

INVESTIGATING THE VIEWS OF MONTESSORI PRESCHOOL  
TEACHERS ON INCLUSIVE EDUCATION  
IN MONTESSORI APPROACH

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Approval of the Graduate School of Social Sciences

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This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

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## **ABSTRACT**

### **INVESTIGATING THE VIEWS OF MONTESSORI PRESCHOOL TEACHERS ON INCLUSIVE EDUCATION IN MONTESSORI APPROACH**

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The purpose of the study was to investigate the views of Montessori preschool teachers on inclusive education in Montessori approach. The views of 18 participants were examined in this study. All participants were selected from Ankara and İstanbul and they were investigated by a semi-structured interview protocol that was developed by the researcher based on the literature review. The protocol contained questions in three major parts; these were demographic questions about participants, questions about views on inclusive education and questions about views on inclusive education in Montessori approach and its advantageous and disadvantageous for children with disabilities. Phenomenology design was employed in the study and purposive sampling was used to reach the participants. According to findings of content analysis, Montessori teachers stated that they did not find themselves adequately educated and experienced in inclusive education but a large part of them thought that inclusive education is good for development of both disabled and non-disabled students. On the other hand, Montessori teachers expressed that enabling children to be independent and to encourage them to make their own

decisions are the most important point of Montessori understanding. However, when considered in terms of disabled students, most teachers indicated that such liberal environment could constitute disadvantages for such students. Teachers stated that an educational environment which is structured and where influence of the teacher is more intensive would be better in terms of education of the disabled child, particularly when working with students with severe disabilities or students with attention deficit or autism.

**Keywords:** student with disabilities, inclusive education, preschool education, Montessori approach, teachers' views

## ÖZ

### MONTESSORİ YAKLAŞIMINDA BÜTÜNLEŞTİRME UYGULAMALARINA İLİŞKİN MONTESSORİ OKUL ÖNCESİ ÖĞRETMENLERİNİN GÖRÜŞLERİNİN İNCELENMESİ

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Bu çalışma, Montessori anaokullarında çalışan okul öncesi öğretmenlerinin bütünleştirme eğitimi ve Montessori yaklaşımında bütünleştirme uygulamaları hakkındaki görüşlerini anlamayı amaçlamıştır. Çalışma 18 katılımcıyı kapsamaktadır. Tüm katılımcılar Ankara ve İstanbul ilinde Montessori okullarında çalışan okul öncesi öğretmenleri arasından seçilmiş olup, görüşmeler araştırmacı tarafından geliştirilen yarı yapılandırılmış görüşme formu ile yapılmıştır. Görüşme formu üç ana bölümden oluşmaktadır. İlk bölümde katılımcılar hakkındaki demografik bilgiler sorgulanırken, ikinci bölümde katılımcıların bütünleştirme eğitimi hakkındaki görüşleri ve son bölümde ise katılımcıların Montessori eğitimindeki bütünleştirme uygulamaları hakkındaki görüşleri sorgulanmıştır. Çalışmanın sonunda nitel analiz yapılmış olup bulgulara göre Montessori öğretmenleri bütünleştirme eğitimi konusunda kendilerini yeterince eğitilmiş ve deneyimli bulmadıklarını belirtmiş, ancak bütünleştirme eğitiminin hem engelli hem de engelsiz öğrenciler için faydalı olduğunu düşündüklerini ifade etmiştir. Öte yandan, Montessori öğretmenleri



Montessori eğitiminin çocuğun bağımsız bir birey olmasında önemli bir rol oynadığını ifade etmiş, çocukların kendi kararlarını vermelerini teşvik etmenin Montessori anlayışının en önemli noktaları olduğunu belirtmiştir. Ancak engelli öğrenciler açısından değerlendirildiğinde öğretmenlerin çoğu bu özgürlükçü ortamın engelli öğrenciler için dezavantajlar oluşturabileceğini söylemiştir. Öğretmenler, özellikle ağır engelli öğrenciler ya da dikkat dağınıklığı olan ya da otizmi öğrenciler ile çalışırken öğretmenin etkisinin daha yoğun olduğu, yapılandırılmış bir eğitim ortamının çocuğun eğitimi açısından daha iyi olacağını ifade etmiştir.

**Anahtar kelimeler:** engelli öğrenciler, bütünleştirme/kaynaştırma eğitimi, okul öncesi eğitim, Montessori yaklaşımı, öğretmen görüşleri

**TO MY LOVELY FAMILY**

**Melek AK,  
Bilgin AK  
and  
İlkem Sena AK**

**You are my luck!**

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My Masters study was an essential first step through which I aimed to verify my own career aspirations and to improve my academic background. However, I have found more than a Masters study in METU over the course of time. In this university, I had a chance to explore my strengths and weaknesses in a detailed way and to understand different perspectives of my life and varied layers of my interest topic. During this very looong journey, Assoc. Prof. Dr. Feyza ERDEN has been the most important person to support me both academically and emotionally. In other words, she was the most important person who helped me to deal with my own barriers in this process. Therefore, I would like to express my wholehearted gratitude to her academic guidance and support in every step of my study.

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## LIST OF ABBREVIATIONS

BEP	Bireyselleştirilmiş Eğitim Programı
CP	Cerebral Palsy
CRPD	Convention on the Rights of Persons with Disabilities
EBA	Eğitim Bilişim Ağı
IEP	Individualized Education Program
MCI	Montessori Center International
MEB	Milli Eğitim Bakanlığı
MoNE	Ministry of National Education
ÖZİDA	Özürllüler İdaresi Başkanlığı
RAM	Rehberlik ve Araştırma Merkezi
TÜİK	Türkiye İstatistik Kurumu
UN	United Nations
UPIAS	Union of Physically Impaired Against Segregation
WHO	World Health Organization

## CHAPTER 1

### INTRODUCTION

#### 1.1. Background to the study

People with disabilities constitute a significant part of populations of countries, however, their problems resulting from being disabled have been ignored until very recently in many parts of the world. According to the predictions of the World Health Organization (WHO) (2011), it was estimated that there are approximately 785 million people around the world who are living with a disability and measured around 5.1 per cent of the world's children and young people, in other words, approximately 95 million children have a kind of impairment. The United Nations (UN) Disability Fact Sheet (2006) stated that around 80 per cent of these children live in developing countries.

The International Institute for the Rights of the Child (2008) stated that excluding the children with disabilities from education services, vocational opportunities, and social and cultural activities are very common behavior. The UN Special Rapporteur Vernor Muñoz Villalobos (2009) added that discrimination is the key problem for education of children with disabilities; therefore more attention should be given to their education. Nevertheless, professionals had a tendency to exclude children with disabilities from the education system until recent times (Hallahan and Kauffman, 2003).

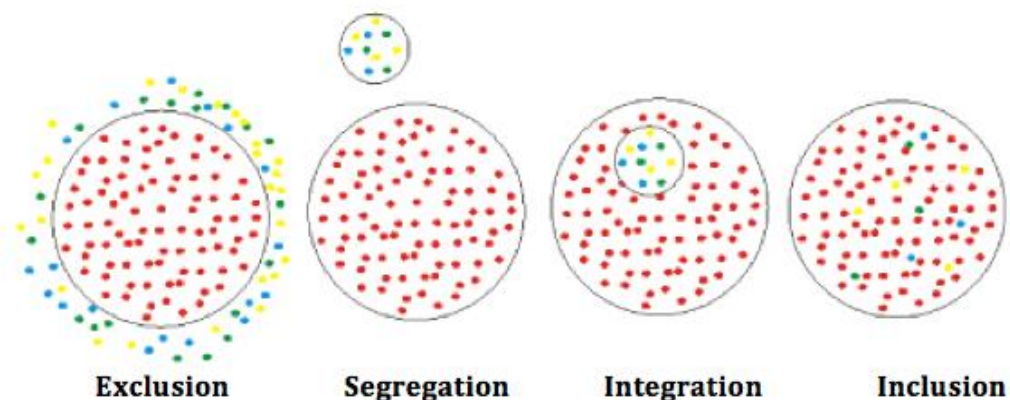
In line with the legal enforcements, education and integration models for people with disabilities have been changed throughout the years. In the beginning of 1960s, medical model of disability was very popular especially in Central and Eastern Europe and in the former Soviet Union (Sammon, 2001). This model reflects the traditional understanding of the disability by focusing on the disability rather than the person (Barnes and Mercer, 2004). It sees the

person with disabilities as the source of the problem. For this reason, the person has to adapt him/herself to fit into the world, if this is not possible he or she must go to the special institutions or schools which are isolated from the society (Open University, 2006). Also, according to this view, person's bodily or intellectual impairments bring some limitations into this person's life and to eliminate these limitations the only way is the medical treatment (WHO, 2001). With the medical model of the disability; there is a tendency to see the person's impairment as the only source/reason of failures or difficulties in academic life as well and the common belief is that people with disabilities require special education because of their impairments and need to be educated at special schools (McConkey, 2001).

However, in 1970s, human rights and disability activists highlighted the negative sides of this model and they emphasized the shift from medical model to social model (Barnes and Mercer, 2004). With the efforts of the Union of Physically Impaired Against Segregation (UPIAS was one of the important organizations established by people with disabilities in the UK), many people understood that the most important limitation is not the individual's disabilities but the limitations caused by the society (UPIAS, 2009). In the 1980s, Michael Oliver was the first person who defined the social model explicitly (Thomas, 2007). According to Oliver (1983), the term "disability" did not refer person's physical or intellectual impairment; on the contrary, this term expressed the negative social effects which were constructed by the society in relation to that impairment and behind this model, he believed that the reason of disability was not the impairment itself; the reason was the prejudices of the society. After the recognition of this model, an amazing progress has been made to eliminate the barriers for people with disabilities in the society regarding education, employment, health and welfare services (Thomas, 2004). In the light of social model, segregated special education schools and segregated care institutions have been criticized strictly, thus social model focuses on inclusion instead of segregation (Barnes and Mercer, 2004).

Today, the benefits of these two earlier models were synthesized and a new model called “biopsychosocial model” which includes biological, social and individual sides of the disability was introduced (WHO, 2001). Hodkinson and Vickerman (2008) stated that this new model helps teachers to support children with disabilities for the full access to education by bearing in mind that these children have some limitations, but they have also potential to be integrated by making the conditions available and accessible. Therefore, maximizing the learning opportunities is the best method to make the education effective for these children.

The shift from medical model to biopsychosocial model started the change in practice, thus moving away from the medical model got the segregated and special educational practices close to the inclusion more.



*Figure 1. A shift from exclusion to inclusion (n.d).*

Yet, several years before identification of biopsychosocial model concept, Maria Montessori claimed that disabled people should be integrated into society through the components of biopsychosocial model instead of the ones of medical model and stated that the best therapy for these children could be carried out through education.

After being graduated from University of Rome as the first female doctor, Montessori commenced to work in a psychiatry clinic in Rome. Here, she saw

that intellectually disabled children calmed down while they tried to put the crumbs of breads on the floor in to an order in a totally empty room with nothing to hold onto and she interpreted this action as no one else did before. Children had an instinctive desire, she thought, towards learning their environment and this desire was being triggered in response to any external stimulus. Hence, Maria Montessori mentioned that disabled children should live in social environments with several stimulus rather than places isolated from the society (Montessori, 1967). In accordance with this understanding, from 1898 to 1900, she started to work 11 hours a day with children at Rome's First State Orthophrenic School and prepared them for a national exam. During this teaching period, she designed a specific special education program with full of activities encouraging teaching academic, social and life skills to students (Packard, 1972). She achieved a totally unexpected result at those days and proved that intellectually disabled children could gain the same level of success as their peers through an adequate education. This remarkable result led Montessori to be recognized throughout Europe and caused Montessori to construct her understanding of education in a more structural way (Montessori, 1967). As Cossentino (2010) underlined "*historically, Montessori's theory and practice have influenced the development of special education pedagogy*" (p. 39).

There is triangle of teachers, students and curriculum in the education system. The teachers are one of the most fundamental elements of this system, since they are the bridge between students and the curriculum and with their actions they have power to affect the system directly. As Sarı (2007) pointed that teachers' views and actions are important for children to have the positive feelings for and commitment towards the school.

With the inspiration of Montessori's challenging vision and the power of teachers' views on engagement to the school, this study has focused on Montessori preschool teachers' views on inclusive education and investigating

the advantages and disadvantages of inclusion in Montessori education for children with disabilities in the light of teachers' views.

## **1.2.Purpose of the study**

The primary aim of this study was to investigate the views of Montessori teachers on inclusive education in Montessori approach. Specifically, this study focused on the following research questions:

1. What are the Montessori teachers' views on inclusive education?
2. What are the Montessori teachers' views on inclusive education in Montessori preschools?
  - a. What are the Montessori teachers' views on the place of inclusion in the philosophy of Montessori's education approach?
  - b. What are the Montessori teachers' views on inclusive education practices in the context of Montessori classrooms?
  - c. What are the Montessori teachers' views on inclusive education practices of Montessori educators?
  - d. What are the Montessori teachers' views on inclusive education practices regarding the use of Montessori materials?
  - e. What are the Montessori teachers' views on inclusive education regarding the application of educational assessment strategy used in Montessori classrooms?
  - f. What are the Montessori teachers' views on inclusive education regarding the family involvement policy of Montessori approach?
3. What do teachers think about the advantages of Montessori approach for the education of disabled students?
4. What do teachers think about the disadvantages of Montessori approach for the education of disabled students?



The main reason that lays behind the cooperation with preschool teachers in this study was that Montessori education is practiced only in early childhood education programs in Turkey. In other words, preschool teachers working in Montessori preschools are the only practitioners of Montessori approach in Turkey, thus these teachers were consciously chosen by the researcher to be able reach intended data in the scope of this research.

### **1.3. Significance of the study**

The education of children with disabilities is a very important issue. However, the UN Special Rapporteur of the Commission for Social Development on Disability reported that the lack of access to education opportunities has the crucial importance in the lives of people with disabilities and there are huge differences between the education services provided for children with disabilities and those provided for children without disabilities in many countries (1999, as cited in Peters, 2007). Therefore, all studies which are working on special education system especially the ones focusing on inclusive education and its problems are important for the improvement of the system.

There two important surveys conducted to determine the population ratio of people with disabilities in Turkey. “Turkey Disability Survey ” conducted by the Administration for Disabled People under the Prime Ministry in 2002 provided the most comprehensive data for the population of disabled people. For this survey, 97.433 households were selected as sample and the results from the interviews were generalized to Turkish population. According to results of this survey, people with disabilities consist of 12.29% of national population (approximately 8.5 million persons), and the children with disabilities consisted of around 4.35% of population of children. According to “Population and Housing Survey” conducted by Turkish Statistical Institute in 2011, 2.2 million households were reached, and it was determined that

approximately 2.3% of population of children have a disability.<sup>1</sup> However, according to the data of Turkish Ministry of National Education (MoNE) (2018), a total number of 17 million 885 thousand 248 students benefit from formal education in 2017-2018 academic year. However, considering the statistics of education, it is seen that disabled students constitute only 1.9 % of total student population (only 353 thousand 610 students). According to the disability statistics given above, the ratio of children with disabilities in Turkey is expected to vary between 2.3% and 4.6% in total child population. Therefore, the proportion of students with disabilities that should be in the total student population is expected accordingly, but only 1.9 % of them are actually registered in the system currently. It is obvious that disabled students are not able to access education under equal opportunities with their non-disabled peers. Education is an important process that provides students with necessary qualifications for being an individual and prepares them for social life. Therefore, it is a must that students benefit from educational opportunities at the maximum level. Considering the development of the disabled students, accessing educational opportunities have a vital importance. However, it is clear from the official data that disabled students are unable to

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<sup>1</sup> It is considered that the percentage difference in these two surveys is associated with the concept of disability defined in the beginning of surveys. The first survey was only focused on the disability, and the concept included in the definition of disability was assumed in a very broad sense including different types of disabilities (people with psycho-social disabilities, people with chronic disorder, etc.). The second survey is based on the general census, and the concept of disability was assumed in a narrow sense including only conventional types of disability (people with physical disabilities, visual disabilities, hearing impaired, and intellectual disabilities). Therefore, data of the first survey are considered to reflect the facts better in terms of inclusion of different types of disabilities. On the other hand, considering the data of survey and the fact that there might be children with disabilities that are not recorded in the birth documents, or were not declared to be present by the other members of the household during interviews, or were not included in the statistics as they lived under the care of an institution, it is likely that the number of children with disabilities is far higher than this data.

access education opportunities sufficiently. That's why working on inclusive education practices, listening to opinions of teachers as practitioners and understanding their needs and problems of the system will be effective to remove the barriers disabled students face.

Although early childhood education is compulsory for children with disabilities aged 3 to 6 years, inclusive education practices in early childhood classrooms are fairly new in Turkey, however, major steps have been taken in recent years. MoNE started this move by carrying out "Strengthening Special Education Project" between 2011-2013 under Directorate General of Special Education and Guidance Services to build school without barriers model and to make inclusive education more visible and practiced. And the MoNE has started to establish many early childhood special education preschools since 2015. According to the National Education Statistics of MoNE (2018), there are 145 early childhood special education preschools all over the country and in these schools 1113 students are registered. In these schools, children with and without disabilities are placed in the same classrooms and inclusive education practices are applied in these classrooms. In parallel with the MoNE's current strategies and implementations, understanding the views of preschool teachers who are working in the field helps us to see the real picture of the current status of inclusive education practices in early childhood education in Turkey and it may lead us to make necessary changes and adaptations for the needs of future generations.

Additionally, teachers are most important component of education system. Investigating their views about inclusive education can help us to understand working and non-working parts of this approach and to find effective solutions for the good of all beneficiaries of the system. Teachers' views on inclusion affect the ecology of their classroom that also affects children's participation and engagement in the activities in that classroom (Fyssa, Vlachou, and Avramidis, 2014).

Finally, this current study is significant because it focuses on views about inclusion in Montessori education. Although Montessori started to her professional life by working with students with disabilities, currently the number of studies focusing on inclusion in Montessori approach is very limited. Thereby, it is believed that the findings of this study contribute to the literature by analyzing the realities of inclusion in Montessori approach from the views of teachers and provide a comprehensive resource on the issue to both current and prospective teachers and researchers.

#### **1.4. My motivation for this study**

In qualitative research, the researcher is an important tool to obtain data while conducting a study (Patton, 2002). Mertens (2010) stated that the researcher is the main authority to decide on the scope of the interview questions, observation, and findings. For this reason, in qualitative studies, assumptions, experiences, biases and orientations of the researcher gain more importance compared to quantitative studies (Lincoln and Guba, 1985). To increase the credibility of the qualitative research, Merriam (2009) stated the importance of the explanations on the researcher's position and motivation.

By being the daughter of a judge who worked in several different cities and towns in Turkey, I had the opportunity to observe the conditions and to compare the contents of the lives and needs of the children in these cities and towns. Not only my observations but also my own experiences throughout my life made me think on what would help the children overcome the difficult life experiences and prevent them from possible risks. Therefore, I decided to study at a department, which I can focus on children, so my path came across with *early childhood education* area! In my university years, I shaped my career goal clearly and decided to work with children living in disadvantaged conditions.

By following this goal, I have been involved in disability issues and inclusive education practices for more than 10 years. At the time of deciding the focus of this research, I was working as a special education assistant in EU funded project run by Turkish Ministry of National Education for strengthening education opportunities of disabled students in Turkey. My experiences at this project and my concerns about the early childhood education system might have pushed me to choose this topic in order to conduct this research.

On the other hand, Montessori is an inspirational figure for many educators as well as for me. Montessori's motivation and afford to train students with intellectual disabilities was the starting point of this research. I believe that her dedication, enthusiasm and insight about education of children with disabilities should be known by all professional working in the field of education. Additionally, rising popularity of Montessori Approach in Turkish preschools led me to think about and search on Montessori Approach and its connection with disabled students.

### **1.5. Definitions of the terms**

The following terms used very often within this study need to be operationally defined for better understanding of the readers.

**People with disabilities/disabled people:** According to the United Nations Convention on the Rights of Persons with Disabilities (CRPD) (2007), persons with disabilities is defined as those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.

**Student with special needs:** According to Special Education Services Regulation of MoNE (2018), student who significantly differs from his/her peers in terms of educational qualifications because of individual and developmental reasons. However, the researcher of this study preferred to use

the terms “disabled child/student” and “children/student with disability” instead of student with special needs during the interviews.

**Inclusive education:** An education system which provides an equal education opportunity for each student and aims enabling these students to fully participate social, cultural economic life of their societies regarding the concept of qualified education for all. In inclusive education, each school is an inclusive school and schools make necessary arrangements for the needs of students. In inclusive education, it is expected that the school adopts itself according to the needs of students rather than requiring students to be adapted the implementations and conditions of the school (ERG and TOHUM, 2011).

**Montessori (education) approach:** Montessori education was developed by Maria Montessori and today it is applied in several different schools around the world by providing education opportunities for children from birth to eighteen years old. During her life, Montessori explained her understanding of education in different written resources and she opened a school to practice her approach. Currently, all Montessori schools worldwide are following the methods and implementations that Montessori used in her practices (Korkmaz, 2006).

**Montessori teacher:** Teachers who are working in Montessori preschools in Turkey are defined as Montessori teachers within the scope of this study. Having an accredited Montessori teaching certificate given by a globally known Montessori (Teacher) Unions was not an obligation to be the participants of this study, since most of the teachers have been reached during this study were mainly educated by in-house trainers who were accredited trainers but not allowed to give new certificates to others at the end of their trainings.

## CHAPTER 2

### REVIEW OF THE LITERATURE

This chapter starts with the explanation of the historical journey of understanding of education of children with disabilities and give some background information about basics of inclusive education. The second part presents some information about Maria Montessori's experiences on students with disabilities. The third part includes the information on Montessori Approach and inclusive education, in that part the key elements of the Montessori Approach are explained regarding their effectiveness on inclusive education. In the fourth part, all kind of studies carried out in Turkey about Montessori practices are covered. And in the fifth part current studies on the views of preschool teachers on inclusive education are presented.

#### **2.1. Education of children with disabilities: from special education to inclusive education**

The existence of disabled individuals is as old as the history of mankind, but their education is not that old. Understanding about the education of people with disabilities has passed through various stages in the history. According to Hallahan and Kaufman (2003), over the course of time, changing perception of rights and changing understanding of disability led to various changes and developments in sense of content and form of the education of students with disabilities.

When we look at the worldwide history of the education of people with disabilities, it can be seen that there is a significant exclusion of these people from education system until the beginning of the 1700s. In the period between the years of 1700-1950, it is seen that special education services were provided

in segregated educational environments based on the disability of students (French, 2000).

In 1948, education is entitled as a human right by the United Nations with the Universal Declaration of Human Right. In the context of disability and education, this brings the idea that everyone has right to education whether they have disability or not. With this legal arrangement, right to education of student with disabilities has been secured legally, but practical problems have not been solved easily.

In the beginning of 1970s, a shift from medical model of disability to social model pointed out the restricted conditions of physical and social environment for people with disabilities. This brought the idea that disability does not result from impairment but from lack of qualified education and participation opportunities (UPIAS, 2009).

Since 1980s, “the least restrictive environment” approach has been rapidly accepted in most parts of the world. With this approach, students with disabilities started to be placed more in regular schools rather than special schools. It is believe that the education of people with disabilities in integrated educational settings instead of disaggregated environments facilitates their full integration into the society, since all children learn through interactions with each other. Additionally, it provides a change in the negative attitudes of the non-disabled people towards disable people and creates more social integration opportunities for both sides (Sucuoğlu and Kargin, 2006).

Today, inclusive education brought the new way of thinking for enabling the right to education of all children. *“The move towards inclusive education means that efforts are being re-directed to supporting all children in regular schools and to finding new ways of advising and guiding teachers.”* (McConkey, 2001, p.32).



### **2.1.1. Basics of inclusive education**

Many people think that inclusive education relates only to disability. This is not true basically. An inclusive education system provides education for all, since it is constructed as flexible and comprehensive as possible to include all children (Save the Children, 2016). The system aims to ensure that every child learns at the highest possible level according to his/her intellectual capacity, skills, talents and interests and interact with other students, thus marginalized groups of learners have a chance to maximize their educational acquisitions (Ainscow, 2008). In other words, by aiming to educate all children together, in inclusive education settings, all children have a chance to meet each other regarding their abilities and needs, thus, socialization of children takes an important place on the basis of this model as well (Ungar, 2012). With this, all children can fully and equally participate in school life, learn from and contribute to as much as possible (McConkey, 2001).

In inclusive education, each school is an inclusive school and schools make necessary arrangements for the needs of students. In inclusive education, it is expected that the school adopts itself according to the needs of students rather than requiring students to be adapted the implementations and conditions of the school (ERG and TOHUM, 2011). Therefore, identifying the educational barriers in school context and removing/reducing these barriers are enabling these students to fully participate school life regarding the concept of qualified education for all.

The most usual learning environment for inclusive education is in ordinary classes where all children are educated together (MacArthur, 2009). In the inclusive education approach, there is an idea that support is brought into the classroom for children who need it (Buckley and Bird, 2000), thus children do not need to go some other places to receive that support for their educational needs and also many children who do not have disabilities may need extra help

and support at some time or in some subjects, thus the support provided in the class will meet the needs of all students (MacArthur, 2009).

## **2.2. Education of students with disabilities in Montessori approach**

Maria Montessori completed the medical faculty and was awarded the first woman physician title in Italy. Montessori, who completed her education in pediatrics and psychiatry, started to work as a voluntary assistant doctor in University of Rome Psychiatric Clinic in 1897. One of her tasks in this clinic was to visit mental hospitals in Rome and to identify patients suitable for treatment in the clinic. During one of these visits, she found a group of children with intellectual disability in a hospital, who were kept in a closed room without any stimulus around. After observing these children for a while, she realized that the children reacted to various stimuli and that their minds were open for learning (Kramer, 1976).

During her research on education of students with intellectual disabilities, Montessori had access to the works of Jean-Marc-Gespar-Itard (1775-1838) and of Edouard Seguin (1812-1880), Itard's scholar, on children with intellectual disabilities; and she was very much impressed by these works (1812-1880). Itard took a speechless boy, who is thought to be around 12 years old and found in Saint-Sernin-sur-Rance region in France, under his protection and tried to educate him for five years; and he reported and published each phase of his work (French, 2000). Itard's education of the child, whom he called Victor, could not go beyond Victor's writing the word "milk", whenever he needs (Ingalls, 1978), however, as Itard proved that the individuals with disability could also be educated, he marked an important era on special education (Gaynor, 1973; Humphrey, 1963).

Seguin carried these works even forward and developed special materials in order to stimulate the sensory perception and motor skills of the disabled

children (such as nails of different sizes, beads to string etc...). He also founded a school for students with intellectual disabilities, and concentrated on educational studies (French, 2000). Montessori, who was affected from these works and who based her studies on the materials that had been prepared, built on these works with her own observations and experiences and she developed her own approach in 1912 (Lillard, 1972). As Erben (2005) emphasized, Montessori argued strictly against the idea that the disabled people were third-class individuals. Although Montessori Method was based on this idea, however, the method was only used for the education of children with normal development and the gifted children in many countries, for quite a long time (Wilbrandt, 2011).

Professor Dr. Theodor Hellbrügge, who works at Munich Children's Center, was the first person who thought that Montessori approach would be the most appropriate model for the education of the disabled and non-disabled students together in 1968; and he found the first Montessori preschool with Margarete Aurin, a former scholar of Montessori, which was composed of disabled and non-disabled students (Wilbrandt, 2011). Hellbrügge, who was a pediatrician, emphasized that this inclusive education setting served for students at early ages had major benefits in many developmental areas of children, especially in social and language development (Hellbrügge and Montessori, 1978).

To further Hellbrügge's work and efforts, in this study it is intended to conduct a qualitative research in order to understand views of teachers on inclusive education practices applied in Montessori preschools. However, Montessori's personal experiences with students with disabilities were only limited with the group of children with intellectual disabilities. Yet in the scope of this study, students with disabilities are defined as students who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society and benefit

from educational opportunities on an equal basis with others (UN CRPD, 2007).

Considering the above-mentioned ideas on inclusive education, as well as the principles of Montessori approach, in the following part it is intended to explain the key components of Montessori education system and to associate them with the elements of inclusive education.

### **2.3.Montessori approach and inclusive education**

#### **2.3.1.Key principals of Montessori approach**

Montessori believes that children have a special skill to absorb information from the people and objects around them. This ability is referred to as "Absorbent Mind" in Montessori's approach (Morrison, 1998). With the Absorbent Mind, the child organizes his own mind and adapts himself to his physical and social environment. According to Montessori, absorbent mind of the child helps him/her to explore the environment through his senses and movements and to absorb the language of the culture in which he lives (Montessori, 1949). Montessori divides this period into two sub-phases: the first being the time between zero and three years of age and the second between three and six years (Toran, 2011). Montessori defines the cognitive activities of children between the ages of zero to three as unconscious absorbent mind (Dresser, 2000). The child's life in this period is merely physical and there is no consciousness in the child. As the child starts to walk, s/he moves from the state of the unconscious absorbent mind to the state of the conscious absorbent mind and starts to interact and discover its surrounding environment through its hands or body using his cognitive functions (Korkmaz, 2006). In this period, the child constructs consciously everything that s/he takes in from the environment and passes judgments using the information s/he previously gained. (Williams, 1996).

For the development of absorbent mind, Montessori also defined another principle as the core of her approach is freedom. According to Montessori, freedom is not doing whatever you want but to like what you are doing (Montessori, 1966). In other words, this is not freedom to be free from something, but to be free to do things. She believed that this understanding of freedom is child's freedom to try to support his/her own development. In Montessori classes, all children have the right to move around however this freedom is a kind of freedom to not hurt themselves or the ones around them. This freedom is a discipline that brings around responsibilities with it. In the Montessori approach, the freedom given to children is the responsibilities of children to themselves, to the society and to the nature (Williams and Keith, 2000; Hedeem, 2005).

Montessori classes have an environment that supports independence of children. According to Montessori (1966), in order for an educational approach to be successful, it must tend to help the child to be independent. Also, Montessori (1949; 1966) defends the idea that child centered activities must consider basic needs of children and social life and contribute to increasing their independence and creativity, thus educational setting allows children to choose and share their interests and success with other individuals in the society and supports self-learning environment (Montessori, 1966). Therefore Montessori concludes that educational setting must be arranged as part of ordinary life and children and their social life must be at the center of this approach.

### **2.3.2.Components of inclusive education in Montessori approach**

#### **2.3.2.1.Classes with different age groups**

Montessori believes that the development of children is made up of 3 main stages (Topbaş, 2004). These stages are as follows:

**Table 2.1: Three main stages of the development of children in Montessori**

Stages	Age range	Characteristics of the child at this stage
First stage	0-3 ages	Newborn baby cannot do anything by himself/herself, s/he is in need of protection, however, the baby comes into existence with an instinctive growth and internalization at this stage.
	3-6 ages	This stage is about discovering the world in a conscious manner; and the child begins to discover himself/herself.
Second Stage	6-12 ages	The child is ready to receive more comprehensive information from the outside world. Social relations based on cooperation, imagination, reasonable problem solving and improvement of cultural information are expected from the child (Korkmaz, 2006).
Third Stage	12-18 ages	At this stage, the child tries to gain a place as a social being in the society and tries to contribute to the society directly. This stage lasts for life (Topbaş, 2004).

In Montessori education system, the classes are formed taking the developmental stages into consideration; thus, classrooms are designed in a way that brings different age groups at the same stage together (Wilbrandt, 2011).

Bringing different age groups together provides a natural inclusive atmosphere and a natural interaction area for students of different age groups. According to Pickering (1992), coexistence of different age groups provides a conducive environment where smaller children can learn from the older, where the weaker

can learn from the stronger and an environment that improves social skills through communication and cooperation; and this also brings along success for children with learning difficulties. At this point where the importance of peer learning is emphasized, it can be stated that Vygotsky's (1967) Zone of Proximal Development concept is applied in these classes; an environment where children with better skills help other students move on to an upper level can be mentioned. A study that supports the statement on student's social sharing in Montessori classes has been carried out in Konya by Koçyiğit, Kayılı and Kuşçu (2009). In the study, 122 preschool students were observed (62 of them had Montessori education and 60 students had education based on normal curriculum). "Preschool and Kindergarten Behaviour Scale" that was developed by Merrell (1994) was used. At the end of the study, it was concluded that preschool students who were educated with Montessori Method achieved significant difference in the scores of social cooperation, social interaction and social independence subdomains. Pavusek (2009) says that Montessori classrooms that include different age groups have a positive atmosphere that is not based on competition, thus students feel more comfortable in these classrooms. Topbaş (2004) states that in these classrooms smaller children can easily find various models to imitate; from this aspect, it would be suitable to say that Montessori's mix-aged classroom environment is appropriate for learning by modeling, which is the most important part of social learning theory of Bandura (1977).

Another advantage of the classroom environment with different age groups is that the materials in the classroom are various and extensive. The reason for this is that the classrooms are equipped with materials that respond to the needs of students at different age groups with different skills, rather than solely meeting the needs of a specific age group. This type of classroom environment provides the students with developmental delays not only with the materials that their peers use, but it also offers them the materials that are suitable for

their developmental levels in the very same classroom (Guess, Benson and Siegel-Causey, 1985).

Another characteristic of a single classroom made up of different age groups is that the students have the opportunity to study with the same teacher for long years. This aspect is especially important for students with disability, because each new teacher takes some time to get to know the student and this results in loss of time in the education of the child. On the other hand, the same teacher would get to know the disability, development level and the way of learning of the student better; s/he would be in a position to better analyze the child's skills and restrictions due to the disability; s/he would learn how to use the special equipment that the child has to use, if any, and develop a working method with the family; thus could respond to the needs of the students better (Guess, Benson and Siegel-Causey, 1985).

#### **2.3.2.2. Individualized education for every student**

Montessori education system is based on a constructivist approach; therefore, the courses are designed according to developmental levels of students and a student-centered education method is adopted (Lapota, Wallece and Finn, 2005). In this system, individual education forms the basis of Montessori approach, the teacher working with the student carries out one-to-one practices; and this meets the the individual education need of the student (Guess, Benson and Siegel-Causey, 1985).

As the readiness states of the students are the most important criteria in transition to the next level, they do not have to follow the same route as each other. This perception provides teachers with the required flexibility in preparing individualized education plans; and spares the students with developmental delay from having anxiety over keeping up with peers (Pickering, 2003). This situation is an advantage for the gifted students, as



well. Montessori pedagogy, which also provides individualized programmes for gifted students who do not have to wait for the others in transition to the next level, also supports the development of such students (Böhm, 1985).

#### **2.3.2.3.Emphasis on functionality in Montessori classrooms**

Reality and naturalness are of major importance in Montessori approach (Erben, 2005). For this reason, one of the most important activities of Montessori programme is the ones related to the daily life (Topbaş, 2004). The objective of these activities is to have children do things by themselves, as the child who has learned to do things by himself/herself is prepared for the possible events that may occur around him/her. For example, if a real vase in the classroom gets broken, s/he would know how to collect the broken pieces of glass or how to help his/her friends in such a situation (Erben, 2005).

The main objective in Montessori classrooms is to prepare the students for real life, which is directly in line with the main objective of special education and inclusion; as the final objective in special education is to prepare the student for real life in the best possible way (Guess, Benson and Siegel-Causey, 1985).

#### **2.3.2.4.Free children who can make choices**

According to (Erben, 2005), Montessori Method is a system that intends to provide the child with freedom of movement and action in a pre-prepared environment where s/he can improve himself/herself. Thus, the children have the freedom to choose the materials and the people that they want to study with, and the place and the time that they want to study in. Therefore, it can be concluded that Montessori Method values the active participation principle, which is of key importance in Piaget's theory (Meagor, 2014).

In Montessori system, the importance of will and freedom concepts is emphasized and it is believed that a child can only make a decision on whether s/he wants or does not want to do something by internalizing this freedom (Standing, 1957).

One of the main aspects of this method is that there is no time limitation for students. By this way, the students have the opportunity to advance at their own paces without any time limitation. This system, which ensures a freedom to study without any competition and limitation, especially for the students with learning problems or for underachievers, avoids the situations where the students pass to the next level without fully mastering on the subject (Pavusek, 2009).

Disabled students in Montessori classrooms also have the freedom to choose between the materials, as their peers with normal development do; they can also pick the materials that they want to work with by themselves (Guess, Benson and Siegel-Causey, 1985). Since the students with learning problems have the freedom to choose the materials that are suitable for their interests and skills, they participate in the learning process effectively (Mahoney and Wheeden, 1999). However, in some cases, some disabled students may have difficulty in choosing materials; in such a situation, the teacher can introduce and recommend a suitable material to the student. Another situation, which might require the teacher's intervention, is when it is not easy for a disabled student to move on to a new material. When this is the case, the teacher can guide the student to studying with the new material, using small rewards (For example, allowing him/her to study with the previous material after using the new material) (Wilbrantd, 2011).

### **2.3.2.5. Classroom environment and materials in Montessori approach**

The tools in the classroom are the ones that are used in real life, in order for the child to face real life. The children use real glasses or real knives when they want to drink or cut something (Dođru, 2009). According to Temel (1994), another advantage of using real life materials is that this facilitates the transfer of activities to the home environment and ensures family cooperation. Using real materials is also very valuable for the disabled students in terms of skills acquisition (Guess, Benson and Siegel-Causey, 1985).

In Montessori classrooms, there is only one of each tool; so, when the child wants to use a certain tool, s/he has to wait for his/her peer till s/he finishes using the tool. According to Temel (1994), by doing so, the children have to respect other people's rights, just like in daily life.

All the materials are organized in open closets in a way that children can reach. The child can have access to any material according to his/her interest and skills independently (Korkmaz, 2006). In order to trigger the child's interest, making everything in the classroom environment colorful and an aesthetic design are important details (Dođru, 2009). The reason for this is that triggering the child's interest in order to discover through the classroom environment and materials is the main objective of Montessori Method (Brown, 1992).

The materials are suitable to the strength and body build of children (Montessori, 2010). Moreover, the materials are designed in a way that helps children discover their own mistakes by themselves (for example, wooden puzzles or geometric figures that are divided into two in order to be reunited), because in Montessori Method, it is more meaningful for the child to understand his/her own mistake by himself/herself than the teacher's correcting them (Montessori, 2010). According to this idea, the teacher does

not tell the child his/her mistake; if the child cannot see his/her own mistake by himself/herself, this indicates that the child has not developed enough. In time, the child sees his/her mistakes and corrects them (Temel, 1994).

In Montessori classrooms, explaining abstract concepts by materializing is underlined, especially mathematics materials in classroom are designed according to this principle (Büyüктаşkapu, 2011). Using concrete materials for disabled students is of critical importance in encouraging learning. In Montessori classrooms, students learn much more easily by using these materials, which are designed as a natural part of education (Guess, Benson and Siegel-Causey, 1985).

Another very important aspect of Montessori education concept is that it attaches great importance to sensory perception and that it has many materials that improve and organize this perception. To this end, Montessori developed materials that help children learn by seeing, hearing, touching, feeling, tasting, moving, thus enabling the children use all their senses (Büyüктаşkapu, 2011). Materials for visual perception (hand-held cylinder blocks, geometry drawers etc.), materials for perception of heat (heat tubes), materials for tactile sensing (pieces of clothes of different tissues), materials for the differentiation of weight (weight tablets), materials for olfactory perception (smell tubes), materials for auditory perception (sound boxes), materials for gustatory perception (flavor bottles), materials for muscle memory are the materials used for sensory education in Montessori classrooms.

The most important characteristic of these materials is that they focus on strengthening and sensitizing only one sense at a time; the main objective here is not to distract children and to prevent burdening children with more than one stimulus (Pavusek, 2009). For example, pink tower, which is composed of 10 pink cubes, is one of the most important materials in Montessori classrooms; in this material, the cubes are different only in their sizes. The child is expected to

build a tower using these cubes, which are in different sizes. During this activity, visual perception of the child is expected to improve (Wilbrant, 2011).

The materials for sensory perception in Montessori classrooms are of critical importance particularly for the disabled children with loss of sense. For example a visually challenged child can benefit largely from the materials aiming at olfactory, auditory and tactile senses (Guess, Benson and Siegel-Causey, 1985). Moreover, children with dyslexia are also known to make great use of these materials, each of which target different senses (Reid, 2003; Skotheim, 2009). In two studies that he carried out with disabled preschool students, Biewer (1991; 1997) revealed that Montessori materials are more effective compared to conventional methods for these students and determined that Montessori materials have positive impacts on sensory perception for disabled students.

#### **2.3.2.6. Visual sampling (demonstration) for students in Montessori classroom**

In Montessori Method, it is often emphasized that allowing the child to choose the material that s/he would study with and to discover it himself/herself is an important objective; however, when the child is not sure how to contact or which way to go, the teacher is expected to introduce the material to the child by visual sampling. This visual sampling that is to be done by the teacher in Montessori Method is expected to be short, systematic, to include oral expressions that effectively explain the activity and to be orderly from beginning of the activity to the end (Wilbrant, 2011).

It is important that all the materials introduced to the child is in line with the individual development of the child and that they are cascaded based on the success of the child (Dođru, 2009). This situation is actually parallel to the methods known as work analysis or segregated behavior steps in special education and it allows the disabled children to make the maximum use of

visual sampling that is appropriate for their levels (Guess, Benson and Siegel-Causey, 1985).

Furthermore, visual samplings are carried out one by one with students, and this brings along the desired learning environment for the disabled students (Orton, 1937).

### **2.3.2.7.Freedom to repeat**

Montessori classrooms have an atmosphere that allows different rhythms. A very small or a very slow child can work with the same material for weeks, without hindering the progress of other students (Topbaş, 2004). Montessori believes in the importance of repetition and she provides the children with an environment where they can repeat; for her, the important thing is the child's learning that specific skill (Pavusek, 2009).

This flexibility that allows students to do as many repetitions as possible also enables the implementation of their individual education plans (Guess, Benson and Siegel-Causey, 1985).

### **2.3.2.8.Role of the teacher in Montessori classrooms**

In Montessori Method, the term "Directress" is used for teachers; because, a Montessori educator is more of a role model, a resource person, a guide and an application educator in the classroom than a teacher (Montessori, 1967). According to Lillard (1972), the teacher in Montessori approach is responsible for preparing the environment and for enabling the student to interact with the environment; s/he provides an opportunity for the students in order for them to achieve their full potentials in developing themselves.

In this system, teachers follow the students regularly and interpret their needs; they support the students whenever necessary and help their transition to the next level, they register the individual progress of the student and share their observations with the families (Neubert, 1973).

In a Montessori classroom, the proportion of teacher-guided activities among the entire activities is 20%, while this proportion is 80% for individual activities (Korkmaz, 2012). In Montessori schools, it is mainly the environment itself that teaches the child (Montessori, 1967).

It would not be wrong to say that the perspective of Montessori on the role of the educator is parallel to that of Vygotsky's. As is known, Vygotsky also makes strong emphasis on the observing role of the teacher, on his/her following the development level of the students, on the fact that the teacher needs to identify the next level that the students is expected to pass and to carry the child to the next level (Zone of Proximal Development) by providing the required assistance (Dodge, Colker and Heromen, 2002).

According to Pavusek (2009), the most important function of the teacher regarding the disabled students in Montessori classrooms is that the teacher is in a position to identify the students who have difficulty in studying with the material by himself/herself and who relate their failure with themselves and their disability; and to help children move out of this circle. Weiner's theory of attribution (1980) also emphasizes this condition and states that the disabled students attribute their failure to their disability instead of attributing it to the insufficient effort that they exert. This reinforces the point that Pavusek stresses.

Another important characteristic of Montessori teachers for the disabled students is that although most of the teachers do not have an educational background on special education, but they have expertise on individual

education and thanks to this expertise, they can prepare individual programmes for the disabled students as well; and this provides an effective learning environment for these students (Hale, 1992).

### **2.3.2.9. Summary on Montessori approach and inclusive education**

In various studies, the fact that Montessori education has positive impacts on the education of children with normal development has been emphasized (Castellanos, 2002; Lillarda and Quest, 2006; Lopata, Wallace and Finn, 2005; McCladdie, 2006; Gleen, 2003) However, according to the limited information on the subject, it also has positive effects on the development of the students with attention deficit, down's syndrome, cerebral palsy, spina bifida, hearing and/or visual impairment and developmental delays (Haines, Baker and Kahn, 2000); the use of this method has also particularly positive results on the children with neuromotor development delay and psychomotor development delay (Dođru, 2009).

One other fundamental aspect of this approach for disabled students is that it attaches importance to individualism, thus focuses on the potential and educational needs of the child instead of his/her medical requirements or incapability (Thompson, 1991).

Furthermore, the materials and the approach applied in this method have important functions for the families of disabled students, in terms of their practicality at home and their help for the families to establish the best communication with their child (Dođru, 2009).

Many aspects of Montessori Method have parallels with practices of special education and it is possible to use Montessori's components in inclusive education. For this reason, it is planned to study the inclusive education practices in Montessori classrooms and to carry out necessary analysis in this study.



### **2.3.2.10. Research studies focused on the practices of Montessori approach in inclusive settings and/or with students with disabilities**

Hale (1992), in her research conducted for her doctoral study at Toledo University studied the inclusion of the children with developmental disabilities in the preschool class where the Montessori approach was followed. 5 children with developmental disabilities were placed in the two preschool classes of the Montessori school and during the study their developmental changes were tracked. Parents of the children were also informed about the purpose of the study. At the end of the study, it was observed that children with developmental disabilities were accepted in a much easier way by other children in the Montessori classroom environment. Thus, it was concluded that Montessorian way of teaching had a positive effect on children with developmental disabilities. Additionally, it was determined that children with developmental disabilities developed their skills and social relationships in the context of Montessori classroom.

Korfmacher and Spicer (2002) conducted a research to examine the experiences of children in different classroom environments and examined the contribution of the children's Montessori materials, learning method, classroom environment and the Montessori Theory on the development of the child. The research was conducted on the children in poor and disadvantaged groups in Montessori classes articulated in the Head Start method in the Head Start center. In the study, qualitative and quantitative research methods were combined; observations, face-to-face interviews and survey techniques were used as the means of data collection. And the study results showed that children from poor and disadvantaged groups were affected in a positive way by conditions provided in the classroom environment. Children had positive reactions to the Montessori materials, thus they had positive impacts on the learning process and academic outcomes of the children.

Centofanti (2002) conducted a research on tactual senses and motion senses of the preschool children with academic and developmental retardation. During the data collection process, 25 interviews were held with 17 children on the writing skills by using Montessori and Multiple intelligence methods. During the interviews with children, he watched the children to form the alphabet letters by using clay. As a result, it was found out that the Montessori Method had a positive effect on the tactual senses and motion senses of the children. Also, it was determined that the skills that children gained in Montessori method can be converted to artistic skills with multiple intelligence method.

In her master thesis at Westminster College, Ruud (2014) examined the benefits and challenges of inclusion in early childhood Montessori classroom. For her study, she worked with her students between the ages of 3 and 6 in an early childhood classroom in a private inclusive Montessori school. The total number of students was 20 and some of them were with disabilities. She constructed her study as an action research and collected the data through observations, interviews and assessments during her teaching. Her findings revealed that although Montessori materials and prepared environment encouraged students' learning and increased their academic success, however, transitions, inconsistency and too much freedom were challenging features of Montessori education for inclusive students.

In the article written by Boynikoglu (2013), after a general overview of the Montessori Pedagogy, special education practices in Montessori developed in accordance with this were explained both theoretically and practically. In various parts of the study, the researcher's observations and examples from Munich Children's Centre were presented on the special education practices used within the Montessori approach. As a result of the observations, the researcher concluded that: The Montessori Pedagogy provides the disabled child with the opportunity to act independently in the early ages thanks to the material exercises. Once the disabled child completes an exercise, s/he heads to another exercise. In this period, the child who is engaged with the exercises as

a game makes a huge progress in his/her own development without any awareness. The disabled child has the opportunity to watch and imitate other children during group works. At the same time, s/he also takes place among non-disabled individuals as a social being. In this sense, the Montessori Pedagogy, which is not only suitable for the education of children with or without disabilities, but also for them to be educated together, i.e. inclusive education, also provides pedagogical support for a democratic society.

#### **2.4. Montessori practices in Turkey**

As it is known, education in Turkey is governed by a central structure; therefore all public and private schools in Turkey are obliged to follow the curricula determined by Ministry of National Education. Apparently, this situation makes it impossible to fully implement Montessori education system in Turkey (Durakoğlu, 2010). However; this situation has not led to a decrease in Turkey in the number of studies focusing on Montessori education. On the contrary, research carried out to further explore Montessori methods has gained momentum in Turkey since 2006 (Korkmaz, 2012).

##### **2.4.1. Books published in Turkish on Montessori approach**

Until very recently, only two books written by Montessori herself were translated into Turkish. National Education Congress - planned to be held on 16th July 1921 in Ankara - was not held although the country was at war. As a matter of fact, Ataturk himself delivered the opening speech in that Congress. One of the suggestions made by Ataturk in his opening remarks was to make sure that all educators must read books written by Maria Montessori (Güneş, 2010). To act on this suggestion, Mustafa Rahmi Balaban who was a member of Copyright and Translation Committee<sup>2</sup> translated Montessori's first book

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<sup>2</sup> The name of the Committee in Turkish is Milli Eğitim Bakanlığı Telif ve Tercüme Heyeti.

into Turkish in 1923 (Durakođlu, 2010). Montessori's second book "The Secret of Childhood" was translated into Turkish by Güler Yücel in 1975. The translated book was called "Child Education" (Korkmaz, 2012). In 2015 and 2016, four of Montessori books (The Secret of Childhood, The Discovery of the Child, The Absorbent Mind and What You Should Know About Your Child) were translated in Turkish, thus, Turkish readers found the opportunity to read Montessori's own books in Turkish directly.

The book called "How to Raise an Amazing Child?", which was written by Tim Seldin who is the president of the Montessori Foundation and explained raising children in accordance with the Montessori method, was translated into Turkish in 2006.

Two books of Paula Polk Lillard were translated in Turkish in 2014. Lillard is an internationally known authority on Montessori theory and practice. "Montessori in the Classroom" explains what happens inside a Montessori classroom and how teachers teach. This book provides examples with a day-by-day record of a year in the life of a Montessori classroom. And the book called "Montessori from the Start" is presenting guidelines and clues to parents for raising their children according to Montessori principles.

Parents are important people for the education of children. By following this trend, two different books based on Montessori's instructions for raising children were translated into Turkish. These are as follows: Montessori Madness! (Trevor Eissler) and Montessori Activities for You and Your Child (Maja Pitamic).

Eriman Topbaş (2004) wrote a book called "Montessori Yöntemi ile Çocuk Eğitimi"<sup>3</sup> and elaborated on Montessori approach to education and practices in line with the Montessori method.

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<sup>3</sup> The book's name can be translated as " Educating Children through Montessori Method".

Emel Wilbrandt (2009) wrote a book called “Maria Montessori Yöntemiyle Çocuk Eğitim Sanatı”<sup>4</sup> in which she explained the philosophical background of Montessori approach, child development stages as described by Montessori, emergence of Montessori method and teaching in line with this method.

Emel Wilbrandt (2011) was the editor of the book called “Okul Öncesi Eğitimde Montessori Yaklaşımı”<sup>5</sup> which further described all details regarding Montessori approach and enriched the content with outcomes of research carried out in Turkey as well as observations made by educators employed at preschool institutions teaching with this method.

One of the founders of Alternatif Okullar website, Eylem Korkmaz wrote a book called “Montessori Metodu” (2012). Eylem Korkmaz, who has different works on alternative education methods, examines "Montessori Method" in this book. She explains the method both theoretically and in terms of its implementations in Turkey.

In 2014, Seçkin Demiralp wrote a book called “Montessori Metodu ve Uygulamaları”<sup>6</sup> in order to explain basics of Montessori Education and key points of the practices of the method.

In 2015, Turgay Keskin wrote a book called “Montessori Yöntemiyle Kendine Güvenen Çocuk Nasıl Yetiştirilir?”<sup>7</sup> in which he explained how children learn how to identify a problem and how to work to solve it.

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<sup>4</sup> The name of the book can be translated as "The Art of Educating Children using Montessori Method".

<sup>5</sup> The name of the book can be translated as "Montessori Approach in Preschool Education".

<sup>6</sup> The name of the book can be translated as " Montessori Method and Practices".

In 2016, in the project called "Montessori Education in the Neighborhood Nurseries of Istanbul", a guidebook was published for teachers and parents. "Çocuğun Ayak İzinden"<sup>8</sup> written by Hannah Joy Baynham explained historical process, philosophy and practice of Montessori education.

Taken together, all these books showed that there is a trend in Turkey to learn more about Montessori approach, however, none of these books is about inclusion or children with disabilities in Montessori approach. Therefore teachers do not have an opportunity to read related book on this topic and self-train themselves.

#### **2.4.2. Research carried out in Turkey on Montessori approach**

In her master thesis entitled "Türkiye'de Montessori Okullarının Yönetim ve Finansman Bakımından İncelenmesi"<sup>9</sup>, Korkmaz (2005) from Marmara University studied at what extent schools in Turkey claiming to employ Montessori teaching methods meet the Montessori standards. This research has yielded the following results: 60% of schools where Montessori approaches are implemented meet 85% of the requirements in Montessori standards whereas the rest of the schools (40% of schools) fulfill less than 85% of the requirements in Montessori standards. This research was also published as a book.

Koçyiğit and Kayılı (2008) have conducted a research in which social skills between preschool children who were exposed to Montessori methodology and those who have not are compared. The test group consisted of 62 students

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<sup>7</sup> The name of the book can be translated as " How to Raise a Self-Confident Child through Montessori Method?".

<sup>8</sup> The name of the book can be translated as " From the Footprint of the Child".

<sup>9</sup> The name of the thesis can be translated as "Studying Schools in Turkey where Montessori Methods are followed from a Financement and Management Perspective".

attending Montessori schools and 60 students not exposed to Montessori methods at their schools, which makes 122 students in total. Data was collected using the "Nursery Class and Preschool Behaviour Scale". The findings suggested that there is significant difference in sub dimension scores related to social cooperation, social interaction and social independence among children who attend schools following Montessori methods when compared to children who attend schools following conventional curricula.

In her master thesis, Öngören (2008) from Selçuk University studied the effectiveness of Montessori method in the attainment of geometrical shapes among children of 4 and 5 years of age who attended preschools. This research focused on 20 of students attending Montessori schools and 20 other students not attending Montessori schools between 4 and 5 years of age, which made 40 students between 4 and 5 years of age. The research suggested that children in the test group who were taught in the Montessori way have better attainment of geometrical shapes when compared to students in the control group who received education in the scope of the MoNE Preschool Education Programme of the Ministry of National Education.

In her master thesis, Yiğit (2008) from Selçuk University made a comparison between Montessori Method and traditional education method to understand which one is more effective in the acquisition of the concept of number among children of 4 and 5 years of age attending preschool institutions. The research focused on 20 students receiving Montessori education and 20 other students not receiving this kind of education. Attainment Assessment Form was used as a tool to collect data in this research. The test group was exposed to Montessori education method whereas the control group was educated in a traditional way. This research has revealed that the level of attainment of the number concept among children in the test group exposed to Montessori education methods is higher than the level among children in the control group receiving education in a traditional way.

In her master thesis, Beken (2009) from Adnan Menderes University made a comparison between Montessori programme and Preschool Education Programme of the Ministry of National Education to understand which one is more effective in developing manual skills among children. The research group consisted of 32 children between 5 and 6 years of age. Manual Skills Control List was used as a tool to collect data in this research. The test group was exposed to Montessori education methods whereas the control group was education in compliance with MoNE Preschool Education Programme. The research revealed that the level of development of manual skills among children in the test group exposed to Montessori education methods is higher than the level among children in the control group.

Kayılı, Koçyiğit and Erbay (2009) studied the effect of Montessori method on the receptive language skills of children between 5 and 6 years of age. This research was carried out with essay form. The study group in this research consisted of 20 children receiving Montessori education and 20 children who are not exposed to Montessori education, which makes 40 children in total. Peabody Picture-Vocabulary Test was used as a tool to collect data in this research. This research revealed a significant difference in the receptive language skills of five and six year old children who receive Montessori education and children of the same age group receiving education as defined in the MoNE Preschool Education Programme.

In his master thesis at Selcuk University, Kayılı (2010) studied the effects of Montessori method on preschool children's readiness to primary education. The test group in the research consisted of 50 children of 5 years of age in total; 25 being in the test group receiving Montessori education and 25 being in the control group. As a result of the study, it was found out that the children who were educated in Montessori way had higher level of school maturity, social skills and concentration skills when compared to those who were not exposed Montessori education methods.



In his doctoral study at Gazi University, Durakoğlu (2010) examined the views of Montessori on "the nature and education of the child" by addressing various elements of this education. This study was enriched with the information on both the theory and the practice and in the last section, the reflections of the Montessori system in Turkey.

Toran (2011), in his doctoral study at Gazi University, examined the effects of Montessori educational method on acquisition of concepts of children between 4-6 years of age (levels of being ready for school, direction/location, individual/social awareness, building/material, quantity/sequence), social compliance (communication, daily life, socialization and motor skills) and small muscle motor skills. In this study, the experimental design with pre-test, final test and experiment-control group was used as the research model. The experimental group consisted of 24 children aged between 4-6 receiving Montessori education and the control group consists of 24 children studying at a school where the MoNE Preschool Education Program is implemented. For data collection Bracken Basic Concept Scale-Revised, Vineland II Compliance Behaviour Scale and the Small Muscles Motor Skills Observation Form were used. According to the research, it was found out that there is a significant difference in the concept acquisition, social compliance and small muscle motor skills of the children who receive education according to the Montessori educational method.

Şahintürk (2012) conducted an experimental research with 44 preschool students. Experimental group was the students who were attending a Montessori preschool in Ankara and the control group was the students who were attending a regular preschool in the same city that applied Ministry of National Education's (MoNE) standard preschool program. Her purpose was to explore impact of Montessori education on preschooler's creative thinking. During the study, Torrance Test of Creative Thinking was used as a data collection tool and she scored students' creativity on four scales which were

fluency, flexibility, originality and elaboration of the thinking. The results revealed that there were meaningful differences on all scales in favors of the experiment group.

The aim of this study, carried out by Bayram (2014) in the Clinical Psychology Department of Üsküdar University, is to examine the role of the method that Montessori put forth based on the observations she made, in 'values education'. The research is prepared through historical method based on the literature review model. In the study, Montessori's theoretical knowledge and empirical studies involving the value education are dealt with as a whole. The study broadly addresses Maria Montessori's life and especially the Montessori education in the preschool period. The techniques used by the Montessori Method to bring in values education are specified. The studies on the subject are compiled and the success of Montessori in bringing values education has been revealed.

This study was carried out by Kayılı (2015) in order to examine the effect of Montessori method supported by the Social Skills Training Program on the understanding of emotions and social problem-solving skills of preschool children. The study group consisted of 53 children who attended İhsan Doğramacı Practice Preschool of Faculty of Health Sciences of Selçuk University in Konya province during the 2013-2014 school year. Wally Feelings Test and Wally Social Problem-Solving Test were used as data collection tools in the study. Tests were applied to children before and after the trial, and reapplied to the trial group six weeks after the end of the training program. Kruskal Wallis H test and Wilcoxon Signed Rank test were used in the analysis of the data obtained during the study. A significant difference was found in favor of the trial group, when the findings were examined. The general conclusion reached in the direction of the findings is as follows: The Montessori method, supported by the Social Skills Training Program, positively influences the understanding of emotions and social problem-solving

skills of the preschool children, and is more effective than the purely practiced Montessori method and the MoNE preschool education program, in terms of the ability to understand emotions and solve social problems.

Keçecioglu (2015) investigated the social skills of preschool children according to educational program that they attended. Personal information form and social skills scale were completed by the families and teachers of 303 students who receive education either in MoNE's standard preschool program or in Montessori approach in Istanbul. Her analysis showed that students in Montessori preschools had higher communication skills, on the contrary, behavior problems of children were much higher in the students who were attending regular preschools those applied the MoNE's standard preschool program.

In this study, prepared by Şeker (2015) as a master thesis, motor skills of 5-year-old children continuing their preschool education in the countryside and those of the 5-year-old children getting Montessori education were compared. The study group consisted of 25 students from the nursery class of Kandil Şehit Ersan Şeker Elementary School under Konya Provincial Directorate of National Education, and 15 students getting Montessori education at İhsan Doğramacı Practice Preschool of Selçuk University. The motor development skills of the children were measured through the "LOS KF 18" scale. The data obtained from the scale were analysed via SPSS 18. According to the results, there was no significant difference between the average motor development skill scores of the 5-year-old children getting Montessori education and those of the 5-year-old preschool children in the countryside. There is no significant difference between motor development of girls and motor development of boys. It has been found that there is no significant difference between the average motor development scores of girls getting Montessori education and those of boys. It has been found that there is no significant difference between

the average motor development scores of preschool girls in the countryside and those of boys.

In this study conducted by Bayer (2015), the effect of Montessori Method on self-care skills of preschool children aged 36-66 months was examined. The dependent variable of the study is the self-care (personal care and cleaning, eating, resting, dressing, avoiding accidents, organising environment) skills of the children, and the independent variable is the Montessori Method. The study group of this research consists of children aged 3-6 years, getting education at İhsan Dođramacı Practice Preschool in Konya province during 2013-2014 academic year, who were selected by neutral appointment. 40 children, including 20 for the test group and 20 for the control group, were included in the study. While the working group of the study was created, the age variable was considered and the groups were equalized. In the study, Self-Care Skills Assessment Test was used to determine the self-care skills of the preschool children. Tests were applied to the children before and after the trial, and five weeks later, they were reapplied to the test group in order to measure the persistence of the training. Mann Whitney U Test and Wilcoxon Signed Rank Test were used in the analysis of the data obtained during the study. The overall conclusion reached in the light of the results is that the Montessori Method contributes positively to the self-care skills of preschool children and is more effective than the cleaning and personal care, eating, resting and dressing skills as per the MoNE Preschool Education Program.

The aim of this research conducted by Gülkanat (2015) is to measure the views of the preschool teachers regarding the educational practices carried out through the Montessori method. The study was designed within the scope of quantitative research. Participants consisted of 100 teachers working at preschool institutions that provide education according to the Montessori philosophy under the Ministry of National Education during 2014-2015 academic year. The research was carried out across Turkey with 100 teachers

working in Ankara, Bursa, İstanbul, İzmir, İzmit, Konya, Nevşehir, Tekirdağ, Tokat, Malatya provinces. The data of the research were obtained through the Attitude Scale Questionnaire developed by the researcher. 15.0 version of the SPSS program was used for the data analysis. From the analysis methods, Chi-square analysis test was carried out. At the end of the research, it was determined that there is a meaningful difference in the variables of "How did you decide to get Montessori education?" and "Which teaching system is applied at the institution you are working for?". When the findings were examined, it was determined that the teachers who chose to apply this method as their own preferences internalized the method more. For the teachers who implement this method with the guidance of the institution they are working for, it has been concluded that they internalize this method in a longer time.

This study by Aslıyürek (2015) aims to assess the effectiveness of the Montessori Education Program in bringing motor skills, visual perception and memory, hand-eye coordination, and small muscle skills of children from 4-5 age group. For this purpose, Montessori Education Program and MoNE Preschool Education Program were applied to the 4-5 age group children studying at Bahçelievler Municipality Preschool to bring them motor skills, visual perception and memory, hand-eye coordination, and small muscle skills, and it has been investigated which method is more effective. The study group is composed of 4-5 year-old preschool children who are educated in İstanbul province, Bahçelievler district, Bahçelievler Municipality Preschool during 2014-2015 school year. The research consisted of 40 children in total 20 of them educated as per MoNE Preschool Education Program including 10 kids aged 4 and 10 kids aged 5, and a mixed group of 20 kids aged 4-5 educated as per the Montessori Training Program. In order to obtain information in accordance with the purpose of the study, the children were applied a pre-test before the training and the Gesell Developmental Test and the Denver II Developmental Screening Test as the final test after 12 weeks. The study has founded that there was no significant difference between the pre-test

achievements of the children educated as per the Montessori Training Program and MoNE PreSchool Education Program while there was a significant difference between the post-test success in favor of the group trained as per the Montessori Training Program.

In this research for the master thesis, Selçuk (2016) investigated the effect of Montessori Method on the large muscle skills of the preschool children. The study group consisted of 40 children (36-60 months old) who attended İhsan Doğramacı Practice Preschool of Faculty of Health Sciences of Selçuk University in Konya province during the 2014-2015 school year. Large Muscle Skills Measurement Test (BÜKBÖT, Turkish abbreviation of the test) was used as data collection tools in the study. Tests were applied to children before and after the trial, and reapplied to the trial group on weeks after the end of the training program. Mann Whitney U Test and Wilcoxon Test were used in the analysis of the data obtained during the study. When the final average scores of the test and control group children at the Large Muscle Skills Measurement Test were compared, a significant difference was found in favor of the trial group, when the findings were examined. The general conclusion reached in the direction of the findings is that the Montessori Method has a positive impact on the large muscle skills of the preschool children, and it is more effective than MoNE Preschool Education Program in terms of large muscle skills.

#### **2.4.3. Studies/researches and books published in Turkey on mainstreaming and inclusion in line with Montessori approach**

Montessori approach was first employed in Turkey in 1970 by the Istanbul University Çapa Child Psychiatry Department in order to provide educational therapy to children and it has been in use for about 15 years (Korkmaz, 2012).

Emel Çakıroğlu Wilbrandt who worked towards establishing a mainstream preschool and rehabilitation center for Istanbul Binbirçiçek Foundation for

children with intellectual disabilities in 1995 and she focused on training of trainers. After that, she also established a Montessori Center at Abant İzzet Baysal University in 2007 within the scope of mainstreaming education project (Durakoğlu, 2010).

Following such developments, Erben conducted a study in 2005 in which the target group was disabled students. She studied whether 'geometric solids' which are part of Montessori training Materials have any effect on receptive language skills and visual perception level of children with intellectual and hearing disabilities. Target population of the study consisted of 40 children in total, being 20 children with hearing disabilities attending the Rehabilitation Center for Persons with Hearing and Speech Disabilities in Konya and Education and Protection Foundation for Children with Intellectual Disabilities and having the skills determined as pre-requisite (ten children in the control group - ten children in the test group) as well as 20 other children with intellectual disabilities (ten being in the control group - ten being in the test group). A control group model involving pre-tests and post-tests was used in the research. Six weeks after the beginner level was identified, 'geometric solids' as part of Montessori Training Materials were used to understand the effectiveness of the program. When the beginning level and the test level that the students have attained after a period of 6 weeks were compared for each group, it was found out that the beginning level of children in the test group with hearing disabilities was equal to that of the control group and there was no significant difference between test level of both groups after 6 weeks. When it comes to students in the test group with intellectual disabilities, it was found out that the beginning level of the test group was equivalent to that of the control group. However; there was a significant increase in their test level after six weeks. Control groups were exposed to traditional education methods for 6 weeks. It was revealed that there was no statistically significant difference between their beginning level and the test level that they attained after 6 weeks (Toran, 2011).

As of the school year 2008 – 2009, Ministry of National Education provided support to implementing Montessori methods. As part of the “Inclusion of Disabled and Non-Disabled Children in Preschool Education” project, Montessori education methods were used in a classroom of Mehmet Ali Türker Preschool School in Bolu. As part of the activities of this project, Wilbrandt, Aydođan and Kılınç (2008) published a book called "Montessori Yöntemiyle Kaynaştırma Eğitimi"<sup>10</sup>. The book explained the background of Montessori approach and its importance in mainstreaming education.

İzmir Provincial Directorate of National Education launched the Montessori Children's House of Life Project in order to prepare the most appropriate environment for the children with hearing impairments where s/he can find anything s/he needs to be independent and to optimize his/her language development (Coşkun, 2009).

Another development is the establishment of "Montessori and Inclusive Education Development Association" in Istanbul in 2010. Then, as an attempt of this organization, a preschool where Montessori method is followed was established with the initiation of parents (Korkmaz, 2012).

Additionally, Montessori methods are employed in two classrooms established in the early childhood education center of MEV Gökkuşuđı Primary School in Ankara, which provides an inclusive environment for disabled students primarily those with cerebral palsy (CP). Furthermore, Montessori education methods are also employed in one classroom found in the early childhood education center of Kemal Yurtbilir Primary schools in Ankara, which provides an inclusive environment for disabled student primarily those with hearing disabilities.

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<sup>10</sup> The name of the book can be translated as "Mainstreaming Education using Montessori Methods".



#### **2.4.4. Montessori approach and problems faced in Turkey**

There are two main issues regarding why Montessori approach cannot become widespread in Turkey. First of these reasons is that centralist educational structure of the MoNE does not allow the educators to administer alternative educational methods in schools (Durakoğlu, 2010), since MoNE requires the school to follow MoNE's standard curriculum. That is why Montessori approach can be applied only in preschools that have a more flexible educational program and it is allowed to combine alternative education approaches with this program in Turkey. However, it is not possible to follow Montessori approach in subsequent educational levels after preschool (Korkmaz, 2012).

When we compare MoNE's current preschool education program and Montessori approach, it is clear to see that there are some major differences between these two educational systems in terms of their objectives. For example, preschool education in Turkey focuses more on the acquisition of the social life skills while the Montessori approach focuses on the individual development. Again, MoNE's program focuses more on the national values while the Montessori approach focuses on the global values (Durakoğlu, 2010). When they are compared according to the educational environments, MoNE's program focuses on the importance and existence of the learning centers in the classroom (MoNE, 2013). However, Montessori approach does not focus on the learning centers (in other words activity corners), on the contrary, it provides a free choice atmosphere for the child so that s/he can study in every environment in and out of the classroom context (Topbaş, 2004). For this reason, the Montessori approach and MoNE's program have substantial differences in terms of their philosophies and practices (Durakoğlu, 2010).

Another issue is that most of the schools following the Montessori approach in Turkey are private schools, for this reason a majority of the society cannot access to this education (Korkmaz, 2012). Due to the same reason, sharing

information and experiences among schools and teachers become very difficult in practice.

Montessori materials are another reason of not preferring to follow Montessori approach in the schools. Since the materials are not manufactured in Turkey, they need to be procured by schools through importing from other countries that makes materials quite expensive for the budgets of many schools (Korkmaz, 2012).

Montessori trainer is the key problem in terms of making the approach widespread and keeping the high standards of quality in the education. Montessori trainers' training can be received only in foreign countries as there are no accredited Montessori teaching training institutions in Turkey. For this reason, sending the educators abroad is seen to be very expensive for the schools, thus these conditions limits the number of schools which practice Montessori approach. Alternative solution for sending the teachers to abroad for receiving Montessori training is to bring the trainer from abroad to Turkey. However, this causes to reach limited number of teachers and it does not help to sustain in-service trainings for a long term. (Korkmaz, 2012).

Accredited Montessori organizations are the main mechanism to inspect the schools in foreign countries; however, this system does not exist in Turkey. For this reason, families are the most important elements of the system to assess the implementations of Montessori schools. Thus, families who want their children to study at Montessori schools should be aware of this situation and should question the practices. However, there is a clear vicious circle on this issue, since the families' knowledge on Montessori approach is very limited and the schools also work to inform families about the components, principles and practices of Montessori education. (Korkmaz, 2012). Under these conditions, it will be difficult to able to receive such support from families for the inspections of the schools.

#### **2.4.5.Examples of including Montessori approach into teacher training programs in Turkey**

In the teaching program of the department of early childhood education at Abant İzzet Baysal University, the Montessori education is given as a selective course (Korkmaz, 2012).

In the Child Development program at the Faculty of Vocational Education in Selçuk University, there is a course called "The Montessori Approach ". Maria Montessori's life and educational philosophy are taught within the scope of this course.

Within the scope of “Montessori Educational Approach Application and Make it Widespread” Project which run by the Child Development Program at Vocational Education Department of Gazi University with the cooperation of General Directorate of Preschool Education; preschool teachers working at independent preschools in Ankara received an applied training on Montessori education (Korkmaz, 2012).

The Foundation for the Support of Women's Work is a civil society organization established in Istanbul in 1986. This organization has been developing and implementing programs in 4 main fields and one of these fields is early childhood education. In 2015, the project called "Montessori Education in the Neighborhood Nurseries of Istanbul" was run by the foundation and financed by Istanbul Development Agency. Project provided 40 hour Montessori teacher training to preschool teachers, interns and candidate teachers. There were theoretical and practical modules of training starting on April 6, 2015. The participant teachers had the opportunity to make observations in the fully established Montessori model class for the 3 - 6 ages group prepared within the scope of the project. The trainings were given by a certified teacher trainer from Montessori Center International (MCI). Participants who completed the full 40 hour training received a London

Montessori Center International (MCI) approved participation certificate. (İstanbul'un Mahalle Kreşlerinde Montessori Eğitimi, 2015).

## **2.5.Importance of teachers' views**

The teacher is the person who specializes in teaching in order to guide and help the students and parents to realize educational objectives in different systems, organizations and levels in the most effective way by creating the most effective teaching-learning environment (Başaran, 1993). In other words, she/he is the bridge between students and education program as well as the guide of parents for the education and development of their children.

Working on the views of teachers helps educators and researchers to understand the working and non-working parts of the education practice and to find effective solutions for the benefits of all stakeholders in the system. Teachers' views clearly affect the ecology of their classroom that also affects children's participation and engagement in the activities in that classroom (Fyssa, Vlachou, and Avramidis, 2014). Their views also affect the children to have the positive feelings for the school (Sarı, 2007).

## **2.6. Preschool teachers' views on inclusive education**

As it was mentioned various parts of this and previous chapter, Montessori education is practiced only in early childhood education programs in Turkey and therefore preschool teachers working in Montessori preschools are the only practitioners of Montessori approach in the country for now. For this reason, in order to understand the views of the teachers on inclusive education in Montessori approach, it was necessary to work with preschool teachers and to understand their views on inclusive education.

Many academic studies on inclusive education practices emphasize the importance of teachers' positive views and practices on the acceptance of

children with disabilities into regular schools and on the success of inclusive education, on the other hand, numerous studies underline the problems and their reasons that preschool teachers experience while working with disabled children.

#### **2.6.1. International studies on preschool teachers' views on inclusive education**

Samadi and McConkey (2018) carried out a study in order to understand the perspectives on inclusive education of preschool children with autism spectrum disorders and other developmental disabilities in Iran. They had in depth semi-structured interviews with 2 head teachers working in preschools. According to the results, the head teachers confirmed that inclusion is one of the important rights of children, on the other hand, they emphasized three main challenges that teachers face during inclusive practices. These are coping with the diverse level of functioning of children with disabilities (especially who do not have self-help skills or with behaviour problems), the need for special devices and training of teachers, and challenging the negative reactions of parents of non-disabled children.

Ramli (2017), in her doctoral study at Leeds University, studied the views of preschool teachers towards inclusive education introduced by Malaysian Government in Malaysian preschools. In this study, 421 preschool teachers in one Malaysian state completed a survey and 18 took part in a semi-structured interview. Results revealed that although teachers have positive views about inclusion, they felt inadequate about their skills and training, resources and facilities as well as knowledge and awareness about IE and children with special educational needs. Therefore, at the end of her work, Ramli recommended improvements to in-service teacher professional development and pre-service teacher education courses as well as the upgrading of preschool facilities.

Fyssa, Vlachou and Avramidis (2014) examined early childhood teachers' understanding of inclusive education and associated practices in Greece. The study group in this research consisted of 77 teachers from 47 different preschool settings and data were gathered through semi-structured interviews. Most of the teachers thought that children with disabilities were experiencing significant difficulties in their engagement during free-play as well as structured/semi-structured activities. At the end of this study, the researchers underline the requirement of shifting away from a narrow individualistic-deficit assumption of disability towards a socio-constructivist conceptualisation of 'diversity' and emphasized the need of establishing inclusive school cultures.

Sukbunpant, Arthur-Kelly and Dempsey (2013) worked with Thai preschool teachers' worked in government run public preschools in the upper northern part of Thailand in order to understand their views about inclusive education for young disabled children. They conducted a mixed method research. In quantitative data collection part, they reached 528 preschool teachers and asked them to fill out a self-reported questionnaire called Thai Preschool Teachers' Perceptions on Inclusive Education Rating Scale. And in qualitative part, the researchers made semi-structured interviews with 20 preschool teachers. The results of the study indicated that many preschool teachers described themselves as undertrained about teaching to children with disabilities and they mainly believed that placing these children at special education schools/classrooms was better for their development. Additionally, many teachers found that inclusive education was difficult to practice because of denying behaviors of parents about disability of their children.

Huang and Diamond (2009) examined preschool teachers' views about including children with disabilities in programs designed for typically developing children. They worked with 155 preschool teachers from two Midwest states in the United States. Teachers shared more positive views on

the inclusion of children with mild disabilities (e.g, children with Down syndrome) and those with physical disabilities (e.g., cerebral palsy). Additionally, the results also showed that teachers' education and experience working with disabled students were correlated with their level of comfort in the classroom.

Naidu (2000) qualitatively worked with 4 preschool teachers working in Head Start Programme in Midwest, in the United States in order to understand conceptions of teacher about full inclusion of children with disabilities in preschool level. The study found that teachers viewed inclusion as an ethical obligation for all children, which showed that all children are teachable and a good environment for children to express themselves. Also, the teachers underlined the importance of inclusion on helping them to see as a social change agent.

Barrafato (1998) worked with 8 inclusive and non-inclusive regular classroom teachers from 2 schools in Montreal, Canada. She aimed to understand teachers' views about which support factors were needed for the successful inclusion of children with disabilities at the early childhood level. The researcher used 2 questionnaires that were the Attitudes Toward Inclusive Education Scale and the Mainstreaming Questionnaire. According to the results, the need of appropriate in-service training for teachers, availability of support services for teachers and families, and smaller class sizes were the mostly cited points.

### **2.6.2.National studies on preschool teachers' views on inclusive education**

In recent times, Batu, Odluyurt, Alagözoğlu, Çattık and Şahin (2017) published an article on the opinions of preschool teachers regarding inclusion. In this study, they worked with 45 preschool teachers from 8 different schools in Eskişehir, Turkey and the teachers' years of experience were varied between 2-

27 years. Data were collected by semi-structured interviews. The results showed that even though the teachers have positive opinions about inclusion, they still have lack of information about types of characteristics of disabilities of children, effective teaching methods, and reasonable accommodation in education.

Sucuoğlu, Bakkaloğlu, Akalın, Demir and İşcen-Karacasu (2015) conducted a study to examine the effectiveness of teacher training programme about preschool inclusion on teachers' outcomes. Data were collected through self-reports of teachers and in-class observations of teachers, data collection was repeated before, during and 6 months after the training. The findings revealed that teacher programmes had significant effects on the views of teachers; however, changes in their classroom behaviors were still very limited.

In her master thesis, Nacaroğlu (2014) conducted a research to investigate the views of preschool teachers towards inclusive education practices. A total of 109 preschool teachers were included into the study. 33-item Likert-type Scale on Teachers' Opinions about Inclusive Education was used. According to results, teachers stated that they have positive views about inclusive education. In addition, teachers who received pre-service training on special education and/or inclusive education showed more positive views compared to those who did not receive training.

Varlier and Vuran (2006) examined the views of preschool teachers about integration. They reached 30 preschool teachers working in public preschools in Eskisehir, Turkey and all teachers had a disabled child in their classrooms. For the data collection, semi-structured interviews were held. Findings indicated that inclusive education should be given in preschool settings, however, current working conditions at preschool were not suitable for implementing qualified inclusive education and teachers were in need of training on children with disabilities and inclusive education.



Kaya (2005) investigated teachers' views about the implementation of inclusive education in preschools in Turkey. He worked with 20 preschool teachers and the results of the study indicated that preschool teachers partially met the academic, social, emotional, and physical needs of children with disabilities and they found themselves inadequate to train these children. Also, teachers stressed that they could not receive any professional support from the specialists in the field and could not attend effective inservice trainings during their professional career.

Özbaba (2000) investigated 32 preschool teachers' attitudes toward inclusion in preschool education and concluded that although teachers did not have negative attitudes toward the inclusion of children with disabilities, teachers felt themselves inadequate to meet the needs of these children due to the lack of educational background in this field.

Temel (2000) conducted a research with 118 preschool teachers in order to understand their views about inclusion education in preschool. The researcher applied survey method and he found a significant relationship between positive views and the number of courses taken in the undergraduate degree. Preschool teachers who took courses about special education or inclusion during their bachelor years showed more positive views for the inclusion of preschoolers with disabilities.

## **2.7 Conclusion**

As a result of the above-summarized state of the literature review, the current study intended to conduct a qualitative study to understand the views of Montessori preschool teachers on inclusive education in general and its practices in Montessori approach. While inquiring the views of teachers on inclusive practices in Montessori approach; questions on the context of Montessori classrooms, roles of Montessori educators, Montessori materials,

and educational assessment strategies used in Montessori classrooms and the family involvement policies of Montessori approach were asked in detail. Lastly, it was aimed to define perceived advantages and disadvantages of Montessori approach for the education of disabled students.

## CHAPTER 3

### METHOD

This chapter is devoted to explain the method of inquiry of the current study. The first section describes the design of the study. The second section presents the sample of the study. The third section gives information about the data collection instrument used in the study. The fourth section presents the data collection procedure, and the fifth section explains the data analysis procedure. The sixth section introduces validity and reliability procedures of the study. Finally, the seventh section explains the limitations of the study.

#### 3.1.Design of the study

The aim of this study was to investigate the views of Montessori teachers on inclusive education in Montessori approach. Specifically, this study will focus on the following research questions:

1. What are the Montessori teachers' views on inclusive education?
2. What are the Montessori teachers' views on inclusive education in Montessori preschools?
  - a. What are the Montessori teachers' views on the place of inclusion in the philosophy of Montessori's education approach?
  - b. What are the Montessori teachers' views on inclusive education practices in the context of Montessori classrooms?
  - c. What are the Montessori teachers' views on inclusive education practices of Montessori educators?
  - d. What are the Montessori teachers' views on inclusive education practices regarding the use of Montessori materials?

- e. What are the Montessori teachers' views on inclusive education regarding the application of educational assessment strategy used in Montessori classrooms?
  - f. What are the Montessori teachers' views on inclusive education regarding the family involvement policy of Montessori approach?
3. What do teachers think about the advantages of Montessori approach for the education of disabled students?
  4. What do teachers think about the disadvantages of Montessori approach for the education of disabled students?

In the light of this aim, the researcher conducted a qualitative research, since the qualitative research design provided complex and detailed understanding of the issue (Creswell, 2007) and more meaningful, clear, useful, and in-depth results for this study.

The study employs phenomenology design that is the most common method of qualitative research used in field of education. Its goal is not only discovering the meaning but also constructing it (Tesch 1998; Van Manen 1990). According to Lichman (2009), in phenomenology design, the researcher has a role for filtering the meaning by using inductive ways with a descriptive outcome and Creswell (2007) states that focus of the phenomenology design is reaching to individuals' shared experiences of a phenomenon. Qualitative researcher focuses on the question of what the participants' perspectives are (Bogdan and Biklen, 2007). Thus, interviewing is one the basic qualitative data collection methods in order to understand different point of views (Patton, 1992).

In this study, inclusive education in Montessori preschool education is defined as the phenomenon and teachers' views are the main focal point of the researcher, which is in line with the focus of the phenomenology design.

Although all of the participants in the sample were preschool teachers, their professional backgrounds on Montessori approach and levels of experiences in Montessori schools were varied. The data discussed in the current study was obtained through semi-structured interviews with the teachers.

### **3.2.Participants**

As it was mentioned in Review of Literature Chapter in detail, Montessori approach is not accredited by any official institute in Turkey, therefore when we mention about Montessori education in Turkey, we are talking about schools that identified their programs as in Montessori approach. Therefore, participants were selected among the professional teachers working in these schools. Purposive sampling was used as one of the non-random sampling techniques and among purposively selected sample; conveniently accessible and volunteer participants were preferred to work with.

The participants of the study were teachers working in different Montessori preschools in Ankara and Istanbul, Turkey. The researcher benefited from the professional connections of her and her colleagues working in her current and past work places for accessing to the participants. Moreover, snowball sampling strategy used for reaching the some of the participants, therefore participants asked for if they could suggest another person/colleague who were in the participant profile and could be willing to participate in the study, and thus those people also contacted for the study.

After the initial contact was established with the potential participants, they were informed about the scope of the study and invited to be a participant. Among 22 potential participants, a total of 18 Montessori teachers agreed to participate in the study.

Table 3.1 describes the demographic characteristics of the participating teachers in terms of gender, age, graduated program and years of vocational experience in teaching.

**Table 3.1: Characteristics of participating teachers**

Teachers' Characteristics (N=18)	f
Gender	
Female	18
Male	0
Age	
21-30 years old	6
31-40 years old	8
41-50 years old	3
51+ years old	1
Graduated Program	
Child Development and Education	9
Preschool Teaching	6
Other	3
Teaching Experience	
1-4 years	2
5-9 years	7
10-14 years	4
14+ years	5

According to descriptive data presented in table 3.1, it can be seen that all participants of the study were female teachers. The range of ages of teachers changed between 25 and 54 years old. Half of the teachers (9 out of 18) graduated from Child Development and Education department, and the rest graduated from Preschool Education (or Early Childhood Education) departments. Years of participated teachers' teaching experiences ranged from 2 to 31 years.

Additionally, participants' years of experiences and trainings that they received on Montessori approach were questioned as well.

**Table 3.2: Participants’ experiences and trainings on Montessori approach**

Teachers’ Characteristics (N=18)	f
Have a training on Montessori approach	
Yes	14
No	4
Years of experience as a Montessori teacher	
1-4 years	7
5-9 years	9
10-14 years	2
14+ years	0

Participants were not required to have specific background on disability issues and/or to have an experience about inclusive education or disabled students. However, to get information about presently existing backgrounds of teachers on inclusive education or disabled students, teachers were asked whether they had taken courses on special education in their pre-service or in-service trainings, whether they had a disabled relative/friend and whether they had a teaching experience with a disabled student. Table 3.3 represents the findings related to these data:

**Table 3.3: Backgrounds of participating teachers on inclusive education**

Teachers’ Characteristics (N=18)	f
Take a course in preservice training	
Yes	6
No	12
Attended an in-service training	
Yes	4
No	14
Have a disabled relative/friend	
Yes	8
No	10
Have a teaching experience with a disabled student	
Yes	15
No	3

As it is seen in the data given in table 3.3, half of the teachers had either pre-service or in-service training on special education and/or inclusive education (only one teacher had both pre and in-service trainings). And 8 of the

participants had a disabled relative or a friend. Most of them (15 out of 18) surprisingly had a kind of experience on inclusive education practices (an experience with a student with any kind of disability in a regular early childhood classroom setting was defined as an inclusive education practice).

### **3.3. Instrument**

In the present study, the data were collected with a semi-structured interview protocol that was constructed by the researcher. Before developing the protocol, the researcher reviewed the literature related to Montessori approach and its practices with disabled students in preschool education (Boynikoğlu, 2013; Centofanti, 2002; Guess, Benson and Siegel-Causey, 1985; Hale, 1992; Pickering, 2003; Rudd, 2014) and the literature related to preschool teachers' views on inclusive education (Barrafato, 1998; Batu, Odluyurt, Alagözoğlu, Çattık and Şahin, 2017; Fyssa, Vlachou and Avramidis, 2014; Huang and Diamond, 2009; Kaya, 2005; Naidu, 2000; Nacaroglu, 2014; Özbaba, 2000; Ramli 2017; Samadi and McConkey, 2018; Sucuoğlu, Bakkaloğlu, Akalın, Demir and İşcen-Karacasu, 2015; Sukbunpant, Arthur-Kelly and Dempsey, 2013; Temel, 2000; Varlier and Vuran, 2006). After the literature review, some important upper themes were defined and following ones were selected in order to construct the interview protocol considering the research questions: the views on inclusive education concept, on the philosophy of Montessori approach, on the education context in Montessori classrooms, on Montessori educators and their teaching practices, on Montessori materials, on assessment of achievement in Montessori classrooms and on family involvement policies of Montessori approach. Additionally, views on the advantages and disadvantages of Montessori approach for disabled students were questioned as well.

Firstly, an initial interview protocol was designed with 21 open-ended questions. The content and face validity of the protocol was conducted by two



field experts from Early Childhood Education and Special Education departments in order to understand whether the questions of the protocol were relevant to the research questions. According to their advices, the language and order of some questions in the protocol was modified in order to make them more understandable and elaborative. Additionally, some sub-questions were added in order to gain more understanding about the views of participants about inclusive education in Montessori approach.

After the initial interview protocol was reviewed and redesigned completely, 5 pilot interviews were carried out with Montessori preschool teachers in order to ensure the appropriateness of questions' content and order, clarity of the questions, and whether the participants had the same understanding of the questions with the researcher. With the feedbacks of the pilot interviews, some questions were revisited in terms of language. By paying attention to clarity and consistency of the flow, the order of the some questions in the interview protocol was changed as well and thus the protocol was finalized.

The final form of the interview protocol contained questions in three major parts; these were demographic questions about participants, questions on inclusive education and disabled students, and lastly questions on Montessori approach and its practices (See Appendix B). Each part enriched with different sub-questions. In the protocol, all questions were open-ended and aimed to investigate the views of Montessori teachers on inclusive education in Montessori approach. The final version of the protocol was re-reviewed by the same field experts who reviewed the first version and it was piloted with 2 teachers again. The piloting of the reviewed interview protocol revealed no change in the final form.

### **3.4.Data collection procedure**

In order to conduct the current study, before administering the instrument, the researcher obtained necessary permissions from the Middle East Technical University Human Subjects Ethics Committee (see Appendix A). After getting the permission, the researcher contacted selected participants to inform about the study and ask whether they would like to participate in the study or not. Then, she scheduled the appointments with the volunteering participants via email or phone call.

On the interview site, first, the researcher explained the aim of the study briefly to the participants and distributed the informed consent form (see Appendix C) to ask for their voluntary participation. Then, she started to ask the interview questions. The questions were asked in the same order to each participant and the answers were audio-recorded with the permission of the participants. There were participants who did not allow the researcher for audio recording. For those participants, the researcher took handwritten notes to record their answers.

Teachers were encouraged to express their views in detail. When they seemed to have difficulty with answers (especially answering on different disability conditions), some sub-questions were asked to teachers. Interviews were held in an empty room/classroom in teachers' schools. During the interviews, the researcher tried to stay alone with the participants and to keep the room silent in order to prevent any external interruptions.

The researcher had the "Special Education Services Regulation" with her during the interviews. Some teachers answered the questions looking at definitions in the regulation to be able to comprehensively think of the disability groups covered by the regulation.

Data collected between January 2015 and June 2016 and each interview held approximately in 45-75 minutes.

During the process of data transcribing, it was noticed that in two interviews there were incomplete or unclear responses and unanswered questions. For those participants, the researcher re-communicated with them and held short interviews to clarify the missing and ambiguous parts.

### **3.5.Data analysis**

By using the content analysis method, the content of the recordings and the handwritten notes were analyzed.

For this analysis, firstly the researcher transcribed the data obtained from one-to-one interviews verbatim. After that, the transcribed, noted, and written data from all participants read couple of times and reviewed in order to ensure its clarity and integrity. Consequently, for each question, the answers were categorized and then the repeated answers were defined and noted with their frequencies. Additionally, several quotations for each category were recorded to enrich the description of the answers.

As Creswell (2007) suggested the data analysis process should be conducted by two independent coders to minimize the subjectivity. One of the coders was the researcher herself and the other coder was an 8 year experienced preschool teacher with a master degree. The second coder was first informed about the scope of the study and the data analysis procedures. Then, both coders developed their own codes, they worked independently through their own code list, analyzed the data by coding the responses under each question, and counting the frequencies of these codes. After the coding of all the responses completed, the two coders compared their codes and coding in order to determine the inter-rater reliability. Comparison procedures revealed that the

coders had a full consensus on all of the codes and the coded responses in terms of categories and the frequencies, and then writing process for findings started by the researcher.

Based on the literature review, upper and sub themes were defined and the list of questions in the interview protocol was designed parallel to these themes. This means that teachers were interviewed with set of questions ordered in three main themes (demographic info, views on inclusive education and views on Montessori Approach). At the end of the analyzing procedure, in the “findings” chapter, obtained responses were written in the flow of questions asked in the instrument and discussed in the same way in the “discussion” chapter. Table below shows the upper and sub themes of this study:

**Table 3.4: The upper/sub themes of the study**

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Views on inclusive education
Views on inclusive education in Montessori preschools
views on the place of inclusion in the philosophy of Montessori’s education approach
views on inclusive education practices in the context of Montessori classrooms
views on inclusive education practices of Montessori educators
views on inclusive education practices regarding the use of Montessori materials
views on inclusive education regarding the application of educational assessment strategy used in Montessori classrooms
views on inclusive education regarding the family involvement policy of Montessori approach
Advantages of Montessori approach for the education of disabled students
Disadvantages of Montessori approach for the education of disabled students

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### **3.6.Validity and reliability**

Strategies suggested by Creswell (2007) were used in order to enhance the validity and reliability in the present study. For assessing the accuracy of the process, during the whole procedure, an external consult specialized in qualitative research examined the steps of the study. Long-standing experience of the researcher in inclusive education and disability field was an

advantage for the data collection procedure, on the other hand, it could also be considered as a disadvantage addressing possible researcher bias (Padgett, 1998). Therefore, in order to clarify the researcher's bias, the researcher's position was defined explicitly to the readers in this chapter. To minimize subjectivity on the outset of the study, two independent coders worked on the findings and a full inter-coder agreement was provided. Additionally, the findings were given by rich and detailed quotes as well as with the participant codes and their frequencies in order to enrich the description of the themes.

### **3.7.Limitations**

The findings of this study were limited with answers of 18 Montessori teachers working in Montessori preschools located in Ankara and Istanbul. Participating teachers were working either in public or private preschools. The limited number of teachers, school types and the nature of the inquiry method did not allow the generalization of findings for a larger group of teachers.

Gender can be considered as another limitation of this study, since all of the participating teachers were female. Although in this study there is no particular aim to seek a correlation between the teachers' answers and gender variable, occasionally gender can be an important factor in views on and attitudes toward inclusive education (Avramidis, Bayliss and Burden, 2000; Kuester, 2000).

Participants were not required to have specific background on disability issues and/or to have an experience about special education/inclusive education. However for some participants, this was a drawback while thinking about possible disabled student profiles and their educational needs.

Moreover, only data collection source was one-to-one interviews with the teachers. Thus, whole analyses were built on the data obtained from a single

type of data source (interviews). The participants' views were not supported or crosschecked by the observations of their teaching practices.

### **3.8.Easy to read version of this study**

Accessibility is a significant right defined in Article 9 of the UN Convention on the Rights of the Persons with Disabilities. This article states that States Parties shall take appropriate measures to ensure persons with disabilities access, on an equal basis with others.... to information and communications. (UN CRPD, 2007). According to Nomura, Nielsen and Tronbacke (2010), easy to read is the design to make linguistic adaptations in complex text in order to enable them understandable for people at different age and ability groups, therefore *“providing easy-to-read materials is a matter of democracy and accessibility”* (p. 3).

Easy to read texts are also supported with illustrations to depict the content of the texts in a concrete way and to make the messages given in these texts more comprehensible for the readers.

To make this study accessible for the readers at different levels of comprehension, the researcher wrote the easy to read version of this study. And the illustrations were drawn by a professional illustrator - Ms. Eda Dereci – with the input and comments of the researcher. First draft of the written text and the illustrations were tested with 3 (three) people with intellectual disabilities older than 25 years of age and the text was edited and finalized with their feedbacks.

In the Appendix E, the easy to read version of this study can be seen with relevant illustrations.



For this study, I visited preschools to ask questions to teachers.

Some schools were in Ankara and some were in Istanbul.

I held the interviews with teachers in an empty room or a classroom in teachers' schools. I tried to stay alone with the teachers and keep the room silent in order to keep their attention.

I asked the question in the same order to each teacher and I audio-recorded the answer with the permission of the teachers.

*Figure 2.* A sample figure from easy to read version of this study.

## **CHAPTER 4**

### **FINDINGS**

The purpose of the study is to explore the views of 18 Montessori teachers on inclusive education in Montessori approach. Participants were selected from Ankara and Istanbul and their views were investigated by a semi-structured interview protocol. The research questions of the study were:

1. What are the Montessori teachers' views on inclusive education?
2. What are the Montessori teachers' views on inclusive education in Montessori classrooms?
  - a. What are the Montessori teachers' views on the place of inclusion in the philosophy of Montessori's education approach?
  - b. What are the Montessori teachers' views on inclusive education practices in the context of Montessori classrooms?
  - c. What are the Montessori teachers' views on inclusive education practices of Montessori educators?
  - d. What are the Montessori teachers' views on inclusive education practices regarding the use of Montessori materials?
  - e. What are the Montessori teachers' views on inclusive education regarding the application of educational assessment strategy used in Montessori classrooms?
  - f. What are the Montessori teachers' views on inclusive education regarding the family involvement policy of Montessori approach?
3. What do teachers think about the advantages of Montessori approach for the education of disabled students?



4. What do teachers think about the disadvantages of Montessori approach for the education of disabled students?

These research questions were supported through some sub-questions in the interview protocol, thus participants' views were investigated through these various and detailed questions. In the interview protocol, the questions have been classified under these main headings:

- a. General information about the participants
- b. Montessori teachers' views on inclusive education
- c. Montessori teachers' views on Montessori's educational approach
- d. Perceived advantages and disadvantages of Montessori education for disabled students

For the findings of the study, qualitative analyses were performed and at the end of the analyzing procedure, obtained responses were grouped carefully and associated with above-mentioned themes. Under the headings of these themes, all findings were presented by the frequencies of the responses and they were enriched by detailed quotations.

Questions asked under "general information about the participants" heading aim to find the demographic information of teachers. All the answers to these questions were given in detail in Chapter 3 of this study. Therefore, they were not presented again in this chapter.

After asking questions to get the demographic information of teachers, in the second phase, teachers were asked to share their views and feelings on inclusive education and disabled students. Therefore, this chapter started by presenting the responses obtained under "Montessori teachers' views on inclusive education" heading.

#### 4.1. Montessori teachers' views on inclusive education

The first question asked to teachers in this section aimed to learn that *what is the first thing that comes to teachers' minds when they think of disabled students*. Most of the teachers (n=15) answered this question by referring the developmental delays and incompetencies of disabled students. And they underlined that disabled students are children who are in need of special education most of the time.

Some children have developmental incompetencies in cognitive behaviour, sensory-motor features, communicational skills and functions compared to their peers. One or more incompetencies in these development areas might have an adverse effect on the education of the child and lead to a special education need for the child. (T9)

If a student is experiencing intellectual or physical challenges, has behavioural problems, is experiencing communicational problems, this student is a student with special education need. (T12)

In the next question, teachers were asked *what they understand from the expression "inclusive<sup>11</sup> education"*. Almost all of the teachers (n=17) described inclusive education as an educational model where special education students received education with their non-disabled peers. One teacher (T15) explained inclusive education as “providing education and training to students with special education needs in regular classes, with their peers who demonstrate normal development. In this education system, an individualized education plan is implemented for these students and supporting education is provided” (T15) and another teacher also added by saying “it is providing education to disabled students in regular classes with their normal peers. (T17).

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<sup>11</sup> The term "inclusive" was a new term for most teachers, therefore in order to make the researcher's questions and statements more comprehensible, questions were asked using the terms "inclusive" and "mainstreaming" alternately.

In the following question, the teachers were asked about their views on "*disabled students receiving education in the same class with their non-disabled peers*". In their responses, some teachers expressed negative (n=6), some positive views (n=10). Teachers who shared negative views mainly focused on crowded classrooms, inadequate pre and in-service trainings about children with disabilities and inclusive education, and lack of physical infrastructure of the schools. For example, T11 stated that although she understood the importance of inclusive education for children, it was difficult to implement it in a crowded classroom.

It is important that students with special education needs receive education in the same class with their peers who demonstrate normal development; however, unfortunately, mainstreaming cannot be fully implemented if you are alone in a class with 25 children. (T11)

Another teacher described her opinions related this issue by referring lack of physical infrastructure at schools and lack of training of teachers.

I believe that this type of education is necessary for students however the required infrastructure for this kind of education does not exist. The school I am currently working at doesn't have it either. Teachers' education is insufficient to provide this training as well. (T10)

In spite negative views and concerns, most of the teachers stated positive views about training disabled and non-disabled students in the same class. One of the teachers described inclusive education as the part right to education.

I believe that education is a right for everyone. It is a fundamental right for these students to receive education together. (T1)

Another one connected this education with the nature of societal life and expressed her views as follows:

Students must definitely receive education all together. As we

cannot separate these students from the society, we should not separate from education either. (T15)

Another teacher expressed her views focusing on the benefits of inclusive education for the development of disabled children.

When students with special education needs receive education in the same class with their peers who demonstrate normal development, they see them as their role models. I believe that this situation will have a positive effect on them from both educational and developmental perspectives. (T9)

When asked "*What are the benefits of inclusive education for disabled students?*", most teachers focused on the social benefits (n=13) and limited answers were received on academic benefits (n=7).

The answers focused on the social benefits highlighted the learning of children from each other. Two examples as follows:

It provides disabled students an opportunity to be with their normal peers, to spend time with them and to learn from each other. (T16)

It will be easier for them to gain self-confidence as they are provided with physical, social and educational environments according to their developmental needs. Interaction between children nourishes this. (T1)

And some other answers on social benefits voiced the importance of inclusive education for preventing the social exclusion of disabled children.

This practice enables the students that they have a place in society, without feeling excluded. (T9)

This type of education prevents students from locking themselves in the house and helps them to have a social life. (T7)

Statements indicating academic benefits reminded the components of inclusive education and their benefits for the academic development of the children.

They receive education according to their capacities with the help of individualized education programs and they develop themselves in such an environment. (T8)

For example, schools have the practice of providing supportive education. With the help of this, they can improve on their weaknesses in a short span of time. (T3)

When asked "*What are the benefits of inclusive education for the non-disabled students?*", all of the teachers (n=18) stated that inclusive education would provide non-disabled students with social benefits and emotional acquisitions. The teachers agreed that inclusive education helped non-disabled children to develop mutual acceptance, tolerance, and feelings of mutual help, sharing, taking responsibility for each other and understanding of common life with disabled people. T4 referred mutual acceptance by telling; "I think the most important thing about this practice for non-disabled students is that it can teach students that not everyone is perfect and that we need to accept everyone as they are."

T8 added:

It teaches non-disabled students receiving mainstreaming education to be aware of and sensitive about their friends who are developmentally behind them and to take responsibilities for them.

When asked "*Does inclusive education have problems in practice? If so, what are these?*", most teachers (n=12) highlighted that during inclusive education it is necessary to spare more time for the education of disabled students and that this might effect the flow of education in class negatively. T11 shared her views as follows:

Mainstreaming education requires intense personal effort and devotion, for this reason teachers need to allocate more time for the student with special education needs. This situation might be problematic in terms of other students.

T1 shared her similar concerns by telling:

Disabled students' behaviours to get attention might distract other students and affect the flow of education negatively. In order to prevent this, teachers should allocate more time for and show attention to mainstreaming students. (T1)

Some teachers pointed out their concerns about the risk of not being able to keep up with the curriculum while practising mainstreaming and the risk of slowing down the whole class.

A group of teachers (n=4) stated that there would be problems, as the teachers would feel incompetent during inclusive education. Lack of teacher trainings and lack of support system were the main dynamics that teachers underlined as the reason of this feeling. T10 describes as “when practising mainstreaming education, we, teachers, feel very lonely. Our training on working with these children is already insufficient and it is even more problematic when we don't know from where and how to get support.” And T6 shared her ideas by saying; “It is difficult to work with the whole class and the disabled student(s) at the same time for a single teacher without an assistant teacher. I had a similar experience in my previous school. While I was teaching there, I frequently felt lonely and experienced problems.”

When teachers were asked about *the duties and responsibilities of teachers in inclusive education*, most participants (n=16) stated that teachers should use various education methods that work for students with different interests and abilities. Teachers highlighted the importance of in-class observations and differentiating the content and teaching methods accordingly.

T2 expressed that:

Teachers who participate in implementing these programs should observe the attention of each child in the group by applying different education methods and arrange their own teaching methods consistently from simple to complicated.

T9 supported this view by saying:

I know that preparing and implementing individualized education plans is very important for mainstreaming students, so I think the most important duty of teachers in inclusive education is to observe interests and skills of students and preparing and implementing individualized education plans according to their needs. (T9)

At this point, T1 emphasized the need for different experts to work together. She said “programs should be designed to enable teachers to provide education for both disabled and non-disabled students in the classroom and to enhance the relationship with each other. For that reason, classroom teachers and special education teachers should always cooperate with each other.”

Teachers were also asked "*What should be the components of inclusive education?*". Teachers were given five different sub-headings for this question. These headings were about how the physical environment should be, how the education program should be, how the education materials should be, how the in-service trainings should be and how the communication with parents should be.

Most of the answers (n=17) given for the question "*How should be the physical environment of a school that provides inclusive education?*" highlighted the importance of physical accessibility of the school buildings and the reasonable physical adaptations in classrooms. T5 questioned the accessibility of school by saying “school buildings must be easily accessible especially considering the physically disabled students. If there is a student in a wheelchair and he/she cannot enter from the school's gate, how can we implement inclusive education?”

For the accessibility of the schools, T6 shared her tragic experience with a wheelchair user child at her previous school:

None of the schools that I've worked at so far including the school I am currently working at, were suitable especially for the

physically disabled students. First of all, schools must have appropriate infrastructure for these students to come to school. In the school I was previously working at, there was a student in a wheelchair. The child was carried into the school by his father or mother but they could do this only because he was little. I've always thought that they would have big problems when he grew up. Even when the child was going to the toilet in his wheelchair, this would be a problem. (T6)

And some teachers pointed out the importance of in-class arrangements. T18 focused on sensitivity of children with autism and said that having too many stimuli in the environment effected students' attention in a negative way. For this reason, she recommended that there shouldn't be many materials hung on the classroom's walls, they shouldn't be painted in bright colours and classroom environment shouldn't be too noisy.

T8 shared her experiences with a child who was using an oxygen tank and how teachers changed the way of their activities and the use of classroom space to include this child into activities as much as possible.

When I was doing my internship at a preschool during my undergraduate studies, there was a child using an oxygen tank. Although he could not come everyday, his parents tried to bring him to class frequently. The oxygen tank was too heavy for the child and it wasn't easy to carry around, so he had to sit at a certain part of the classroom and was isolated from the other children. And we discussed this issue with the teacher and reached a decision, we were organizing more big group activities when he came to the class. When we come together for the big group, the child was included in the group and other children were allocating time for him. I think in the preschools implementing inclusion, the physical environment should be designed to enable big group activities as much as possible. Also, the floors should be made of slip-proof materials for children like this child who has trouble in walking with his oxygen tank or for children who like to run on the opposite end. (T8)

Shelves are very important components of classroom design. T1 explained the necessity of accessible shelves for children who are blind or with visual



impairments expressing as follows: “Shelves in the classrooms should be reachable by all children. For example, if there is a visually impaired child, labels on the shelves could be written by Braille alphabet or the material itself could be fixed there. So children will have learned what material should be on that particular shelf.”

Addition to this, T16 reminded the importance of providing solo studying areas in particular for children with attention deficit disorder. She said that having tables facing the walls or tables that are enclosed and ensuring that these children can study at these tables when they need might enable them to concentrate more easily in certain activities.

Most of the answers (n=15) given for the question "*How should the education program be at a school that provides inclusive education*" highlighted the importance of diversifying the content and methods of teaching while practicing inclusive education. T8 expressed that inclusive education should be designed to address as many different learning models as possible and content of the curriculum should be restructured with various teaching methods options. On the other hand, T9 highlighted the importance being student centered while addressing the learners at different levels and encouraging students to participate in the decision-making mechanisms in the class! For this question, T15 underlined the need of sufficiently structuring education programs to teach children necessary skills to be an independent person and to be flexible and diverse to address different needs of children.

A significant amount of answers (n=16) for "*What kind of materials should be at a classroom that provides inclusive education?*" highlighted the importance of having various materials to address different interests and skills of children:

There should be materials that appeal to different perceptions in the classroom. Montessori classes are very advantageous in this sense. In the classroom there should be materials with different colours, sounds, smells, tastes, weights and volume so that all

children can learn about these differences and come into contact with these materials according to their interests and skills. (T3)

Materials with different textures should be kept in the classroom. Therefore children with sense weakness or vision disorders can learn through these different textures and can differentiate between materials. (T12)

Technological products could be used. Computer applications that are designed to teach different concepts might help children to learn very easily. For example, I know that there are some online applications developed by TOHUM Foundation for autistic children. A friend of mine used this program for a student that had delayed onset of speech. (T8)

My cousin is visually impaired, it is very important for students like him to have books with larger font sizes. I think it is a necessity to have books with larger font sizes in the classrooms. I am sure they will be attractive for all children. (T15)

When asked "*How should the in-service training for teachers be at a school that provides inclusive education?*", most teachers (n=14) stated that in-service trainings should focus on the nature of disabilities and inclusive education practices and some of them (n=7) highlighted the importance of having supervision meetings where they can receive professional guidance and support.

T1 explained her need as follows: "I took only one course about special education during my undergraduate studies but I don't think what I learned will be enough when working with these students. In-service trainings should include information that will enable us to better understand the developmental needs of disabled students in our classes. I know that there are so many types of disabilities and many rare syndromes. However, knowing some basics concepts about disabilities will help us to teach in a more effective way".

T5 reported that tailoring an individualized education plan for each student was a really complicated task for her. And she added her previous experience at a special education and rehabilitation center by citing as follows; "as teachers of

that center, we were writing these plans by downloading the samples from the internet and copying them for our students and we all knew that this was not correct, but our vocational qualifications were not enough to prepare such specific plans. I think teachers should receive continuous trainings on this matter.”

In addition to these examples, T9 drew attention to another aspect of inclusive education: Working with families, especially the ones of non-disabled students. In her answer, she expressed that these families do not want to see disabled students in their children's classes and she said sometimes as teachers, they don't know what to do in these situations. Therefore, she emphasized that in-service trainings should be provided with a content to teach teachers how to communicate and interact with families effectively.

Moreover, some teachers highlighted teachers' need for supervision. T16 said that teachers could get quite tired while working with disabled students and therefore it was very important for them to receive vocational and psychological help. She suggested that there should be supervision trainings for teachers to meet these needs from time to time.

T8 shared her teaching experience at a special education and rehabilitation center and explained how she was frustrated without having any supervision during her professional career at the center.

Couple of years ago, I was working at a rehabilitation center. The principal who saw that I could work with preschoolers with intellectual disabilities started consistently directing this kind of students to me. After a while, I quit working at that centre because I was very tired and there was no one to understand my psychological and physiological needs. If there were supervision meetings from time to time, I think I could continue working there. Sometimes I think that these kinds of meetings are more supportive and useful for us than in-service trainings.

Most teachers (n=14) who were asked "*How should be the communication with parents at a school where inclusive education is provided?*" emphasized that teachers should give more information to the parents of disabled students about their children. Limited number of teachers (n=4) highlighted the importance of organizing informative meetings about the benefits of inclusive education for non-disabled students' parents.

For example, T1 claimed that inclusive students' parents and teachers should meet more often. She thought that it was not enough to see these parents only at the parent-teacher meetings and she put two important reasons. One was that parent-teacher meeting time periods were not enough for the teachers to relay detailed information to parents about their children. And second was that it was not appropriate to talk with the parents of disabled students about their educational and developmental needs in front of other parents.

On the other hand, T8 emphasized that inclusive education at preschool is an educational process for families. She said that parents of disabled students should be frequently invited to the school often and teachers should demonstrate them the activities and teaching strategies, since the families might implement similar education at home as well.

T6 pointed to another aspect of communication and underlined that families should be a part of school education. She emphasized the importance of inviting parents to the school often and trying to conduct some activities together with them. For her, parents of disabled students should be encouraged to participate in these activities and they should be enabled to see what their children are capable of. She said that this is a highly necessary practice to motivate disabled students' parents who are usually sad and worried. (T6)

Additionally for this question, some teachers reminded that good communication should be established with the parents of the non-disabled students for successful inclusion. Statements on the need to organize

informative meetings about inclusive education with non-disabled students' parents are given below:

T12 explained the situation by associating it with a sociological study and noted that a similar situation can be experienced in the classroom environment:

Once I read some news about a research in the newspaper. This research was conducted here in Turkey. For this research, people were asked "Would you want disabled people as your neighbours?". Half of the participants answered "no". I think the same situation applies for the classroom environment. Most parents don't want a disabled student in their children's class. However if they were asked if the disabled students should receive education, I am sure that most would say "yes". This is a situation of "Let sleeping dogs lie!" For this reason, I think it is especially important to work with non-disabled children's parents.

T9 explained the need for parents' education with another example. According to him, these parents (parents of non-disabled students) thought that disabled children would affect the success of their children negatively.

Non-disabled children's parents think that the disabled children will hurt their children and effect their children's education negatively especially at the beginning of the academic year. They believe that disabled children's behaviour would have a negative effect on their own children. They might get anxious about safety. In order to minimize and even eliminate these concerns, we should organize special meetings with these parents and invite them to observe the classroom environment.

T15 supported this view by telling:

One of my friends is teaching at grade eight and at one of her classes she has an inclusive student with autism. Once she told me that because of TEOG<sup>12</sup> exams competition among students is really fierce, that's why many parents of non-disabled students focused on the academic success of students and do not want this student at the class with their children, and the families believed that this student's behaviours distracted the attention of other

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<sup>12</sup> TEOG was the short name of the central exam for 8th grade students in Turkey. TEOG stands for "Temel Öğretimden Ortaöğretime Geçiş Sistemi" in Turkish.

students during the teaching and effected their academic performances negatively. However, this exam based class atmosphere is not the case for preschools and our students, so as teachers, we should encourage the interaction among the students as much as possible and train our parents on the importance of inclusive education.

When asked "*How does it make you feel to have a disabled student in your classroom?*", most teachers (n=13) expressed negative feelings, since they said that if/when they had a disabled child at their class, this would make them feel inadequate for their teaching practices. Teachers complained about having inadequate teacher training about inclusive education, lack of support system at school and therefore being alone at class, lack of knowledge about how to manage inclusive classroom with students with and without disability at the same time, and difficulty to work with families and not knowing how to cope with increasing work load due to the responsibilities of inclusive education.

T10 shared her views as follows:

Sometimes I feel very lonely myself. If I could get some support from my other colleagues at the school, I'd feel more comfortable. I came here without any previous academic knowledge about special needs of children with disabilities. And in the school, we are not finding any effective support from the director, school counsellors and other teachers.

T11 added this:

I think that my workload would increase if I have a mainstreaming student in my class and I would be anxious to not be able to respond to this as necessary.

And some teachers (n=8) expressed positive feelings regarding the professional satisfaction and positive effects of inclusive education on students. In their answers, teachers described having students with disabilities in the classroom as a richness and diversity and it helped enhance the respect of students towards differences. And they also added that it was very beneficial to add value to other students and to raise the awareness among students.

In her reply, T15 mentioned the importance of practicing inclusive education in preschool level.

Early ages are vital years in human development, especially in the life of children with disabilities. Therefore, we need to start their education as early as possible. As a preschool teacher, I am feeling good to be the part of this important period. Inclusion is very important and very possible at early ages. We should take the advantage of the flexibility of the ECE program to include these students into our classrooms. (T15)

T3 shared her experience with a student with autism. She explained that how she was worried about working with this student in the beginning, but then in time how much she and other students learned with the existence of this student at her class.

Two years ago, I had an autistic child in my class. I was very scared at first. Then I said to myself: *“Keep calm and carry on [laughs], he's just a kid, just like the other kids. And you're just a human, you can make mistakes. This is normal. Just try to do your best”*. This kind of thinking really helped me at that period and we worked amazingly with that child and his parents. Existence of him in my class really taught me and other students a lot. (T3)

#### **4.1.1.Key findings on Montessori teachers’ views on inclusive education**

**Table 4.1. Key findings on Montessori teachers’ views on inclusive education**

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- Most teachers identified a disabled student as a student with developmental delay and/or insufficiency.
  - Teachers defined inclusive education as an educational model in which disabled and non-disabled students receive education together.
  - Mostly, the teachers stated that inclusive education would make a positive contribution to learning together.
  - Some teachers complained about the lack of preliminary preparation in schools for inclusive education. They referred the problems such as crowded classrooms, inadequate pre and in service training for teachers, and lack of physical infrastructure.
  - Most teachers thought that inclusive education good for social skills of disabled and non-disabled students.
  - When the problems of inclusive education asked, most teachers focused on the disabled students and worried that disabled students might disrupt the flow of the class. And they revealed that they needed to
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**Table 4.1. (continued)**

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- spare more time to disabled students.
  - Almost all of the teachers thought that differentiation and diversification of their teaching methods and education program as the most important task of teachers in inclusive education.
  - Teacher thought that the school building and classrooms offering inclusive education become accessible to students with disabilities. For this reason, reasonable physical arrangements must be made in such environments in line with student needs.
  - Teachers emphasized that in inclusive classrooms the materials should be of a quality that answer children's - especially those with disabilities - differing interests and abilities.
  - Most teachers responded that they needed inservice training on disability types and inclusive education, and some also needed supervision for their professional development.
  - Most of the teachers stated that they have negative emotions if they have a disabled students in their classrooms. Lack of training on inclusive education and lack of support mechanism in the school context were the repeated answers as the reasons of these negative feelings.
  - Some teachers expressed positive views about having a disabled student in their classrooms. They associated this with professional satisfaction.
  - A large part of the teachers stated that communication with parents in schools providing inclusive education should focus on the family of the disabled students by providing special meetings for them. And a limited number teachers thought that it should focus on the families of the non-disabled students by organizing trainings about inclusive education.
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#### **4.2. Montessori teachers' views on Montessori's educational approach**

In the last part of the interview protocol, teachers were asked questions on the Montessori educational approach. In this part, questions are grouped in 6 sub-headings. These are:

- Montessori educational approach
- Educational environment in Montessori classrooms
- Montessori educator
- Montessori materials
- Evaluation of success/development in Montessori classrooms
- Cooperation with families in the Montessori approach

In this part, teachers' views on the components of Montessori's Approach were asked and possible advantages and disadvantages of inclusive practices were



inquired regarding these components. Thus, the questions asked in this part tried to seek answers to the last three research questions of this study.

#### **4.2.1. Montessori educational approach**

Teachers were asked two questions under this sub-heading. In the first question, *teachers' views were sought regarding the core understanding of the Montessori educational approach*. Many of the teachers (n=10) emphasized that Montessori approach has an educational understanding that encourages the student to make his/her own choices in the educational environment and enables the student to be active and free.

For example, T5 underlined that the core understanding of Montessori education was based on liberating the children in their choices. For this reason, the educational environment in Montessori schools enabled children to make choices on their own as much as possible. And she added that Maria Montessori also highlighted in her books that children should be respected in their choices.

Additionally, T3 pointed that the authoritarian approach was quite far from the Montessori approach. She mentioned that according to Montessori, a suppressive and protective approach killed the inner energy, the will to learn and creativity of children and for this reason, providing the appropriate physical environment for children and encouraging them to make their own choices were the core understandings of Montessori education and educators.

T8 stressed that it was important to provide students with independent skills and said:

Protection of children's independence is very important in Montessori education. Educational environment provides necessary conditions to protect this independence and to enable children make decisions themselves.

The second question of this part is "*Is the Montessori educational approach fit for inclusion practices?*". Some of the teachers (n=6) said Montessori education was fit for the inclusive approach in a good way. At this point, one teacher (T9) referred to historical background of Montessori Approach and said that Maria Montessori started her educational studies first with intellectually disabled children and then she worked with poor and disadvantaged children in India. T9 considered all these experiences as the starting point and foundation of this education system and argued that that's why Montessori teaching fit for inclusive education.

Another teacher (T8) mentioned how students work in Montessori classes and how it fit for disabled students. According to her, in Montessori classes, students were able to study at their own pace. Therefore both non-disabled and disabled children could study together but everyone at their own pace. Moreover, students were also encouraged to learn from each other. Considering these, she expressed that the Montessori education system provided an ideal environment for inclusive education.

Moreover, T15 mentioned about non-competitive classroom environment in Montessori classes and claimed that in Montessori approach, children are evaluated within their own developmental phases and guided to reach the highest developmental phase they can reach. That's why she believed that this understanding of the Approach is crucial for inclusion.

T13 shared her views by exemplifying the situation for blind students:

Our neighbour had a visually impaired son, I remember that his senses and perceptions were quite strong. In Montessori classes, we conduct many activities to strengthen senses. Now that I think of it, these children can benefit such education. (T13)

On the other hand, some teachers (n=8) replied by pointing the difficulties of practicing inclusion in Montessori Approach. Some of the teachers said that

the learning environment that makes the child very independent in Montessori education is not suitable for students with disabilities, since they believed that an individual and intensive education is very important while working with disabled students, however, Montessori education wants children to learn by themselves. For this reason, teachers thought that Montessori approach is not fit for disabled students.

For example, T2 supported this opinion by telling this:

I think a teacher-centred education is very important in inclusive education. However here everything is children or student centred. I believe that this environment is not fit especially for children with heavy disabilities.

In another example, it was said that disabled children might not decide for themselves or have trouble in making decisions. However, Montessori education was based on children's making decisions for themselves and this skill was an indispensable part of the Montessori approach. For this reason, T5 thought this type of education was not fit for disabled students.

In addition to this, some teachers said that daily flow at a Montessori classroom was not suitable especially for children with attention deficit disorder or autism, this could be quite challenging for these students since they need more structured activities and orders. And teachers argued that while working with these children, teachers should always check these students closely and provide a multi-planned education and support but this differs from the Montessori understanding.

And as the third group, some teachers (n=4) said that they were undecided on this matter. Undecided teachers said that they were not experienced enough with disabled students or inclusive education; therefore it was not easy say a certain thing on this matter. And some claimed that this situation differs

according to student's type of disability. For some disabled children, Montessori practice could be great and for some it could be just the opposite.

#### **4.2.2.Educational environment in Montessori classrooms**

In this part, teachers were asked 3 different questions. Some questions were supported with sub-questions. These sub-questions sought to identify advantages and disadvantages of the educational practice regarding the disabled students.

In the first question, teachers were asked "*What is the daily flow like in a Montessori classroom?*". Despite working at different schools, almost all of the teachers described a similar daily flow and they all highlighted that most of the time is allocated for free [play] time using Montessori materials (n=17).

Teachers mentioned that they start the day by greeting students and have a little chat with the whole group by sitting in a circle. Then children told them which materials they would like to spend time with and plan their day accordingly. In other words, everyone selected their next activity before the group scatters and starts working individually. Of course, they had breakfast, lunch and afternoon snacks in between. After students work with the materials, they generally had a group work altogether. After lunch, some said that they have a reading hour or sleeping hour. In the afternoon, most have them usually had outdoor activities or activities in the multi-purpose room which make children active. And many of them have a group activity at the closing.

They were asked "*Considering disabled students, what are the advantages and disadvantages of this daily flow in Montessori classes for these students?*". Most of the teachers said that individual studying hour which is an important part of the daily flow might have both positive and negative effects on students. Teachers who think it would affect in a positive way (n=6) said that especially during free study hours, while working with Montessori materials, every child

studies according to their own developmental level. If they cannot do it, they try again. Until they learn, they can try as much as they can, so they can discover materials at their own pace. While they study, the teacher could check disabled students and help them to have a productive study time.

On the other hand, teachers who thought it would affect in a negative way (n=7) said that in Montessori classes, students are encouraged to make decisions independently and study independently. Montessori materials are also designed to enable studying independently. However, many disabled students may need the teacher's attention more, they may not be able to make decisions independently and/or may not be able to study by themselves. For this reason, they may not benefit from the free study hour.

In the next question, teachers were asked about *the mixed age group practice in Montessori classes*. They were asked about the advantages and disadvantages of this practice considering disabled students.

The following opinions were expressed as advantages of this practice (n=14):

Some teachers emphasized the language development aspect in mixed age classroom. Teachers thought that older children's language and reading skills are more developed than younger children and therefore when children are together, younger children's language skills develop. For this reason, education provided in this environment would be quite beneficial for students with dyslexia or students whose language skills are underdeveloped. Also the opposite should be considered, i.e. children who are younger but with better reading skills would benefit from this.

Some underlined the importance of keep up going with the same teacher. Participant teachers thought that especially children with trust problems or many children with autism who are dependent on their routines feel safe and

secure as they will continue their education with the same teacher. T3 stated that in such environments, the first week of the school usually passes a lot more easily.

Some said that it is very important considering the social-emotional development of children. In these classes, older children are usually role models and even teachers to younger children. Moreover, older children develop protective behaviour towards younger children. In such classes, disabled children also benefit from this protective environment and his/her development is supported by peer education.

T9 supported this view by telling:

When children from different age groups are together, they can work on a project much more inclusively. Everyone gets a task according to their skills. Through older children's guidance, younger children and disabled children develop mentally and learn a lot more. (T9)

Some teachers addressed that mixed aged groups means mixed ability groups. Therefore, children who are older yet whose skills are not at the same level as their peers or children with learning challenges can study with their peers who are younger than them but with the same skill level and have the opportunity to develop that skill.

And finally, some teachers declared that as different age groups receive education in one classroom, teachers arrange the educational content accordingly to be able to work with students with different developmental levels. However, in a class of same aged students, teachers usually implement a standard educational content. Thus, students who are developmentally slow or advanced benefit from this differentiated practice.

On the other hand, some teachers shared opinions as disadvantages of the practice (n=4). Some reported that there are some legal problems regarding this

practice in Turkey and therefore they do not have mixed aged group practices in their schools.

All of the teachers complained about lack of training on how to manage and work with students from different age groups in the class. Therefore, they were concerning about affecting the students with special education needs in that class negatively.

Some teachers expressed the parents' concerns. They said that parents of students in older age groups are usually worried because they think that their child is not receiving sufficient education in such classes.

T11 argued that it is not possible to pay enough attention to a disabled student in mixed aged practice, since she believed that in a class with the same age group, children's development could be tracked more easily.

And lastly, T17 underlined the risk of peer bullying in mixed age classes. She believed that sometimes children can be very cruel. If the class is not well managed, especially children who are less developed might be affected negatively from this. Especially when the child with a behavioural disorder is older, the situation is very difficult for the teacher; also for younger students it might be even more dangerous.

According to the definition of Montessori, a prepared environment is: An environment which is specially organized before the child comes in and bears the physical characteristics to enable them take and implement independent decisions. In this question, teachers were asked “*do you think prepared environment is suitable for children with different disabilities and why?*”.

All the teachers expressed that (n=18) prepared environment would enhance the participation and material utilization of disabled children and emphasized

they would feel safe at school. Responses for students with different disabilities are as follows:

T3 answered the question by taking the perspectives of students with autism. And she stated that prepared environment in a Montessori classroom provides an ideal learning environment particularly for students with autism. Students with autism usually feel safe and become more active participants in environments where there are not many stimuli and the routine is preserved. The low-stimulus environment prepared by the educator beforehand provides the order where students with autism would feel more comfortable.

T1 answered the question by taking the perspectives of students with attention deficit and stressed that when the order of the shelves is considered according to the Montessori method, usually only one material is put on each shelf, so this helps children with attention deficit better communicate with the environment. And she warned that the teacher is responsible to keep this order.

T8 answered the question by taking the perspectives of students with physical disabilities. She thought that a prepared environment might help provide an accessible classroom order considering the students with physical disabilities. According to her, teachers prepare the classroom as required before the student comes in, it is even ideal that the teacher reviews the classroom environment with the student before the education starts, identifies the needs and necessary arrangements together with him and prepare the classroom according to these needs before he comes in. Thus, the prepared environment would provide the most accessible educational environment for the student.

T15 answered the question by taking the perspectives of students with visual impairments. She believed that preparing the classroom before the student comes in definitely helps maximize the benefits they will get from the environment. For a visually-impaired student, the classroom may be prepared



by labelling the places of materials. A method can be considered for this preparation could be to stick the material in front of the shelf. Thus the child can easily access that material in the classroom. She also reminded that Montessori method changed the life of Hellen Keller.<sup>13</sup>

Teachers also drew attention to school safety. They responded that a prepared environment also enables to organize the school environment to meet the needs of students with disabilities and make them feel safe at school. According to these teachers, a child feeling safe at school would demonstrate more positive behaviours both academically and socially.

#### **4.2.3.Montessori educator**

Teachers were asked the first question *about the Montessori educator in order to find out the role of educators (teachers) in the classroom*. All participants (n=18) stated that the Montessori educator is a role model for the students; someone who provides resources and who observes rather than being an instructor in the classroom solely.

According to teachers' views in Montessori classrooms, teachers have a different position than the usual "instructor" role, teachers act as a facilitator of education in the classroom, because no one can be educated by another person, however, their learning can be facilitated.

First of all, a teacher is a person who prepares/designs the environment. Teachers are responsible to ensure that children engage with the environment

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<sup>13</sup> The participant is referring to American female activist Hellen Keller here. Hellen Keller was both deaf and blind due to a disease she had when she was 19 months old. Her legendary teacher Anne Sullivan met Keller at Perkins School for the Blind and taught her how to communicate. It is known that she used the Montessori education method and materials for her education.

and gain experience. Teachers who create and provide resources for children are role models rather than instructors.

An educator is never an authority figure. Since in the Montessori understanding, children are expected to develop their own auto-control. An important role of the teachers was cited as monitoring the students at all times in the classroom, making observations and keeping records. This way, it was believed that they could review the development of every child in detail and assess their personal development.

Another question in this part was: *Is the role of Montessori teacher suitable for working with disabled students?*

Half of the teachers replying "yes, it is suitable" (n=9), especially highlighted the guiding attitude of teacher towards students in the classroom.

Teachers told that Montessori teachers mostly do not stand in front of the students and tell them subjects like traditional teachers do. Instead, they work with one or two students directly. They ask the students which material they are interested in and then show them how to use it. Teacher organizes the classroom as a calm, orderly, funny, safe and stimulating atmosphere; thus enables children to learn at their own pace. Students can have the chance to learn at their own pace and therefore it is beneficial for students with disabilities and facilitates their learning without having to compete with other peers.

Teachers also emphasized the importance of individual education in this approach. According to them, in Montessori classrooms, teachers often observe the needs of students and apply individual education. Teachers identify the needs of children with disabilities well during their observations and educate them accordingly during their individual sessions.

Other half of the teachers (n=9), on the other hand, emphasized that teachers must be "more interfering" while working with students with disabilities and stated they might need some additional adaptations.

At this point, some teachers concerned that they may need to go beyond just observing and interfere more while working with students with disabilities. And they worried about being more authoritarian while working with especially children with intellectual disabilities and coming across more instances requiring their interference. And therefore, teachers worried about changing their education methodology according to the disability of students and being interfering to children's independency.

#### **4.2.4. Montessori materials**

In this part, *views of teachers on Montessori materials were asked and importance of materials for disabled students* was questioned.

Teachers were asked "*Could you define the general characteristics of Montessori materials?*" and their responses were gathered under five headings:

It was emphasized that Montessori materials were designed to support different areas of development. It was told the materials particularly supported sensory development (n=18), everyday living skills (n=17), mathematics skills (n=16) and language skills (n=18).

- *Materials supporting sensory development (n=18)*

Teachers told that sensory development materials are one of the most important components of Montessori classrooms. With these materials they aim to develop five sense organs of the child. In other words, touching, hearing, feeling, smelling and tasting senses of children are stimulated and developed with these materials.

For example, T18 reported that they use materials aiming for tactile perceptions in our classroom, since they want to enhance sensitivity of the child towards the materials in her/his surroundings. She also shared that in their classrooms they have wooden tablets covered with fabric, with the help of them the child learns concepts such as thin, thick, slippery, rough, woolly, soft and hard etc. In another example, T6 shared that they have scent tubes with different scents, flavour tubes with different flavours and materials with different weights in their classrooms.

- *Materials supporting everyday living skills (n=17)*

According to teachers, Montessori believed that the children must be taught the real life and teaching daily living skills is very important to make children independent. Therefore, teachers expressed that they use different materials in the classroom to teach children daily living skills. And teachers shared their examples:

T2 said that children washed the clothes they use in the classroom and then hung them using clothes-pins.

T14 said that they have button sets; they practice with children on how to button-unbutton.

T1 said that there is a skills table in her classroom. There are different locks on this table. With this material, children learn skills such as locking-unlocking doors, opening-closing the windows, plugging-unplugging, turning on-turning off the tap etc.

- *Materials supporting mathematics skills (n=16)*

A large number of teachers stressed that Montessori materials are supporting the mathematical skills of students. T16 mentioned a good point and said that

actually all parents are familiar with the Mathematics materials of Montessori; however, they do not know these materials belong to Montessori. Materials with holes in different geometric shapes on a wooden surface are the ones used very often in Montessori classrooms, with these materials the children are expected to put the appropriate shape in these holes (like square, triangle, rectangle and cylinder).

Also most of them stated that they often use abacuses with colourful beads to teach them how to add and subtract.

Teachers expressed that according to Montessori, abstract concepts such as numbers are taught with tangible materials as far as possible. For instance, T7 said that they have a box of chips and numbers in the classroom and children match appropriate number of chips with the numbers.

- *Materials supporting language skills (n=18)*

In her observations, Maria Montessori saw children learnt how to write before they learnt how to read and thus she developed materials to support writing skills.

T13 added that children should have high hand-arm coordination to be able to write well. Therefore, Montessori prepares them for writing skills by designing materials developing their hand muscles.

And T3 mentioned that they use matching cards, colourful alphabets and picture cards to develop children's language skills. According to her, vocabularies of students using these materials evolve directly.

- *Wooden materials in Montessori (n=11)*

Teachers agreed that in the design of Montessori materials, natural materials are used as far as possible; Montessori mostly used wooden materials and refrained from using artificial materials like plastic. According to teachers, Montessori aimed to stimulate the senses of children by using wooden materials mostly, since providing rich experience is very important for senses and also wooden toys are the most proper materials for children health.

T15 addressed that another reason for Montessori to use wooden materials is that Montessori developed her method by observing children for long years, and therefore she made most of these observations in deprived areas- countries such as India and wooden toys made of trees are the materials easiest to access for children in deprived areas. Montessori realized that children like touching wooden materials. In other words, she discovered an advantage arising from the deprivation of other materials.

T8 supported this idea by telling:

When archaeologists discovered toys from ancient civilizations, they saw that these toys were usually small wooden replicas of the tools used by adults. Montessori method got back to these basic principles and attached importance to use wooden tools to help children learn.

- *Materials designed to help children understand their own mistakes (n=14)*

Teachers agreed that Montessori materials are designed to ensure that children can understand their own mistakes when practising. The teacher does not warn the child when he makes a mistake working on a material since this external warning may distract him. The child finds the solution himself; this is the aim of the education. When working with these materials, students realize they made a mistake and complete their work with that material correcting their

mistakes. For instance, there is a material for placing geometric shapes; on this material, you cannot put a square block in the place for a triangle block.

T4 shared her view on this as follows:

Each material includes a mistake control. This mistake control enables children to work independently without needing approval of an adult. I think this mistake control frees the children as they work. (T4)

- *Materials usually designed to teach a single concept (n=8)*

Teachers who mentioned about this point said that In Montessori education, each material is prepared for a single skill. With this principle of focusing on a single feature, each material teaches one concept. Thus, children just learn the concept they are meant to without getting confused by many concepts.

T2 exemplified this kind of materials as given below:

Each material focuses on teaching only one concept. For example, there is a panel for tying laces; children just work on tying laces on that panel. (T2)

- *Real life materials to teach real life skills (n=3)*

According to teachers, there are no imaginary games in Montessori method. Children are provided with real experience. Thus, it is ensured that they have real experience instead of "pretending".

T9 gave this example:

For instance, children work in a real kitchen and clean the environment with real broom and dustpan rather than with miniature kitchen tools and equipment. Kitchen counters and

cabinets are constructed at heights that are accessible for children to provide this experience.

In the following question, teachers were asked, "*Are Montessori materials suitable for working with disabled students? Could you explain considering the different development areas and disability types?*" All participants stated that materials were suitable for working with students with special education needs (N=18). As teachers answered the question, they related the properties of the materials to different groups of disabilities and told what benefits they have for these disability groups. These views were shared as follows:

T17 mentioned that Montessori materials were generally developed to teach a single concept or a single skill. These materials significantly facilitate our work especially with slow learners or children with attention deficit.

T3 reported that certain materials are quite valuable for children who have difficulty in understanding abstract concepts. And she described that while teaching the letters, children first learn about the sounds and then, teachers and students trail the letter moulds with their fingers and conduct tangible practices, thus, children materialize the abstract concepts and learn more easily.

T1 pointed that working with heat and scent tubes can be useful especially to support the other senses of visually impaired children. Regarding the scent tubes, T18 added that students with autism can be sensitive to scents and therefore scent tubes were quite useful for minimizing the sensitivity of these students. She emphasized that if these students' families cooperate with teachers and prepare similar tubes at home and practice regularly as well, children can be familiarized with different and strong scents gradually.

T14 argued that activities related to daily life are significant for all children as they serve to prepare them for life. And she added that they also use real



household items in their classrooms, and even request most of them from families. And she shared that if they can teach students with Down syndrome how to place plates, forks and spoons, napkins and saltshakers on the table would possibly pave the way for them to be employed especially in Down Cafes<sup>14</sup> in the future.

For students with dyslexia, T9 shared her experience with her friend working as a teacher at the special education center. She said that, her friend had a student with dyslexia and did not know how to work with her. And participant teacher recommended her friend to use a sand paper with this student as they did at their school. According to her recommendation, she asked her friend writing the letters one by one on sand paper (paper with a rough surface), and asked the student close her eyes and examine the letters by touching the paper. At the end of it, the child could appropriately learn the letters that were found confusing in reading and writing previously.

Another teacher (T8) shared that she had an experience with delivering speech courses for students with autism by using picture cards. And she pointed that they also use such cards in their classrooms, so recommended that communication with children with speech impediment can be ensured through these cards.

And T15 shared her experience with a student who has difficulty in using hand muscles as follows:

Last year, I had a 4-year-old student in my class who had difficulty in using hand muscles. They moved abroad this year due to the father's business. We made some arrangements in the materials used upon the mother's suggestion last year, and made sure that this child could also use the same materials. [What kind of arrangements did you make?]. For instance, we attached

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<sup>14</sup> Down Cafe is a sheltered café where waiters/waitresses with Down syndrome are generally employed.

magnets on one side of the cubes composing the pink tower; therefore, cubes did not fall thanks to the magnets as the child piled them up. The mother told us about this activity that she had seen in a book. Again with the same child, we frequently conducted other activities such as basket weaving and stringing beads to make necklace. We made sure that the child frequently used the tongs at dining table. At first, we would fix the tongs to the child's wrist with a rubber band, and the child would serve meatballs for lunch using the tongs.

#### **4.2.5.Evaluation of student's development/success in Montessori classroom**

Teachers were asked two questions in this section. The first question was as follows: *What are the methods that you use to evaluate/record student development/success in Montessori classes?*

Teachers answered this question stating different methods which can be listed as follows: I observe/prepare development observation report (n=10), I prepare a portfolio (n=4), I record anecdotes (n=3), I use my own method (n=1).

Teachers with the answer "*I observe/prepare development observation report*" (n=10) shared the following information:

Teachers who used observation methods agreed that the most important role of a teacher in a Montessori class is observation and therefore they declared that they observe children in the class as much as possible and identify children's individual needs and areas of interest in a deeper way.

There are development checklists for different age groups on the internet. Some teachers said that they print out these development lists and fill them in observing the children. In doing so, they sometimes work with students one-to-one while their intern colleagues look after the class. Then they inform parents about the child's development state, strengths and weaknesses according to these observations.

In accordance with the rules of the Ministry of National Education, teachers need to fill in a development observation form for each child. For example, T18 said that she keeps her notes in an individual notebook during the week, she constantly records important things that she observes regarding children's different development areas, and she transfers all these notes to the children's personal forms at the end of each month (or earlier if she has time). And she added that she shares these notes with parents when they come to school to pick their children up at the end of the day, or shares information via WhatsApp if there is an urgent case.

Teachers with the answer "*I prepare a portfolio*" (n=4) shared the following information:

Some teachers told that they have been keeping portfolio records at the school, therefore they select among the activities conducted by students throughout the year, and keep them in these files. At the end of the year, generally students exhibit their own portfolios and share what they have collected in their files with their parents. And their teachers also inform parents about the activities within the same files.

And two teachers also added that they trained by academicians about the proper presentation of portfolios, and also their school asked them to systematically record children's development through the portfolios as much as possible.

T7 mentioned that when children take the activity papers and documents home, they lose them most of the time, unfortunately parents are not generally good at keeping them. Therefore, she said that they are providing lockers for each child in the class and asking parents to buy a couple of plastic document cases in the beginning of the year. And then they file important activity documents in these cases and keep them in children's lockers to track their development throughout

the year. And they share these files with parents during the parent-teacher meetings.

Teachers with the answer "*I record anecdotes*" (n=3) reported that they record anecdotes mostly when they observe unexpected or extraordinary situations. Since it is not always possible to record anecdotes in nature of the flow of the daily activities in the class, but children sometimes say unexpected and funny things and teachers want to record these special moment and share with parents.

The teacher with the answer "*I use my own method*" (n=1) shared the following information:

I ask parents to buy large drawing notebooks. We use these drawing notebooks as logs. For instance, I ask them to draw their best friends when they first arrive at school. We start using the drawing notebook with this activity. Children's skills of using plain paper, selection of crayons, attention span and the details in the drawing of their best friends (organs, clothes, etc.) actually provide information about many development areas of children. We conduct the same activity at the end of the year, as well. Thus, we use the differences between the drawings to learn about the features that children have developed throughout the year. I ask them also to record other activities with drawings. For example, we went to the post office yesterday, and I asked children to draw their post office experience when we got back. Or, for instance, we listened to the song "Afacan Kedi (Naughty Cat)" from Fazıl Say's album for children last week. I asked the children, "How do you think that the cat looks like?", and I asked them to draw the cat on their minds, and then, they told their classmates about their own cats. I wrote down the details that they told about their drawings on the back of the page. I sometimes shoot a video using my mobile phone during such presentations or physical activities. I send these videos to parents and inform them via WhatsApp in the evening. (T9)

The second question asked in this chapter is as follows: *What are the methods that you use to evaluate student development/success while working with*

*disabled students? Are there additional evaluation methods that you implement? Could you explain with examples?*

Teachers stating that they evaluate student development using observation method (n=8) also mentioned some different observation recording techniques. Some teachers said that they use behaviour frequency records method generally for reducing the frequency of the problematic behaviours. Therefore they systematically record the frequency of the child's problematic behaviour in the class and try different teaching strategies to minimize the frequency of this behaviour. And they also asked parents to do the same thing at home.

T3 exemplified her method as follows:

I write things down in my notebook and report afterwards. For instance, I have a student with obsessions and thumb-sucking habit. I record the time when the student sucks thumb during the day to evaluate the frequency of thumb-sucking behaviour.

Some teachers told that they generally observe children and use the checklists prepared according to the development areas to keep records.

As another method of observation, T8 shared that she also used behaviour span recording time to time. She has a student with attention deficit disorder and upon the request of the special education teacher of this student at the special education and rehabilitation centre, she observes and writes down the student's attention span regularly.

Some teachers stated that *they use individualized education plan (IEP)* (n=6):

Teachers stated that if a student has a disability and he/she has an educational diagnosis report sent by the Guidance and Research Centre, they have to prepare IEP report for this student as a legal requirement and share it with families and the Guidance and Research Centre.

And some of the teachers said that their disabled students are going to special education and rehabilitation centers to receive support education and to be able to collaborate with colleagues from these centers, teachers mentioned that they prepared an IEP report for these students.

T9 explained this by telling:

One of my students is receiving supporting education at the special education centre. There is a notebook that I use jointly with the student's teacher there to exchange information. The teacher writes down the things to be done or followed up at school during the week if there is any. I also write my observations in the same notebook during the week. Then, we transfer our notes there to the IEP report.

As it is mentioned in different parts of this chapter, teachers were also complaining about their lack of education on inclusive education and applying its components (applying differentiated and inclusive teaching methods in class, preparing reports according to the needs of the children etc.). Therefore, they often mentioned that they use websites to get information about how to prepare IEP reports. For example, T12 explaining this situation by saying:

There are certain websites such as Eđitimhane. Teachers discuss about the issues to be taken into consideration while preparing IEP files on this platform. I also sometimes use certain methods originating from the ideas there. For example, I had a student with autism. The student could not follow the instructions. We worked together to make the student follow certain instructions in the class. For instance, when we said "sit down", the child did not sit down right away. We started to note down the student's waiting time and prepared an IEP for him, which was a suggestion on this website.

#### **4.2.6. Family involvement/cooperation in Montessori approach**

The participants were asked '*How families are involved / cooperated within Montessori approach?*'. They classified the involvement/cooperation with the families in three different categories. While some of the participants focused on supporting and training the family (n=11), some of them focused on enhancing the communication between home and school and which methods to be used to

achieve this (n=7). Yet other participants focused on improving the quality of the education through the participation and contribution of the family to the education process (n=4)

The participants who emphasized *supporting and educating the family* have stated that they have problems in practice when some responsibilities taught by Montessori approach need to be maintained within family, and therefore they organize trainings through which the families learn the fundamentals of Montessori method and in-family practices. Additionally, in some schools, some extra trainings are organized on the emerging topics in accordance with the requirements of that year such as child abuse, use of technology, life in nature.

Some schools also find alternative communication methods to reach families and to be accessible by the families. At this point, some teachers reported that they carry out online trainings as webinars or information meetings for families. The underlying reason for this is explained in the following way: “Families are very busy with their works, thus it is sometimes hard for them to join the meetings, so we have decided to apply this method.” (T5) And teachers also stated that they use social media accounts of their schools to inform the families, and most of them publish online bulletins even if not that regular.

The participants who highlighted *enhancing the communication between family and school* stated that family events are a great opportunity for the families to get to know school activities in more detail and to be able to meet each other. Also, inviting parents or sometimes grandparents to school gives children an opportunity to show their parents how they spend an ordinary day in the classroom. During these family events, parents experience activities from children’s daily routines at school and play the games or toys as the way children play at school, so the parents learn how to use the materials of those games and use it properly when they work/play with their children at home.

As another method of communication with parents, many teachers said that they use WhatsApp application, since almost each class has a WhatsApp group. In this way, not only the parents can communicate with each other, but also, teachers can reach and share a lot of information easily. On the other hand, some traditional ways of communication is still in use. Some teachers stated that they publish monthly guides for informing parents.

Some participants emphasized the importance of *improving the quality of the education via the participation and contribution of the family to the education process*. In order to involve parents to the education of their children, these teachers believe that enabling families to take part in classroom activities is one the good methods. Reading day or the day of profession introduction are some of examples of these. On these days, parents come to school to introduce their professions or read a book they choose, and then they talk with the students about that book. For example, at one of the participant teachers' school (T10), they have a presentation day with the families. In this activity, a student and one of his/her parents choose a topic and present it together to the other students. Sometimes, colouring activities are done as a complementary activity at the end of these presentations. By this activity, not only parents have a chance to see and be part of the flow in the classroom but also the students have the satisfaction of having an activity together with their parents in front of their peers.

In another example, T5 shared this:

For example, we choose the student of the week. The student of the week introduces him/herself and his/her family to the other students, his/her family members may join our lunch or trips and may come to classroom to introduce their profession or hobbies. One of our student's father recorded a children's book on a CD and sent it to classroom for the students to listen to. Sharing such things makes us very happy.



The participants were also asked *how it is to cooperate with the families of disabled children in Montessori approach*. Almost all participants highlighted that it is necessary to have one-to-one interviews and provide separate education programs for the families of disabled students in order to make the education sustainable at home (n=16).

Teachers shared that it is possible for skills that they built at school to be permanent and be further developed, only with the support of the families. That's why they believed that it is necessary to cooperate with the families with disabled children and to provide one-to-one training for them. Therefore, teachers recommended to invite parents to the classroom and to introduce the way of teaching of teachers and the activities of the student in the classroom to the parents. In this way, they may have the awareness of Montessori activities and apply them at home.

Additionally, teachers declared a risk that parents of disabled children keep their expectations about the positive sides of their children very low most of the time. According to teachers, although many families notice the slow and small positive changes in their children's development, they still keep their expectations low. In such a case, it is necessary to cooperate with these parents one-to-one and they must be shown how to support their children's education given at school. Furthermore, they must be encouraged and oriented in giving duties and responsibilities (such as helping to prepare the dinner table, etc.) to children at home.

The following question was: *What do you think that having the school-family cooperation contributes to the parents of disabled child according to Montessori Approach?*

Most of the teachers (n=10) emphasized that positive school-family cooperation will help to reduce the anxiety level of parents of disabled

children. Teachers thought that even though it is not always easy to do this, teachers must invite the parents to the school and classroom, listen to their problems, try to relieve their anxiety, inform them about the Individualized Education Program (IEP) and show that parents and their ideas are cared about at the school during the education of their children. When this is achieved, the worries of families for their children will reduce. In other words, teachers and directors must empathize with parents to have positive communication and to be able to cooperate with them. If this can be achieved, families will also communicate easier with the teachers and have less stress during the education process.

T4 emphasized that teachers must always keep in touch with the parents, if they communicate only when there occur some problems, both family and the teacher get tired. Therefore, way before the problems come out, a proper communication method must be established and used between school staff and the family. This will make the things easier for these families to involve in education of their children more effectively.

For the parents - teacher meetings, T13 suggested that teachers must not only give information during the whole meeting, but also let the families take part in the meetings actively. It must be ascertained that families can express their opinions about their children and they must be encouraged to participate the education of their children more. This will help them feel better. They will also communicate with other parents more.

Considerable number of participants (n=7) emphasized that positive school-family cooperation will have an important role in making the children build independent life skills as well.

Main philosophy of Montessori begins with considering the child as an individual. Montessori emphasized that each child should be an independent

individual, regardless of the disability condition. This is hard for most of the families. Children may be regarded as beings who always need care. This comes to a very serious point when the child is disabled. That's why it is agreed that teachers must have interviews with families to tell them that they should remember their children are individuals and parents must be shown how to make their children more independent by Montessori approach.

T16 supported ideas by telling as follows:

According to Montessori, accompanying children when it is not necessary will adversely affect the independent development of them. I believe that a healthy school-family cooperation will teach parents how to communicate and act with their children and so it will help children have independent skills as much as possible.

#### **4.2.7.Key findings on Montessori teachers' views on Montessori's educational approach**

**Table 4.2.Key findings on Montessori teachers' views on Montessori's educational approach**

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- Many of the teachers emphasized that Montessori approach has an educational understanding that encourages the student to make his/her own choices in the educational environment and enables the student to be active and free.
  - Some of the teachers said that Montessori education was fit for the inclusive approach in a good way by referring historical background of Montessori approach, non - competitive educational environment which encourages students to learn from each other and to study at their own pace.
  - On the other hand, some teachers replied that Montessori education was not fit for the inclusive approach by pointing the difficulties of practicing inclusion in Montessori classrooms. These teachers believed that an individual and intensive education is very important while working with disabled students, however, Montessori education wants children to learn by themselves. Therefore, they believed that an educational environment which is structured and where influence of the teacher is more intensive would be better in terms of education of the disabled child.
  - For the daily flow in the classroom, teachers underlined the importance
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**Table 4.2. (continued)**

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of “free play time”. Some teachers indicated that students with development delay or that are slow learners, could spend time at their own learning pace during free play times and this encourages their learning. However, some of them indicated that free play time would not be sufficiently efficient for students who have distraction problem or have limited self study skills since they can be easily distracted without an external guide.

- Most teachers indicated that mixed age group practice offered advantages for disabled students since children at different ages being in the same classroom would support development of each other and children would constitute role model for each other. However, some teachers focused on the disadvantages by referring the high risk of peer bullying in such classrooms.
  - All teachers emphasized that prepared environment would improve involvement of disabled children and material usage, thus students would feel safe at school.
  - All participants defined the main role of the teachers as an educator who provides sources to children, who observe and who support children whenever necessary. Some thought this role was good for disabled students since teachers can observe the needs of children and react accordingly, however, some thought this role of teacher was not good for disabled students since these children need more interventionist educators in the classroom.
  - All of the teachers have stated that the materials were suitable to work with disabled students.
  - The majority of teachers mentioned that they evaluated the development and success of the students through observations, which are in line with Montessori approach. For disabled students, they generally observed frequency and duration of the behaviour.
  - Teachers stated that they were cooperating with families in three ways which are family trainings, family invitations and through communication tools such as WhatsApp groups. While answering on cooperation with families, some teachers focused on the importance of communication with the families of disabled students in order to keep the flow between school and home, however, some teachers focused on the parents of non-disabled students in order to train them about social inclusion and acceptance.
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## **CHAPTER 5**

### **DISCUSSION**

This chapter presents the discussion of the findings. The first section was devoted to the summary of the study. In the second part, the findings of the study were discussed in a detailed way. In the third part, the advantages and disadvantages of Montessori Approach for the education of disabled students were summarized. In the fourth part, educational implications of the current study were introduced and finally in the last part, recommendations for further studies were presented.

#### **5.1. Summary of the study**

According to the statistic of national and international organizations, discrimination and access to education are the key problems for education of children with disabilities in this day and age; therefore more attention should be given to their education urgently. Maria Montessori is a very important figure in the field of education by triggering the idea of education the disabled children. Even though she started her career as a medical doctor, she saw the severe benefits of education on the development of disabled students, so she changed her way of career from medicine to the field of education. And she started working on children's education and developed her approach while working with disadvantaged children.

Additionally, teachers and their views and attitudes have an important role in including disabled students into the education system. As Hallahan and Kauffmann (2003) said that professionals had a tendency to exclude children with disabilities from the education system. Therefore, this study focused on the views of teachers as one of the key components of the school system.

In the study, the views of 18 Montessori preschool teachers on inclusive education in Montessori approach were explored. While inquiring the views of teachers on inclusive education in Montessori approach; questions on inclusive education, the context of Montessori classrooms, roles of Montessori educators, Montessori materials, and educational assessment strategies used in Montessori classrooms and the family involvement policies of Montessori approach regarding the disabled children were asked in detail. At the end of the study, it was defined the perceived advantages and disadvantages of Montessori approach for students with disabilities.

## **5.2. Discussions**

### **5.2.1. Montessori teachers' views on inclusive education**

The teachers participating in the study were asked to define "*the student profile that come to their minds when thinking of disabled students or those with special needs.*" Most of them identified disabled student as a student and individual with developmental delay and/or insufficiency/incompetencies. In other words, they pointed to disability as a state of deficiency - insufficiency. In fact, this is not a very surprising result. On the contrary, it is an extension of the medical approach frequently emphasized in the disability movement around the world.

The medical approach addresses disabled individuals as normal/abnormal based on the loss of functions. In this approach, medical science and specialists have an essential significance. The medical science addresses disabled individuals according to their bodies defining them based on the lack of physical, sensory and perceptual functions. Due to its nature, it regards the solution as the treatment of people because it views them as the source of the problem. According to this approach, a disabled person should be "treated," and the "anomalies" should be corrected to be able to solve the problem (Yardımcı, 2015).

Enacted in 2006, amended with the transition to the 4+4+4 system in 2012 and finalized in July 2018, the "Special Education Services Regulation" (MoNE, 2018) unfortunately carries the traces of the medical model, too. For example, the definitions in Article 4 include phrases such as "individual with visual impairment" or "individual with mild intellectual insufficiency." These expressions focus on the physiological deficiencies of people rather than their skills and abilities. They constantly define disabled persons and/or those with special needs on the basis of their insufficiencies.

A similar result can be seen in the answers given to the question "*What do you understand from the expression 'inclusive education?'*" Teachers defined inclusive education as an educational model in which disabled and non-disabled students receive education together. However, their definitions frequently included phrases from medical model like "normal peer," "normally developing peer."

On the other hand, most of the teachers (10 out of 18 people) held positive opinions when asked: "*What do you think about the education of the disabled student in the same class with their non-disabled peers?'*" Mostly, the teachers stated that inclusive education would make a positive contribution to learning together. One teacher even stressed that such education was a basic right. They emphasized that the students would achieve learning by taking each other as a role model. Similarly, the studies examining peer interaction in inclusive education emphasize this view clearly (Buysse, Goldman and Skinner, 2002; Lieber, Capell, Sandall, Wolfberg, Horn and Beckman, 1998). However, some participants gave a negative answer to this question. These teachers complained about the lack of preliminary preparation in schools for this type of education although they believed in its importance. They referred to problems such as crowded classrooms, inadequate pre and in service training for teachers, and lack of physical infrastructure. It is a frequent problem that the classrooms are crowded in inclusive education. Some studies in the literature

addressed this issue previously (Bilen, 2007; Sadioğlu, Bilgin, Batu and Oksal, 2013).

When asked, "*What are the benefits of inclusive education for the disabled students?*", most teachers said that this education provided social skills to disabled students. They stated that children's communication and adaptation skills with their peers improved along with higher self-esteem. The results of the study by Batu, Odluyurt, Alagözoğlu, Çattık and Şahin (2017) also revealed a parallel picture. The fact that students with disabilities play with their peers or participate in their games and carry out tasks jointly in the schools applying inclusive education improves their communication and social adaptation skills.

When asked, "*What are the benefits of inclusive education for the non-disabled students?*", all the teachers pointed to the development of social skills and social gains. A detailed examination of the teachers' answers show that they emphasized the development of respect for individual differences, accepting each other, taking responsibility, showing sensitivity and tolerance to others' needs and cooperation. These results are consistent with the relevant studies in literature (Batu et al., 2017; Bozarıslan and Batu, 2014; Cook, Tessier, and Klein, 2000; Frazier Cross, Traub, Hutter-Pishgahi and Shelton, 2004). These studies also state that inclusive education enhances the confidence of non-disabled students, teaches them how to share and contributes to their sense of responsibility.

When asked, "*Does inclusive education have problems in practice?*", most teachers worried that disabled students might disrupt the course of the class. Also, they revealed that they needed to spare more time to disabled students. In their research Yatgın, Sevgi and Uysal (2015) examined teachers' views regarding the mainstreaming education and their occupational burnout according to several variables. The results obtained in the study are also similar to those of the present study. In the said research, teachers stated that if they



had mainstreaming students in their classroom, they would not be able to apply their teaching plan accordingly, the flow of their courses would be disrupted, and the non-disabled students would be negatively affected. The replies clearly show that teachers develop concerns about classroom management and course flow when their classrooms include students with disabilities.

The following question was put to the teachers to better understand how they position themselves in inclusive education: *“In your opinion, what are the duties and responsibilities of teachers in inclusive education?”* Almost all of the teachers responded to this question as adapting the management of the class and content of education to the interests and skills of disabled students. In other words, teachers’ differentiation and diversification of their education and teaching methods was emphasized as the most important task and responsibility in order to increase the social interaction between themselves and students. This task is quite valuable in ensuring that education reaches its objective. Also, it goes beyond a task and becomes a legal responsibility for teachers. On the other hand, the teachers were also asked questions about the components of inclusive education. In this section, they answered the following question in a way similar to the ones regarding their duties and responsibilities: *How should the education program be at a school providing inclusive education?* In their replies, the teachers again focused on diversifying education methods. The education and teaching approach based on strengths and weaknesses of students and individual differences indicates that a single type of teaching process does not fit all the students and necessitates differentiation/adaptation in the teaching process. This aspect was also covered by the legal regulations in developed countries and in our country as well (Diken and Batu, 2010).

Another question about the components of inclusive education is *how the physical environment should be*. According to the teachers, it is imperative that the school building and classrooms offering inclusive education become

accessible to students with disabilities. For this reason, reasonable physical arrangements must be made in such environments in line with student needs. When speaking about physical arrangements, the teachers indicated the following points: enabling wheelchairs to enter schools, creating private toilets for disabled students, avoiding too many materials hung on the walls (to avoid too many stimulants), creating huge spaces within the classroom, and designing solo study areas in the classroom (for students who need to be alone). These essential physical needs and regulations that teachers refer to are crucial for effective inclusive education. The physical structure of schools should be designed in the light of universal design principles and according to the needs of the students to enable them to act independently with the least help. It may enable all of us to create school environments that can be accessed, used and trusted by children (Degenhart and Schröder, 2016; Sucuoğlu and Kargin, 2006).

As for the question of *what kind of materials used in a classroom for inclusive education should be*, the teachers emphasized that the materials should be of a quality that answer children's - especially those with disabilities - differing interests and abilities. Teachers emphasized that classroom materials should have different colors, sounds, smells, textures, tastes, weight and volume, that technological applications should be used with materials according to the needs of the students. Turning a classroom environment into a sensory-friendly atmosphere with different materials is crucial for effective learning of a disabled student (Pickering, 1992). On the other hand, effective technology integration in inclusive education gives all students access to the general education curriculum offering and offers more convenience and independence in fulfilling their previously unattainable tasks (Roberts, Keane and Clark, 2008).

The teachers were asked *how the in-service training (the content) should be in a school providing inclusive education*. Most of them responded to this

question by analyzing the current situation stating that they did not receive sufficient relevant training in the pre-service period (during their university education). They explained that they first needed basic knowledge regarding the states of disability as part of necessary in-service training as well as information on inclusive education practices (such as preparing the IEP, working with the parents, and ensuring communication between disabled and non-disabled students). Research by Artan and Uyanık (2003) on the examination of pre-school teachers' knowledge and opinions about inclusion revealed that teachers needed information about the disability types of students in their classrooms, students' readiness level for classroom activities and access to different information sources regarding inclusive education. Many studies in Turkey and the world (Babaođlan and Yılmaz, 2010; Batu 2010; Gök and Erbaş, 2011; Huang and Diamond, 2009; Odom and Bailey, 2001; Rafferty and Griffin, 2005; Sucuođlu, Bakkalođlu, Akalın, Demir and İřcen Karacasu, 2015) repeatedly demonstrated that the teachers lacked information on inclusive education, a conclusion also repeated in this study.

On the other hand, the teachers indicated, in the current study, that they also needed supervision for their professional development and progress. For this reason, they underlined that in-service training should also have a supervision function. An examination of the contents of the answers shows that the need for supervision emerges for two main reasons. Some of the teachers need professional guidance and some others psychological support in the process. Supervision is necessary to meet these needs. It is quite natural that teachers without sufficient prior knowledge of inclusive education and practices need professional guidance. Teachers require professional guidance on how to use content and materials for students with disabilities in schools and how to provide a balance between disabled and non-disabled students in education and teaching (Kardos, Johnson, Peske, Kauffman, and Liu, 2001; Quagliga, Marion and McIntre, 2001). Coaching strategy in professional guidance appears as a recommended method in the literature (Artman-Meeker and Hemmeter, 2013;

Harjusola-Webb and Robbins, 2012; Ottley and Hanline, 2014). As for the practices, we see coaching services delivered in classrooms or web-based platforms (Snyder, Hemmeter, McLean, Sandall, McLaughlin and Algina, 2018). The content of coaching services covers principally technology use, the diversification of teaching methods and classroom management come to the fore (Snyder, et al.; 2018). In addition, the study emphasizes that supervisions should be able to meet the psychological needs of teachers in order to ensure the professional progress of the teachers and to reduce their frustration rate in the process. Other recommendations in the literature include guidance and counseling teachers can organize trainings in schools to respond to classroom teachers' particular needs (Koçyiğit, 2015) or teachers can form groups by themselves to be able to support each other at the school (Varlier and Vuran, 2006).

Following is another question the answer for which pointed to teachers' professional needs: *How does it make you feel to have a disabled student in your classroom?* In response, a large part of the teachers stated that they had negative emotions. Their reasons were consistent with the results from the literature. One of the most important reasons is that the teachers said they were not educated enough to work with children with disabilities. Many studies in Turkey and world reveal that pre-school teachers do not receive adequate training on special education and inclusion as part of their pre-service training (Akalın, Demir, Sucuoğlu, Bakkaloğlu and İşcen, 2014; Altun and Gülben, 2009; Hammond and Ingalls, 2003; Dikici-Sığırtmaç, Hoş and Abbak, 2011; Gök and Erbaş, 2011; Nutbrown and Clough, 2004; Özbaba, 2000; Varlier and Vuran, 2006). Another prominent value is teachers' feelings of being alone and lack of support from other colleagues in the school environment. As emphasized in the literature, school administrators who need to make all kinds of measures and arrangements for mainstreaming education are expected to adopt a favorable attitude towards children with special needs, to help classroom teachers take care of physical arrangements and to enable teachers to

receive necessary training sessions (Kargın, 2004). On the other hand, counseling teachers are expected to inform teachers adequately about mainstreaming/inclusive practices and communicate the mechanisms whereby teachers can receive help in the process (Koçyiğit, 2015).

However, some teachers gave positive answers to this question. Two points stood out here. The first is the professional satisfaction of the teachers. The teachers explained that they valued what they did if they had mainstreaming students in their classrooms. Akkaş (2017) reached a similar conclusion in a study on the professional satisfaction of teachers working with students receiving special education. According to the results of this study, teachers increase their awareness while working with students with special needs. They take more satisfaction from their educational achievements with these students compared to non-disabled students. As a result, they regard their work as more valuable and important. The second point of the study is the opinions of the teachers about the positive effects of the inclusive education. Teachers stated that they viewed having a disabled student in their classrooms positively associating this positive emotion with the positive effects of inclusive education on non-disabled students. In the study by Varlier and Vuran (2006), pre-school teachers stated that both disabled and non-disabled students benefited from mainstreaming practices. For this reason, they expressed that they looked positively at mainstreaming practices in the pre-school period and they felt well in such an environment.

When the teachers were asked about *how to communicate with parents in schools providing inclusive education*, a significant number focused on the family of the disabled students, while a limited number on the families of the non-disabled students. Those focusing on the first group of families said that special meetings should be designed for them. They said that they could give more detailed information to the families about their children's development and that they would be able to teach families during such meetings (so that they

could apply their learnings at home). The teachers also think that the parents of students with developmental deficiency will be able to express themselves more easily in such special interviews and they would not feel as if their children were compared to other students. Additionally, the teachers stated that it was a good idea to invite the families to some class activities to integrate them into the education of their children. Thus, parents will feel the support of the teacher rather than alone; they will be part of their children's education and they will be able to observe their children directly in the classroom or school environment. In a similar study, Bolat and Ata (2017) interviewed principals in 12 independent kindergartens asking for their opinion about their inclusive education practices. One of the important outputs of this study is holding training sessions for families of children with disabilities for the mainstreaming to be successful. Similarly, Bayraklı and Sucuoğlu (2017) stated that the implementation of supporting education programs for the parents of children with disabilities in the pre-school environment may be helpful in reducing the difficulties faced by families.

As stated above, some teachers focused on the parents of non-disabled students and stressed the need to organize training sessions for these parents in order for inclusive education to be efficient. In literature, there are studies showing that the parents of non-disabled children exhibit negative attitudes towards mainstreaming education (Baykoç-Dönmez, Aslan and Avcı, 1998; Gottlieb and Leyser, 1996; Özbaba, 2000; Salend, 1998). A study conducted by Özbaba (2000) found that families with non-disabled children thought that they could be happy to see special needs children being educated with other similar children rather than in mainstreaming education. According to this study, parents of non-disabled children initially do not approve of mainstreaming programs and do not want their children to be in the classrooms where mainstreaming practices are applied. Although parents initially expressed such concerns, they were later found to support mainstreaming practices thanks to the necessary information provided by teachers and their own observations.

The data in the current study is consistent with these findings from the literature and suggest that special informative meetings and support workshops should be held for the parents of both disabled and non-disabled students for the efficient implementation of inclusive education.

## **5.2.2.Views on Montessori’s educational approach**

### **5.2.2.1.Montessori educational approach**

When they are asked what the main understanding of Montessori's philosophy is, most of the teachers emphasized that Montessori's approach encourages students to make their own decisions and makes children active and free. Teachers frequently emphasized that they attached importance to children’s making their own decisions and they associated such with the free environment in Montessori classrooms. Classes being away from authoritarian and competitive education understanding and being child-oriented are the characteristics mentioned in the answers for depicting the liberal environment in Montessori understanding. Importance of a liberal environment for enabling the child to actually make decision is an aspect that is accentuated in Montessori understanding (Standing, 1957).

However, when considered in terms of disabled students, most teachers indicated that such liberal environment could constitute disadvantages for such students. Teachers stated that an educational environment which is structured and where influence of the teacher is more intensive would be better in terms of education of the disabled child, particularly when working with students with severe disabilities or students with attention deficit or autism. While Wilbrant (2011) accentuates that in Montessori's approach, a bit structured education should be present in the initial periods when teachers or therapists start to work with disabled students, and indicated that students could then become able to make their choices easefully over time. On the other hand, teachers have indicated each student being able to progress at his/her own pace

in Montessori, education being away from competitive environment and sense-oriented education constitute advantage for disabled children.

#### **5.2.2.2.Educational environment in Montessori classroom**

In this part, educational environment in Montessori classrooms were examined within scope of 3 basic components of education and these are: daily flow in classroom, mixed age group practice and prepared environment.

##### **5.2.2.2.1.Daily flow in Montessori classroom**

Almost all of the teachers mentioned a similar daily flow although they are teaching at different schools. However, in all of these, children could play independent games by themselves with Montessori's materials and have free play time in the prominent practice. At schools, the day generally started with the children gathering to plan the day and continued with free play time. A group activity was performed again before lunch and this was followed by lunch time. While some schools organized sleep time after lunch, some schools continued the day with group activity or garden games. In the afternoon, almost all schools continued with free play time following snack time and completed the day. Student were frequently dealing with Montessori's materials during free play time and the teachers were making observation while the students were dealing with those materials and providing the support suitable for the need of the students. Güleş (2011) emphasizes that periods of free play time spent with Montessori's materials would encourage the student for self-motivation and self-education.

When evaluation of the daily flow in classroom in respect to disabled students was requested, all of the teachers provided answers by focusing on "free play time". Some of them indicated that students with development delay or that are slow learners, in particular, could spend time at their own learning pace with the materials during free play times, meanwhile the teacher could support the student individually, and added that disabled student would make use of this



practice positively. However, some teachers indicated that free play time would not be sufficiently efficient for students who have distraction problem or have limited self study skills. They stated that these students would require teacher's intervention more, however, such condition would conflict with the rationale of "free play time". Nevertheless, Guess, Benson and Siegel-Causey (1985) have presented in their study that most disabled children would use free play time just like their peers without disability, make material choices freely and work with this material in such period of time.

#### **5.2.2.2.2.Mixed age group practice**

When the teachers were asked about the advantages and disadvantages of the mixed age group practice at Montessori, most teachers indicated that this practice offered advantages for disabled students. Teachers considered that children from different ages being in the same classroom would support development of each other and indicated that children would constitute role model for each other. They stated that teachers should perform diversified - enriched - differentiated practices to educate students from different age groups in the same classroom and consequently, the children who demonstrate different development would benefit from such practices according to their own needs. Also, children who have problem of adapting to school and people (to other students and the teachers), children who are dependent on a routine (such as children with autism) could work with the same teacher for extended years through mixed age group practice. And this increases student's connection to the school. Pickering (1992) highlighted that presence of students from different age groups in the same classroom would increase cooperation and communication among children, accentuated that younger ones and weaker ones would have a lot to learn from older ones and strong ones. Mixed age group practice creates a natural learning opportunity among peers as underlined in the literature (Montessori, 1967). Rudd (2014), in her thesis study, has observed her own Montessori classroom which also included her disabled students. Expressing that she considers different age group

practice to be rather useful, Rudd stated she observed that the children were educationally supporting each other although they were not peculiarly required to do so. She expressed that particularly older children in the classroom frequently helped the student with language development delay.

On the other hand, some teachers have stated that such practice had disadvantageous aspects. They expressed that since teachers were not sufficiently knowledgeable about working with students from different age groups in the same classroom, the student could be negatively affected by such case. Also, it was emphasized that development of a disabled student could be tracked chronologically easier in a classroom where peers are present. Additionally, it was mentioned that children could be very cruel at young ages, they have stated that younger children or children with developmental delay were exposed to the risk of peer bullying in such classrooms more frequently for this reason. Rudd (2014) has observed that some children without disability did not communicate with disabled children at all in her observations, it was observed that those children would directly accuse disabled children due to problems occurring in the classroom even in some cases. Again, according to Rudd's observations, particularly when students who cannot express their needs verbally due to their disabilities express themselves through certain physical behaviors, their peers could not understand this was resulting from the disability of the student and could act aggressive towards the disabled child. Rudd emphasized that organizing friendship development sessions in the classroom to get the children to know each other better would be a good way, however, it would still not be possible to overcome the communication barriers for some students without disability.

#### **5.2.2.2.3.Prepared environment**

When the teachers were asked about the advantages and disadvantages of the prepared environment practice at Montessori, all teachers indicated that prepared environment would improve involvement of disabled children and

material usage and accentuated that students would feel safe at school. It was highlighted that a classroom environment prepared beforehand according to the need of students would encourage students to act comfortably in the classroom and to get involved in the class. Montessori has emphasized that prepared environment is important exactly by aiming this (Gargiulo and Kilgo, 2012; Montessori, 1967). Arrangements that are made to ensure comfortable movement of a student with physical disability using wheelchair, materials displayed in open shelf layout for a visually impaired student, a classroom environment which contains less stimulus (material) for a student with autism or distraction problem were expressed as possible examples of "prepared environment" for disabled students. Rudd (2014) has stated that prepared environment designed by Montessori for disabled children was very important for children both with and without disabilities and emphasized that this would invoke children to interact with the class.

#### **5.2.2.3. Montessori educator**

When the teachers were asked about *the role of Montessori educator in the classroom*, all participants defined the main role of the teachers as an educator who provides sources to children, who observe and who support children whenever necessary. The most important role of the teacher is to provide the children with the free environment they need. Opinions of Montessori in this context had similarities with Vygotsky's. Both emphasize that the observer role of the teacher is very valuable and accentuate that the main role of the teacher is to provide support to the students with regard to the subjects they need (Dodge, Colker and Heromen, 2002).

When the question of *"Is the role of Montessori teachers suitable for working with disabled children?"* was asked, half of the teachers expressed positive views while the other half expressed negative views. Teachers who expressed positive views emphasized that teachers at Montessori classrooms observed students' needs frequently and carried out individual studies. Thus, teachers

identify the needs of disabled students very well during observations and educate students according to their needs during individual studies. Teachers who expressed negative views emphasized that teachers who have disabled children in their classes should be more interventionist as an educator.

As a matter of fact, teachers both who expressed positive and who expressed negative views mentioned the same point and underlined that teachers shall carry out individual studies with such students in case of classes with disabled children. In other words, some teachers considered that studies carried out individually with disabled child would be positive in terms of the role of Montessori educator while some considered that to be negative.

Rudd (2014) presented that absence of free play times in Montessori education and lack of sharpness in the routines could be challenging for disabled children. She has emphasized that teacher should carry out more individualized studies with such children in this case. It was stated that 2 teachers with Montessori certification and 1 special education teacher shall be in the class at the same time in order to observe also other children in an effective manner and to provide support to them sufficiently. This suggestion of Rudd will be good for eliminating the sense of incapability indicated by teachers particularly in previous chapter (arising when working with disabled child), however, it is unfortunately not a suggestion which can be implemented in terms of cost for many regular schools.

#### **5.2.2.4. Montessori materials**

Teachers were asked to define the general characteristics of Montessori materials. Teachers have primarily stated that the materials have the quality of supporting sensory development of the students. Additionally, it was stated that materials support daily life skills, mathematics skills and language skills were available in the classroom environment. They stated that most of the materials were made of wood. When considered in terms of teaching functions of the

materials, the teachers highlighted three points. Materials were designed to enable the students to find their own mistakes, most materials were focused on teaching a single concept and some materials are directly the ones that are used in real life, which allow students to learn real life skills through use of such materials by actually experiencing rather than imitating them. When it was asked whether the materials are suitable to work with disabled students, all of the teachers have stated that the materials were suitable to work with disabled students.

Materials' being focused on sensory teaching in Montessori is also a frequently highlighted point in the literature. According to Montessori, even if the children are incapable of mobility yet, their senses are active and it is the most important medium which allows the children to comprehend the world. In other words, sensory organs are windows of a child that open to the world and sensory development shall be supported at early ages (Büyüктаşkapu, 2011; Montessori, 1967; Orem, 2012). Sensory materials offer a significant facility to teachers to support such development in the classroom environment. On the other hand, most teachers have responded by focusing on sensory materials when evaluating the materials in respect of disabled students. It was stated that materials which develop tactile sense and smelling would be beneficial particularly for students with visual disabilities and autism, while visual materials would be useful for students with hearing loss or speech impairment . It was recorded that exercises of letter tracking by finger on sandpaper performed with children with dyslexia would have positive influence on reading skills of the students. However, Fidler (2006) reports that Montessori teachers who are working with students with autism should pay attention when working with children who are hypersensitive to certain materials (for instance, certain fabric types) and emphasizes that alternative materials should be made available in the classroom setting in order to avoid stimulating such sensitivity of the student.

When materials were evaluated in terms of what they are made of, teachers stated that most materials were made of wood. As stated by Yacob (2016), Montessori observed that wooden materials are ideal learning tools as a result of extended years of research, because wooden materials had a structure that would encourage children to touch, they would not break easily and they possessed various mathematical properties (having corners, etc.). As emphasized by a participant, Montessori was influenced by the fact that toys were made of wood as revealed in the studies carried out by archeologists and this has led her to design most toys from wood. According to the research carried out by a civil society organization, Planet Ark (2015), materials made of wood offer benefits to children in 6 different fields. These can be compiled as follows: Wooden materials are organic, recyclable, therefore, do not jeopardize children's health; they aid teaching of many educational concepts to children; they eliminate bad vibe and allow easier concentration; they are durable for a long time and do not cause safety risk easily; they trigger children's creativity and help communication among children unlike video games. In this study, benefit of wooden materials in terms of students with disabilities was not stated directly, however, it was emphasized that wooden materials are the most suitable materials for the health of all children.

The attribute of the materials for allowing the students to find their own mistake was specified as another characteristic. Montessori observed that students with disabilities had or wanted to have independent skills like students without disabilities, according to the researches she had made in the beginning of her career. Therefore, she designed the classroom environment to ensure that students are independent at the maximum extent. Materials were also created with such an understanding. Thus, students would be independent while studying in the classroom environment and would require minimal aid from the teacher (O'Donnell, 2013). An advantage directly in this context with regard to students with disabilities was not presented in this study. However, Vettiveloo (2008) refers to students' being able to see their own mistake while spending

time with the material as an auto-education. She argues that risk of underestimating the capacity and skills of children with learning problems in particular can arise in teacher oriented education performed in conventional classes. Yet, students who work with materials that have auto-education characteristics find the required independent area to demonstrate their actual capacities. Such materials also allow strengthening of the skill of learning by experience.

Another property presented in relation to materials is that most materials focus on teaching only one concept in Montessori. As stated by Marshall (2017), Montessori materials particularly used for teaching tactile sensation are designed to teach only one property and the materials do not contain hints to teach different concepts at the same time. In this study, when considered in terms of students with disabilities, teachers have found that such property of the materials is beneficial for students who are slow learners or have attention deficit.

Finally, the teachers emphasized that certain materials in the classroom environment are literally the materials used in real life. As also stated by Pickering (1992), real life materials allow the children to establish connection between him/herself and his/her environment; their motor skills develop and their interpersonal relationships improve. Through their relationship with such materials, children learn to complete a task (for instance, cleaning the table), to concentrate on a work and to get in a queue. Teachers have indicated in this study that children learn real life directly with real-life materials and are not obliged to imitate. When considered in respect to disabled children, it was said that real-life materials prepare students to real life skills and get them gain significant skills for their future lives. As a matter of fact, in an example that was given, it was mentioned that students with Down syndrome could find jobs easily particularly at cafes run by adults with Down syndrome/where adults with Down syndrome are employed, by learning to use these materials. It was

also emphasized in the literature that use of real-life materials is important for the challenged students to acquire skills (Guess, Benson and Siegel-Causey, 1985).

#### **5.2.2.5. Evaluation of student's development/success in Montessori classroom**

When teachers were asked about *how they evaluated development and success of the student*, teachers mentioned different methods, however, the majority stated that they did evaluation through observation. Rudd (2014) stated in her study that making observation has critical importance for the teachers in order to understand the need of the students and to plan the subsequent flow. Baker (2015) emphasizes that it is very important to make observation at Montessori class and recommends to the teachers to sit aside in the classroom at certain hours during the day and only keep written records of what is happening. In this study, teachers stated that they also mostly archive their observations and the works (portfolio, individual notebooks, logbook, official forms) of the students and then shared those records with the families.

When they were asked about *what kind of evaluation methods they use while working with disabled students*, most of them again stated that they used different observation techniques. They indicated that they observed the frequency or duration of the behavior according to the situation while they are making observation. They stated that sometimes they made observations through use of checklists (development evaluation). Some teachers have emphasized that they made observation and recording according to individualized educational plans of the students. One of the teachers indicated that a website named "Eğitimhane" was made use of to access information in order to prepare IEP report. Use of such kind of websites by the teachers rather than the Ministry's services (instead of EBA<sup>15</sup>) for accessing to information is

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<sup>15</sup> Eğitim Bilişim Ağı (EBA) is an online information exchange platform for teachers. It is designed and run by the Turkish Ministry of Education.



remarkable. On the other hand, disabled children who also attend special education and rehabilitation centers in addition to school are working with teachers of special education at those centers. Therefore, some Montessori teachers have indicated that they also made certain special observations and recordings according to the request of the special education teacher. Teachers' getting into cooperation with special education teachers is very valuable for tracking development of the children and for meeting their needs. However, it is noteworthy that teachers are doing these plans for recording their activities, not for regulating the education of children. This shows us that teachers are still not well-informed and experienced about the purpose of the IEP.

#### **5.2.2.6. Family cooperation in Montessori approach**

When teachers were asked with the question of "*How families are cooperated within Montessori approach?*", they mentioned 3 different practices. Most of the teachers stated that they held "*family trainings*" in order to explain the details of Montessori approach to the families and to make possible to carry out the practices also at home. Some teachers stated that they are continuously in communication with the families through various means of communication. "WhatsApp group created for parents, monthly bulletins submitted to families or family event held on a weekend or in an evening within the year" are the means of communication that were mentioned. Finally, they mentioned about "family invitations" they organize for the reasons such as ensuring participation of families in school activities and honoring children in the classroom environment. Parents' explaining their professions or hobbies in the class, reading books to the children or making presentation to other children about a subject they chose with their own child were among those events. It is very important that parents' being a part of the school and even of the classroom. This helps to establish a strong relationship not only between the child and his/her parent but also between the teacher and the family of the child and such cooperation is crucial in terms of both development of children and their academic success (Keith and Singh, 2003).

When the question of "*How is cooperation with families having disabled children realized in Montessori approach?*" is asked, almost all of the teachers emphasized that one-to-one interviews - mini-trainings shall be done with families in order to make education of students who have special education needs, sustainable. Thus, the things taught at school can also be applied by the families at home. Bolat and Ata (2017) interviewed preschool school managers in their study and those managers emphasized that trainings shall be performed for parents of disabled children in order to make mainstreaming practice successful. Bayraklı and Sucuoğlu (2017) indicated that implementation of support training programs in school setting for mothers and fathers of disabled children at preschool age would be useful in minimizing the challenges experienced by the families.

In the last question of this part, *advantages and disadvantages of family cooperation* were asked. No disadvantage was mentioned, however, 2 points were referred as advantages. One of these has focused on the family and presented that a good school-family cooperation would decrease the level of anxiety of parents of disabled children. Teachers indicated that they place importance to being in continuous communication with the families throughout the academic year. While such kind of a relationship allows the family to be more participatory in the education of the child and ensures that the teacher becomes more knowledgeable with regard to the student. This ensures that needs can be satisfied easier and possible problems can be solved before getting worse. Thus, it is prevented that families encounter with such problems. Hughes (2017) emphasized that development of family participation programs for families of disabled children helps to reduce the stress of the family and highlights that it makes possible for them to participate in the education of the student in the following years.

The second positive point stressed by the teachers is regarding the impact of family cooperation on the student. Teachers consider that a positive family

cooperation contributes to a better transfer of Montessori's philosophy to the family. Montessori's main philosophy commences from the point of regarding the child as an individual. Perceiving such condition can be very difficult for the families of disabled children sometimes due to their experiences. Children might be considered as beings who always need care and attention. It can be clearly explained to the families, that children are also independent individuals through positive family cooperation. Weafer Research Associates (2010) emphasized that parents believe that they will be involved in the lives of their children until death, in the interviews made with the families of disabled children. These families accept that they are very protective towards their children, however, they legitimize this in their own by expressing that they do this for their children's good. Teachers are concerned about such legitimization process and consider such to be an obstacle to individualization of the child. Therefore, they expressed their opinion that positive cooperation with families shall be developed and Montessori's philosophy of independent living shall be conveyed to the families.

### 5.3. Summary of the perceived advantages and disadvantages of Montessori approach for the education of disabled students

**Table 5.1: Summary of the perceived advantages and disadvantages of Montessori approach for the education of disabled students**

	<b>Advantages</b>	<b>Disadvantages</b>	<b>Information comes from the Literature</b>
<b>a. Montessori educational approach:</b>	<p>Makes children active and free</p> <p>Classes being away from authoritarian and competitive education understanding and being child-oriented</p> <p>Liberal environment in Montessori classes enabling the child to actually make decision</p> <p>Each student being able to progress at his/her own pace in Montessori</p>	<p>Teachers stated that an educational environment which is structured and where influence of the teacher is more intensive would be better in terms of education of the disabled child, particularly when working with students with severe disabilities or students with attention deficit or autism.</p>	<p>Wilbrant (2011) pointed that in Montessori's approach, an education which is a bit more structured should be present in the initial periods when teachers or therapists start to work with disabled students, and indicated that students could then become able to make their choices easefully over time.</p>
<b>b. Educational environment in Montessori classroom:</b>			
<b>Daily Flow in the Classroom</b>	<p>Some teachers indicated that students with development delay or that are slow learners, in particular, could spend time at their own learning pace with the materials during "free play times",</p>	<p>Some other teachers indicated that "free play time" would not be sufficiently efficient for students who have distraction problem or have limited self</p>	<p>Guess, Benson and Siegel-Causey (1985) have presented in their study that most disabled children would use "free play time" just like their peers without</p>

**Table 5.1. (continued)**

	<p>meanwhile the teacher could support the student individually, and added that disabled student would make use of this practice positively.</p>	<p>study skills. They stated that these students would require teacher's intervention more, however, such condition would conflict with the rationale of "free play time".</p>	<p>disability, make material choices freely and work with this material in such period of time.</p>
<p><b><i>Mixed Age Group Practice</i></b></p>	<p>Teachers considered that children from different ages being in the same classroom would support development of each other and indicated that children would constitute role model for each other.</p> <p>They stated that teachers should perform diversified - enriched - differentiated practices to educate students from different age groups in the same classroom and consequently, the children who demonstrate different development would benefit from such practices according to their own needs.</p> <p>Also, children who have problem of adapting to school and people (to other students and the teachers), children who are dependent on a routine (such as</p>	<p>Teachers expressed that since teachers were not sufficiently knowledgeable about working with students from different age groups in the same classroom, the student could be negatively affected by such case.</p> <p>Also, it was emphasized that development of a disabled student could be tracked chronologically easier in a classroom where peers are present.</p> <p>Additionally, it was mentioned that children could be very cruel at young ages, they have stated that younger children or children with developmental delay were</p>	<p>Rudd (2014), in her thesis study, had observed her own Montessori classroom which also included her disabled students. Expressing that she considers different age group practice to be rather useful, Rudd stated she observed that the children were educationally supporting each other although they were not peculiarly required to do so. She expressed that particularly older children in the classroom frequently helped the student with language development delay.</p> <p>Rudd also observed that some children without disability did not communicate with disabled children at all in her observations,</p>

**Table 5.1. (continued)**

	<p>children with autism) could work with the same teacher for extended years through mixed age group practice. And this increases student's connection to the school.</p>	<p>exposed to the risk of peer bullying in such classrooms more frequently for this reason.</p>	<p>it was observed that those children would directly accuse disabled children due to problems occurring in the classroom even in some cases. Again, according to Rudd's observations, particularly when students who cannot express their needs verbally due to their disabilities express themselves through certain physical behaviors, their peers could not understand this was resulting from the disability of the student and could act aggressive towards the disabled child. Rudd emphasized that organizing friendship development sessions in the classroom to get the children to know each other better would be a good way, however, it would still not be possible to overcome the communication barriers for some students without disability.</p>
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**Table 5.1. (continued)**

<p><b><i>Prepared Environment</i></b></p>	<p>All teachers indicated that prepared environment would improve involvement of disabled children and material usage and accentuated that students would feel safe at school.</p> <p>It was highlighted that a classroom environment prepared beforehand according to the need of students would encourage students to act comfortably in the classroom and to get involved in the class.</p> <p>Also stated that prepared environment would provide accessible physical conditions for disabled students in the classroom.</p>	<p>N/A</p>	<p>Rudd (2014) has stated that prepared environment designed by Montessori for disabled children was very important for children both with and without disabilities and emphasized that this would invoke children to interact with the class.</p>
<p><b>c. Montessori educator:</b></p>	<p>Teachers who expressed positive views emphasized that teachers at Montessori classrooms observed students' needs frequently and carried out individual studies. Thus, teachers identify the needs of disabled students very well during observations and educate students according to their needs during individual studies.</p>	<p>Teachers who expressed negative views emphasized that teachers who have disabled children in their classes should be more interventionist as an educator.</p>	<p>Rudd (2014) presented that absence of free play times in Montessori education and lack of sharpness in the routines could be challenging for disabled children. She has emphasized that teacher should carry out more individualized studies with such children in this case. It was stated</p>

**Table 5.1. (continued)**

<p><b>d. Montessori materials:</b></p>	<p>Materials were designed to enable the students to find their own mistakes</p> <p>Most materials were focused on teaching a single concept and</p> <p>Some materials were directly the ones that are used in real life, which allow students to learn real life skills through use of such materials by actually experiencing rather than imitating them.</p> <p>Sensory materials would be good for children with sensory loss.</p> <p>Wooden materials are the most suitable materials for the health of all children.</p>	<p>N/A</p>	<p>that 2 teachers with Montessori certification and 1 special education teacher shall be in the class at the same time in order to observe also other children in an effective manner and to provide support to them sufficiently.</p>
			<p>Vettivello (2008) refers to students' being able to see their own mistake while spending time with the material as an auto-education. She argues that students who work with materials that have auto-education characteristics find the required independent area to demonstrate their actual capacities. Such materials also allow strengthening of the skill of learning by experience.</p> <p>Fidler (2006) reported that Montessori teachers who are working with students with autism should pay attention when working with children who are hypersensitive to certain</p>



**Table 5.1. (continued)**

			<p>materials (for instance, certain fabric types) and emphasizes that alternative materials should be made available in the classroom setting in order to avoid stimulating such sensitivity of the student.</p>
<p><b>e. Evaluation of student's development/success in Montessori classroom:</b></p>	<p>The majority of teachers stated that they did evaluation through observation. They observed the quantity or duration of the behavior according to the situation while they are making observation. Some teachers have emphasized that they made observation and recording for the individualized educational plans of the students.</p>	<p>N/A</p>	<p>Rudd (2014) stated in her study that making observation has critical importance for the teachers in order to understand the need of the students and to plan the subsequent flow.</p>
<p><b>f. Family Cooperation in Montessori Approach:</b></p>	<p>Presenting a good school-family cooperation would decrease the level of anxiety of parents of disabled children.</p> <p>Teachers consider that a positive family cooperation contributes to a better transfer of Montessori's philosophy to the family. Montessori's main philosophy commences from the point of regarding the child as an individual. Perceiving such condition can be very</p>	<p>Reactions of parents of non-disabled students might not be very positive for including the disabled students with their own children. Therefore, mini-trainings or information meetings can be effective to explain the benefits of inclusive education to these families.</p>	<p>Bayraklı and Sucuoğlu (2017) indicated that implementation of support training programs in school setting for mothers and fathers of disabled children at preschool age would be useful in minimizing the challenges experienced by the families.</p> <p>Hughes (2017) emphasizes that development of family</p>

**Table 5.1. (continued)**

	<p>difficult for the families of disabled children sometimes due to their experiences. It can be clearly explained to the families, that children are also independent individuals through positive family cooperation</p>		<p>participation programs for families of disabled children helps to reduce the stress of the family and highlights that it makes possible for them to participate in the education of the student in the following years.</p>
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#### **5.4.Educational implications**

This study was made to contribute to the fields of "early childhood education" and "early childhood special education". One-to-one interviews were made with teachers of Montessori preschools in Turkey, teachers' views considering teaching disabled students in Montessori approach were researched. A number of results can be reached in the light of the research findings with the purpose of developing educational practices.

When the teachers were asked questions regarding disabled students, it was seen that teachers considered "disability" in a very narrow scope. Teachers have generally focused on students with severe disabilities when responding to the questions and failed to focus on the fact that disability covers a very wide spectrum. On the other hand, teachers frequently stated that they did not receive sufficient training regarding education of disabled students during their university education and in-service trainings. Education of teachers shall be developed for the reasons such as extending and improving teachers' perception of disability, explaining the points considered as important by disability movement in the world, conveying the current legal legislation to the teachers. Courses such as special education and disability rights shall be made obligatory in early childhood education departments. Specialization trainings in addition to such courses shall be provided to candidate teachers who want to specialize in the field, through minor or certificate programs. Particularly, in-service trainings which include up-to-date information and information focusing on application shall also be held by MoNE for teachers who are already on the job. Also, MoNE shall make available such in-service trainings to teachers who teach at private schools/special education and rehabilitation centers and their managers.

Again, the teachers have stated that they did not know from where they can receive support while working with disabled children during the service and they were too much on their own for that reason. Teacher support units can be

established in Guidance and Research Centers located in provinces and districts in order to prevent that, meetings can be held in certain intervals in order to get the teachers working in the same region to share things with each other. Teachers teaching at private schools can be invited to those meetings as well.

Teachers' feeling lonely and insufficient if a disabled student is present in the class is an understandable condition. Rudd (2014) stated in her study that 2 teachers with Montessori certificate and 1 special education teacher shall be present in Montessori classrooms at the same time. This suggestion is not a condition that can be easily met by many schools in terms of employee cost. Instead of that, it can be possible to have one special education teacher such as counselor at each school, thus, classroom teachers may develop their practices with the support provided by that teacher.

Teachers have emphasized that access of the students to the school has utmost priority for the education of disabled students. Buildings of preschool educational institutions shall be physically accessible also for disabled students. MEB shall stipulate accessibility criteria for the permit it will issue for opening institutions and shall carry out required inspections.

Teachers indicated that Montessori's materials have many positive aspects in respect to disabled students. Use of such materials also in special education classes and rehabilitation centers would be beneficial for the development of children.

Teachers emphasized that basic principles of Montessori's approach shall be explained to the parents of the children who are educated according to Montessori's approach. They emphasized that meetings exclusive for the family of disabled child shall be held when working with disabled student. Teachers also expressed that studies shall be carried out particularly with the families of children without disability at schools where inclusive education is

being carried out. Both teachers and the managers can be aware of this subject and organize meetings for the parents of students without disability. Cooperation can be established with academy for such meetings, experts of the field can be invited to school for conveying up-to-date information to the parents and teachers.

Another outcome which is reached through the opinions of the teachers is that the basic principle of Montessori's approach is to get students to gain independent life skills as far as possible, ensure that they make their own decisions and thereby, to prepare them to real life. However, when disabled students are of question, expectations for getting the students to gain independent life skills and including them in decision-making processes might be kept very low. Today, disability activists place importance to independent life of disabled people very much and carry out advocacy efforts for that. They even defend participation of people in decision-making mechanism with regard to subjects which concern them with this sentence: Nothing About Us Without Us! In this case, programs including subjects such as remaining loyal to Montessori's basic principles and explaining to the teachers who work with disabled children supporting of independent life skills and inclusion of disabled children in decision making processes may be prepared and available educational contents can be enriched within this context.

### **5.5.Recommendations for further studies**

Considering the research studies on Montessori in Turkey, it is observed that mostly quantitative research methods are being used rather than qualitative ones. In future studies, works can be conducted using more qualitative research designs. Thus, experiences and knowledge of teachers (participants) can be analyzed thoroughly and using qualitative type of designs can provide more information about the dynamics faced in practice.

One to one personal interviews held in this study proved the singularity of personal experiences and enabled individuals to express their own views in depth by making it possible for them to interpret their knowledge and experiences distinctively. However, collective discussion groups/focus groups that might be formed in future studies could provide new points of view by sparking discussions between two or more people.

By conducting long term studies with teachers that have disabled students, we can monitor the experiences that change and develop over the years. Therefore we can demonstrate teachers' needs and the strengths and weaknesses of the Montessori method while meeting these needs.

Only a limited number of academic studies were available in the literature regarding the disabled students that receive education according to the Montessori approach. This study reflects the views of teachers working at the schools that follow the Montessori approach in Turkey, on inclusive education, therefore it offers an insight into a limited context. This study and studies with similar content should be repeated in different contexts (different countries, different age groups, different school types that provide Montessori education) and effects of the Montessori education on disabled students should be demonstrated with its possible variables and constants. After a certain amount of time, all these individual studies can be synthesized in another study in the future using the meta analysis method and significant facts could be revealed on the effects of Montessori approach on disabled students.

While selecting the teachers to participate in this study, there was no condition on having preliminary experience regarding disabled students. For this reason, teachers' knowledge and experience on the development and education of disabled students were quite different than each other. In future studies, pre-experience could be a condition for the participant teachers and even research designs could be created where teachers are subjected to pre-trainings on the

development, educational needs and educational rights of disabled students and then participate in the research. However, while these pre-trainings are prepared, an educational understanding that is similar to the "medical model" which can still be seen in many studies in the disability area and which focuses on the physical and intellectual incompetencies of disabled individuals should not be followed, on the contrary relevant trainings should be organized where the right to education is a basic human right. Unfortunately, it is easy to observe the traces of this medical model in our educational system. Therefore, while designing the educational content, we should not focus on the content that is similar to this model. For example, fourth article of MoNE's Special Education Services Regulation (2018) covers the descriptions related to this area however in this regulation that dominantly has the traces of the medical approach, definitions regarding disabled individuals are expressed with a focus on physical incompetencies rather than educational needs. Today, the activists in disability movement are refusing the traces of medical approach of disability in the field of education.

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## APPENDICES

### A: APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARASTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



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25.07.2014

Gönderilen : Doç. Dr. Feyza Tantekin Erden  
İlköğretim Bölümü

Gönderen : Prof. Dr. Canan Özgen  
IAK Başkanı

İlgi : Etik Onayı

Danışmanlığını yapmış olduğunuz İlköğretim Bölümü öğrencisi İdil Seda Ak'ın "Montessori Yaklaşımında Bütünleştirme Uygulamalarına İlişkin Öğretmen Görüşleri" isimli araştırması "İnsan Araştırmaları Komitesi" tarafından uygun görülerek gerekli onay verilmiştir.

Bilgilerinize saygılarımla sunarım.

Etik Komite Onayı

Uygundur

25/07/2014

Prof.Dr. Canan Özgen  
Uygulamalı Etik Araştırma Merkezi  
( UEAM ) Başkanı  
ODTÜ 06531 ANKARA

## B: INTERVIEW PROTOCOL

**Çalışmanın Adı:**

**Montessori yaklaşımında bütünleştirme uygulamalarına ilişkin öğretmen görüşleri**

### 1. Katılımcı Hakkında Genel Bilgiler

Cinsiyetiniz	Erkek <input type="checkbox"/>	Kadın <input type="checkbox"/>							
Yaşınız	21-30 <input type="checkbox"/>	31-40 <input type="checkbox"/>	41-50 <input type="checkbox"/>	51+ <input type="checkbox"/>					
Mesleki deneyim yılınız	Bir yıldan daha az <input type="checkbox"/>	1-4 yıl <input type="checkbox"/>	5-9 yıl <input type="checkbox"/>	10-14 yıl <input type="checkbox"/>	14+ yıl <input type="checkbox"/>				
Engelli bir öğrenci ile çalışma deneyiminiz var mı? Varsa süresi nedir?									
Deneyimim yok <input type="checkbox"/>					Bir yıldan daha az <input type="checkbox"/>	1-4 yıl <input type="checkbox"/>	5-9 yıl <input type="checkbox"/>	10-14 yıl <input type="checkbox"/>	14+ yıl <input type="checkbox"/>
Bu deneyimi nerede edindiniz?									
Mezun olduğunuz bölüm									
Lisans eğitimi esnasında özel eğitim/bütünleştirme konusunda herhangi bir ders aldınız mı?									
Mesleğiniz esnasında özel eğitim/bütünleştirme konusunda hizmet-içi eğitim aldınız mı? Herhangi bir sertifika programına katıldınız mı?									
Sınıfınızdaki öğrenci sayısı									
Sınıfınızda varsa bütünleştirme yoluyla eğitime devam eden öğrenci sayısı									

### 1.1 Montessori deneyimi hakkında sorular:

Montessori yaklaşımı hakkında eğitim aldınız mı?
Ne kadar süredir Montessori öğretmenliği yapıyorsunuz?
Engelli bir yakınınız/arkadaşınız var mı?

### 2. Bütünleştirme eğitimi / Özel Eğitim İhtiyacı olan Öğrenciler Hakkında Öğretmenlerin Görüşleri

1. Özel eğitime ihtiyacı olan öğrenci dediğimizde aklınıza gelen öğrenci profilini tanımlayabilir misiniz?
2. Bütünleştirme eğitimi dediğimizde ne anlıyorsunuz?
3. Özel eğitime ihtiyacı olan öğrencinin engelsiz akranları ile aynı sınıfta eğitim görmesi hakkında ne düşünüyorsunuz?
4. Bütünleştirme eğitiminin özel eğitime ihtiyacı olan öğrenciler için ne gibi faydaları vardır?
5. Bütünleştirme eğitiminin engelsiz öğrenciler için ne gibi faydaları vardır?
6. Bütünleştirme eğitiminin sorunları var mıdır? Varsa sizce bunlar nelerdir?
7. Bütünleştirme eğitiminde sizce öğretmenlerin görev ve sorumlulukları nelerdir?
8. Bütünleştirme eğitimin bileşenleri neler olmalı? :
  - a. Bütünleştirme eğitimin verildiği bir okulda fiziksel ortam sizce nasıl olmalı?
  - b. Bütünleştirme eğitiminin verildiği bir okulda eğitim programı nasıl olmalı?
  - c. Bütünleştirme eğitiminin verildiği bir okulda eğitim materyalleri nasıl olmalı?
  - d. Bütünleştirme eğitiminin verildiği bir okulda idarecilerin, öğretmenlerin ve hizmet personelinin hizmetiçi eğitimleri nasıl olmalı?

e. Bütünleştirme eğitiminin verildiği bir okulda veliler ile iletişim nasıl olmalı?

9. Özel eğitime ihtiyacı olan bir öğrencinin sınıfınızda bulunması size ne hissettirir?

### **3. Montessori Eğitimi Üzerine Sorular**

#### **a)Montessori Eğitim Yaklaşımı:**

1. Montessori eğitim yaklaşımın temel anlayışı sizce nedir?
2. Sizce Montessori eğitim yaklaşımı bütünleştirme uygulamaları ile örtüşüyor mu?

#### **b)Montessori Sınıflarında Eğitim Ortamı:**

1. Montessori sınıfında günlük akış nedir?
  - a.Özel eğitim ihtiyacı olan öğrenciler açısından düşündüğünüzde bu günlük düzenin ne gibi avantajları olabilir?
  - b. Özel eğitim ihtiyacı olan öğrenciler açısından düşündüğünüzde bu günlük düzenin ne gibi dezavantajları olabilir?
2. Montessori yaklaşımında kullanılan “karışık yaş grubu” uygulaması özel eğitim ihtiyacı olan öğrenciler için sizce uygun bir eğitim yöntemi mi?
  - a. Özel eğitim ihtiyacı olan öğrenciler açısından düşündüğünüzde bu yöntemin ne gibi avantajları olabilir?
  - b. Özel eğitim ihtiyacı olan öğrenciler açısından düşündüğünüzde bu yöntemin ne gibi dezavantajları olabilir?
3. Montessori'nin kendi yaptığı tanıma göre hazırlanmış çevre: Çocuk içine girmeden önce özel olarak düzenlenmiş ve çocuğun bağımsız şekilde karar alma ve uygulamasına olanak veren fiziksel özellikler taşıyan ortamdır. Hazırlanmış çevre sizce farklı engel gruplarından gelen çocuklar için uygun mu, neden?

#### **c)Montessori Eğitimcisi:**

1. Montessori eğitimcisinin sınıf içindeki rolü nedir?
2. Sizce bu rol özel eğitim ihtiyacı olan öğrenciler ile çalışmak için uygun mu?

#### **d)Montessori Materyalleri:**

1. Montessori yaklaşımında materyallerin önemi nedir?



2. Montessori materyallerinin genel özellikleri nelerdir?
3. Montessori materyalleri özel eğitim ihtiyacı olan öğrencileri ile çalışmak için uygun mudur? Bu soruyu cevaplarırken aşağıdaki sınıflamalar üzerinden cevap veriniz: Günlük yaşam becerilerinin öğretiminde kullanılan materyaller, Duyusal gelişim materyalleri, Matematik materyalleri, Dil materyalleri

**e) Montessori sınıflarında başarının değerlendirilmesi:**

1. Montessori sınıflarında öğrencinin gelişimini/başarısını nasıl değerlendiriyorsunuz?
2. Özel eğitim ihtiyacı olan öğrenciler ile çalışırken hangi değerlendirme yöntemlerini kullanıyorsunuz? Lütfen örnekler vererek açıklayınız.

**f) Montessori yaklaşımında aile işbirliği:**

1. Montessori yaklaşımında ailelerle işbirliği nasıl sağlanmaktadır?
2. Özel eğitim ihtiyacı olan öğrencilerin aileleri ile işbirliği nasıl sağlanıyor?
3. Sizce Montessori yaklaşımına göre aile işbirliğinin sağlanması engelli bir çocuğu olan aileye neler kazandıracaktır?

## C: CONSENT FORM

### Gönüllü Katılım Formu

Bu çalışma Orta Doğu Teknik Üniversitesi Öğretim üyelerinden Doç. Dr. Feyza Tantekin Erden danışmanlığında İdil Seda Ak tarafından yürütülmektedir. Çalışmanın amacı, ülkemizde okul öncesi düzeyde eğitim yapan bazı okullarda uygulanan Montessori yaklaşımında eğitimci olarak çalışan Montessori öğretmenlerinin bütünleştirme uygulamalarına dair görüşlerini tespit etmek ve Montessori eğitim yaklaşımının ve uygulamalarının özel eğitim ihtiyacı olan öğrencileri için olası avantajlarını ve dezavantajlarını belirlemektir.

Çalışmaya katılım tamamen gönüllülük esasına dayalıdır. Görüşme sürecinde kimlik belirleyici hiçbir bilgi istenmemektedir. Görüşme yaklaşık 40-50 dakikalık bir zamanı alacaktır. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayınlarda kullanılacaktır.

Görüşme, genel olarak kişisel rahatsızlık verecek soruları içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda görüşme yaptığınız kişiye, görüşmeyi tamamlamak istemediğinizi söylemeniz yeterli olacaktır. Görüşme başında ve sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz.

Çalışma hakkında daha fazla bilgi almak için araştırmayı yürüten yüksek lisans öğrencisi İdil Seda Ak ( Tel: 0505 757 95 16) ; E-posta: [idilseda@yahoo.com](mailto:idilseda@yahoo.com)) ya da tez danışmanı Doç. Dr. Feyza Tantekin Erden (Tel: 0312 210 36 99; E-posta: [tfeyza@metu.edu.tr](mailto:tfeyza@metu.edu.tr)) ile iletişim kurabilirsiniz.

***Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum.*** (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz)

İsim Soyad

Tarih

İmza

## D: EASY TO READ VERSION OF THIS STUDY



Hello! That's me!

My name is idil Seda AK.

I am student at Middle East Technical University in Ankara, Turkey.

I conducted a study for my master thesis.

Now I want to give you some information about my study.

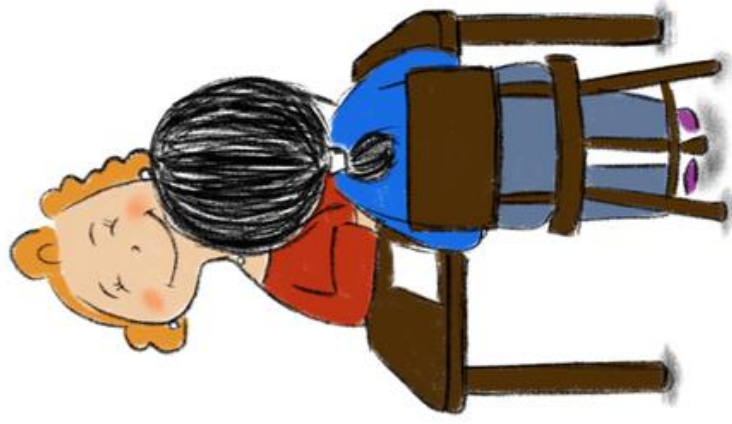


This is my professor at the university.

Her name is Feyza ERDEN.

When I was conducting my study, she supported me with her academic guidance and feedbacks.

She gave comments on my writings and showed me how I can finalize this study.



For this study, I visited preschools to ask questions to teachers.

Some schools were in Ankara and some were in Istanbul.

I held the interviews with teachers in an empty room or a classroom in schools. I tried to stay alone with the teachers and keep the room silent in order to keep their attention.

I asked the question in the same order to each teacher and I audio-recorded the answers with the permission of the teachers.

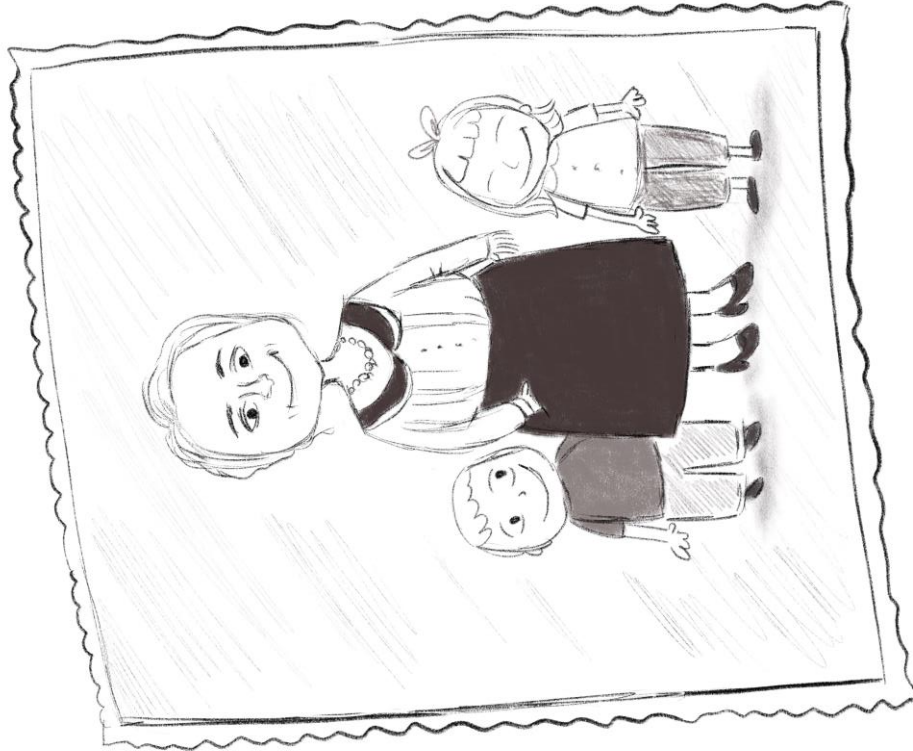
Maria Montessori inspired me to conduct this study.

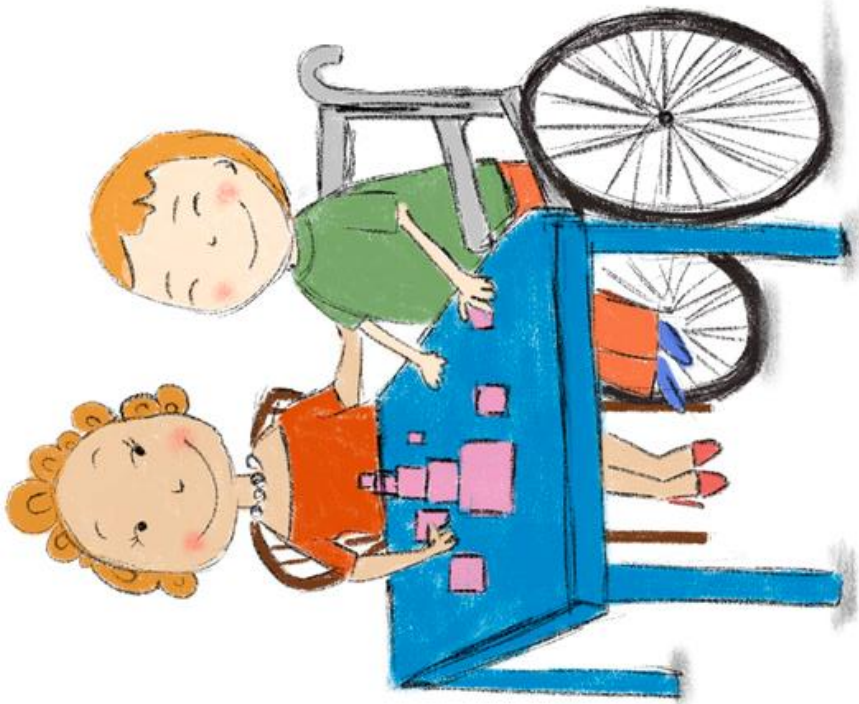
Doctor Maria Montessori became the first female doctor in Italy.

She worked with disabled children at the hospital.

After this experience, she decided to train children and opened the House of the Children.

She improved her educational approach - also known as Montessori Approach.





Inspiring from the work of Maria Montessori in her school, I decided to work with preschool teachers in my study.

These teachers were working on Montessori Approach.

I asked preschool teachers questions to learn their views about inclusion in Montessori schools.

Inclusion means an education system that provides equal education opportunity for disabled students and



I asked teachers this question:

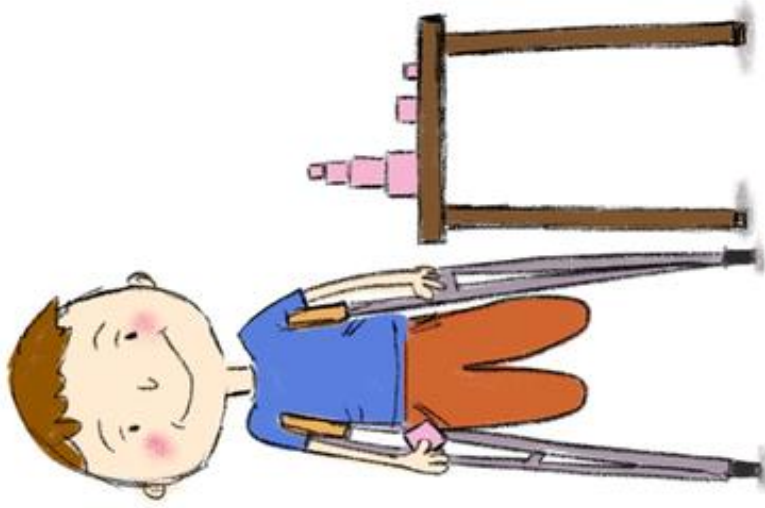
Q: What do you think about the education of disabled students in the same class with non-disabled students?

Most teachers thought that inclusive education good for social skills of disabled and non-disabled students.

Students can learn from each other.

However, teachers worried that disabled students might disrupt the flow of the class. And they thought that they needed to give more time to disabled students.





Many teachers thought that flow of the day in Montessori preschool was good to encourage students to make her/his own choices and to make them active and free at school.

Free playtime is important in a Montessori preschool.

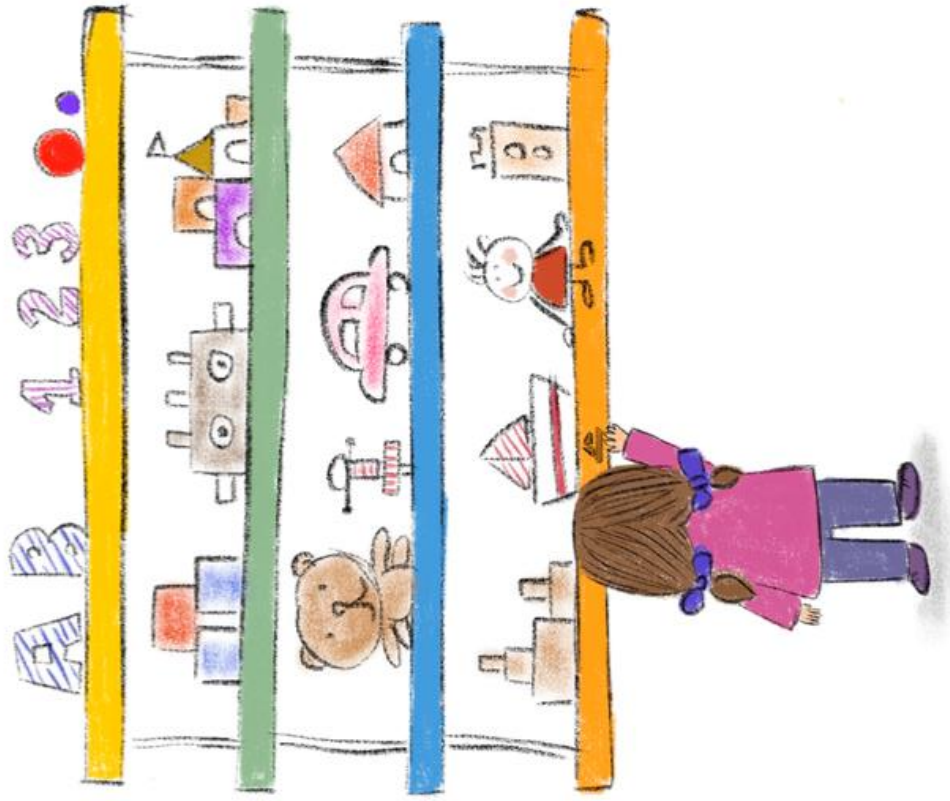
However, teachers thought free play times can be difficult for children with attention problems.



Maria Montessori believed that students at different ages should be in the same classroom.

Some teachers thought that if older and younger children come together at a classroom, they can learn from each other.

On the other hand, some teachers thought that if older and younger children come together at a classroom, the older children might behave badly to younger ones.



Maria Montessori believed that preparing the Classroom for students is very important for students' learning.

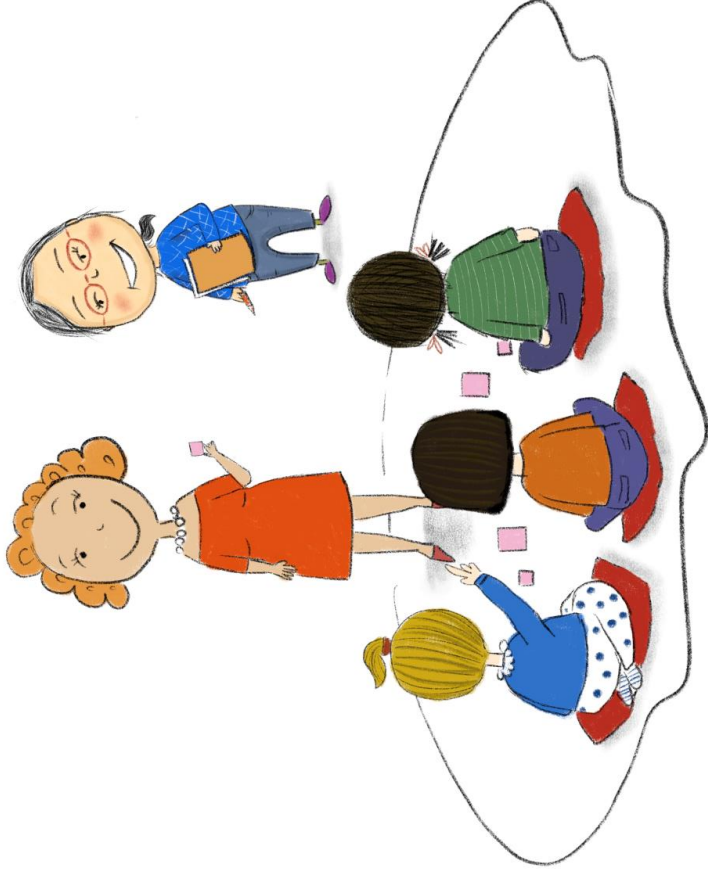
Teachers also thought that it is important to prepare and design the Classroom for students.

If teachers design the Classroom according to needs and interests of students, all students can feel comfortable at Classroom and especially disabled students can find and return the materials easily in the Classroom.

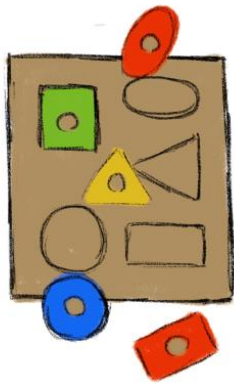
Teachers said that they generally observe children and support students whenever necessary in Montessori preschools.

Some teachers thought that observer role of teacher in the classroom was good for disabled students because teachers can observe the needs of children and react accordingly.

However, some teachers thought that observer role of teacher was not only enough for disabled students because these children need more help in the classroom.



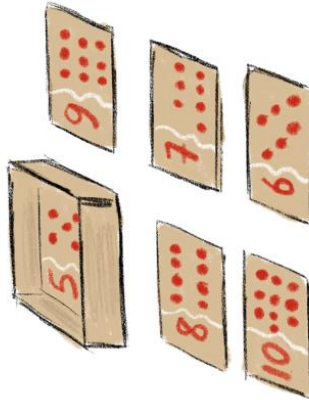
# ☺ Montessori Materials ☺



geometric finger panel



Pink Tower



Wooden Math  
(matching game)

In Montessori schools, children play with materials designed by Maria Montessori.

All of the teachers stated that Montessori materials were suitable to work with disabled students. This means that many disabled students can easily work with these materials at school.



Most of the teachers said that they followed the development and success of their students through observations.

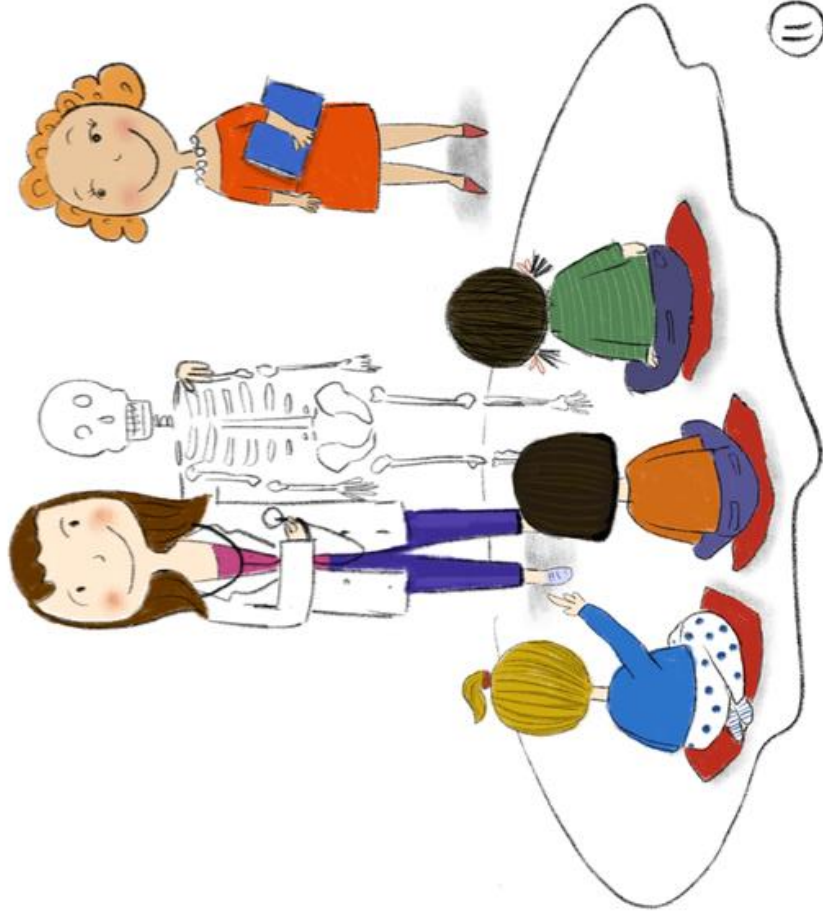
For disabled students, they generally observed frequency (how many times s/he does) and duration (how long/s/he does) of the behaviour.

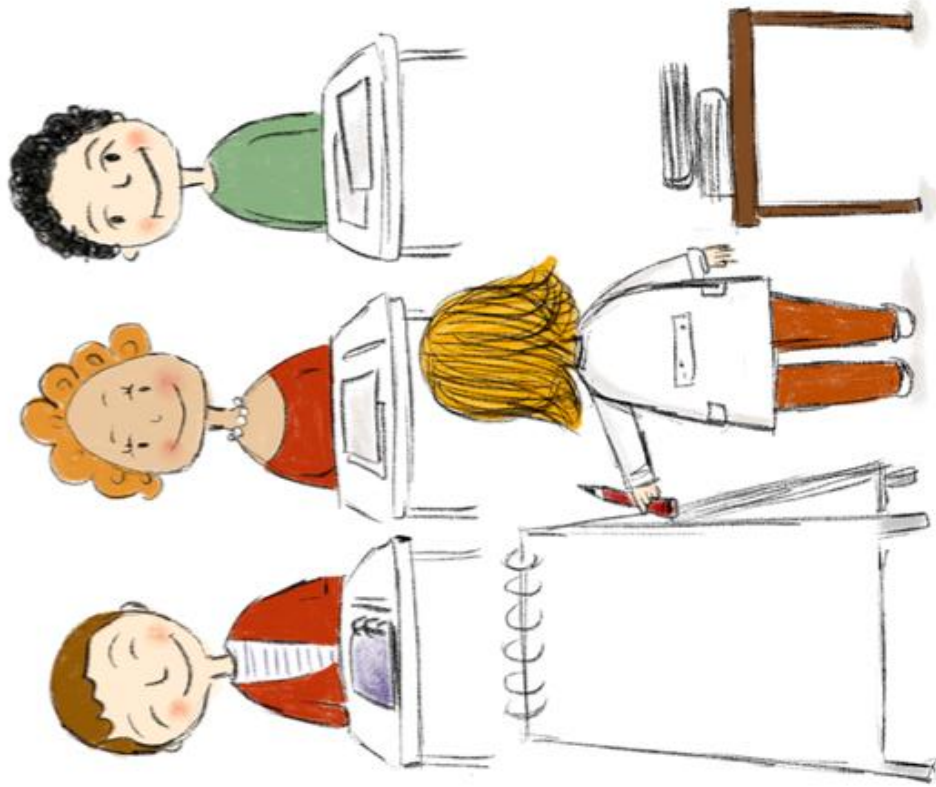
Teachers said that it is important for them to have good relations with the parents of their students. Therefore, sometimes they invite parents to the Classroom.

When parents come to the Classroom, sometimes they talk to students about their jobs or hobbies and students ask questions to them.

Teachers also have private meeting with parents.

Teachers also send messages to parents via WhatsApp about school activities.





Teachers often said that they did not receive sufficient training to work with disabled students.

Organizing trainings for teachers about needs of disabled students can be good for teachers, so they can feel better while working with disabled students.





Many teachers think that school building are not appropriate for disabled students.

According to them, if we want disabled students at school, we need to build accessible schools first.

Unfortunately, many preschools that I visited during this study were not accessible for students who use wheelchair.



For this study, I held one to one interviews with teachers.

For next researches, I recommend to create a group of teachers and ask their views when they are together.

## E: TURKISH SUMMARY/TÜRKÇE ÖZET

### GİRİŞ

#### 1.Çalışmanın amacı

Bu çalışmanın temel amacı Montessori öğretmenlerinin bütünleştirme hakkındaki görüşlerini incelemek ve Montessori yaklaşımının engelli öğrenciler için avantaj ve dezavantajlarını öğretmen görüşleri ışığında ortaya koymaktır.

#### 2.Çalışmanın önemi

Maria Montessori 1896 yılında İtalya'nın ilk kadın doktoru ünvanını alarak tıp fakültesini tamamlamıştır. Çocuk sağlığı ve psikiyatri alanlarında eğitim alan Montessori, mezuniyetinin ardından 1897 yılında Roma Üniversitesi Psikiyatri Kliniği'nde gönüllü asistan olarak çalışmaya başlamıştır. Buradaki görevlerinden biri Roma'daki akıl hastanelerini ziyaret etmek ve klinikte tedavi için uygun hastaları tespit etmektir. Bu ziyaretleri esnasında bir hastanede bir grup zihinsel engelli çocuğun kapalı bir odada çevrelerinde herhangi bir uyaran olmadan tutulduklarını görür. Bir süre bu çocukları gözlemledikten sonra çocukların çeşitli uyaranlara tepki verdiğini fark eder ve zihinlerinin öğrenmeye açık olduğunu düşünür ve onları eğitmeye karar verir (Kramer, 1976). Kariyerine tıp doktoru olarak başlamış olmasına rağmen, engelli öğrencilerin gelişiminde eğitimin çok ciddi yararları olduğunu düşünen Montessori kendi eğitim yaklaşımını geliştirir ve dezavantajlı çocuklarla çalışmaya başlar. Bu yaklaşımda Montessori, Erben'in (2005) de vurguladığı gibi engelli kişilerin üçüncü sınıf insanlar olmasına şiddetle karşı çıkmıştır. Ancak Montessori eğitimi bu temele dayanmasına rağmen, çok uzun süre dünyanın birçok ülkesinde sadece engelsiz çocukların ve üstün yetenekli çocukların eğitiminde uygulanmıştır (Wilbrandt, 2011). Bu çalışma Montessori'nin çıkış noktasına geri dönerek Montessori eğitim yaklaşımının engelli çocuklar için avantajları ve dezavantajlarını sorgulamaktadır.

## YÖNTEM

### 1.Araştırma soruları

Bu çalışmanın temel amacı Montessori öğretmenlerinin bütünleştirme hakkındaki görüşlerini incelemek ve Montessori yaklaşımının engelli öğrenciler için avantaj ve dezavantajlarını öğretmen görüşleri ışığında ortaya koymaktır. Bu nedenle araştırmada şu araştırma sorularına cevap aranmıştır:

1. Montessori öğretmenlerinin bütünleştirme hakkındaki görüşleri nelerdir?
2. Montessori öğretmenlerinin Montessori okullarındaki bütünleştirme eğitimi hakkındaki görüşleri nelerdir?
3. Montessori öğretmenlerine göre Montessori yaklaşımının engelli öğrenciler için avantajları nelerdir?
4. Montessori öğretmenlerine göre Montessori yaklaşımının engelli öğrenciler için avantajları nelerdir?

### 2.Araştırma yöntemi

Bu çalışmada nitel araştırma yöntemi tercih edilmiş, olgubilim (fenomenoloji) deseni ile derinlemesine ve ayrıntılı bilgilere ulaşılmaya çalışılmıştır. Olgubilimde amaç sadece bilginin anlamını keşfetmek değil, aynı zamanda onu inşa etmektir (Tesch 1998; Van Manen 1990). Nitel araştırmacı, katılımcıların bakış açılarının ne olduğu sorusuna odaklanır (Bogdan ve Biklen, 2007). Dolayısıyla katılımcılarla yapılan birebir görüşmeler, farklı bakış açılarını anlamak için temel nitel veri toplama yöntemlerinden biridir (Patton, 1992).

### **3.Katılımcılar**

Bu çalışmada, Montessori anaokullarında çalışan 18 Montessori öğretmeni ile çalışılmıştır. Amaçlı örnekleme yöntemi ile katılımcılara ulaşılmıştır.

Okul öncesi öğretmenleriyle yapılan işbirliğinin ardında yatan temel sebep, Montessori eğitiminin Türkiye yalnızca erken çocukluk eğitimi programlarında uygulanıyor olmasıdır. Başka bir deyişle, Montessori ana okullarında çalışan okul öncesi öğretmenleri Türkiye'deki Montessori yaklaşımının tek uygulayıcılarıdır, bu nedenle bu öğretmenler bu araştırma kapsamında amaçlanan verilere ulaşmak için araştırmacı tarafından bilinçli bir şekilde seçilmiştir.

Katılımcı profiline bakıldığında ise, tüm katılımcı öğretmenler kadındır. Yaşları 25-54 arasında, öğretmenlik deneyimleri ise 2-31 yıl arasında değişmektedir. Katılımcıların 9 tanesi çocuk gelişimi bölümünden mezunken, geri kalan 9 katılımcı da okul öncesi öğretmenliği bölümünden mezundur. Montessori öğretmeni olarak deneyim yılları ise 1-14 yıl arasında değişmektedir.

### **4.Veri toplama aracı ve süreci**

Bu çalışmada veriler, araştırmacı tarafından oluşturulan yarı yapılandırılmış görüşme protokolü ile toplanmıştır. Protokolü geliştirmeden önce araştırmacı, Montessori yaklaşımı ile ilgili literatürü ve okul öncesi eğitimde engelli öğrencilerle olan çalışmalarını taramış ve ilgili başlıkları literatürdeki bilgiler ışığında oluşturmuştur.

Görüşme protokolünün son şekli üç ana bölümden oluşmaktadır, bunlar: katılımcılar hakkında demografik sorular, bütünleştirme eğitimi ve engelli öğrenciler hakkında sorular ve son olarak Montessori yaklaşımı hakkındaki sorulardır (Bkz. Ek B). Protokolde yer alan tüm sorular açık uçludur.

Protokolün son hali, saha uzmanları tarafından gözden geçirilmiş ve pilot uygulama yapılarak son haline getirilmiştir.

Görüşmeler katılımcılarla birebir yapılmıştır. Görüşmenin yapıldığı yerde, önce araştırmacı araştırmanın amacını katılımcılara kısaca açıklamış ve gönüllü katılımlarını istemek için bilgilendirilmiş onam formunu (Bkz. Ek C) kendilerine iletmiştir. Görüşme protokolünde yer alan sorular her katılımcıya aynı sırada sorulmuş ve cevaplar katılımcıların izniyle kaydedilmiştir. Araştırmacının ses kaydı yapmasına izin vermeyen katılımcılar da olmuştur. Bu katılımcılar için araştırmacı cevaplarını kaydetmek için el yazısı ile notlar almıştır.

Öğretmenler görüşlerini detaylı bir şekilde ifade etmeleri için araştırmacı tarafından teşvik edilmişlerdir. Görüşme sırasında araştırmacı "Özel Eğitim Hizmetleri Yönetmeliği" ni de yanında bulundurmıştır. Bazı öğretmenler, yönetmelik kapsamındaki engel gruplarını kapsamlı bir şekilde düşünebilmek için yönetmelikteki tanımlara bakarak soruları yanıtlamıştır.

Veriler Ocak 2015 ile Haziran 2016 arasında toplanmış, her görüşme yaklaşık 45-75 dakika sürmüştür.

## **5. Veri analizi**

Kayıtların içeriği içerik analizi yöntemi kullanılarak analiz edilmiştir. Bu analiz için araştırmacı, birebir görüşmelerden elde edilen verileri öncelikle yazılı hale getirmiştir. Analiz esnasında, her soru için cevaplar kategorilere ayrılmış ve ardından tekrarlanan cevaplar tanımlanmış ve bu cevapların sıklıkları not edilmiştir. Ek olarak, cevapların açıklamasını zenginleştirmek için her kategori için birkaç çarpıcı yanıt doğrudan alıntı olarak verilmek üzere kaydedilmiştir.

Creswell'in (2007) önerdiği gibi, veri analiz süreci özneliği en aza indirmek için iki bağımsız kodlayıcı tarafından yapılması gerekmektedir. Kodlayıcılardan biri araştırmacının kendisi, diğer kodlayıcı 8 yıllık deneyimli bir okul öncesi öğretmendir. Tüm cevapların bağımsız olarak kodlanmasından sonra, iki kodlayıcı kodlarını karşılaştırmıştır ve ortak noktaları ortaya koymuştur. Karşılaştırma prosedürü sonucunda kodlayıcıların kategoriler ve sıklıklar bakımından tüm kodlar ve kodlanmış cevaplar konusunda tam fikir birliğinde olduğunda ortaya koymuştur.

## **BULGULAR ve TARTIŞMA**

### **1.Montessori öğretmenlerinin bütünleştirme hakkındaki görüşleri**

Öğretmenlerden, “engelli ya da özel eğitime ihtiyacı olan öğrenci dendiğinde akıllarına gelen öğrenci profilini” tanımlamaları istendi. Çalışmaya katılan öğretmenlerin çoğu, özel eğitime ihtiyacı olan öğrenciyi gelişim geriliği ya da yetersizliği olan öğrenci/birey olarak tanımladı. Diğer bir deyişle engelliliği, eksiklik - yetersizlik olarak gören bir durum olarak ortaya koydular. Bu durum aslında çok da şaşırtıcı bir sonuç değil, aksine engelli hareketinde ve engellilik çalışmalarında sıklıkla vurgulanan medikal yaklaşımın bir uzantısıdır.

Benzer bir sonuç, “bütünleştirme eğitimi” dendiğinde ne anlıyorsunuz sorusuna verilen yanıtlarda görülebilir. Öğretmenler, bütünleştirme eğitimini engelli ve engelsiz öğrencilerin bir arada eğitim aldığı eğitim modeli olarak tanımlamışlardır. Ancak yapılan tanımlar esnasında sıklıkla “normal akran”, “normal gelişim gösteren akran” gibi tabirler kullanmışlardır.

Öte yandan “özel eğitime ihtiyacı olan öğrencinin özel eğitime ihtiyacı olmayan akranları ile aynı sınıfta eğitim görmesi hakkında ne düşünüyorsunuz?” diye sorulduğunda öğretmenlerin olumlu görüşler belirtmiştir. Hatta öğretmenlerden biri öğrencilerin birlikte eğitim almasının temel bir hak olduğunu vurgulamıştır. Ayrıca öğretmenler, birlikte eğitim

almanın birlikte öğrenmeye de olumlu katkıları olacağını belirtmiştir. Öğrencilerin birbirini rol model alarak öğrenecekleri vurgulanmıştır. Bütünleştirme eğitiminde akran etkileşimini inceleyen çalışmalarda da bu durum benzer şekilde vurgulanmıştır (Buysse, Goldman ve Skinner, 2002). Bu soruya bazı katılımcılar da olumsuz yanıt vermiştir. Öğretmenler, birlikte eğitimin önemine inansalar bile okullarda bu tip bir eğitimin verilmesi için yeterli ön hazırlığın olmamasından şikayet etmişlerdir. Sınıfların kalabalık olması, öğretmen eğitiminin yetersizliği, fiziksel alt yapının olmaması gibi sorunlar dile getirilmiştir.

“Bütünleştirme eğitiminin özel eğitime ihtiyacı olan öğrenciler için ne gibi faydaları vardır” diye sorulduğunda ise öğretmenlerin çoğu bu eğitimin engelli öğrencilere sosyal beceriler kazandırdığını söylemiştir. Çocukların akranları ile iletişim ve uyum becerilerinin geliştiğini, özgüvenlerinin arttığını belirtmiştir. Bütünleştirme eğitimi uygulanan okullarda, engelli öğrencilerin akranları ile beraber oynaması ya da onların oyunlarına katılması, derste verilen görevleri yine onlarla birlikte yerine getirmesi gibi durumlar engelli öğrencilerin iletişim ve sosyal uyum becerilerini geliştirmektedir.

“Bütünleştirme eğitiminin özel eğitime ihtiyacı olmayan öğrenciler için ne gibi faydaları vardır” diye sorulduğunda ise öğretmenlerin hepsi sosyal becerilerin gelişimine ve duygusal kazanımlara işaret etmiştir. Öğretmenlerin cevaplarına detaylı olarak bakıldığında ise kişisel farklılıklara saygı, birbirini kabul etme, sorumluluk alma, birbirlerinin ihtiyaçları hakkında duyarlılık ve hoşgörü kazanma, yardımlaşma gibi becerilerin bu süreçte geliştiği vurgulanmıştır.

“Bütünleştirme eğitiminin sorunları var mıdır?” diye sorulduğunda ise öğretmenlerin büyük bir bölümü engelli öğrencinin sınıftaki ders akışını bozabileceğinden endişe ettikleri görülmüştür. Ayrıca, yine öğretmenlerin engelli öğrencilere daha fazla zaman ayırması gerektiğini düşündükleri ortaya çıkmıştır. Verilen cevaplardan anlaşılıyor ki sınıflarında engelli öğrenciler olduğunda öğretmenlerin sınıf yönetimi ve ders işleyişi konusunda kaygıları ortaya çıkmaktadır.



Öğretmenlerin bütünleştirme eğitiminde kendilerini nasıl konumladıklarını daha iyi anlayabilmek için onlara şu soru sorulmuştur: Bütünleştirme eğitiminde sizce öğretmenlerin görev ve sorumlulukları nelerdir? Bu soruya öğretmenlerin hemen hepsi eğitim yönetiminin ve içeriğinin engelli öğrencinin ilgi ve becerilerine yönelik değiştirilmesi olarak yanıtlamıştır. Diğer bir deyişle, akademik öğrenmenin ve öğrenciler arasındaki sosyal etkileşimin artmasını sağlamak için öğretmenlerin eğitim ve öğretim yöntemlerinde çeşitlilik yaratması en önemli görev ve sorumluluk olarak vurgulanmıştır. Bu görev, eğitimin hedefine ulaşması açısından oldukça değerlidir, hatta görev olmanın ötesinde öğretmenler için bir yasal sorumluluktur. Öte yandan, bütünleştirme eğitiminin bileşenleri hakkında da öğretmenlere sorular sorulmuştur. Öğretmenler, yukarıda görev ve sorumluklara ilişkin verdikleri cevapların bir benzerini de bu kısımda şu soruya yanıt olarak vermiştir: Bütünleştirme eğitiminin verildiği bir okulda eğitim programı nasıl olmalı? Verdikleri cevaplarda öğretmenler yine eğitim metotlarının çeşitlendirilmesine odaklanmıştır. Öğrencilerin güçlü ve zayıf yönleri ile bireysel farklılıkları temel alan eğitim-öğretim yaklaşımı tek tip eğitim-öğretim sürecinin tüm öğrencilere uymayacağını altını çizer ve eğitim-öğretim sürecinde farklılaştırmayı/uyarlamalar yapmayı zorunlu kılar. Bu durum gelişmiş ülkelerde ve ülkemizde yasal düzenlemelerde de yerini almıştır. (Diken ve Batu, 2010).

Bütünleştirme eğitiminin bileşenleri hakkındaki bir diğer soru da fiziksel ortamın nasıl olması gerektiğine ilişkindir. Öğretmenlere göre, bütünleştirme eğitiminin verildiği okul binasının ve sınıfların engelli öğrenciler için erişilebilir olması şarttır, bunun için de ortamda öğrencinin ihtiyacına uygun şekilde makul fiziksel düzenlemelerin yapılmış olması gereklidir. Öğretmenler fiziksel düzenlemelerden bahsederken; tekerlekli sandalyenin okul içine girebilmesi, engelli öğrenciler için özel tuvaletlerin olması, duvarlarda çok fazla asılı materyalin olmaması (çok fazla uyaran olmaması için), sınıf içinde geniş alanların olması ve yine sınıf içinde tekli çalışma alanların (yalnız kalma ihtiyacı olan öğrenciler için) olması gibi noktalara değinmişlerdir. Etkili bir

bütünleştirme eğitimi için öğretmenlerin bahsettiği bu temel fiziksel ihtiyaçlar ve düzenlemeler çok önemlidir. Okulların fiziki yapısı öğrencilerin gereksinimlerine göre en az yardımla bağımsız hareket etmelerine olanak sağlayacak biçimde evrensel tasarım ilkeleri ışığında tasarlanmalıdır. Böylece erişilebilir, çocuklara tarafından kullanılabilir ve güvenilebilir okul ortamları yaratılabilir (Degenhart ve Schruder, 2016; Sucuoğlu ve Kargın, 2006).

Bütünleştirme eğitimi verilen bir sınıfta kullanılan materyallerin nasıl olması gerektiğine ilişkin soruda öğretmenler, materyallerin çocukların – özellikle de engelli çocukların - farklı ilgi ve yeteneklerine cevap verecek nitelikte olması gerektiğini vurgulamıştır. Sınıf ortamındaki materyallerin farklı renk, ses, koku, doku, tat, ağırlık ve hacimde olması; teknolojik uygulamaların kullanılması ve materyallerin öğrencilerin ihtiyacına uygun biçimde adapte edilmesi öğretmenlerin vurguladıkları özellikler olarak öne çıkıyor. Farklı nitelikteki materyallerle sınıf ortamını duyu dostu bir ortama çevirmek engelli öğrencinin etkili öğrenimi için çok önemlidir (Pickering, 1992). Öte yandan, bütünleştirmede etkili teknoloji entegrasyonu, tüm öğrencilere genel eğitim müfredatına erişme olanağı sunarak, daha önce başarıya ulaşamadıkları görevleri yerine getirmede daha fazla kolaylık ve bağımsızlık sağlar (Roberts, Keane ve Clark 2008).

Öğretmenlere, bütünleştirme eğitimi uygulanan bir okulda öğretmenlere sağlanan hizmetiçi eğitimler nasıl (ne içerikte) olmalıdır diye soruldu. Öğretmenlerin çoğu öncelikle bir durum tespiti yaparak bu soruya yanıt verdi ve hizmet öncesi dönemde – yani üniversite eğitimleri sırasında- bu konuda yeterince eğitim almadıklarını belirttiler. Olması gereken hizmetiçi eğitimlerde, öncelikle engellilik hallerini anlatan temel bilgilere ihtiyaç duyduklarından bahsettiler ve bütünleştirme eğitiminin uygulamaları (BEP hazırlamak, veliler ile çalışmak ve engelli-engelsiz öğrenciler arasında iletişimi sağlamak gibi konularda) hakkında bilgilenebilmeye ihtiyaçları olduklarını belirttiler.

Öte yandan şu anki çalışmada öğretmenler, mesleki gelişimleri ve meslekteki devamlılıkları için süpervizyona da ihtiyaç duyduklarını belirtmişlerdir, bu nedenle hizmetiçi eğitimlerin aynı zamanda süpervizyon sağlar nitelikte olması gerektiğinin de altını çizmişlerdir. Verilen cevapların içeriğine bakıldığında ise süpervizyon ihtiyacının iki temel sebeple ortaya çıktığı görülmektedir. Öğretmenlerin bir kısmı süreç içerisinde mesleki rehberliğe, bir kısmı da psikolojik desteğe ihtiyaç duymaktadır, süpervizyon da bu ihtiyaçları karşılamak için gereklidir. Bütünleştirme eğitimi ve uygulamaları konusunda yeterince ön bilgisi olmayan öğretmenlerin mesleki rehberliğe ihtiyaç duyması oldukça doğaldır. Öğretmenlerin okul ortamında içerik ve materyalleri engelli öğrenciler için nasıl kullanacakları, eğitim ve öğretimde engelli ve engelsiz öğrenci arasında nasıl bir denge sağlayacakları konusunda mesleki rehberliğe ihtiyaçları vardır (Johnson, Birkeland, Kardos, Kaufman, Liu, ve Peske, 2001; Quagliga, Marion, ve McIntre, 2001). Mesleki rehberlikte koçluk stratejisi literatürde önerilen bir yöntem olarak karşımıza çıkıyor (Artman-Meeker ve Hemmeter, 2013). Ek olarak, öğretmenlerin mesleki devamlılığının sağlanması ve süreç içindeki tükenmişlik oranlarının azaltılması için süpervizyonların öğretmenlerin psikolojik ihtiyaçlarını karşılar nitelikte olması gerektiği vurgulanmıştır. Okuldaki rehber öğretmenlerin sınıf öğretmenlerin bu ihtiyacına cevap verebilecek nitelikte çalışmalar yapması (Koçyiğit, 2015) ya da öğretmenlerin birbirlerine destek sağlayacak gruplar oluşturması (Varlıer ve Vuran, 2006) yine literatürde önerilen yöntemler olarak karşımıza çıkıyor.

“Engelli bir öğrencinin sınıfınızda olması size ne hissettirir?” sorusuna cevaben öğretmenlerin büyük bir kısmı, olumsuz duygulara sahip olduklarını belirtmiştir. En önemli sebeplerden biri, öğretmenler engelli çocuklar ile çalışmak için yeterince eğitilmiş olmadıkları düşünülmektedir. Öne çıkan bir diğer sebep ise öğretmenlerin kendilerini okul ortamında yalnız hissetmesi ve okul ortamındaki çalışma arkadaşlarından destek alamamalarıdır.

Diğer yandan öğretmenlerin bazıları bu soruya olumlu yanıtlar vermiştir. Burada iki nokta öne çıkmıştır. Bunlardan ilki, öğretmenlerin mesleki

memnuniyetidir. Öğretmenler, sınıflarında kaynaştırma öğrencisi olduğunda yaptıkları işi değerli bulduklarını ifade etmişlerdir. Ortaya çıkan ikinci nokta ise öğretmenlerin bütünleştirme eğitiminin olumlu etkileri hakkındaki görüşleridir. Öğretmenler, sınıflarında özel eğitim ihtiyacı olan bir öğrencinin olmasını olumlu bulduklarını ifade etmişler ve bu olumlu duyguyu bütünleştirme eğitiminin engelsiz öğrenciler üzerindeki olumlu etkileri ile ilişkilendirmişlerdir.

## **2.Montessori öğretmenlerinin Montessori eğitimi ve bütünleştirme hakkındaki görüşleri**

### **2.1.Montessori eğitim yaklaşımı hakkındaki görüşler**

Montessori felsefesinin temel anlayışı nedir diye sorulduğunda öğretmenlerin çoğu Montessori yaklaşımının öğrenciyi kendi kararlarını almaya teşvik eden, çocukları aktif ve özgür kılan bir anlayış olduğunu vurguladı. Sınıfların otoriter ve rekabetçi eğitim anlayışından uzak olması, çocuk merkezli olması Montessori anlayışındaki özgürlükçü ortamı betimlemek için cevaplarda aktarılan özelliklerdir.

Ancak engelli öğrenciler açısından değerlendirildiğinde öğretmenlerin çoğu bu özgürlükçü ortamın engelli öğrenciler için dezavantajlar oluşturabileceğini söylediler. Öğretmenler, özellikle ağır engelli öğrenciler ya da dikkat dağınıklığı olan ya da otizmli öğrenciler ile çalışırken öğretmenin etkisinin daha yoğun olduğu, yapılandırılmış bir eğitim ortamının çocuğun eğitimi açısından daha iyi olacağını belirttiler. Öte yandan öğretmenler, Montessori’de her öğrencinin kendi hızında ilerleyebilmesini, eğitimin rekabetçi ortamdan uzak olmasını ve duyu odaklı eğitimi engelli çocuklar açısından avantaj olarak belirtmiştir.

## **2.2.Montessori sınıflarındaki eğitim ortamı hakkındaki görüşler**

Bu bölümde Montessori sınıflarındaki eğitim ortamı , eğitimin 3 temel bileşeni çerçevesinde sorgulanmıştır, bunlar: sınıftaki günlük akış, karma yaş uygulaması ve hazırlanmış çevre.

### **2.2.1.Sınıftaki günlük akış**

Farklı okullarda öğretmenlik yapmalarına rağmen öğretmenlerin hemen hemen hepsi benzer bir günlük akıştan bahsettiler. Ama hepsinde öne çıkan uygulamada, gün içinde çocuklar Montessori materyalleri ile sık sık tek başlarına bağımsız oyunlar oynayabiliyor ve serbest zaman geçirebiliyorlardı. Okullarda, gün genellikle çocukların bir araya gelerek günü planlaması ile başlıyor, serbest zaman ile devam ediyordu. Öğlen yemeğinden önce yine bir grup aktivitesi yapılıyor ve sonrasında öğlen yemeği yeniyordu. Öğlen yemeğinden sonra bazı okullar uyuma saati düzenlerken bazı okullar ise grup aktivitesi veya bahçe oyunları ile güne devam ediyordu. Öğleden sonra atıştırma vaktinden sonra hemen hemen tüm okullar serbest zamanla devam ediyor ve günü sonlandırıyorlardı. Öğrenciler, serbest zaman esnasında sıklıkla Montessori materyalleri ile ilgileniyor, öğretmenler de öğrenciler bu materyaller ile ilgilenirken gözlem yapıyor ve öğrencinin ihtiyacına uygun desteği sağlıyordu. Güleş (2011), Montessori materyalleri ile geçirilen serbest zaman dilimlerinin öğrenciyi öz motivasyona ve öz eğitime teşvik ettiğini vurgulamaktadır.

Sınıftaki günlük akışın engelli öğrenciler açısından değerlendirilmesi istendiğinde, öğretmenlerin hepsi “serbest çalışma saatine” odaklanarak yanıtlar verdiler. Bir kısmı, özellikle gelişim geriliği gösteren ya da yavaş öğrenen öğrencilerin serbest çalışma saatinde materyaller ile kendi öğrenme hızında vakit geçirebileceğini, bu esnada öğretmenin de öğrenciyi bireysel olarak destekleyebileceğini ifade ederek bu uygulamadan engelli öğrencinin olumlu biçimde faydalanacağını ifade etmiştir. Fakat bazı öğretmenler ise

dikkat problemi olan ya da kendi kendine çalışma becerisi sınırlı olan öğrenciler için serbest çalışma saatinin yeterince verimli olamayacağını ifade etmiştir. Bu öğrencilerin öğretmen müdahalesine daha çok ihtiyaç duyacaklarını, ancak bu durumun “serbest çalışma saatinin” mantığı ile uyuşmadığını ifade etmiştir.

### **2.2.2.Karma yaş uygulaması**

Öğretmenlere Montessori'deki karma yaş uygulamasının engelli öğrenciler açısından avantajları ve dezavantajları sorulduğunda, öğretmenlerin çoğu bu uygulamanın engelli öğrenciler için avantajları olduğunu belirtmiştir. Öğretmenler, farklı yaşlardaki çocukların aynı sınıfta olmasının birbirlerinin gelişimini destekleyeceğini düşünüyor, çocukların birbirine rol model olacaklarını belirtiyordu. Öğretmenlerin aynı sınıfta farklı yaş gruplarından gelen öğrencileri eğitmek için farklılaştırılmış - zenginleştirilmiş - çeşitlendirilmiş uygulamalar yapması gerektiğini ve bu nedenle farklı gelişim gösteren çocukların bu uygulamalardan kendi ihtiyaçlarına uygun biçimde faydalanacağını belirttiler. Ayrıca, okula ve kişilere (diğer öğrencilere ve öğretmenlere yönelik) adaptasyon problemi olan çocuklar, rutine bağlı olan çocuklar (otizmli çocuklar gibi) karma yaş uygulaması sayesinde aynı öğretmen ile uzun yıllar birlikte çalışabilirler. Bu da öğrencinin okula bağlılığını artırır. Pickering (1992) de aynı sınıfta farklı yaş gruplarından öğrencilerin olmasını çocuklar arasındaki işbirliğini ve iletişimi arttıracığını vurgulamış, böylece küçüklerin büyüklerden, zayıfların güçlülerden öğreneceği birçok şeyin olduğunu altını çizmiştir. Karma yaş uygulaması literatürde de vurgulandığı gibi akranlar arasında doğal bir öğretim fırsatı yaratır (Bobo, 2012; Montessori, 1967). Rudd (2014) yaptığı tez çalışmasında engelli öğrencilerinin de olduğu kendi Montessori sınıfını gözlem altına almıştır. Farklı yaş grubu uygulamasını oldukça faydalı bulduğunu ifade eden Rudd, sınıf ortamında çocuklardan özel olarak istenmemesine rağmen birbirlerine eğitsel açıdan destek olduklarını gözlemlediğini belirtmiştir. Sınıfta, dil gelişim

geriliği bulunan öğrenciye özellikle yaşça büyük çocukların sıklıkla yardımcı olduğunu ifade etmiştir.

Öte yandan bazı öğretmenler de bu uygulamanın dezaavantajlı yanları olduğunu belirtmiştir. Öğretmenlerin, aynı sınıfta farklı yaş gruplarından gelen öğrenciler ile çalışmayı yeterince bilmedikleri için öğrencilerin bu durumdan olumsuz etkilenebileceğini belirttiler. Ayrıca, engelli öğrencinin gelişiminin kronolojik olarak aynı yaştaki akranları ile birlikte olduğu bir sınıfta daha kolay takip edilebileceği vurgulanmıştır. Ek olarak, çocukların küçük yaşlarda oldukça zalim olabildikleri söylenmiş, bu nedenle bu tip sınıflarda yaşça küçük çocukların veya gelişim geriliği olan çocukların akran zorbalığına daha sık uğrama riski olduğu belirtilmiştir. Rudd (2014) yaptığı gözlemlerde sınıftaki bazı engelsiz çocukların engelli çocuklar ile hiç iletişime geçmediğini gözlemlemiş, hatta bazı durumlarda bu çocukların sınıfta oluşan sorunlar için doğrudan engelli çocukları suçladıklarını gözlemlemiştir. Yine Rudd'un gözlemlerine göre, özellikle engel durumu nedeniyle ihtiyaçlarını sözel olarak ifade edemeyen öğrenciler, bir takım fiziksel davranışlar ile kendini ifade ettiğinde akranları bu durumun öğrencinin engelinden kaynaklandığını anlayamıyor ve engelli çocuğa karşı saldırganlaşabiliyordu. Rudd, sınıfta arkadaşlık geliştirme oturumları düzenleyerek çocukların birbirini daha iyi tanımalarını sağlamanın iyi bir yol olduğunu vurgulamış ama bazı engelsiz öğrenciler için yine de iletişim duvarların yıkılamadığını belirtmiştir.

### **2.2.3.Hazırlanmış çevre**

Öğretmenlere Montessori'deki hazırlanmış çevre uygulamasının engelli öğrenciler açısından avantajları ve dezavantajları sorulduğunda, öğretmenlerin hepsi hazırlanmış çevrenin engelli çocukların katılımını ve materyal kullanımını arttıracaklarını ifade etmiş, öğrencilerin kendilerini okulda güvende hissedeceklerine vurgu yapmıştır. Öğrencilerin ihtiyacı doğrultusunda önceden hazırlanmış bir sınıf ortamının öğrencileri sınıfta rahatça hareket etmeye ve sınıfa dahil olmaya teşvik edeceği vurgulanmıştır. Montessori tam da bunu

hedefleyerek hazırlanmış çevrenin önemli olduğunu vurgulamıştır (Bobo, 2012; Gargiulo & Kilgo, 2012; Montessori, 1967). Tekerlekli sandalye kullanan fiziksel engelli bir öğrenci için sınıfta rahatça hareket edebilmesi için yapılan düzenlemeler, görme engelli bir öğrenci için açık raf düzeninde sergilenen materyaller, otizmi veya dikkat dağınıklığı olan bir öğrenci için etrafta az uyarının (materyalin) olduğu bir sınıf ortamı “hazırlanmış çevrenin” engelli öğrenciler için olası örnekleri olarak paylaşılmıştır. Rudd (2014), Montessori’nin kariyerinin başında engelli çocuklar için dizayn ettiği hazırlanmış çevrenin hem engelli hem de engelsiz çocukların gelişimi için çok önemli olduğunu belirtmiş, çocukları sınıf ile etkileşime davet ettiğini vurgulamıştır.

### **2.3.Montessori eğitimcisi hakkındaki görüşler**

Öğretmenlere, Montessori eğitimcisinin sınıf içindeki rolü sorulduğunda tüm katılımcılar öğretmenlerin temel görevini öğrencilere kaynak sağlayan, gözlem yapan, gerektiğinde çocuklara destek olan bir eğitimci olarak tanımladı. Öğretmenin en önemli rolü çocuğa ihtiyacı olan özgür alanı vermesiydi. Montessori’nin bu bağlamdaki görüşleri Vygotsky ile benzerlikler gösteriyordu. İkisi de öğretmenin gözlemci rolünün çok değerli olduğunu vurgular ve öğretmenin temel görevinin öğrenciyi ihtiyaç duyduğu konuda desteklemesi olduğunu altını çizmektedir (Dodge, Colker & Heromen, 2002).

“Montessori öğretmenlerinin rolü engelli öğrenciler ile çalışmak için uygun mudur?” diye sorulduğunda ise öğretmenlerin yarısı olumlu görüş bildirirken, diğer yarısı ise olumsuz görüşler bildirmiştir. Olumlu görüş bildiren öğretmenler; Montessori sınıfında öğretmenlerin öğrencilerin ihtiyaçlarını sıklıkla gözlemlediğini ve bireysel eğitimler yaptığını vurgulamıştır. Olumsuz görüşler bildiren öğretmenler ise sınıfında engelli öğrenci bulunan öğretmenlerin eğitimci olarak çocukların eğitimine daha müdahaleci olması gerektiğini vurgulamıştır.



Olumlu ve olumsuz görüşler bildiren öğretmenler aslında aynı noktaya değinmiş ve engelli çocukların olduğu sınıflarda öğretmenlerin bu öğrenciler ile bireysel eğitimler yapması gerektiğinin altını çizmiştir. Diğer bir deyişle, engelli çocukla bireysel yapılan eğitimleri bazı öğretmenler Montessori eğitimcinin rolü açısından olumlu bulurken bazıları olumsuz bulmuştur.

Rudd (2014), Montessori eğitiminde serbest çalışma saatlerinin olmasının, rutinlerin çok keskin olmamasının engelli çocuklar için zorlayıcı olabileceğini ortaya koymuştur. Bu durumda öğretmenin bu öğrenciler ile daha bireysel eğitimler yapması gerektiğini vurgulamıştır. Diğer çocukların da etkili bir biçimde gözlemlenebilmesi ve onlara da yeterince destek sağlanabilmesi için sınıfta 2 Montessori sertifikalı öğretmenin, 1 tane de özel eğitim öğretmenin bulunması gerektiğini belirtmiştir. Rudd'un bu önerisi öğretmenlerin özellikle ilk bölümde belirttiği yetersizlik hissini (engelli öğrenci ile çalışırken ortaya çıkan) de ortadan kaldırmaya yönelik olacaktır, ancak maliyet açısından kolay uygulanabilir bir öneri ne yazık ki değildir.

#### **2.4.Montessori materyalleri hakkındaki görüşler**

Öğretmenlerden, Montessori materyallerinin genel özelliklerini tanımlamaları istenmiştir. Öğretmenler, öncelikle materyallerin öğrencilerin duyu gelişimini destekleyecek nitelikte olduğunu söylemiştir. Ek olarak, günlük yaşam becerilerini, matematik becerilerini ve dil becerilerini destekleyecek materyallerin de sınıf ortamında bulunduğunu ifade etti. Materyallerin çoğunun tahta malzemedan yapıldığını belirttiler. Materyallerin öğretim fonksiyonlarına bakıldığında ise öğretmenler üç noktanın altını çizdi. Materyaller öğrencinin kendi yanlısını kendisinin bulmasına imkan verecek nitelikte tasarlanmıştı, çoğu materyal sadece tek bir kavramı öğretmeye odaklanıyordu ve bazı materyaller doğrudan gerçek hayatta kullanılan materyallerdi, böylece öğrenciler bu materyalleri kullanarak gerçek hayat becerilerini taklit ederek değil gerçekten deneyimleyerek öğrenebiliyordu. Engelli öğrenciler ile çalışmak açısından materyallerin uygun olup olmadığı

sorulduğunda ise öğretmenlerin hepsi materyallerin engelli öğrenciler ile çalışmak için uygun olduğunu belirtmiştir.

Montessori’de materyallerin duyu öğretimine odaklı olması literatürde de sıklıkla vurgulanan bir noktadır. Montessori’ye göre çocuk henüz hareket etme kabiliyetinden yoksun olsa da duyuları aktif haldedir ve çocuğun dünyayı anlamasına olanak sağlayan en önemli araçtır. Diğer bir deyişle, duyu organları çocuğun dünyaya açılan pencereleridir ve bu nedenle erken yaşlarda duyu gelişimi desteklenmelidir (Büyüктаşkapu, 2011; Montessori, 1967; Orem, 2012). Duyu materyalleri de bu gelişimi sınıf ortamında desteklemek için öğretmenlere önemli bir olanak sağlar. Öte yandan, engelli öğrenciler açısından materyalleri değerlendirirken öğretmenlerin çoğu duyu materyallerine odaklanarak yanıt vermiştir. Dokunma ve koklama duyusunu geliştiren materyallerin özellikle görme engelli ve otizmliler için, görsel materyallerin ise işitme kaybı olan veya konuşma geriliği olan öğrenciler için faydalı olacağı söylenmiştir. Disleksi problemi olan çocuklar ile zımpara kağıdı üzerinde yapılan parmakla harf takip çalışmalarının öğrencilerin okuma becerilerine olumlu etki edeceği ifade edilmiştir. Ancak Fidler (2006), otizmliler ile çalışan Montessori öğretmenlerinin bazı materyallere (örneğin bazı kumaş tiplerine/yüzeylerine) aşırı duyarlılığı (hypersensitivity) olan öğrenciler ile çalışırken dikkatli olmaları gerektiğini söylüyor ve öğrencinin hassasiyetinin uyarılmaması için alternatif materyallerin sınıf ortamında bulundurulması gerektiğini vurguluyor.

Öğretmenler, materyalleri üretildiği malzeme açısından değerlendirdiğin de çoğunun tahta malzemedan yapıldığını belirttiler. Bir katılımcının da vurguladığı gibi, arkeologların da yaptığı çalışmalarda oyuncakların ahşap materyallerden yapılmış olması Montessori’yi etkilemiş ve çoğu oyuncak ahşaptan tasarlamasına vesile olmuştur. Bu çalışmada engelli öğrenciler açısından ahşap materyallerin faydası doğrudan belirtilmemiştir, ancak ahşap materyallerin tüm çocukların sağlığı için en uygun materyal olduğu vurgulanmıştır.

Materyallerin öğrencinin kendi yanlısını kendisinin bulmasına imkan verecek nitelikte olması da bir diğer özellik olarak ortaya konmuştur. Montessori, çalışma hayatının başında yaptığı araştırmalar sonucu engelli öğrencilerin de engelsiz akranları gibi bağımsız becerilere sahip olduğunu veya olmak istediğini gözlemlemiştir, bu nedenle sınıf ortamını öğrencileri maksimum derecede bağımsız kılacak biçimde tasarlamıştır. Materyaller de bu anlayışla oluşturulmuştur. Böylece öğrenciler sınıf ortamında çalışırken bağımsız olacak ve öğretmen yardımına en az düzeyde ihtiyaç duyacaktır (O'Donnell, 2013). Engelli öğrenciler açısından doğrudan bu bağlamda ek bir avantaj bu çalışmada ortaya konmamıştır, ancak Vettivelloo (2008) öğrencinin materyalle vakit geçirirken kendi hatasını görmesini bir oto-eğitim olarak ifade etmektedir. Geleneksel sınıflarda yapılan öğretmen merkezli eğitimde, özellikle öğrenme problemi olan öğrencilerin kapasitesinin ve becerilerinin küçümsenme riskinin ortaya çıkabileceğini söylemektedir. Oysa ki oto-eğitim özelliği olan materyallerle çalışan bu öğrenciler kendi gerçek kapasiteleri ortaya koymak için gerekli bağımsız alanı bulurlar. Bu materyaller ayrıca deneyerek öğrenme becerisinin de güçlenmesine olanak sağlar.

Materyaller ile ilgili ortaya konan bir diğer özellik, Montessori'de çoğu materyal sadece tek bir kavramı öğretmeye odaklanıyor. Marshall'ın (2017) da belirttiği gibi özellikle duyu öğretiminde kullanılan Montessori materyalleri tek bir özelliği öğretmek için tasarlanmıştır, materyaller üzerinde farklı kavramları aynı anda öğretmek için ip uçları bulunmaz. Engelli öğrenciler açısından değerlendirildiğinde bu çalışmada öğretmenler, materyallerin bu özelliğini yavaş öğrenen ya da dikkat dağınıklığı olan öğrenciler için faydalı bulmuştur.

Son olarak, öğretmenler sınıf ortamındaki bazı materyallerin doğrudan gerçek hayatta kullanılan materyaller olduğunu vurguladılar. Pickering'in (1992) de belirttiği gibi gerçek hayat materyalleri çocuğun kendisi ve çevresi arasında bağ kurmasına olanak sağlar, motor becerileri gelişir, insanlar arası ilişkileri gelişir. Bu materyaller ile ilişkisinde çocuklar; bir görevi tamamlamayı (örneğin, masayı silmek), bir işe konsantre olmayı, sıraya girmeyi öğrenir. Bu

çalışmada da öğretmenler, gerçek materyaller ile çocukların gerçek hayatı doğrudan öğrendiğini, taklit etmek zorunda kalmadığını ifade etmiştir. Engelli çocuklar açısından değerlendirildiğinde ise gerçek materyallerin öğrencileri gerçek yaşam becerilerine hazırladığı söylenmiş, gelecek hayatları için onlara önemli beceriler kazandırdığı ifade edilmiştir. Hatta verilen bir örnekte, down sendromlu öğrencilerin bu materyalleri kullanmayı öğrenerek ileride özellikle down sendromlu yetişkinlerin çalıştığı/çalıştırdığı kafelerde kolaylıkla iş bulabileceği ihtimalinden bahsedilmiştir. Gerçek materyallerin kullanımının engelli öğrencilerin beceri edinimi için önemli olduğu yine literatürde de vurgulanmıştır (Guess, Benson ve Siegel-Causey, 1985).

## **2.5.Montessori sınıfında öğrencinin gelişimin/başarısının değerlendirilmesi hakkındaki görüşler**

Öğretmenlere, öğrencinin gelişimini ve başarısını nasıl değerlendirdikleri sorulduğunda öğretmenler farklı yöntemlerden bahsettiler, ancak çoğunluk gözlem yaparak değerlendirme yaptıklarını belirtti. Öğretmenler ayrıca gözlemlerini ve öğrencilerin yaptığı çalışmalarını çoğunlukla arşivlediklerini (portfolyo, bireysel defterler, logbook, resmi formlar) belirttiler ve daha sonra bu kayıtları aileler ile paylaştıklarını vurguladılar.

Engelli öğrenciler ile çalışırken nasıl bir değerlendirme yaptıkları sorulduğunda ise öğretmenlerin çoğu yine farklı gözlem tekniklerini kullandıklarını belirtti. Gözlem yaparken duruma göre davranışın sayısını veya süresini gözlemlediklerini belirttiler. Bazen kontrol listeleri (gelişim değerlendirme) kullanarak gözlemler yaptıklarını ifade ettiler. Bazı öğretmenler ise öğrencilerin bireyselleştirilmiş eğitim planlarına göre gözlem ve kayıt yaptıklarını vurgulamıştır. Öğretmenlerden biri BEP raporu hazırlamak için bilgiye erişirken “Eğitimhane” adlı siteden faydalandığını söylemiştir. Öğretmenlerin bilgiye erişirken MEB kaynakları (öğretmenler için tasarlanmış EBA yerine) yerine bu tip sitelerini kullanıyor olmaları dikkat çekicidir. Öte yandan, okula ek olarak özel eğitim ve rehabilitasyon merkezlerine devam eden engelli öğrenciler bu merkezlerde özel eğitim öğretmenleri ile çalışıyor. Bu nedenle

bazı Montessori öğretmenleri, özel eğitim öğretmenin talebi doğrultusunda da bazı özel gözlem ve kayıtlar yaptığını da belirtmiştir. Öğretmenlerin, özel eğitim öğretmenleri ile işbirliği yapması çocuğun gelişiminin doğru takip edilmesi ve ihtiyaçlarının karşılanabilmesi için çok değerlidir.

## **2.6.Montessori yaklaşımında ailelerle işbirliği hakkındaki görüşler**

Öğretmenlere, “Montessori yaklaşımında ailelerle işbirliği nasıl yapılmaktadır” diye sorulduğunda 3 farklı uygulamadan bahsetmişlerdir. Öğretmenlerin çoğu ailelere Montessori yaklaşımın detaylarını anlatmak ve uygulamaların evde de yapılabilmesini sağlamak için “*aile eğitimleri*” düzenlediklerinden bahsetmiştir. Bazı öğretmenler ise farklı iletişim yöntemleri kullanarak aileler ile sürekli iletişimde olduklarından bahsetmiştir. “*Veliler için oluşturulmuş WhatsApp grubu, ailelere gönderilen aylık bültenler ya da yıl içerisinde bir haftasonu ya da akşam düzenlenen aile etkinliği*” bahsedilen iletişim yöntemleridir. Son olarak ailelerin okul aktivitelerine katılımını sağlamak ve çocukları sınıf ortamında onurlandırmak gibi sebeplerle düzenledikleri “*aile davetlerinden*” bahsettiler. Ebeveynlerin mesleklerini ya da hobilerini sınıfta anlatması, çocuklara sınıfta kitap okuması veya çocuğu ile birlikte seçtiği bir konuda diğer çocuklara sunum yapması bu etkinlikler arasında sıralanmıştır.

*Montessori yaklaşımında engelli çocuğu olan aileler ile nasıl işbirliği sağlanıyor?* diye sorulduğunda öğretmenlerin hemen hemen hepsi özel eğitim ihtiyacı olan öğrencilerin eğitimin sürdürülebilir kılınması için aileler ile birebir görüşmeler – küçük eğitimler yapılması gerektiğine vurgu yaptı. Böylece okulda öğretilen şeyleri aileler de evde uygulayabilirler. Bolat ve Ata (2017) yaptıkları çalışmada anaokulu yöneticileri ile görüşmüş ve bu yöneticiler kaynaştırma uygulamasının başarılı olması için engelli çocuk sahibi velilere yönelik eğitimler yapılması gerektiğini vurgulamıştır. Bayraklı ve Sucuoğlu (2017) da okul öncesi dönemde engelli çocuğu bulunan anne babalara yönelik okul ortamında destek eğitim programlarının uygulanmasının ailelerin karşılaştıkları güçlükleri azaltmada yararlı olabileceğini belirtmiştir.

Bu bölümdeki son soruda aile işbirliğinin avantajları ve dezavantajları sorulmuştur. Herhangi bir dezavantaj belirtilmemiş, buna karşın avantaj olarak 2 noktaya değinilmiştir. Bunlardan biri aileye odaklanmıştır ve iyi bir okul- aile işbirliğinin engelli çocuk sahibi ebeveynlerin kaygı düzeyini düşüreceğini ortaya koymuştur. Öğretmenler, eğitim öğretim yılı boyunca aileler ile devam eden bir iletişimde olmayı önemsediklerini belirttiler. Bu tip bir ilişki ailenin çocuğun eğitimine daha katılımcı olmasını sağladığı gibi, öğretmenin de öğrenci hakkında daha fazla bilgiye sahip olmasını sağlıyor. Bu da ihtiyaçların daha kolay karşılanmasını ve olası problemlerin büyümeden çözülmesini sağlıyor. Böylece ailelerin bu sorunlarla baş başa kalmalarını engelliyor.

Öğretmenlerin vurguladığı ikinci olumlu nokta ise aile işbirliğinin öğrenci üzerindeki etkisi hakkındadır. Öğretmenler, olumlu aile işbirliğinin Montessori felsefesinin ailelere daha iyi aktarılmasına katkı sağlayacağını düşünmektedir. Montessori'nin temel felsefesi çocuğu bir birey olarak görmekle başlıyor. Engelli çocuğa sahip aileler için bu durumu algılamak bazen deneyimleri nedeniyle çok zor olabiliyor. Çocuklar hep bakıma ve ilgiye ihtiyaç duyan varlıklar olarak görülebiliyor. Olumlu bir aile işbirliği ile ailelere çocuklarının da bağımsız bireyler olduğu net bir biçimde anlatılabilir. Weafer (2010) engelli çocukların aileleri ile yaptığı görüşmelerde ebeveynlerin çocuklarının hayatlarına ölünceye kadar dahil olacaklarına inandıklarını vurgular. Bu aileler çocuklarına karşı çok koruyucu olduklarını kabul ederler, ancak bunu çocuklarının iyiliği için yaptıklarını söyleyerek bu durumu kendilerince makulleştirirler. Öğretmenler, bu makulleştirme sürecinden kaygı duymakta ve çocuğun bireyselleşmesinin önünde bu durumu engel olarak görmektedir. Bu nedenle aileler ile olumlu işbirlikleri geliştirerek Montessori'nin bağımsız yaşam felsefesinin ailelere aktarılması gerektiği yönünde görüş bildirmişlerdir.

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