

EXAMINATION OF TEACHERS' SELF-REPORTED PRACTICES AND  
ENVIRONMENTAL SETTINGS IN SUPPORTING THE CREATIVITY OF  
PRESCHOOL CHILDREN

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**I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.**

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## **ABSTRACT**

### **EXAMINATION OF TEACHERS' SELF-REPORTED PRACTICES AND ENVIRONMENTAL SETTINGS IN SUPPORTING THE CREATIVITY OF PRESCHOOL CHILDREN**

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The purpose of this study is to examine teachers' views on creativity, self-reported practices of preschool teachers, the classroom learning environment, and materials in terms of supporting the creativity of preschool children. The sample for this research consists of preschool teachers working in public and private schools in three main districts of Ankara province. Among the twenty preschool teachers participating in the study, ten were working in private schools, and ten were working in public schools. This is a qualitative study, and data were collected using three different measurement tools within the scope of this study. The Physical Environment and Material Checklist were implemented to assess the physical conditions in the school that could have an impact on the practices of teachers in supporting students' creativity. In addition, semi-structured interview questions were posed to participants to gain a deep understanding of the views of preschool teachers on creativity and what they do to support students' creativity. Content analysis was used to describe, code, categorize, and identify primary patterns in the interview data. Furthermore, to understand the reliability of the practices of teachers in supporting students' creativity, the portfolios of students were examined and analyzed.

**Keywords:** creativity, preschool teachers, teachers' self-reported practices, environmental settings, qualitative research

## ÖZ

### OKUL ÖNCESİ ÇOCUKLARIN YARATICILIĞININ DESTEKLENMESİNDE ÖĞRETMENLERİN BİLDİRDİĞİ UYGULAMALARIN VE ÇEVRESEL ORTAMLARIN İNCELENMESİ

ÇALIŞKAN, Gamze Günce  
Yüksek Lisans, Temel Eğitim, Okul Öncesi Eğitim Bölümü  
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Bu çalışmanın amacı, okul öncesi öğretmenlerinin yaratıcılık ile ilgili görüşlerini, bildirdikleri uygulamalarını, sınıf öğrenme ortamını ve materyallerini okul öncesi çocukların yaratıcılığını destekleme açısından incelemektir. Bu araştırmanın örneklemini Ankara ilinin üç ana ilçesinde devlet kurumlarında ve özel kurumlarda çalışan okul öncesi öğretmenleri oluşturmaktadır. Çalışmaya katılan 20 okul öncesi öğretmeninden 10'u özel kurumda, 10'u devlet kurumunda çalışmaktadır. Bu çalışma nitel bir çalışmadır ve bu çalışma kapsamında veriler üç farklı ölçme aracı ile toplanmıştır. Öğretmenlerin öğrencilerin yaratıcılıklarını desteklemek adına yapmış oldukları uygulamalara etkisi olabilecek okuldaki fiziki şartların değerlendirilmesi için Fiziksel Çevre ve Materyal Envanteri uygulanmıştır. Bunun yanı sıra okul öncesi öğretmenlerinin yaratıcılık ile ilgili görüşlerini ve öğrencilerin yaratıcılıklarını desteklemek adına neler yaptıklarını derinlemesine anlamak için katılımcılara yarı yapılandırılmış görüşme soruları sorulmuştur. Görüşme verilerini tanımlamak, kodlamak, kategorize etmek ve verilerdeki birincil kalıpları takip etmek için içerik analizi kullanılmıştır. Bunlara ek olarak, öğretmenlerin öğrencilerin yaratıcılıklarını desteklemek adına yapmış oldukları uygulamaların güvenilirliğini anlamak adına öğrencilerin portfolyoları incelenerek analizi yapılmıştır.



**Anahtar Kelimeler:** yaratıcılık, okul öncesi öğretmenleri, öğretmenlerin bildirdiği uygulamalar, çevresel ortamlar, nitel araştırma

*To MY FAMILY...*

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## CHAPTER 1

### INTRODUCTION

Teaching and learning include an essential component that impacts global educational policies, teacher practices, and enhances the potential of 21st-century learners (Kaplan, 2019).

Creativity plays a crucial role in achieving this purpose because it empowers people to adapt to a rapidly changing world and to solve problems by applying our existing knowledge to new circumstances and using information in different ways (Duffy, 2006).

Creativity is defined in various ways within the literature because it is a complex concept (Andriopoulos, 2000). Garaigodobil and Berruoco (2011) defined creativity as a key process for thinking originally, producing unique things, creating new concepts, and solving problems. Torrance (1969) one of the most renowned experts in the field of creativity research, defined creativity as original ideas, divergent perspective, or original way of approaching problems, a successful step into the unknown, diverging from the primary route, and fostering an eagerness for novel situations. Torrance (1995) also defined creativity as a process because he believed that by understanding this process, we can predict who can facilitate it, the kind of environment that fosters its growth, and the products that should be involved in this process. While Stenberg and Lubart (1995) consider that creativity involves the generation of original ideas and the creation of a product that is not only appropriate but also of excellent quality. According to Mayesky (2009), creativity is seen as a form of thinking and behavior that involves generating something unique, which is appreciated by the individual and others. Moreover, Mullen (2020) views that creativity is an innate ability, that revolves around the act of crafting, constructing, or accomplishing tasks. Moreover, imagination's potential enables us to perceive things

in unconventional ways and discover innovative problem-solving approaches Mullen (2020). When we look at all these definitions, we can infer that creativity expresses original thoughts, is unique, involves novelty, and is a process. In addition to these aspects, the importance of who manages and sustains this process and how it is supported in what kind of environment emerges.

Recognition of the significance of fostering creativity is increasing at all phases of education (Siraj-Blatchford, 2007) because students should be prepared for future life to solve complex problems and think creatively (Wagner, 2010). For the past 10 years, research has shown the importance of both teachers' behaviors and the learning environment to support students' creativity. Creativity has also been defined as an educational aim and an essential 21st-century skill that should be supported in schools (Chan & Yuen, 2014). Most researchers believe that the preschool years are crucial to improving children's creativity (Gardner, 1982) because during these years, all children show their creative potential naturally by playing, singing, dancing, drawing, and telling stories (Alfonso-Benlliure, Melendez & Gargia-Ballesteros, 2013). For this reason, teachers should provide opportunities for children to do these activities to support children's creativity. Teachers also should be open to new ideas, value independent thinking, be flexible in their thinking, and establish a humanistic relationship with students to support their creativity (Amabile, 1996; Cropley, 1997; Hennessey, 1995; Lubart, 1994; Stenberg & Lubart, 1995). In addition to these, according to Cropley (1997) to foster students' creativity, teachers should encourage independent learning among students, comprehend the importance of divergent thinking, provide various kinds of materials, help students to cope with frustration, and emphasize students' suggestions. Moreover, Burnard et al. (2006) state that play, innovation, risk-taking, self-determination, question-posing, and being imaginative are important for creativity. Teachers should take a role to realize these features to stimulate students' creativity. Teachers also should be facilitators, co-learners, or guides for students in a learning environment that supports the creativity of students (Richardson & Mishra, 2018).

In addition to teachers' roles in supporting students' creativity in the early years, the learning environment also plays an important part (Richardson & Mishra, 2018). The

learning environment, which supports the creativity of students, should provide open-ended materials and engaging choice activities for students (Cole, Sugioka, & Yamagata-Lynch, 1999). Tasks should be related to students' life experiences as inquirers. Activities should be learner-centered to stimulate creativity and learning by doing (Richardson & Mishra, 2018). Play activities, drama activities, and early literacy activities also foster the creativity of preschool students, so creativity education programs include these kinds of activities (Dere, 2019). The learning environment should provide discussion and reflection parts to support the novel ideas of students. Moreover, another key element to support creativity is the availability of resources in the learning environment since resources serve as the infrastructure of creativity (Warner & Myers, 2009). Physical space also plays an important part in the support of creativity. Hong, Hartzell, and Greene (2009) indicated that using space for collaborative work supports the creativity of students. In addition to these, the learning environment should be open to differences between members of the classroom to create a caring and respectful atmosphere (Richardson & Mishra, 2018).

### **1.1. Statement of Problem**

Creativity, which is related to producing novel ideas, is essential for the preschool curriculum (Dere, 2019). The world is rapidly changing, and there is a need for individuals who think creatively, solve problems in different ways, and behave independently in many areas (Gürgen, 2006). Therefore, students' creativity should be supported by teachers and the learning environment. Researchers emphasize the importance of teacher behaviors, which include maintaining an open attitude towards creative ideas or behaviors, demonstrating humanistic approach, exhibiting flexibility in thinking and behavior, and appreciating independent thinking to foster children's creativity (Amabile, 1996; Cropley, 1997; Hennessey, 1995; Lubart, 1994; Sternberg & Lubart, 1995). For this reason, Soh (2000) developed the Creativity Fostering Teacher Behavior Index using Cropley's (1997) lists, which include nine teacher behaviors that foster student creativity. However, the literature has a gap in understanding the specific teacher behaviors fostering students' creativity (Soh, 2000). Although research acknowledges the importance of creativity in preschool

education (Siraj-Blatchford, 2007), there is a necessity to explore the specific behaviors demonstrated by teachers that actively contribute to nurturing creativity in students (Cropley, 1997). Therefore, the current study aims to gain information about how preschool teachers support children's creativity in the process of teaching. Apart from teacher behaviors, the learning environment also takes an important place in fostering students' creativity (Richardson & Mishra, 2018). In recent years, although creativity research has increased, there have not been efforts to investigate the impact of the learning environment on children's creativity (Richardson & Mishra, 2018). Henriksen, Mishra, and Mehta (2015) discovered in their examination of creativity tools that a mere 3% of the instruments assessed the environmental support of creativity. This is a surprisingly small number when considering the impact of the environment on creativity (Beghetto & Kaufman, 2014). There is a gap about this issue in the literature, so this current study aims to gain knowledge about the design of the learning environment that supports students' creativity or not. As a result, this current study may contribute to the literature about what preschool teachers do to support preschoolers' creativity and whether the physical environmental conditions and materials of early childhood classrooms support preschoolers' creativity or not.

## **1.2. Purpose of the Study**

The present study has two aims. One of them is to investigate the settings of the classroom learning environment and materials that support the creativity of preschool children. The second purpose is to examine the views and self-reported practices of preschool teachers working at public and private schools regarding creativity, to understand what they do to foster students' creativity.

## **1.3. Research Questions**

The purpose of this study is to examine the self-reported practices of preschool teachers, the classroom learning environment, and materials in terms of supporting the creativity of preschool children. In line with these purposes, this study seeks to answer the following research questions:

1. What are the physical environmental settings and materials that support the creativity of preschool children?

1. a. To what extent do the physical environmental conditions and materials that support the creativity of preschool children differ depending on the type of school?
2. What are the views of preschool teachers working in public and private schools regarding creativity?
  2. a. To what extent do teachers' self-reported practices include the factors that support the creativity of preschool children differ in terms of school type?

#### **1.4. Significance of the Study**

The recognition of the significance of supporting creativity and creative thinking is increasing in education (Siraj-Blatchford, 2007), so teachers are expected to foster students' creativity (Dikici & Soh, 2015). Research shows that knowledge is an important component of teacher professionalism, but professional competence encompasses more than just knowledge (Guerriero, 2014). Therefore, observing the learning environment and assessing the visibility of children's work in the classroom provide clues for us to understand how teachers support children's creativity.

Research indicates that creativity can be developed (Cheung & Leung, 2013). Amabile (1996) stated that the creative behavior of individuals can be supported by certain teaching strategies. For this reason, it is important to foster and improve children's creative potential (Jeffrey & Craft, 2004). The environment and people around the child play an important role in fostering the creativity of children (Kemple & Nissenberg, 2000; Wright, 2010). Especially, preschool teachers take an important part in the process of fostering children's creativity by providing a learning environment with rich materials and activities (Leggett, 2017; Wright, 2010). According to Cropley (1997), the teacher should encourage the independence of children, provide the opportunity to think divergently, support children in making mistakes, allow children to reflect on their learning, teach how to cope with their failure, encourage work as a group, give time to think. With the help of this current study, an in-depth examination is provided into the views of preschool teachers concerning creativity, to gain perspective about their self-reported practices in

fostering children's creativity by looking at the children's activity. The current study aims to uncover what preschool teachers do to support their children's creativity, offering insights for other preschool teachers on how they can foster creativity in the early childhood classroom setting.

Apart from teachers' practices, the learning environment is crucial to nurturing, stimulating, and supporting children's creativity in early childhood educational settings (Mohammed, 2018) because imagination and creativity can be negatively affected by an ineffective learning environment and may be hindered (Tarr, 2004). Therefore, the learning environment should provide opportunities for children to explore, engage with open-ended materials, take risks, and play (Mohammed, 2018). The current study investigates various factors that support children's creativity, including a physical environment, a materials checklist, and offers a perspective on the relevant literature. Numerous studies in the literature have delved into the design of learning environments. One such study, conducted by Hasırcı in 2000, focused on "The Effects of the Design and Organization of Learning Environment on Creativity." The investigation in this particular study aimed to fill a gap in the existing literature concerning Turkish preschool teachers' practices in fostering preschoolers' creativity and the influence of learning environment design in early years educational settings. For this reason, the study specifically explored the impact of environmental settings on supporting the creativity of preschoolers. For this reason, this study is meaningful for gaining information and comprehension of the topic nationally.

Apart from examining the learning environment fostering preschoolers' creativity, this study also investigated teachers' self-reported practices. While the literature includes several studies on teachers' behaviors supporting students' creativity, most focus on secondary education teachers and EFL classrooms. In contrast, this study specifically examined preschool teachers' self-reported practices in fostering creativity among preschoolers. Consequently, this study explores what preschool teachers do to foster children's creativity, their views on creativity, and how the design of the learning environment in early years educational settings supports children's creativity. This study may shed light on investigations into these topics.



## 1.5. Definition of Key Terms

**Early Childhood Education:** This domain covers educational period of children who are from infant to age 8 (Essa & Burnham, 2019). The age group of children pertains to those between 36 months old to 72 months old, in this study (MoNE, 2013).

**Preschool Teacher:** The teachers, who work with children aged 3 to 6 in the MoNE (2013) program are referred to as preschool teachers.

**Learning Environment:** It refers to the physical structure of the space where teaching occurs (Dudek, 200).

**Practice:** Engaging in a specific activity regularly to enhance proficiency in that skill (Mayor, 2011).

**Creativity:** It is a key process for thinking originally, producing unique things, creating new concepts, and solving problems (Garaigodobil & Berrueco, 2011).

**Creative Child:** Creative child, is a child who thinks uniquely, acts differently, or performs tasks differently (Tegano et al., 1991).

**Creative Curriculum:** It is an educational program for children to learn various subjects across multiple areas of learning. The curriculum includes specific aims and objectives that children are expected to achieve. In a creative curriculum, children have the opportunity to imagine, create, gain diverse experiences, express their ideas and feelings, solve problems through various approaches, engage in deep thinking, and explore their surroundings. The creative curriculum also motivates children to continue learning (Mohammed, 2018).

**Public and Private School:** While public school is administered by the state, the private school is administered by individuals.

## CHAPTER 2

### LITERATURE REVIEW

This chapter presents comprehensive information about 1) definitions of creativity, 2) the importance of creativity in early childhood, 3) support of creativity in a learning environment, 4) the roles of preschool teachers in fostering children's creativity, 5) the creative child, 6) the creative curriculum, 7) play and creativity, 8) theories of children's learning about creativity and 9) literature review summary.

#### 2.1. Definitions of Creativity

There are a variety of definitions for creativity. It can be explained in different ways. Some researchers believe that creativity is mysterious to define (Corazza, 2016). This is a mysterious process because it shows up both new ideas and new things. Besides defining creativity as mysterious, some researchers think that creativity stems from experiences, ideas, actions, and artifacts (Beghetto, 2019). Apart from these definitions of creativity, creativity is thought of as possible thinking (Craft, 2002). This idea involves children making the transition from "*what is*" to "*what might be*", and also transitioning from "*what is this?*" to "*what can I or we do with this?*" as well as imagining "*as if*" (Craft, 2011). Torrance (1995), also emphasized that creativity is the ability to produce something novel and a core skill related to problem-solving and finding solutions for problems by making predictions, testing, re-testing, and hypothesizing to conclude. Creativity is the ability to perceive things from different perspectives, generate novel concepts, and integrate unrelated things to create innovative outcomes (Schirmacher, 2002).

When all these definitions are investigated, the most common characteristic of creativity is originality because of new ideas and using imagination to apply possible thinking, and usefulness because of pragmatic value.

### **2.1.1. Creativity as a Process**

When someone creates something, their activity involves two parts. The first part pertains to the process of discovering, imagining, playing with ideas, and exploring. The second part is associated with the actual production process which involves the application of acquired skills, testing, and evaluation (Mayesky, 2009).

Mayesky (2009) mentioned that two types of thinking contribute to problem-solving. The first is called convergent thinking, which is a single answer or solution to the problem. In contrast, divergent thinking refers to generating multiple answers or solutions for the problem. For example, when the teacher inquires about the quantity of fish in the aquarium, this question refers to convergent thinking because there is a singular correct response. However, if the teacher asks how we can create a big aquarium for the fish, many possible answers are gathered from the children. There are many possible answers to this question, so it represents divergent thinking. Creativity is greatly enhanced by the presence of both types of thinking. Consequently, the teacher should avoid replacing one with the other.

### **2.1.2. Creativity as a Product**

Sometimes the result of the creativity process can be turned into a product, which is novel and different. If there is no creative process, creative products cannot be possible. For this reason, we can understand the process and product are complementary (Schirrmacher, 2002).

When thinking of creativity framework, productivity refers to generating something novel either by an individual or a group of individuals (Isbell & Raines, 2007). There are two criteria for creative products. One of them is novelty while the other one is aesthetic appreciation (Russ, 1993). Rothenberg (1990) stressed that the originality of a product is more important than the quantities of the products. He also mentioned that if something is creative, it should be valuable and new. Bronowski (2002) also mentioned that creative products can change from person to person, so both artists' work and children's work can be creative.

## **2.2. The Importance of Creativity in Early Childhood**

What is the point of creativity? Why is creativity so important during the early years? Mohammed (2018), mentioned that creativity is one of the most important components because if children do not have any chance to engage with and experience their creativity in the early years, it will be impossible to use their creativity in their later life like further education, higher education, or in the world of work. He believes that this is why the early years are recognized as a crucial period of life for future learning and experiences. Supporting creativity in children during the early years also gives shape to their thinking skills and it takes place during adulthood period and makes their life easier and more productive (Mohammed, 2018).

Creativity empowers children to deal with unexpected situations and helps them respond to a rapidly changing world (Duffy,2006). It enables them to adapt their current knowledge to new circumstances and use information in new ways. Creativity also motivates them to take risks, think uniquely, be innovative, provide imaginative answers, and explore different perspectives (Duffy, 2006). Children are naturally very curious about their world and creativity supports children's ability to explore and understand their world. Creativity enables individuals to make new connections and gain different perspectives, offering numerous opportunities for successful learning (Tims, 2010). Moreover, Duffy (2006) stated that, as Tims mentioned, young children are naturally curious about the world and the people around them. For this reason, children always seek to acquire more information about their relationship with the world and the people. Therefore, Duffy believes that nurturing the creativity and imagination of young children is essential to help them explore their world and develop new understandings by forging new connections.

The study by Alfonso-Benlliure et al. (2013) demonstrated that engaging in creativity practices during early childhood positively influences children's subsequent development. In their research, significant changes were observed in the creative process and the quality of the final outcomes of preschoolers' creative activities after the intervention program. The Creativity Training Program involved games that

offered opportunities for exploring the children's environment, problem-solving, sensory discovery, expressing feelings through dance and drawing, and using objects in various ways during playtime. This research demonstrated that implementing the intervention encourages children to enhance their understanding of the world and the interconnectedness of its components. Simultaneously, it fosters adaptability, creativity, and children's ability to formulate solutions to problems. The study of Alfonso-Benlliure et al. (2013) also highlighted the importance of pretend play and imaginative play as they observed that these types of play stimulate children's creative thinking. For this reason, the learning environment and preschool teachers should provide opportunities for children to engage in play with their friends. Another study, conducted by Dere and Ömeroğlu (2018), aimed to examine the impacts of a creative training program on children's creativity, similar to the work of Alfonso-Benlliure et al. This creative training program consists of 36 activities related to exploration, problem-solving, engaging in play, investigation, and role-playing, which foster children's creative behaviors in the dimensions of flexibility, fluency, originality, and enrichment. After applying this program, the researchers found that the creativity training program had positive impacts on the creative development of children (Dere & Ömeroğlu, 2018).

### **2.3. Support of Creativity in a Learning Environment**

Duffy (2006) stated that children can manifest their creativity when they feel valued and accepted for who they are, reflecting the importance of the emotional environment. If the emotional environment is not provided for children, they may not feel secure enough to take risks or make mistakes and so they cannot reveal their creativity (Duffy, 2006). Therefore, the emotional environment plays a crucial role in enabling children to actively express themselves and communicate.

In addition to establishing the emotional environment, it is of utmost importance to create an organized physical environment and arrange the learning materials in a way that nurtures children's creativity (Richardson & Mishra, 2018). In the learning environment, children should explore and play because these arouse curiosity, which is one of the key parts of the creative process (Duffy, 2006). As Piaget (1928)

mentions young children engage in active knowledge construction through their interactions with the surrounding environment. This means that to foster their development and learning, children require hands-on experiences where they can touch, observe, explore, and interact with both objects and concepts (Copple & Bredekamp, 2009). For this reason, open-ended materials should be available in the learning environment. For example, pencils, crayons, markers, glue, scissors, playdough or clay, paint, brushes, envelopes, and various types of paper, such as construction, wallpaper scraps, tissue, and newsprint should be kept available all the time while others, cardboard boxes, tubes, shapes, ribbon, yarn, string, wrapping paper, wire, beads, wood pieces, pom-poms, crepe paper, buttons, pipe cleaners, stamps, ink, painting tools, such as toothbrushes, toothpicks, tongue depressors, cotton balls, cotton swabs, feathers, leaves, sticks, can be added or removed based on the children's needs (Maynard & Ketter, 2015). In addition to these materials, Koralek (2015) emphasized the importance of prop boxes, which contain a collection of items related to a specific theme or interest areas for young learners who want to express themselves, expand their interests, and face challenges, which should be kept in the classroom. These boxes are portable containers with lids. These prop boxes should be arranged according to young learners' current skills, interests, and curriculum themes to encourage their creativity and imagination (Koralek, 2015).

The article by Richardson and Mishra (2018) discussed the development of a total designed to assist educators in creating practical and effective learning environments that foster students' creativity. The result of their literature review, getting feedback from their administrators, and making classroom observations, revealed three important elements that support children's creativity, which support children's creativity and one of them was the physical environment. They showed that the design of the learning environment plays an important role in supporting students' creativity. Hence, Richardson and Mishra (2018) developed a tool, which was SCALE-Support for Creativity in a Learning Environment, for both teachers and administrators to measure and identify the support of the learning environment for students' creativity. Two other elements identified were learner engagement and the learning climate. While the learner engagement and the learning environment are related to the emotional environment component, the physical environment is related

to organizing the space inside and out for children to provide opportunities, that support children's imagination, curiosity, and creativity (Richardson & Mishra, 2018).

Physical environmental components were considered to support children's creativity. These components are a variety of resources and open-ended materials that should be available and accessible to students (Peterson & Harrison, 2005) because open-ended materials provide many opportunities for preschoolers to express themselves in creative ways (Maynard and Ketter, 2015). Moreover, as highlighted by Maynard and Ketter (2015), the development and learning of young children can be facilitated through hands-on interactions with objects, involving touching, observing, exploring, and manipulating them and this is possible with open-ended materials because these materials provide various opportunities for preschoolers to express themselves creatively.

Students' work should also appear in the classroom because it is necessary for the support of creativity (Mishra & Richardson, 2018). Skinner (2007) also stated the significance of displaying all students' work in the classroom by writing students' comments and capturing photos of students' work during the process of the activity because Mishra and Richardson (2018) also pointed out that making students' work visible in the classroom allows children to develop their creativity and send powerful messages to children about the value of their work (Mohammed, 2018).

Learning centers also should be available to students and the place of furniture should be changeable for new arrangements (Warner & Myers, 2009). Dere (2019) emphasized in her study that the Ministry of National Education's Preschool Curriculum (2013) provides instructions related to learning centers. These learning centers, which include blocks, dramatic play, mathematics, science, art, and books, should be present in the classroom environment to foster children's creativity. Furthermore, in Dere's study (2019), it was emphasized that the curriculum states integrating children's learning processes with these areas supports the development of their creativity. However, on the other hand, Dere's study (2019) showed that there were no efforts by teachers to create learning centers and to use materials in the classroom.

Mayesky (2009) emphasized the importance of dramatic play, which is one of the learning centers in the classroom environment. She stated dramatic play is an excellent means for supporting the imagination and the creativity of young children and so the dramatic play center is an ideal setting for young children to engage in creative and expressive play. The block center serves as an ideal setting for the creative development of young children, as they use blocks to construct imaginative structures (NAEYC, 2012). Moreover, as they collaboratively build, they engage in social interactions and acquire physical, social, and cognitive skills. (NAEYC, 2012). Providing natural materials and a rich stimulation learning environment provide opportunities for the active participation of children in activities to support children's creativity (Faizi, Azari & Maleki, 2012). The environment is so important in nurturing, stimulating, and fostering preschoolers' creativity because different learning environments offer variable stimulating resources for preschoolers (Mohammed, 2018). For example, one of the learning environments could be designated for inquiry-based learning. It is one of the educational method, which is a student-centered approach guided by students' questions and natural curiosity (Gholam, 2019). Children's creativity is supported through inquiry or discovery-based learning, representing a constructivist approach, especially when the task is engaging or attractive to them (Jeffrey & Carft, 2014). Duffy (2006) also emphasized that various learning spaces play an important part in nurturing children's creativity and imagination because the environment is considered a third teacher for children. For example, the research emphasized the significance of fantasy activities, which provide opportunities to stimulate both creativity and divergent thinking in young children (Smilansky 1968; Lieberman 1977; Singer 1973). Therefore, it is important for preschool educational institutions to have a room designated for dramatic play as a learning environment.

The adequacy of lighting in the learning environment is another crucial factor for supporting preschoolers' creativity because it affects the children's motivation to participate in and understand creative activities (Skinner, 2017). S.A. In the study conducted by Samani and S.A. Samani (2012), the researchers measured the relationship between the quality of lighting and students' performance. They found a significant correlation between the quality of lighting and students' learning



performance. According to their study, students' productivity increased with the improvement of lighting quality. Moreover, Rea et al. (2001) emphasized the significance of natural light because Rea et al. (2001) emphasized the significance of natural light because it has a positive impact on students' learning outcomes.

#### **2.4. The Roles of Preschool Teachers in Fostering Children's Creativity**

The relationship between the teacher and student is one of the key factors in fostering creativity in students (Torrance, 1995). Mayesky that (2009) stated preschool teachers, who spend significantly more time with preschoolers in early childhood institutions, should first be aware of the significance of creativity during the early years. They should actively support young children in expressing their creative natures. Following this, teachers should accept students as individuals and encourage them to do their best (Mayesky, 2009). Moreover, in a relaxed and respectful learning environment, children can creatively benefit and comfortably test their own ideas (Smith, 1996). For this reason, the teacher should support preschoolers' creativity by providing a learning environment that receives children's social and emotional needs. This classroom environment tells children that it is all right to take a risk and make a mistake (Smith, 1996). Duffy (2006) indicated that if the teachers wish children to be creative, all children should feel valued and one of the members of the classroom. These feelings are crucial to taking risks or making mistakes (Duffy, 2006).

Cropley (1997) also listed nine teachers' behaviors that support children's creativity according to the extensive literature review. The teacher should encourage independent learning in children and group work to promote creativity. Motivation is so important to enable divergent thinking, so the teacher should allow students to express themselves and think originally. The teacher should not judge students' ideas. The teacher should do activities that promote flexible thinking. Moreover, the teacher allows students to reflect on their learning by self-evaluation. The teacher should listen to students' suggestions and questions. In this manner, the student understands that I am valuable and my ideas are also valuable. Therefore, the student thinks that I can express my ideas easily. Consequently, the students do not hesitate to share their ideas with others and their creative process is influenced positively. The teachers

should provide opportunities for students to use different kinds of materials and the teacher should appreciate students when they put what they have learned into different uses. Finally, according to Cropley's nine teachers' behaviors, teachers should teach students how to cope with failure and frustration (1997).

In addition to Cropley's nine teacher behaviors, Dere (2019) states that preschool teachers should provide rich materials to trigger the imagination of students, and the teacher should encourage different perspectives. Child-initiated activities should be prepared by the teachers to support the active participation of students (Faizi, Azari & Maleki, 2012). Moreover, preschool teachers should give a place for drama activities, play activities, and early literacy activities because these kinds of activities foster the creativity of students (Dere, 2019). As a result, the findings of Dere's study show that preschool teachers have numerous roles in fostering students' creativity. However, sometimes it can be difficult because even if the teacher has the motivation to foster students' creativity by changing their attitudes and behaviors, they need to face numerous obstacles (Kampylis, 2010, as cited in Alencar, 2022; Craft, 2003). The first one is the teachers have a curriculum to follow and manage. Secondly, assessing creativity is challenging and there should be enough time required for the development of creativity (Kampylis, 2010, as cited in Fryer, 1996; Kaufman, 2009). Meanwhile, teachers need to address some parents' concerns because parents believe that their children are just playing all day and not learning anything. Furthermore, teachers often lack the resources required for creative education. Consequently, their primary focus appears to be maintaining control of the class and following the curriculum to cover all the topics, rather than prioritizing creative education targets (Kampylis, 2010, as cited in Vosniadou et al., 2001). Also, it is important to know that teachers have a specific curriculum to follow. In this case, it is necessary to take a look at whether the content of the curriculum fosters preschoolers' creativity (Kampylis, 2010, as cited in Vosniadou et al., 2001).

In addition to the preschool teachers' behaviors that support students' creativity mentioned by Cropley, some researchers also highlight the personal characteristics of creative teachers (Đuranović & Matešić, 2020). They are highly motivated to work, open-minded, flexible, support the idea of lifelong learning, energetic, hardworking,

and self-confident (Bramwell et al., 2011) but also interesting, imaginative, friendly, knowledgeable, and caring (Hamza and Griffith, 2006). The preschool teachers who foster students' creativity believe in students' abilities and strengths and they give opportunities for students to interpret knowledge and seek information independently (Duranović & Matešić, 2020, as cited in Alencar 2002; Runco, 2003). Moreover, they inspire students to explore unusual ideas and provide the opportunity to carry their imagination forward (Duranović & Matešić, 2020, as cited in Cvetković-Lay et al., 2004). In addition to these, Dweck (2015) emphasized the role of preschool teachers, especially those with a growth mindset, is reflected in the fact they put extra effort into supporting students' learning and development.

## **2.5. The Creative Child**

In the literature, creativity researchers have emphasized various personal attributes, including cognitive skills like divergent, critical, analogical, and reflective thinking, as well as personality traits such as openness to new experiences, belief in their creative abilities, motivation for tasks, domain knowledge, risk-taking, and resilience in the face of criticism. These qualities are considered essential for being creative (Davis, 2004). Moreover, Daniels (2013) implemented an 8-week professional development program for in-service teachers in K-12 settings, aiming to enhance their comprehension of creativity, creative traits, and creative potential. She tried to raise awareness by discussing creative personality traits during the first half of the course. She mentioned that individuals with creative characteristics exhibit diverse characteristics that contribute to their potential. These are being aware of their creativity, having imagination, taking risks, having high energy, having curiosity, being independent, having a sense of humor, being attracted to complexity, having artistic interests or aesthetic perspectives, open-mindedness, a need for alone time, and having a different perceptiveness.

The study by Çelik et al. (2022) investigated teachers' perceptions of creativity in children. The researchers conducted interviews with 25 classroom teachers, obtaining information about various characteristics of creative children, such as being eager for knowledge, collaborative, curious, multilingual, imaginative, achieving high academic success, possessing critical thinking skills, and having self-awareness.

Creative children were also shown to display several socially undesirable traits such as non-conformity, impulsivity, and disruptive behavior, at the same time teachers were found to value more traits of compliance and conformity in the classroom (Runco & Johnson, 2002; Westby & Dawson, 1995).

Moreover, it was discovered that a significant number of teachers, regardless of culture, might possess an unjustified prejudice against creative children. Teachers tend to favor children who exhibit politeness, punctuality, obedience, popularity, and a willingness to adhere to authority over those who are more sensitive and visionary. These preconceived negative notions about creative children could lead to teachers forming biased opinions against them prematurely (Torrance, 1995, as cited in Scott, 1999). Scott's study (1999) showed that teachers have biases related to creative children, who are perceived as more disruptive and difficult to control within the classroom.

## **2.6. The Creative Curriculum**

The creative curriculum is an attitude that starts with the teachers' ability to interpret the curriculum and this attitude identifies and makes the most of creative moments (Tegano et al., 1991). Creative curriculum can manifest in various ways, such as engaging in hands-on activities, exploring technology, participating in role modeling, utilizing storybooks and storytelling, collaborating with others, introducing innovations, embracing dramatic arts, and undertaking cultural projects (Mullen, 2020). In addition to these, Mohammed (2018) mentions many criteria for what makes a creative curriculum. The creative curriculum should provide many opportunities for children to use their imagination and creativity, develop essential skills, engage in meaningful experiences, express their thoughts and ideas, try to solve problems, stimulate critical thinking, and explore various methods of acquiring knowledge and learning (Mohammed, 2018). How can the teacher make the creative curriculum visible? The creative curriculum may be visible through learning opportunities. These are providing open-ended materials, allowing children to choose their approach to their learning, creating a safe environment that enables children to feel a sense of belonging to the group and supporting the child in taking on

responsibilities in their learning environment, ensuring sensory experiences, putting materials to explore and experiment, using different types of books and other media text, integrating the music into the learning experiences, adopting a creative approach to routines like during transition time acting like your favorite animal, going to the cubby like this animal, providing opportunity to work collaboratively (Mohammad, 2018). Moreover, the creative curriculum may be visible through interactions by fostering children to pursue their ideas, teaching them to solve problems on their own, involving children in the process of reflection, and giving them a chance to make mistakes by seeing the mistakes as new learning, asking open-ended questions, giving feedback about children's progress, being a model. Mohammad (2018) emphasizes these basic examples of the creative curriculum and they represent how the curriculum seems in practice. Documentation also plays an important part in the creative curriculum, showing how the creative curriculum can be made visible in practice. Documentation shows the children's learning journey through note-taking, observation, photography, discussion, and play (Mohammed, 2018). Moreover, play takes an important place in the curriculum because it provides a flexible atmosphere that supports the creative thought of children. The role of exploration and play helps the preschoolers' teacher to comprehend how preschoolers construct and gather information to solve problems (Tegano et al., 1991). Children also demonstrate a higher level of creative thinking and imagination during playtime (Wood & Attfield, 1996). For this reason, the curriculum should provide opportunities for students to play and engage in imaginative and creative activities. When children participate in these kinds of experiences, they gain different perspectives, develop the ability to reconstruct existing knowledge, and find different ways to solve problems (Tsai, 2012).

### **2.6.1. Creativity in the Preschool Curriculum in Turkey**

Dere (2019) conducted a study to examine children's creativity in preschool. For this reason, she examined the details of the Preschool Curriculum (2013) of the Ministry of National Education to understand the positive relationship between children's creative skills and the Ministry of National Education preschool curriculum, and she found the curriculum has positive influence on the creativity skills of preschoolers.

Dere (2019) explained the Ministry of National Education Preschool Curriculum in a very clear way in her study. She mentioned that early childhood education in Turkey is regulated and monitored by the MoNE. The national early years curriculum is used and followed in educational institutions throughout Turkey. The early-year curriculum gives educators guidelines and a framework but does not list the activities or give ready-made lesson plans. Teachers are planning their educational activities. Types of activities, learning processes, and used materials may vary based on the teachers' availability, experience, and interest (Dere, 2019). She also emphasized the characteristics of the early years curriculum. She said the early years curriculum is child-centered and promotes children's enthusiasm for exploring and learning by discovery. Teachers are supposed to help children reach their learning goals by using semi-structured activities where students are learning by doing. Children are engaged in the planning, implementing, and evaluating of the activities and their own learning processes according to their abilities. The physical environment of the children is flexible for adaptation according to their family characteristics. The early years curriculum is a spiral curriculum where instructions can be learned and re-performed according to the needs of the children's learning process. The curriculum is diverse, with different approaches and models being introduced. The play-based curriculum emphasizes family education, considers universal values, and promotes everyday life experiences, where the teaching topics are tools, not objectives. This includes accommodations for children with special needs and their assessment.

When looking at the Preschool Curriculum of the Ministry of National Education (2013) has outcomes and instructions for developing creativity. For example, there is an instruction stating "*Offers creative solutions for the problem*" for the acquirement stating, "*Finds a solution in case of problems*" in the field of cognitive development. In the field of social and emotional development, it includes the acquisition stating "*Expresses him/herself in a creative way*". Additionally, the curriculum includes learning centers such as building blocks, play, art, books, science, music, sand, and water, which also support creativity. For example, there is an expression for block center stating that "*It is a center that allows children to notice the figures of different sizes, shapes, and colors in the places where they are and the relations between these figures and to use their creativity through building-construction games by using*

*different figures.*” Language, art, drama, music, movement, play, science, arithmetic, early reading, and field trips are all included in the MoNE preschool curriculum. An essential component of these educational activities is to promote creativity. In conclusion, her research illustrated that the Preschool Curriculum (2013) of the Ministry of National Education positively influences the creative skills of children (Dere, 2019).

## **2.7. Play and Creativity**

Play plays an important part in children’s healthy development (Anderson-McNamee & Bailey, 2010). It enables children to express emotions, develop critical thinking skills, foster creativity, and tackle problem-solving. Play also allows children to be creative while nurturing their imaginations (Anderson-McNamee & Bailey, 2010). Contemporary research supports the significance of play during the early childhood period in various areas of growth and development, including both problem-solving and creativity (Johnson et al., 2019).

Earlier, Friedrich Froebel (1886) highlighted the significance of play and the use of gifts (play materials) and occupations (activities). He aimed to promote the establishment of educational settings that involved real-world applications and direct use of materials. By actively interacting with the world, understanding unfolds, highlighting the importance of play as a creative endeavor for children to develop an awareness of their position in their world. Moreover, if the environment provides opportunities to discover, to be curious, to explore, to imagine, and to play, children learn best (Johnson et al., 2019). Like imaginative play, constructive play also supports children's creativity because it is open-ended with various outcomes (Johnson et al., 2019).

Almon (2004) emphasized that engaging with open-ended materials supports creative and divergent thinking because children attempt to solve problems by using open-ended materials, there is no right way to use, them during play. Furthermore, Garaigordobil and Berrueco (2011) conducted a study to assess the impact of a play program on the creative thinking of preschoolers. In this study, there are 86

participants, with 53 of them belonging to the experimental group and 33 to the control group. Participants receive weekly play sessions, each lasting 75 minutes, throughout the school year. The result of this study showed that this intervention program stimulated verbal and graphic creativity, creativity behaviors, and personal traits of preschool children, such as having novel solutions, asking unexpected questions, sense of humor, and inventing games and making toys. The findings of Garaigordobil and Berrueco's study highlight the significance of including a play program to foster the creative thinking of children from preschool and throughout the entire educational journey. In addition to these studies, there are also some studies, which examine the impacts of pretend play on preschoolers' creativity.

Another study conducted by Howard-Jones and his colleagues (2002) aimed to examine the effects of unstructured play on young children's creativity in subsequent activities. The participants in this study were 52 children aged between 6 and 7 years old. One group of young children played with salt dough for 25 minutes, while the other group had handwriting tasks where they copied whatever was written on the board. After these activities, materials were provided to the children to create collages with tissue papers. This entire procedure was repeated with the groups, and the researchers compared the effects of structured writing tasks and free play with salt dough. They found that children who engaged in free play with salt dough showed creativity in subsequent activities, specifically in making collages from tissue papers. "Consequently, studies show the importance of play for the development of children's creativity.

## **2.8. Theories of Children's Learning about Creativity**

Runco and Albert (as cited in Richardson & Mishra, 2018) stated that the empirical study of creativity has been increasing in the last 50 years. In this field, there is a problem related to the lack of a standard definition of creativity (Plucker & Makel, 2010). For this reason, there are many definitions of creativity. Runco and Albert (as cited in Richardson & Mishra, 2018) emphasized the two common components of many definitions of creativity. These are originality and usefulness. If something is seen as either novel or unique, it can be called an original (Runco & Jaeger, 2012).



Usefulness is also another common definition of creativity. It is related to the effectiveness of a product's design or pragmatic value.

The learning environment plays a vital role in supporting the creativity of preschoolers. Researchers found that a necessary part of learning is making mistakes and taking sensible risks, which fosters creativity (Chan & Yuen, 2014). Other creativity-supporting activities are fantasy play, outdoor play, model making, building, planning, and design (Jindal-Snape et al., 2013). A learning environment is also a community and the relationship between the teacher and students is important to foster creativity because this relationship affects the behaviors of the members (Peppler & Solomou, 2011).

Almon (2004) highlighted that involvement with open-ended materials fosters creative and divergent thinking. As children endeavor to solve problems through the use of open-ended materials during play, there is no predetermined or correct way to use them. Moreover, in 1972, architect Simon Nicholson developed the loose parts theory, which stated that loose parts are open-ended, allowing children to use them in different ways, forming and combining them with other loose parts using their imagination and creativity (Gençer & Avci, 2017). Loose parts offer numerous opportunities for children to bring their dreams to life (Daly & Beloglovksy, 2015). The materials serve as stimuli and components of the world that children attempt to explore (Daly & Beloglovksy, 2015). Children need materials to perceive the world, establish cause-and-effect relationships, and enhance their creativity and imagination. Materials can be used freely to create whatever children want (Gençer & Avci, 2017). Utilizing loose-part activities is an appropriate way to support children's creativity because, by using loose parts, children can express themselves freely and in a creative way (Sardi & Mayor, 2023). These loose-part materials can be utilized for children's learning. These loose parts and materials trigger children's creativity as they engage with them freely (Susanti et al., 2023). The loose parts theory emphasizes the importance of materials for children to perceive the world and foster their creativity and imagination (Gençer & Avci, 2017). Therefore, the theory guided the current study to examine the availability and accessibility of various resources and materials.

Researchers also found that the behaviors of teachers are so important in promoting children's potential creativity because teachers can encourage and reward students' novel ideas, unique perspectives, and creative abilities with activities (Beghetto, 2007; Sternberg & Grigorenko, 2004), and with arranging the learning environment. In an investigation of kindergarten children's creativity, Dababneh et al. (2010) found that when teachers do not give importance to students' ideas, are not tolerant of mistakes, and use worksheets, unfortunately, students' creativity will be affected negatively and it will decrease. The teachers limit the creativity of students in this manner. For this reason, the current study aims to investigate how teachers support preschoolers' creativity.

Bronfenbrenner's Ecological Systems Theory (1979) discusses the impact of different system layers and the opportunities and limitations of the environment on human development (Bronfenbrenner, 1979). This theory mentions that behavior is influenced not only by intrapersonal factors but also by social and environmental factors (Shaw et al., 2013). For this reason, this theory guided the current study to consider how to learning environments support children's creativity.

According to Bronfenbrenner, interactions between individuals, objects, and symbols in their immediate external surroundings affect human development (Bronfenbrenner & Morris, 2006). Creative motivation from external sources can originate at various levels within the environment (Stennberg, R. J., & Karami, S., 2022). This theory gives importance to interactions between individuals, so this theory also guided the current study to consider how teachers' behaviors foster students' creativity.

Bronfenbrenner's ecological systems theory defines different levels of environment on behavior. One of the levels of the environment is the microsystem, which includes the context of family, school, work, and friends with whom the individual frequently interacts (Bronfenbrenner, 1977; 1979; 1986). For this reason, the microsystem level draws attention to the role of preschool teachers in early childhood education and guides the current study to consider the importance of the physical learning environment and teachers' behaviors in fostering students' creativity.

As a second level of environmental influence on behavior, the mesosystem also draws attention to the relationship between different contexts, where the family, school, and peer groups are the person actively involved (Bronfenbrenner, 1977; 1979). In other words, there is a relation among the components of the microsystem (Morrison, 2015). Peer relationships and teacher-peer relationships can enhance children's creativity. Therefore, this current study also examines the suitability of the classroom for small and whole-group activities to gather information about peer relationships.

Lev Vygotsky gained worldwide renown as a prominent educational theorist for formulating the social constructivist theory, which emphasizes the social and cultural dimensions of development (Gajdamaschko\*, N., 2005). According to Vygotsky (1962), the creative process unfolds during play, as children employ their imagination to generate new and unfamiliar meanings for real-life situations. Furthermore, in line with Vygotsky's theory, the interactions children engage in during play become internalized, transforming into imaginative processes. This transformation occurs because children utilize objects for different purposes during play, drawing upon their imagination throughout this process (L. Smolucha & F. C. Smolucha, 1986). Additionally, Vygotsky's theory supports the notion that the social environment provides opportunities for children to interact with each other, especially during playtime, due to increased interaction time. Vygotsky (1978) posited that children are active explorers of their world, and play serves as a means to construct their own knowledge. The environment should facilitate students in discovering, being curious, exploring, and supporting their imagination and play, as children learn best in such environments (Mayesky, 2009). Vygotsky's theory guided the present study, highlighting the significance of play and the learning environment settings in gaining insights into children's creativity and imagination within a social context, which represents the learning environment in this study.

Jean Piaget (1960) developed constructivist theory, which mentions how learning occurs. He used the term "constructivism" to express the idea that individuals build their knowledge through ongoing, active interactions between the environment and the structure within the brain (Cohen & Waite-Stuplansky, 2022). According to this

theory, life experiences affect the intellectual development of children (Carew & Clarke-Stewart, 1980). Individuals learn and develop knowledge within social learning environments by constructing their own schema based on the information presented to them (Alanazi, 2016). Previous experiences are also important to build one's own individual knowledge (Spodek & Saracho, 1987). The Piagetian theory emphasizes that learners should be mentally and physically active participants in their own learning, so teachers should provoke and encourage learners' curiosity through experiences with real objects (Cohen & Waite-Stuplansky, 2022). The Constructivist Theory guided this current study to explore what preschool teachers do in the classroom learning environment to enhance children's creativity, and how they provide opportunities for self-directed learning.

Discovery is the most significant and fundamental foundation of learning, it is open to experience and manipulation of materials in the environment (Honomichl & Chen, 2012). Therefore, the teachers should provide interactive materials to use, promote student inquiry through thoughtful, open-ended questioning, and encourage students to ask questions to one another while seeking further clarification of their initial responses (Bada & Olusegun, 2015).

## **2.9. Literature Review Summary**

In this chapter, numerous definitions of creativity were explained. Dimensions of creativity, such as creativity as a process and creativity as a product, were examined in detail. The importance of creativity in early childhood was emphasized by sharing several studies related to the impacts of a creative training program on children's creativity. They demonstrated that participating in creative activities during early childhood has a positive impact on the subsequent development of children. Furthermore, the importance of the learning environment and teacher behaviors in the development of children's creativity was highlighted. Information was provided on the significance of the learning environment. By investigating factors contributing to fostering children's creativity, particular emphasis was placed on the need for open-ended and natural materials in the learning environment, the presence of different learning centers in the classroom, the visibility of children's work in the

learning environment, the necessity of a designated area for dramatic play, and the significant impact of adequate lighting on children's performance. In addition to the physical learning environment, it has been emphasized that an emotional environment where children can express themselves comfortably, feel valued, and are not afraid to make mistakes or take risks is crucial. Beyond the physical learning environment, attention has been drawn to Cropley's (1997) nine teacher behaviors, emphasizing their critical role in fostering children's creativity. Additionally, the finding that teachers possessing creative characteristics also have an impact on enhancing children's creativity has been shared. Studies describing the characteristic features of creative children have been referenced, providing insights into the qualities of these children. Some studies suggesting biases among teachers regarding the characteristics of creative children, portraying them as disruptive and challenging to control, have been discussed. Information about the characteristics of a creative curriculum has been obtained, and by utilizing a study investigating the Ministry of National Education's preschool program, an assessment has been made regarding whether the program supports creativity. Finally, it has been emphasized that play and creativity cannot be separated, citing studies that demonstrate how children express themselves and enhance their creativity during playtime. The significant contribution of play to the development of children's creativity has been highlighted.

## **CHAPTER 3**

### **METHOD**

In this chapter, the researcher will discuss the following methodological procedures:

1) research design, 2) participants, 3) data collection procedure, 4) school characteristics 5) data collection instruments, 6) data analysis, 7) ethical consideration, and 8) trustworthiness of the study.

#### **3.1. Research Design**

The researcher conducted a qualitative research design. Qualitative research emphasizes examining people's words, actions, and records (Lunenburg & Irby, 2008) and in this current study, the participants' own words take an important place because the semi-structured interview method was used to learn how preschool teachers support children's creativity and to indicate teachers' views about creativity. In addition, the researcher has investigated whether there is any connection between students' works and the statements regarding what teachers do to foster students' creativity. The physical environment and materials checklist was used to learn whether the physical environmental conditions of the learning classroom environment and materials support the creativity of preschool children or not.

There are two purposes of this study. The first purpose is to investigate the physical environmental settings and materials that support the creativity of preschool children. Another aim is to examine the views and self-reported practices of preschool teachers regarding creativity. For this reason, the current study focuses on the following research questions;

1. What are the physical environmental settings and materials that support the creativity of preschool children?

1. a. To what extent do the physical environmental conditions and materials that support the creativity of preschool children differ depending on the type of school?
2. What are the views of preschool teachers working in public and private schools regarding creativity?
  2. a. To what extent do teachers' self-reported practices include the factors that support the creativity of preschool children differ in terms of school type?

### **3.2. Participants**

Fraenkel et al. (2011) mention that in qualitative studies, the sample size typically ranges from 1 to 20. Therefore, the sample size in this study deliberately consists of 20 early childhood teachers, including 10 from public schools in the interview and 10 from private schools in different districts in Ankara. Preschool teachers who expressed interest in the study provided signed informed consent to one of the researchers and were then included in the study. Additionally, the researcher aims to examine whether there are any differences in the views of preschool teachers working in public and private schools regarding creativity and supporting children's creativity.

When selecting participants, the researcher has four aims. Firstly, participants must be early childhood teachers, with ten actively working in private early childhood institutions and the other ten in public early childhood institutions. Participants should be easily accessible to conduct this study. Additionally, the researcher considered the participants' schedules for conducting interviews, and a notice was sent to the principal a few days ago to arrange meetings with suitable teachers. The researcher also inspected these teachers' classrooms using a checklist about their learning environment.

The descriptive information of 20 preschool teachers was taken in the demographic information part. Teachers were asked about their educational levels, the type of school they work in, teaching experiences, the number of students in their

classrooms, the age groups they work with, whether the teachers have assistant teacher or not, whether they have taken courses related to creativity at university, and whether they have participated in training for any service.

Educational levels of teachers included associate's degree (PR=4, PB=0 (n=4)), bachelor's degree (PR=3, PB=6 (n=9)), and master's degree (PR=3, PB=6 (n=9)). Teachers are working in either public preschools (n=10) or private preschools (n=10) in Ankara. Teachers had been working for 1 to 4 years (PR=1, PB=0 (n=1)), 5 to 8 years (PR=3, PB=1 (n=3)), and 9 years or more (PR=8, PB=8 (n=16)). The number of children in their classrooms was another factor. Teachers are working with 0-15 children (PR=2, PB=2 (n=4)) and 15-30 children (PR=8, PB=8 (n=16)). The ages of the children teachers worked with were 36-48 months (PR=2, PB=1 (n=3)), 49-60 months (PR=5, PB=4 (n=9)), and 61-72 months (PR=3, PB=5 (n=8)). Teachers are categorized as follows: those working with their teaching partners (PR=2, PB=0 (n=2)), teachers working with assistant teachers (PR=8, PB=0 (n=8)), teachers working with assistant sister (PR=0, PB=2 (n=2)), and teachers working alone (PR=0, PB=8 (n=8)). The courses related to creativity were another factor. Teachers have taken courses about creativity as a university course (PR=7, PB=7 (n=14)), as an extracurricular activity (e.g., in-service training) (PR=2, PB=3 (n=5)), and both university courses and extracurricular activity (PR=1, PB=0 (n=1)). The summary of teachers' responses can be seen in Table 1.

**Table 1.** *Descriptive Information about the Participants*

<b>Factors</b>	<b>n</b>	<b>Private Schools</b>	<b>Public Schools</b>
<b>Education</b>			
Associate's Degree (2years)	4	4	0
Bachelor's Degree (4years)	9	3	6
Master's Degree	7	3	4
<b>School Type</b>			
Private preschool	10		
Public preschool	10		
<b>Teaching Experience</b>			
1-4 years	1	1	0
5-8 years	3	1	2
9+ years	16	8	8



Table 1. (continued)

Number of Children			
0-15 children	4	2	2
15-30 children	16	8	8
Age Group			
36-48 months old	3	2	1
49-60 months old	9	5	4
61-72 months old	8	3	5
Working With			
Teaching Partner	2	2	0
Assistant Teacher	8	8	0
Assistant Sister	2	0	2
Alone	8	0	8
Creativity Courses Taken			
Only University Course	14	7	7
Only Extracurricular Activity (e.g., in-service training)	5	2	3
Both University and Extracurricular	1	1	0

The criteria for selecting participants in this study were driven by several considerations. Firstly, the researcher aimed to capture diverse views and perspectives. To achieve this, preschool teachers actively working in various neighborhoods of Ankara, including Bağlıca, Etlik, Alacaatlı, İncek, Bilkent, Çukurambar and Kızılay were selected. These neighborhoods are situated in three districts of Ankara: Çankaya, Etimesgut, and Keçiören. Schools in these areas were listed, and the selection of schools in these areas was due to their easy accessibility. Secondly, the researcher sought to encompass different experiences of teachers in both public and private schools affiliated with the Ministry of National Education. Consequently, ten participants were chosen from public schools, and ten of them from private schools.

In this present study, all participants are currently working as teachers, yet they exhibit diverse educational backgrounds. The diversity extends to teachers who have graduated from various levels of higher education, including those with associate degrees in child development (2 years), bachelor's degrees in either early childhood education or child development (4 years), and master's degrees in early childhood education or another educational field, in addition to their bachelor's degree in early childhood education. The participating teachers have different education levels and graduated from different universities. Therefore, it was also important to see what

differences exist in their views on creativity and how they support children's creativity.

### **3.3. School Characteristics**

In this current study, ten schools were selected, with five from private schools and five from public schools, aiming to investigate potential differences in supporting preschoolers' creativity between private and public educational settings. The study utilized checklists assessing the physical environment and materials conducive to creativity to determine the presence of factors supporting preschoolers' creativity. Inspections were conducted in two classrooms per school, totaling twenty classrooms overall. Schools are considered professional learning communities, focusing on preventing negative effects, supporting innovative thoughts among students, and creating a conducive learning environment to foster the creativity of students (Fidan & Oztürk, 2015).

#### **3.3.1. Private School Context**

There were several general characteristics of private schools in this current study. One of them was related to different learning spaces except for classrooms, like the library room, art room, music room, and dramatic room. Another characteristic was related to materials. There were different kinds of open-ended materials like blocks, construction toys, chenille, tongue depressors, crayons, clay, ribbons, and rope. Children's works were visible in most of the classrooms in the private school. Generally, in their classrooms, natural lighting, as another characteristic, was enough because of the size and amount of the windows. Most of the furniture in the classrooms was small, easily movable, and allowed for various arrangements.

Moreover, specific information about the private school context should be known. In this study, there were five private schools, and the researcher conducted interviews with ten teachers whose classroom learning environments and students' portfolios were inspected. Two teachers were interviewed from each of three private schools, one teacher from another private school, and three teachers from yet another private

school. In total, the researcher interviewed ten teachers working in five different private schools. These private schools are labeled as 'PR.' For example, 'PR-1' refers to data from the first private school. In this study, PR-1 is a preschool affiliated with primary education, but the preschool building is separate from the elementary school. This private preschool is one of the international schools in Çankaya. The school follows both the PYP (Primary Years Programme) and the curriculum of the Ministry of Education (MEB), and T3 and T4 work in this school with their teaching partners. PR-2 is an independent private preschool in Çankaya. This school follows the curriculum of MEB, and T5 works in this school with a teacher assistant. PR-3 is also an independent private preschool in Çankaya, and T10 and T11 work with their teacher assistant. PR-4 is another preschool affiliated with primary education in Çankaya, and T16 and T17 work in this school. This school did not allow for taking photos. PR-5 is another preschool affiliated with primary education in Çankaya, and T18, T19, and T20 work in this school with their assistant teacher.

### **3.3.2. Public School Context**

There were several general characteristics of public schools in this current study. One was related to different learning spaces except for the classroom. The most common learning spaces outside the classroom were the library and science room. There was no art room in any of the public schools in the study. There were no specific discovery areas openly displayed in the classrooms of public schools, but just one classroom had various materials and paint inside a cabinet with compartments to provide an opportunity for students to create new ideas and experiences. Looking at the centers in the classroom, which is a general characteristic of public school classrooms, there were learning centers. However, children's works were not visible in the classroom environment. There were different kinds of open-ended materials like blocks, construction toys, chenille, tongue depressors, crayons, clay, ribbons, and rope, but the accessibility of these materials was difficult for students. Another general characteristic of public schools in this present study was the lack of adequate natural lighting in the classrooms due to the presence of curtains and the size of the windows. Except for several tall and large cabinets, most of the furniture in the classrooms was small, easily movable, and allowed for various arrangements.

All public schools in this study follow the Ministry of National Education (MEB) curriculum and operate as independent public schools, each having its own building. PB-1 is located in Çankaya, and T1 and T2 work in this public school with their teacher assistant. PB-2 is situated in Keçiören, and T6 and T7 work in this school. These teachers do not have a teacher assistant but have an assistant colleague. PB-3 is located in Etimesgut, where T8 and T9 work in this school without a teacher assistant. PB-4 is also in Etimesgut, and T12 and T13 work in this school. PB-5 is situated in Çankaya, where T14 and T15 work in this public school without a teacher assistant.

### **3.4. Data Collection Procedure**

The data collection was completed in 3 months which started in April 2023 and ended in June 2023. In this current study, the data was collected from three sources: semi-structured interviews, the physical environment and materials checklist, and reviewing children's work in their portfolios. The use of multiple data collection tools provides benefits to have a strong research process because these tools find out several aspects of the research (Patton, 1999).

After obtaining the necessary permissions, the researcher visited the preschool. The researcher introduced herself and provided information about the study to both the school administrators and the teachers, who would participate in the research. The researcher explained the purpose of the study to the teachers and how they could take part. Teachers were informed about ethical issues by reading the consent form before the interviews. The researcher emphasized that all information would be kept confidential. Participants were also informed of their right to decline or withdraw from the study at any time. Before the interview, the teachers were informed about the physical environment and materials checklist. Then, the researcher asked questions related to demographic information. After completing this part, the researcher proceeded by asking the main questions of the interview. During the interview, the researcher recorded the participants' responses on audio. The interview lasted approximately 25 minutes. After the interviews, the researcher went to the classroom of the participating teachers to inspect the learning environment according

to the physical environment and materials checklists, aiming to gather information about whether the classroom learning environment supports preschoolers' creativity or not. During the inspection, the researcher took photos and notes related to the materials and physical conditions of the classroom. After completing this process, the researcher examined students' portfolios as the last step of the data collection procedure.

### 3.5. Data Collection Instruments

In qualitative research, information can be gathered from various sources such as field notes, interview transcriptions, documents, and other types of representations (Coffey & Atkinson, 1996). In this study, information was acquired through the utilization of three distinct data collection methods: interviews, checklists, and reviewing children's work in their portfolios (see Table 2).

**Table 2.** *Data Collection Instruments and Research Questions*

<b>Research Questions</b>	<b>Data Collection Instruments</b>
1. What are the physical environmental settings and materials that support the creativity of preschool children?	Physical environment and materials checklists
1. a. To what extent do the physical environmental conditions and materials that support the creativity of preschool children differ depending on the type of school?	Reviewing children's work in their portfolios
2. What are the views of preschool teachers working in public and private schools regarding creativity?	Semi-structured interviews Reviewing children's work in their portfolios
2. a. To what extent do teachers' self-reported practices include the factors that support the creativity of preschool children differ in terms of school type?	Physical environment and materials checklists

The study aims to investigate both the settings of the classroom learning environment and materials supporting the creativity of preschool children and the views and self-reported practices of preschool teachers, both in public and private schools, regarding their approaches to fostering students' creativity. For this reason, several factors were considered in this study (e.g., education level, school type, teaching experience, the number of children in the classroom, age groups of children, the taken courses, and in-service training related to creativity (see Table 3).

**Table 3.** *Data Collection Instruments*

<b>Type of Instrument</b>	<b>Purpose</b>	<b>Content</b>	<b>Number of Questions</b>	<b>Response Format</b>
Demographic Information Questions	to gather information on background characteristics pertaining to the early childhood field and creativity.	education level, school type, teaching experience, the number of children in the classroom, age groups of children, the taken courses, and in-service training related to creativity	9	Researcher completed: orally
Physical Environment and Materials Checklist in Relation to Creativity	to gather information about whether the design of the learning environment and the materials within the learning environment are conducive to supporting the creativity of preschoolers.	availability and accessibility of materials, visibility of students' works, centers in the class, different learning spaces, the adequacy of lightning, furniture in the class.	12	Researcher completed: by making inspections and taking notes

Table 3. (continued)

Semi-Structured Interview Protocol	to gather information about the views of teachers about creativity and their self-reported practices to support children's creativity	the views of teachers about creativity and teachers' self-reported practices about how to support preschoolers' creativity	12	Researcher completed: orally
Reviewing children's work in their portfolios	to gather written data on teachers' self-reported practices supporting children's creativity	children's works		Researcher examined

### 3.5.1. The Physical Environment and Materials Checklist of Factors Supporting Creativity in a Learning Environment

The Physical Environment and Materials Checklist of Factors Supporting Creativity in a Learning Environment was designed to examine whether the classroom's physical conditions, the classroom's furniture, and the materials present in the class are conducive to supporting preschoolers' creativity. The draft of the checklist was developed with the assistance of the Support of Creativity in a Learning Environment (SCALE) framework (Richardson & Mishra, 2018), which delineates how the design of the learning environment should foster preschoolers' creativity. Two experts' opinions were taken about the drafts of the checklist to ensure internal validity. One expert was working in the early childhood education field, and another expert was working in the assessment and evaluation field. After gathering feedback from experts and conducting a review of relevant literature, the researcher reorganized and modified the checklist items. Subsequently, the items were finalized, resulting in a checklist comprising 12 questions. While some questions were answered by teachers,

the researcher provided answers to other questions through inspections of the learning environment to examine the design of the learning environment and materials within the learning environment to support preschoolers' creativity. The first item is related to the variety of resources and materials available in the classroom, while the second item refers to a variety of resources and materials in the classroom accessible to students. Being accessible and being available in the environment are different aspects; resources and materials may be present in the class but not accessible to the students. Therefore, these items were written separately. Examples of these resources and materials include clay, playdough, chenille, transparent paper, tongue depressors, stones, shells, pine cones, and acorns—all considered open-ended materials. In addition to these, items like crayons, markers, watercolors, Lego, and various construction materials such as different types of blocks were also listed. The third item pertains to the visibility of children's work in the class, including on the wall, in students' cubbies, on windows, and at main door entrances. Another item addresses the presence of different centers in the classroom, such as the science center, art center, book center, music center, block center, and dramatic play center. The fifth item emphasizes the existence of a play center in the class, equipped with materials like Legos, blocks, cars, animals, dolls, and kitchen utensils. Additionally, the checklist includes items about different learning centers in the school, like STEAM atelier and music atelier. The seventh item is related to whether the amount of light in the classroom is appropriate, considering factors such as the presence of curtains, whether the classroom is too dark or too light, and whether the light source is natural or artificial. Another item examines whether the classroom is suitable for small group work. The following item assesses whether the classroom is suitable for children to work in large groups. The tenth item evaluates whether the furniture in the classroom is flexible and comfortable, allowing for multiple arrangements. Another item considers the presence of a construction center in the classroom. The final item checks for the existence of discovery areas in the classroom—spaces with open-ended natural materials where students can explore on their own at certain times of the day. The researcher assessed all items and also took photos of the learning environment according to the components of the checklist to analyze whether they met the criteria or not. Observations can take two forms: participant observer and nonparticipant



observer (Lunenburg & Irby, 2008). In this study, the researcher functioned as a nonparticipant observer, focusing solely on the learning environment according to the checklist's components. This checklist can be seen in APPENDIX A.

### 3.5.2. Semi-structured Interviews

One of the aims of this current study is to investigate teachers' views on creativity and explore what is done to enhance preschoolers' creativity. For this reason, the researcher used semi-structured interview protocols. The researcher utilized The Creativity Fostering Teaching Behavior Index (CFTIndex) (see APPENDIX D), developed by Soh (2000), which is based on Cropley's lists (1997) encompassing nine teacher behaviors that foster students' creativity. Two experts' opinions were taken about the drafts of the interview questions to ensure internal validity. One expert was working in the early childhood education field, and another expert was working in the assessment and evaluation field. After gathering feedback from experts and conducting a review of relevant literature, the researcher reorganized and modified the interview questions. There were two parts to the semi-structured interview protocol and 21 interview questions in total. Nine of these questions were closed-ended, which took place in the demographic information part, while the remaining 12 were main questions related to teachers' views about creativity and teacher behaviors that support children's creativity (see Table 4).

**Table 4.** *Distribution of Semi-structured Questions*

<b>Interview Sections</b>	<b>Questions</b>
Demographic information	9 questions
Main questions related to teachers' views about creativity and teachers' self-reported practices that support children's creativity	12 questions

In the demographic information part, the teachers were asked about education level, school type, teaching experience, the number of children in the classroom, age groups of children, the taken courses, and in-service training related to creativity. In the main section of the semi-structured interview protocol, 12 open-ended questions

were posed to participating teachers. These questions centered around teachers’ views on creativity and their self-reported practices that support children’s creativity. Exemplary interview questions can be seen in Table 5. These interview questions also can be found in APPENDIX C.

**Table 5.** *Exemplary Interview Questions*

<b>The Content</b>	<b>Exemplary Questions</b>
Knowledge about creativity and the creative child	<p>How do you define creativity? What does creativity mean to you?</p> <p>Do you describe yourself as a creative teacher? If your answer is yes, could you please elaborate a bit? If your answer is no, why do you think so?</p> <p>What is the role of creativity in early childhood education?</p> <p>Do you have any children in your class whom you would describe as creative? If so, what are their characteristics in your opinion?</p>
Teachers’ self-reported practices to support preschoolers’ creativity	<p>What do you do to support children’s creativity in your classroom? Can you provide examples?</p> <p>How do you support children in thinking about their ideas in your class?</p> <p>How do you promote idea exchange among the children in your class?</p>

**3.6. Data Analysis**

The researcher followed Creswell’s (2007) data analysis steps, which include organizing and preparing the data, making sense of general information, coding, describing, representing, and interpreting. After collecting data, the researcher

initiated content analysis to identify patterns in the data, code, and categorize the data (Krippendorff, 2003). The content analysis is significant for systematizing and quantifying the collected data (Fraenkel et al., 2011). In the initial step of content analysis, transcripts of the voice recordings were written to organize research data after the data collection process. All interview content was transcribed by the researcher. A “T” code was given to each preschool teacher's interview transcript and numbering the documents facilitated the organization of data. For instance, T10 referred to the interview transcript of the tenth preschool teacher. This coding system allowed for a better understanding of the information. The transcripts underwent multiple readings to enhance familiarity with the collected data and develop an early comprehension of categories. Codes were identified by reviewing and identifying similarities in the written forms of the interview data. Sorting related codes led to the formation of categories, and coherent categories were further grouped to establish themes. The researchers ensured clarity and consistency by reviewing all themes. These theme tables were created to summarize the analysis, and interpretations related to these themes were made. An expert in childhood development validated the analysis procedure and the themes within categories. To enhance reliability and ensure the authenticity of the coding process, an inter-coding agreement was employed. The first coder was the researcher and the second coder was a research and teaching assistant in the childhood development department of a state university. The second coder independently read, examined, and coded randomly selected organized data. Both coders discussed themes that emerged during the independent coding process. The intercoder reliability formula of Miles and Huberman (1994) was applied, resulting in a reliability rate of 85.3%. This rate indicated a consistent analysis process between the two coders, meeting the threshold of 80% reliability (Miles & Huberman, 1994).

Assigning codes to school types is also crucial to see potential differences between public and private schools. For this reason, the “PR” code was given to private schools, while the “PB” code was given to public schools. For instance, PB-2 means that the information from the second public school. This coding system enhances the organization of data, making it more accessible for a comprehensive understanding of the information.

### **3.7. Ethical Consideration**

To conduct this current study, the researcher needs to follow ethical procedures (Pittenger, 2003). For this reason, before the data collection, the researcher obtained permission from the Middle East Technical University's Ethical Board to conduct this study. The ethics committee's approval can be found in Appendix E. The researcher also obtained the necessary permission from the Ministry of National Education to collect data in preschools in Ankara. The Ministry of National Education can be seen in Appendix F. The researcher provided the participants with a consent form to offer information about the study and to enhance their understanding of the study's process. The researcher also mentioned they had the freedom to withdraw from the study at any time if they did not want to continue the study. The participants signed it voluntarily to indicate their willingness to participate. In addition to these, the researcher obtained permission from the preschool teachers, who were participants, to record their voices while responding to the interview questions. The researcher has provided several explanations to ensure that participants feel secure. These include stating that there were no right or wrong answers to the questions, ensuring the confidentiality of the data, specifying that participant names were not shared in any way, and indicating that study data was only used for scientific research purposes.

### **3.8. Trustworthiness of the Study**

Employing diverse data collection techniques enhances both the validity and reliability of the study (Fraenkel et al., 2011). For this reason, in this current study, diverse methods, which are semi-structured interviews and checklists were employed during data collection to ensure the accuracy of the study. Furthermore, the researcher analyzed students' portfolios to cross-reference teachers' statements on how they foster students' creativity.

As another method for the trustworthiness of this study, the researcher benefits from the thick description method by providing detailed information related to participants, research setting, and findings. Geertz (1973) argued that thick

description is one of the strategies to strengthen the information in qualitative research. This strategy was used to define the details of the setting, codes, and participants (Creswell, 2007). In this regard, the researcher used direct quotes from the participants to ensure the completeness and accuracy of the results (Creswell, 2007).

To enhance the trustworthiness of this study, the researcher employs the thick description method, offering comprehensive details regarding participants, the research setting, and the findings. Geertz (1973) contended that thick description is a strategy that fortifies information in qualitative research. This approach was utilized to specify the intricacies of the setting, codes, and participants (Creswell, 2007). In this context, the researcher incorporates direct quotes from participants to guarantee the completeness and accuracy of the results (Creswell, 2007).

Triangulation refers to using various kinds of methods or data in qualitative research (Patton, 2015). Denzin (1978) and Patton (1999) have defined four different types of triangulations: data triangulation, investigator triangulation, theory triangulation, and methodological triangulation. Using multiple methods in triangulation allows for obtaining information from various data sources to ensure the validity of qualitative studies (Carter et al., 2014). In this current study, data triangulation was employed, involving gathering data from diverse resources, such as individuals, groups, families, or communities to ensure the validation of data by obtaining various perspectives (Carter et al., 2014). Data in this study were obtained from preschool teachers through interviews, from the learning environment through inspections, and from children's work in their portfolios by checking their activities for understanding. During interviews, teachers shared their self-reported practices to support children's creativity, and the children's works were reviewed to determine consistency between the shared teacher self-reported practices and children's works.

Moreover, two experts' opinions were taken about the drafts of the checklist to ensure internal validity. One expert was working in the early childhood education field, and another expert was working in the assessment and evaluation field. After gathering feedback from experts and conducting a review of relevant literature, the

researcher reorganized and modified the checklist items. This is also for the trustworthiness of the study.

## **CHAPTER 4**

### **FINDINGS**

This chapter represents the results of the current study. The purpose of the present study was twofold: a) investigate the settings of a classroom learning environment to support the creativity of preschool children, and b) examine the views on creativity and self-reported practices of preschool teachers in terms of supporting children's creativity. In Section 4.1, the settings of the classroom learning environment will be presented before exploring the views of preschool teachers and their self-reported practices regarding how to support children's creativity in their classrooms. The decision not to initially share teachers' views at that stage.

In this context, a checklist of factors supporting creativity in a learning environment will be demonstrated. The classroom learning environment and materials were inspected based on these factors. These factors were adapted from Richardson and Mishra's (2018) tool, known as SCALE (Support for Creativity in a Learning Environment). This tool is designed for both teachers and administrators to measure and identify the extent of support the learning environment provides for students' creativity.

In the following, the views of preschool teachers working at public and private schools to encourage preschoolers' creativity will be demonstrated in section 4.2. This section will present the interview findings in alignment with the semi-structured questions employed in the study. The findings are organized by their respective codes, with tables illustrating the relationships between codes, categories, and themes. To provide clarity, exemplary examples are included within the categories, and the interview transcripts are referenced to demonstrate how the codes relate to the categories.

#### 4.1. Physical Environment and Materials Checklist of Factors Supporting Creativity in a Learning Environment

The study’s first phase includes the physical environment and materials checklist about factors that support creativity in a learning environment. Factors that support children’s creativity in a learning environment were analyzed. Questions were asked to gather information about how suitable the physical conditions of learning environments and the materials present in the learning environment are for supporting children’s creativity. Inspections were conducted regarding the presence and accessibility of various resources and materials that support creativity for students in the classroom, whether students’ work is visible in the classroom, the existence of various centers in the classroom, the presence of a play and construction center, and the types of toys in the play center. Additionally, inspections were made to determine if there are spaces used for learning outside of the classroom, the adequacy of lighting in the classroom, the suitability of the classroom environment for children to work in small and large groups, whether the classroom furniture is comfortable and flexible, and finally, whether there is an area with open-ended natural materials in the classroom where students can go at specific times during the day to explore and experiment independently. Teachers were asked questions related to these inspections. 20 preschool teachers participated in the study, representing a total of 10 different schools. Among these schools, 5 were public schools designated as “PB”, and the remaining 5 were private schools labeled as “PR”. For instance, “PR-2” refers to data from the second private school. The school’s classification, whether public or private, is a critical factor in this research to examine potential distinctions between the two types of schools. To facilitate this analysis, the schools have been organized in Table 6.

**Table 6.** *Preschools and Teachers*

<b>Preschools</b>	<b>Codes of the Schools</b>	<b>Teachers</b>
Private (n=5)	PR-1	T3,T4
	PR-2	T5
	PR-3	T10,T11
	PR-4	T16,T17
	PR-5	T18,T19,T20



Table 6. (continued)

Public (n=5)	PB-1	T1,T2
	PB-2	T6,T7
	PB-3	T8,T9
	PB-4	T12,T13
	PB-5	T14,T15

#### 4.1.1. The Availability and Accessibility of Various Resources and Materials

The materials that assist in supporting preschool children's creativity, listed below, were checked to gather information about their availability in the classroom. The most common materials were books, chenille, playdough, and construction toys (n=15). In the following, three materials were common: blocks (n=14), tongue depressors, and crayons (n=13). Another type of material was clay (n=11). The distribution of materials in private and public schools is provided in Table 7.

**Table 7.** *The Availability of Resources and Materials in the Classroom*

<b>Material and Resource</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Playdough	15	8	7
Construction toys	15	7	8
Book	15	6	9
Chenille	15	7	8
Block	14	6	8
Tongue Depressor	13	7	6
Crayon	13	6	7
Clay	11	7	4
Television	10	5	5
Colorful Paper	9	5	4
Fingerpaint	9	7	2
Marker	9	5	4
EVA Foam Paper	8	2	6
Ribbon	8	6	2
Rope	8	6	2
Computer	8	5	3
Bead	7	6	1
Watercolor	7	4	3
Pine Cone	6	4	2
Stone	6	4	2

Table 7. (continued)

Seashell	5	4	1
Foam	4	3	1
Wooden Pieces	3	3	0
Transparent Paper	2	2	0
Projector	2	2	0
Crepe Paper	1	0	1

*Note.* Multiple Materials Inspected in Every Classroom

Additionally, in 13 classrooms (PR=8, PB=5), while these materials are available in the classroom, access to some of the materials is challenging for children. This is because the materials are either located in high places or stored in cabinets in a disorganized and mixed manner. It is difficult for children to access these materials and create anything without the assistance of an adult.

#### 4.1.2. Visibility of Children's Work in the Classroom

In eleven classrooms (n=11), children's work is visible, while in many others (n=9), there is no visibility of students' work (see Table 8).

**Table 8.** *Visibility of Children's Work*

<b>Visibility of Students' Work</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Yes	11	8	3
No	9	2	7

Some of the findings related to the visibility of children's work are provided below.

T3 made the children's work visible by using both the classroom board, the classroom walls, and spaces outside of the classroom. She transcribed what the children said about their work and the topic, and these transcriptions were displayed. Furthermore, she provided explanations about the activities to help others understand what the students had done. For instance, they created paintings and sculptures using dots, and she shared the story behind these activities. To enhance everyone's understanding, she displayed these works on the walls, as presented below (see Figure 1).



## Yayoi Kusama

We listened to a story about Yayoi Kusama and learned that she is From Japan. She is an artist. She is Famous For creating paintings and sculptures with dots. We made our own art pieces inspired by her work. We used different materials: oil pastels, water color paints, recycled lids stamps with paint, and dot stickers. The teachers observed the children enjoying this activity, especially the stamping part. ©

We are our own artists just like Yayoi Kusama!

Listening to Yayoi Kusama From Here to Infinity! by Sarah Suzuki and Elin Weinsten



## OUR LEARNING

**AKIK GÖRÜŞÜM (Open Minded)**  
Bilgilerimi diğer okulların bilgilerine ve kültürlerine karşı gösteririm.

**DENGELİTİM (Balanced)**  
Sağlığımı etkileyecek kadar çalışmam için gerekli yapıyorum. Yemeklerimi zamanında ve yeterli miktarda vermeye çalışırım.

**İLKELİM (Principled)**  
Doğru olanı yaparım. Akademiğimle ilgili olanları için bir şekilde çalışırım. Kurulmuş için saramı bekletim ve kurallara uyuyum.

**BİLGİLİM (Knowledgeable)**  
Okul öğrenim çalışmam ve öğretmenleri bilişim için öğrenim için çalışırım.

**DÖNÜŞÜMLÜ DÜŞÜNÜRİM (Reflective)**  
Öğrenimden öğrendiklerimi diğer öğrencilerime öğretirim. Nerede doğrusu nerede yanlış olduğunu fark etmeye çalışırım.

**RİSKİ GÖRÜ ALIRIM (Courageous)**  
Yeni bilgiler edinmeye çalışırım. Akademiğimle ilgili olanları için saramı bekletim ve kurallara uyuyum.

**DUYARLILIM (Caring)**  
Akademiğimle ilgili olanları öğrenimden öğrendiklerimi diğer öğrencilerime öğretirim. Nerede doğrusu nerede yanlış olduğunu fark etmeye çalışırım.

Figure 1. Examples of children's work

T4, working at the private school in Çankaya, also made the children’s work visible, both inside the classroom and outside of the classroom. For example, she photographed children as they tested their ideas regarding the topic of magnetism and provided explanations by documenting students’ ideas and theories about the topic. She displayed extensive details of students’ work on the wall. More details can be found in Figure 2.

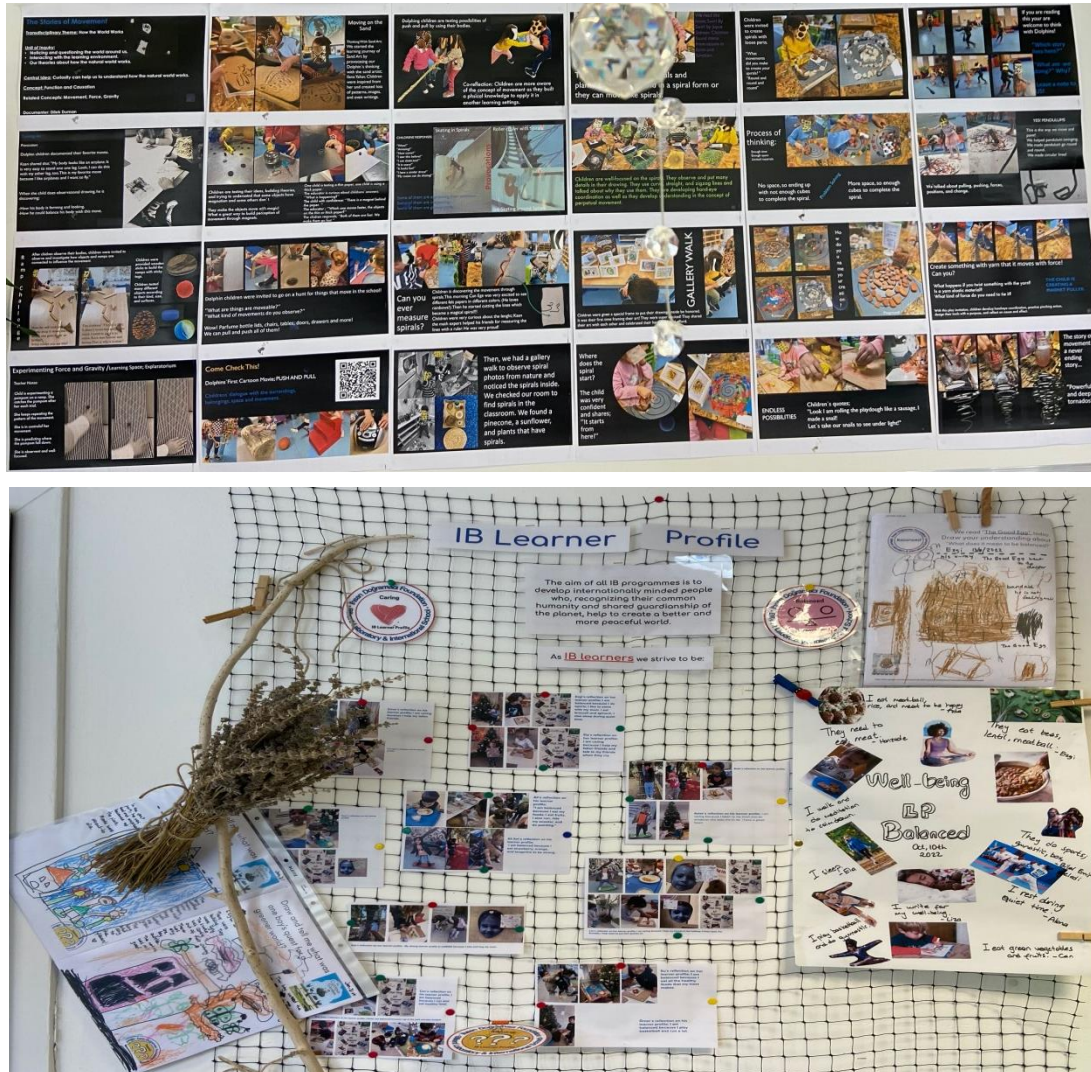


Figure 2. Examples of children’s work

T5, who is from the another private school in Çankaya, made the children’s work visible only within the classroom. As an illustration, she attempted to make children’s ideas about Atatürk visible by writing them down. She also incorporated children’s ideas about spring into the concept map. Additionally, she collaborated

with children to create a KWL (What I know, What I want to know, and what I have learned) Chart. Figure 3 provides examples of how the children's work was made visible within the classroom using these methods. Furthermore, she mentioned storing many of the children's works in cabinets, which she shared with the researcher.



**Figure 3.** Examples of children's work

T6 from the public school simply displayed two children's works on the classroom board. There are no accompanying explanations for the children's work on the wall.

One of the children's work is a Picasso-inspired portrait, and the other relates to April 23 National Sovereignty and Children's Day. These works can be seen in Figure 4.



**Figure 4.** *Examples of students' work*

T8, working at the public school, made several posters brought by the children from home, along with a few in-class projects, visible on the classroom wall and bulletin board. Furthermore, there is no explanation about the works of children. Questions such as why the children engaged in the activity, what the facilitator did during the activity, and the intentions behind these learning experiences are left unaddressed. Details can be seen in Figure 5.



**Figure 5.** *Examples of children's work*

T9 working at the public school only made two of the children's works visible on the classroom boards. These works were related to coloring and origami (see Figure 6).



**Figure 6.** *Examples of children's work*

As previously mentioned, there is no visibility of children's work in nine classrooms. The researcher spoke with the teachers in classrooms where children's work was not visible on the subject and some of the teachers explained the following: T1 from the public school mentioned that they display children's work at the school entrance and

in the hallways during important weeks. T10 working at the private school stated that children’s work is not displayed; instead, it is placed in portfolios after completion. T11 working at the same public school as T10, mentioned that they display some of the children’s work in the classroom but remove it shortly after. She also noted that they engage in activities primarily using natural materials, which they cannot display in the classroom. They shared these works on their Instagram accounts and discussed how they show the process. T13, from another public school, mentioned that they place children’s work in a box and send it home when the first term and the second term are completed.

#### 4.1.3. Centers in the Classroom

Six centers in the classroom were checked. The researcher inspected ten classrooms from five different private schools and five different public schools. These six centers are block center (n=13), book center (n=12), dramatic play center (n=10), science and nature center (n=10), art center (n=3), and music center (n=3) (see Table 9).

**Table 9.** *Centers in the Classrooms*

<b>Centers</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Block Center	13	4	9
Book Center	12	4	8
Dramatic Play Center	10	2	8
Science Center	10	4	6
Art Center	3	1	2
Music Center	3	1	2

In several classrooms, the center names were written but there were no materials (see Figure 7). On the other hand, although the name of the center was not written, there was a center in the classroom (see Figure 8). There were three art centers in total. They have different materials (see Figure 9). There were also three music centers in total and details are given in Figure 10.





Figure 7. The center's name was written but there were no materials





**Figure 8.** *There was no written center name but there was a center*



**Figure 9.** *Three art centers with different sets of materials*



**Figure 10.** *Three different music centers*

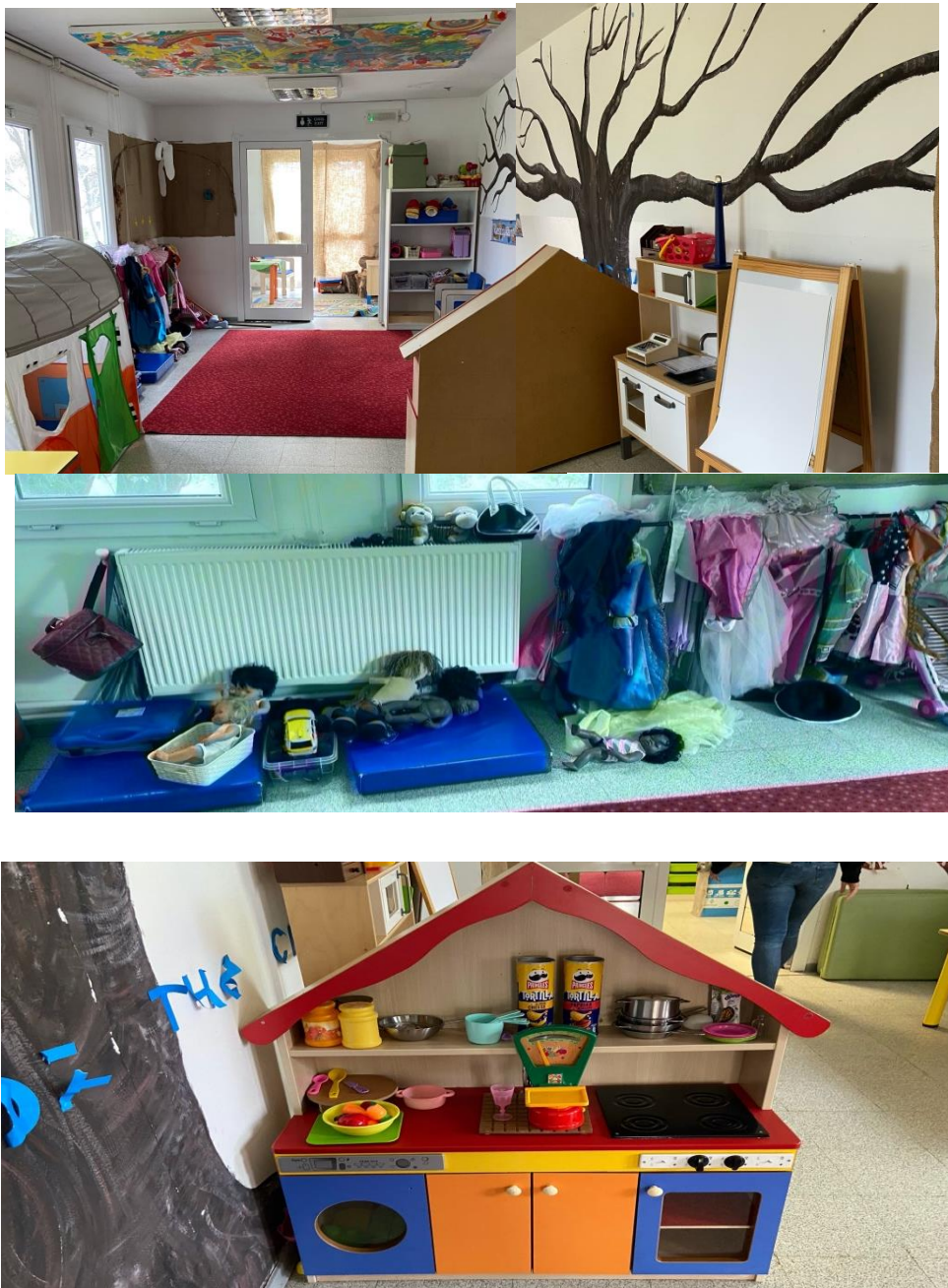
#### 4.1.4. The Dramatic Play Center in the Classroom

In the previous section, the researcher mentioned there were ten dramatic play centers in total. However, although each classroom did not have a dramatic play center, they had toys related to this center. These are play kitchen accessories (n=13), toy cars (n=12), blocks (n=11), different types of construction toys (n=10), animal toys (n=10), puppets (n=9), plush toys (n=7), baby dolls (n=3), repair toys (n=3), unifix (n=2) and doctor playset (n=1). Details can be seen in Table 10.

**Table 10.** *Types of the Toys in Dramatic Play Center*

<b>Toys in Dramatic Play Center</b>	<b>n</b>	<b>Private Schools</b>	<b>Public Schools</b>
Play Kitchen Accessories	13	6	7
Toy Cars	12	3	9
Blocks	11	6	5
Construction Toys	10	5	5
Animals Toys	10	4	6
Puppets	9	2	7
Plush Toys	7	1	6
Baby dolls	3	1	2
Repair Toys	3	2	1
Unifix	2	1	1
Doctor Playset	1	0	1

They were not organized and all together but these toys related to the dramatic play center took place in these classrooms, which do not have the dramatic play center. Furthermore, even the classrooms that had a dramatic play center were not well-organized. Additionally, three schools have a playroom. One of the schools is referred to as the fantasy room. They have lots of different kinds of toys in these rooms (see Figure 11).



*Note.* These three photographs are from a private school, which refers to this room as a ‘fantasy room.’ In this room, there are a variety of toys, including costumes, baby dolls, kitchen utensils, puppets, a tent, bags, and toy cars.



*Note.* These two photographs are also from a public school, and this room is referred to as a playroom. However, there are not many toys in this room.



*Note.* These four photographs are from another private school. They have a dramatic playroom with a wide variety of toys, including pillows, a tent, a doctor's playset, fruits and vegetables, various plush toys, a plastic scooter, a bicycle, and a toy cash register.

**Figure 11.** *Fantasy Room and Play Rooms*

#### 4.1.5. Different Learning Spaces

The existence of spaces utilized beyond the classroom for learning is considered among the factors that support the creativity of preschool children. Therefore, this current study was conducted to examine which learning environments exist in schools outside of classrooms. As a result, it was inspected that among the ten schools, five of which are private and the other five public, some have different learning environments. These learning environments are library (n=5), science room (n=4), art room (n=4), dramatic-play room (n=3), music room (n=2), mind games room (n=2), swimming pool (n=2), exploratorium (n=1), multipurpose room (n=1), chess room (n=1), PC room (n=1) and gymnasium (n=1) (see Table 11).

**Table 11.** *Different Learning Spaces in the School*

<b>Different Learning Spaces</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Library	6	2	4
Science Room	4	1	3
Art Room	4	4	0
Dramatic- Play Room	3	2	1
Music Room	2	1	1
Mind Games Room	2	1	1
Swimming Pool	2	2	0
Exploratorium	1	1	0
Multipurpose Room	1	1	0
Chess Room	1	0	1
PC Room	1	1	0
Gymnasium	1	1	0

The most common learning spaces except for the classroom were the library and science room. PR-1 has a wonderful, extensive library for students. The library contains a wide range of books in both English and Turkish, including some large-format books (see Figure 12). PB-3 has their own library, primarily featuring Turkish books (see Figure 12). PB-4 has a highly equipped library with books known for their content quality. Additionally, the library is equipped with many bean bag chairs for preschoolers. In addition to these, there are tables and chairs available (see Figure

12). PB-5 has a well-stocked library with numerous Turkish books and various toys related to the book content. The library also provides ample pillows to accommodate students comfortably while they read books or listen to stories (see Figure 12).



*Note.* This library photograph is from PR-1.



*Note.* This library photograph is from PB-3.



*Note.* This library photograph is from PB-4.



*Note.* This library photograph is from PB-5.

**Figure 12.** Library in Different Schools

PB-5 also has an organized science and botany atelier (see Figure 13). In this atelier, there is a wide variety of materials, including numerous natural items like stones, seashells, rocks, acorns, and pine cones. In addition to the natural materials, there are various other items such as books, blocks, puzzles, plants, animal toys, a light table,



x-ray photographs, globes, binoculars, radios, microphones, flashlights, phones, calculators, overhead projectors, a human body model, and kinetic sand. Furthermore, they have planted tomatoes, cucumbers, peppers, and eggplants and are observing their growth.





**Figure 13.** *Science and Botany Atelier from PB-5*

PR-1 also has an exploratorium and multipurpose room. The exploratorium is equipped with a variety of open-ended materials that encourage children to bring their creative ideas to life. These materials include ribbons, yarn, pipe cleaners, fabric, pompoms, and colored borders. In addition to the open-ended materials, you can find various art supplies such as markers, scissors, pencils, play dough, watercolors, paintbrushes, paint stamps, and rollers in the exploratorium. Furthermore, there is a wide array of loose parts in this room that can be used to construct various creations (see Figure 14). The multipurpose room is also a part of PR-1. Its name reflects its versatility as it serves several purposes. One of its functions is as a music room, equipped with a variety of musical instruments such as drums, rhythm sticks, a radio, shakers, and bells. Another purpose is to use it as a physical education room, where large mats are available to facilitate various physical movements (see Figure 14).





*Note.* The top photo is of the exploratorium, while the middle and bottom photos are of the multipurpose room.

**Figure 14.** *Exploratorium and Multipurpose Room in PR-1.*

#### 4.1.6. The Adequacy of Classroom Lighting

The adequacy of classroom lighting is also considered a factor in supporting creativity. The assessment of whether the classroom has an appropriate amount of light, whether it is dark or bright, and the presence of curtains, was conducted through classroom inspections. Most of the private schools (n=7) had ample natural lighting due to the size of their windows (see Table 12).

**Table 12.** *The Adequacy of Classroom Lighting*

<b>Amount of the Natural Lighting</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Enough	8	7	1
Not Enough	12	3	9

For example, one classroom in one private school (PR-5) had one side surrounded by windows. It serves as a great example of a classroom that receives ample natural light (see Figure 15).



**Figure 15.** *An example of a classroom (PR-5) that receives ample natural light*

In contrast, most of the public schools (n=9) did not have sufficient natural lighting, due to the window size, curtain structure, the trees in front of the window, and the building in front of the window. For example, two classrooms in the same school (PB-5) lack adequate natural lighting. One of them is affected by the trees in front of the windows because there is a door that opens to the winter garden. The garden's windows are covered with trees, which is why the classroom does not receive sufficient natural daylight. In the other classroom, there is also a door that opens to the winter garden. In front of the garden's windows, there is a large building, which affects the amount of sunlight entering the room. As a result, the presence of trees and the building restricts the entry of sunlight into these classrooms. Moreover, one classroom in PR-3 does not receive enough sunlight due to trees in front of the window. In the other classroom in the same school (PR-3) there is not enough natural light due to the curtain structure, as the windows in the class have fixed curtains. Apart from these, one of the classrooms in the PB-1 is located on the ground floor of the building. There are six small square windows in a row in the upper part of the classroom. These windows have fixed curtains, so an adequate amount of natural light does not enter the classroom (see Figure 16). On the other hand, another classroom in PB-1 receives an ample amount of natural light because it has large and

multiple windows (see Figure 16). This classroom is unique among the classrooms in public schools, as it receives a significant amount of natural light. However, if artificial light is considered, this facility is available in every classrooms.



**Figure 16.** An example of two different classrooms in the PB-1 building

*Note. The top photo is related to a classroom in PB-1 that receives an ample amount of natural light. The second photo is related to the classroom, which has no adequate natural lighting due to fixed curtains and the size of the windows.*

#### **4.1.7. The Suitability of the Classroom for Small and Whole Group Activities**

In order to facilitate both small and whole group activities for children, the space within the learning environment is important to foster children's creativity. For this reason, the researcher checked whether there was enough space in the classrooms. Considering whether the space within the classroom is adequate or not, the number of children in the classroom has also been taken into consideration (see Table 13).

**Table 13.** *The Suitability of the Classroom for Small and Whole Group Activities*

<b>The Suitability of the Classroom</b>	<b><i>n</i></b>	<b>Private Schools Classrooms</b>	<b>Public Schools Classrooms</b>
For Small Group			
Enough space	19	9	10
Not enough space	1	1	0
For Whole Group			
Enough space	8	2	6
Not enough space	12	8	4

Both classrooms in PB-1 school, although there were crowded ( $n=22,25$ ) had enough space for both small group and whole group activities due to the adequate space within the classroom. These classrooms were notably large. Two classrooms in PR-1 had enough space for small groups, but there was not enough space for whole-group activities because of the children's number ( $n=17,17$ ). Teachers mentioned that they do whole group activities in the classroom but expressed that they face challenges while doing so. There were ten children in the classroom, which was part of PR-2 school. Actually, the number of children was fewer, but the classroom space was not sufficient for whole group activities, especially during their physical education lessons. Moreover, the classrooms in the same school did not have the same sizes. For example, in PB-2, two classrooms differed in size. One of them did not have enough space for 20 children during whole group activities, while the other classroom had sufficient space for the entire class of 17 children. Sometimes, this situation can be related to the number of children except for the size of the classroom, as seen in two classrooms in PB-3. In one of these classrooms, there was not an appropriate space for 17 children during the whole class activities, while in the other classroom, there was enough space for 13 children. Two different classrooms from another school, PR-3, have different physical conditions. Therefore, in one classroom, there is not enough space for both small group and whole group activities for 16 children, while in the other classroom of the school, there is a classroom with a significantly spacious area for both small group and whole group activities for 20 children. In PB-4, one classroom had 10 children, while the other had 17. However, both classrooms had sufficient space for both whole group and small-group activities. On the other hand, in another public school, PB-5, there was

insufficient space for whole group activities, although there was enough space for small-group activities in two classrooms (n=21, 18). In PR-4, although one class had 12 students, there was not enough space for whole group activities. However, this class had adequate space for small group activities. In another classroom in the same school, despite having 18 children, there was enough space for whole class activities.

Finally, the findings about three classrooms inspected in a school, PR-5, are as follows. Only one of the classrooms had ample space for whole group activities, while unfortunately, the other two classrooms did not have enough space for whole group activities. It had been noted that children feel quite cramped during whole group activities. In addition, all three classrooms in this school, each with 19 children, had enough space for small group activities.

#### **4.1.8. Furniture in the Classroom**

In both classrooms in PB-1 school, large and cumbersome cabinets are present. However, alongside these, there also a few cabinets within the classroom that possess the convenient feature of being easily movable, providing flexibility in the arrangement of the learning space. These cabinets' photos can be seen in Figure 17.





**Figure 17.** *Examples of large and cumbersome cabinets in the classroom from PB-1 school*

The furniture in both classrooms in PR-1 school is easily movable and allows for multiple arrangements. In one of the classrooms, there is only one tall and large cabinet, which can be relocated with the help of a few people (see Figure 18).



**Figure 18.** *One side of the classroom from PR-1 school.*

*Note.* The cabinet standing in the left corner is large and cumbersome. Except for it, all the other furniture can be easily moved.



Additionally, although the classroom in PR-2 had less furniture, these furniture were movable and their positions could be easily changed. The furniture in the classroom in PB-2 school is both low and adaptable for multiple arrangements. On the other hand, the two classrooms in PR-3 school had several easily movable pieces of furniture. However, one of the classrooms had a large, house-shaped cabinet, and the other had a massive, unwieldy cabinet that was challenging to relocate (see Figure 19).



**Figure 19.** *An example of a large cabinet shaped like a house and a huge cabinet from the class in PR-3*

In the two classrooms at PB-3, PB-4, PR-4, and PR-5 schools, there was not a lot of furniture. The furniture present in the classrooms was small and easily movable,

allowing for various arrangements. In the classrooms at PB-5 school, the furniture was generally movable and allowed for various arrangements. In these classrooms, there was only one large and bulky cabinet in each, used to store sleep mats.

#### **4.1.9. The Building and Construction Center in the Classroom**

The information about this topic was provided under the heading “Centers in the Classroom”. It was mentioned that there were a total of 12 classrooms with block centers, with 4 of them in private schools and 8 in public schools. Another important finding was also shared, indicating that in some classrooms, even though they were not explicitly labeled as block centers, a specific section of the classroom was equipped with block-center toys. Students use this area to build and create the structures they want (see Figure 20).



**Figure 20.** *A block center in the classroom from PB-5 school without being explicitly labeled as a block center.*

#### **4.1.10. Inquiry-Based Learning Space in the Classroom**

The inquiry-based learning space in the classroom is also considered a factor in supporting the creativity of children. The inquiry-based learning space is present in only 4 out of 20 classrooms. Two of them are in a private school, another one is in a

different private school, and the last one is located in a classroom in a public school (see Table 14).

**Table 14.** *Inquiry-Based Learning Space in the Classroom*

<b>Inquiry-Based Learning Space</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Yes	4	3	1
No	16	7	9

In all of the public schools except one (PB-4), there was no specific space designated for inquiry-based learning. In that one classroom, there was not exactly a full-fledged discovery center, but the teacher had placed open-ended materials and coloring pencils in a drawer, allowing children to access these materials and create whatever they wanted (see Figure 21).



**Figure 21.** *Examples of Inquiry-Based Learning Space in the Classroom at PB-4*

*Note.* Children in this classroom know that during their free time, they can come and take the materials from this cabinet to create something.

The teacher provided support for the children to use these materials for their own explorations and creations. In the other classroom within the same school, there was no designated inquiry-based learning center. It seems that the situation was more related to the teachers. In one classroom within the same school, the teacher has made efforts to create a space with open-ended materials and various types of coloring pencils to support children’s creativity. Meanwhile, in another classroom in the same school, no arrangements or setups related to a discovery area were

inspected. In addition to these, in the classroom at PB-5, there was no specific area designated for making discoveries. However, as previously mentioned, this school has a science and botany atelier where many open-ended materials and areas for children to explore are available. Unfortunately, one of the teachers from the two classrooms in this school mentioned that they did not use this atelier extensively due to the large class size ( $n=21$ ). When they used it, the teacher also noted that they were unable to provide individual attention to every child during the time they spent there. In addition to public school classrooms, three classrooms from two different private schools had inquiry-based learning spaces for preschoolers. Actually, only one of them had a dedicated space for inquiry within the classroom. The teacher placed various materials such as seashells, rocks, wooden circle pieces, tongue depressors, beads, magnets, latches, logs and corks in this space to encourage preschoolers to create new things (see Figure 22).



**Figure 22.** *Examples of Inquiry-Based Learning Space in the Classroom at PR-1*  
*Note.* The areas in the photos are side by side in the classroom.

In another classroom at this school (PR-1), there was no specific inquiry-based learning space. However, similar to the other teacher at PB-4 school, this teacher also placed open-ended materials in the cabinet's compartments and stated that it allowed children to use them to create things whenever they wanted. Similarly, in another private school (PR-3), a similar situation was observed in one classroom. There was no specific discovery area openly displayed in the classroom, but the teacher placed various materials and paints inside a cabinet with compartments. The teacher mentioned that this allows children to take materials from there and create things as they wish.

## **4.2. Preschool Teachers' Support to Encourage Preschooler's Creativity**

The second phase of the study is to gather information about preschool teachers' views on creativity and teachers' self-reported practices about how they encourage children's creativity. Semi-structured interviews were conducted with 20 teachers. When examining the qualitative data, the researcher employed content analysis, which involves investigating a dataset to recognize, assess, and report recurring patterns (Braun & Clarke, 2006). The responses provided by the teachers regarding these themes will be elaborated on by categorizing and coding them to ensure a clear understanding of their meaning. Findings will be demonstrated in the following sections.

### **4.2.1. Defining Creativity**

Teachers were asked what creativity means to them and how they could define it to learn their knowledge concerning the concept of creativity. Analysis of the responses revealed that most teachers defined creativity as having different perspectives (n=7), having unique and original ideas (n=7), and having imagination (n=6). One teacher said creativity involves approaching problem-solving from various perspectives and using a wide range of methods. It implies that creative thinking is not limited to a single approach but rather encompasses a diverse and flexible mindset that explores different ways of thinking and doing things. This approach encourages innovation and the generation of multiple solutions to challenges (T4, private school). Two

teachers defined creativity as using materials in different ways. T5 from the private school provided an example, “I asked open-ended questions like, what can we do with the sticks? They gave various creative answers”. T11 from another private school also provided an example related to using sticks in different ways. The teacher expressed that they collected sticks from nature and then asked the children what they could use them for and they used them as rhythm sticks. Then, they sang songs while keeping the rhythm with these sticks that we had learned. Three different teachers also provided answers that defined creativity as a form of freedom. Two of them are referenced. T4 from the private school stated, “Creativity is the freedom to discover beyond the known” while T12 from the public school mentioned, “Creativity is the freedom to use different materials to create different things.” These teachers’ responses encompass both views, considering creativity as a form of freedom and the act of creating something with various materials. The distribution of teachers from private and public schools was located in the following table (see Table 15).

**Table 15.** *The Meaning of Creativity*

<b>Creativity means</b>	<b><i>n</i></b>	<b>Private Schools Teachers</b>	<b>Public Schools Teachers</b>
Having different perspectives	7	3	4
Having unique and original ideas	7	0	7
Using materials in different ways	2	2	0
Solving the problems	1	1	0
Having imagination	6	4	2
Being free	3	2	1
Creating something with different materials	1	1	0

*Note.* Several teachers gave more than one answer.

#### **4.2.2. Being a Creative Teacher**

The teachers were asked about their creativity as a second question to learn their ideas about considering themselves creative teachers or not. The teachers’ responses were categorized into yes and no. Most of the teachers said ‘yes’ (n=14) while six teachers answered ‘no’ (n=5) and one teacher (T7, public school) said ‘partially’

because she thought that sometimes she was not using open-ended activities (see Table 16).

**Table 16. Creative Teacher**

<b>Creative Teacher</b>	<b><i>n</i></b>	<b>Private School Teachers</b>	<b>Public School Teachers</b>
Yes	14	7	7
Partially	1	0	1
No	5	3	2

The teachers explained the reasons describing themselves as creative or not. For example, T1, working in public school, said, “I cannot describe myself as a creative teacher because I am not open-minded. I have a routine and I cannot break out of my routine, yet I believe creativity is about breaking out of the routine and trying new things.” On the other hand, T3 working in a private school stated that she is not a creative teacher and explained, “I cannot describe myself as a creative teacher because when I was a child, I was not encouraged to think differently and apply what I thought. Everything was ready for me. I did not need to think to do something. I lack divergent thinking”. T15 from another public school does not describe herself as a creative teacher. She said, “No, I am not. When I look at social media, I see teachers who engage in a wide range of activities. However, I am not like that. Some teachers wear special clothes to grab children's attention. I do not do these kinds of things.” Some teachers do not define themselves as creative teachers, while others do identify as creative teachers. For example, T4, working in private school described herself as a creative teacher and she explained that “I am naturally curious to try and create new things. I enjoy discovering new ideas, conducting research, thinking, creating, and observing the results. It might be a new thinking provocation, an aesthetic learning environment, intentionally designing a lesson, or different kinds of pedagogical documentation. I love playing with loose parts and nature to create and model creativity.” T5 (private school) also explained that “I am a creative teacher because I do not strictly adhere to the existing plan. Moreover, I provide opportunities for my students to learn by doing. For example, we had a topic related to fossils. First, we made the dough. From the dough, we created dinosaur bones and left them to dry. After they dried, we buried them in the sand. We excavated the

dinosaur bones in the sand, just like archaeologists.” T11 (private school) also described herself as a creative teacher because she said, “I respect children’s different ideas and requests. Moreover, when children bring materials to school, we create activities related to these materials by discussing them. We are thinking about what we can do with this material. Then, I changed the changing the schedule during this time.” Another teacher (T12, public school) believes that she is a creative teacher and explained the reason in detail. She said, “I am a creative teacher because I allow children to have freedom in games and art activities. I do not intervene with them. There is an art center where children can access paints, papers, pencils, scissors, and more, allowing them to create whatever they want. I give them the opportunity for freedom. Additionally, I provide boxes and waste materials to my students, which they can use to create something unique. Giving my students the chance to express themselves in various ways is so important to me. Furthermore, the locations of the centers in the class should be known, and the materials in the center should be diverse to attract students’ attention. I prefer to provide a wide variety of materials to students. While some teachers believe that offering fewer materials encourages children to think and boosts their creativity, I believe in the opposite approach. I want children to create different things by using a wide range of materials.”

In addition to teachers who describe themselves as creative and those who do not, there is also a teacher in the study who describes herself as partially creative. This teacher explained why she thinks that she is a partially creative teacher in the following way: “I cannot say I am a creative teacher or not because time to time it changes. While I sometimes do not use open-ended activities, sometimes I use and arrange the activities according to children’s interests and transform the activity into another activity.”

#### **4.2.3. The Role of Creativity in Early Childhood**

As a third question, the teachers were asked to state the role of creativity in early childhood education to understand the importance of creativity for the teachers during this period. Analysis of responses showed that the role of creativity is supporting original ideas (n=2), supporting developmental areas of children (n=4),



supporting learning with discovery (n=5), and supporting imagination (n=4) (see Table 17).

**Table 17.** *Creativity in Early Childhood Education*

<b>The Role of Creativity in Early Childhood Education</b>	<b><i>n</i></b>	<b>Private Schools Teachers</b>	<b>Public Schools Teachers</b>
Supporting original ideas	2	1	1
Supporting developmental areas	4	4	0
Supporting learning by discovering	5	2	3
Supporting imagination	4	2	2

*Note.* Some teachers' responses were not related to the question and several teachers gave more than one answer.

Each teacher in the interview emphasized the importance of creativity during the early childhood period and most of them also highlighted the role of early childhood teachers and stimulating environment in fostering children's creativity during this period. Some of the teachers emphasized that the early childhood period takes an important place in fostering children's creativity but children having creativity on their own, without teacher support or without the learning environment being used to foster creativity, will not contribute to the development of children's creativity. Therefore, no matter how creative children are during that period. For this reason, supporting with a rich environment and supportive educators, who are actively attentive to the cognitive process of the children have a big role during this period.

Several teachers said, "Teachers should allow children to think in an original way to solve the problems in different ways to inquire." One of the teachers, working at a private school (T4) said, "Children start discovering the world around them after they start sensing the world before birth. They collect data continuously from the environment and start building their schemas. The searches prove that children's relationship to the environment and people during the first years of their lives affects how the intricate circuitry of their brains is wired. Natural pathways are created with greater speed in the first three years for children's ability to learn and regulate their own emotions. That is why I believe that children are born with unique thoughts and are capable, and nurturing their development is also very crucial. Children's creativity is affected by personal traits (self-confidence, motivation, curiosity), emotional process (Tolerance of anxiety, pleasure in challenge), and cognitive

abilities (transform thinking, judgment.) For children to express their creativity, they need a combination of these attributes. When children are given a choice, and voice in their learning, they will own it. When children feel welcomed, included, respected, and loved, they feel safe and express themselves. When children's thinking and imagination are supported by a rich learning environment and supportive environment." T5 from the private school also mentioned that, "Children want to create different things with different materials that during this period and so they do not stay connected to one color, or something on the paper. They do not want to stick a material, paint, or something that is already drawn on paper. They want to discover." Another teacher (T6, public school) emphasized the importance of receiving children's needs during the early period. She said, "After receiving children's needs, they can show their creativity. Teacher support is very crucial during this period because Each child is unique and their expectations and developmental level are different. Therefore, the teacher has to create different ideas to adapt the things to children."

Six teachers particularly emphasized the importance of not restricting or limiting children's creativity during the early period. One of them (T5, private school) said, "The teachers should not provide activities, which are connected to one color, or something on the paper because children do not want to stick a material, a paint, or something already drawn on paper. They want to create different things with different materials. For this reason, as a teacher, we should not limit children. T9 (public school) also mentioned the limited coloring activities and she stated that, "We need to move away from limited coloring and telling children to make this one color fold that one like these art activities where they all come out the same and create more unique products. They already have an imagination. I believe we should support children's development without limiting them." Apart from these, two teachers mentioned that when the teachers limit children's creativity in the early years, they will gradually lose this ability. While T13 (public school) mentioned, "If we limit or restrict children's creativity when they are very young, their thoughts and creative activities may be dulled prematurely." T17 from the private school also mentioned something about not limiting children during this period. She indicated that, "In my opinion, the most crucial time for creativity is the early childhood period

because children’s intellectual development continues until the age of 7 or I can say that children complete a significant portion of their intellectual development by the age of 7. For this reason, if we restrict and hinder children from creating new ideas and products during this period, we will destroy their creativity and imagination.” T18 from the private school also emphasized the importance of not limiting children just like the other five teachers. She said, “I think it’s the time when the highest opportunities should be provided because I believe it's when children's worldview is first formed. I consider this period to be very important because what they see during this time will influence their perspective on life in the future. I think it’s the most important time not to limit the child.”

#### 4.2.4. Creative Child

To obtain more information about the characteristics of a creative child, teachers were asked, “Do you have any children in your class whom you would describe as creative? If so, what are their characteristics in your opinion?” Every teacher responded ‘yes’ to this question, except for one of them. Moreover, they mentioned different characteristics of creative children (see Table 18).

**Table 18.** *The Characteristics of Creative Children*

<b>The Characteristics of Creative Children</b>	<b><i>n</i></b>	<b>Private Schools Teacher</b>	<b>Public Schools Teacher</b>
Creative Abilities			
Creating something new	3	2	1
Using materials in different ways	1	1	0
Expressing themselves very well	4	3	1
(verbally)			
Having a unique perspective	8	4	4
Imaginative	3	2	1
Social Abilities			
Outgoing	2	1	1
Enterprising	1	0	1
Communicator	5	4	1
Having leadership qualities	1	0	1
Analytical Abilities			
Thinking analytically	2	1	1

Table 18. (continued)

Inquirer	3	1	2
Open-minded	1	1	0
Problem-solver	1	1	0
Quick learner	1	0	1
Asking challenging questions	2	1	1
Curious	2	1	1
Physical Abilities			
Very energetic	2	2	0
Free spirit	2	2	0
Easily Getting bored	1	0	1
Others			
Breaking the rules	2	2	0

*Note.* Each teacher gave more than one answer.

One of the teachers said, “Each child is creative because every child has their own potential. While the terms ‘less creative’ or ‘more creative’ are not commonly used in the literature, I believe that every child is inherently creative (T12, public school).”

According to the teachers’ answers to the question five categories were created. These categories have also codes. The first category under this theme, the characteristics of creative children, is creative abilities and it involves five codes: 1) creating something new, 2) using materials in different ways, 3) expressing themselves very well, 4) having a unique perspective, and 5) imaginative. Related to this topic, two teachers from the different private schools shared their ideas and they mentioned that creativity can be showed different ways. T4 from the private school commented, “I believe that all children are creative in many different ways and they are capable, competent, colorful, and creative and are born like that. T10 from different private school said that, “I give her a toy, but she uses her creativity to play with it in different ways.

The second category under this theme is communication and social traits and it involves four codes: 1) outgoing, 2) enterprising, 3) communicator, and 4) having leadership qualities.

The third category under this theme is analytical abilities, and it involves seven codes: 1) thinking analytically, 2) inquirer, 3) open-minded, 4) problem solver, 5)

quick learner, 6) asking challenging questions, and 7) curious. Related to this topic, T4 from the private school commented, “They are individuals with brave hearts and beautiful minds who always surprise and challenge my thinking as an educator.” Other teacher from the public school said, “They are asking challenging questions at a completely unexpected moment when we have a conversation about a topic (T6, public school).”

The fourth category under this theme is energetic and curious nature, and it involves three codes: 1) very energetic, 2) free spirit, and 3) easily getting bored. Related to this topic, T18 from the private school commented, “If I were to give an example from the creative children in my class, there is a boy who is highly energetic and free-spirited. His family encourages him to believe he can do anything without limits. However, he often makes mistakes because, in life, there are boundaries, and we can't always do everything we want.”

The fifth category under this theme is others and it involves one code: 1) breaking the rules. Related to this topic, two teachers from the different private schools, T3 and T18 emphasized being creative child is related to not obeying the rules. T3 from the private school said, “Creative child does not like following the routines while T18 from the different private school stated, “He, being a creative child, tends to resist the existing order or structure.”

#### **4.2.5. Supporting Children’s Creativity**

To gain further insight into teachers’ self-reported practices aimed at fostering preschoolers’ creativity, teachers were asked, “*What do you do to support children’s creativity in your classroom? Can you provide examples?*” Based on the responses provided by the teachers to this question, four categories were created. These categories have also codes.

The distribution of teachers’ responses, obtained from both public and private school educators, is presented in detail within Table 19. This table provides a comprehensive overview of how teachers support preschoolers’ creativity, shedding light on the various strategies and approaches employed in fostering creative development in early education.

**Table 19.** *How to Support Children’s Creativity in Your Classroom*

<b>The Ways to Support Creativity</b>	<b><i>n</i></b>	<b>Private Schools Teachers</b>	<b>Public Schools Teachers</b>
<b>Supporting Children’s Social and Emotional Needs</b>			
Encouraging take risks and make mistakes	1	1	0
Having a loving and supportive relationship	1	1	0
Talking about feelings	1	1	0
<b>Providing Different Types of Materials</b>			
Waste materials	1	0	1
Less material	1	1	0
Lego	1	1	0
Natural materials like sand	1	1	0
Open-ended materials and loose parts	1	1	0
<b>Implementing Diverse Activities</b>			
Mind games	1	0	1
Play-based learning	2	1	1
Learning by touching	2	2	0
Create a game	3	0	3
Drama	4	1	3
Completing the story	4	2	2
Flexible art activities	6	2	4
<b>Supporting Higher Order Thinking Skills</b>			
Making reflection	1	1	0
Making a philosophy circle	1	1	0
Solving the problems	1	1	0
Brainstorming	2	1	1
Having a discussion	2	1	1
Asking open-ended questions	4	2	2

*Note.* Each teacher gave more than one answer.

The first category under this theme, supporting children’s creativity, is providing social and emotional support and it involves three codes: 1) encouraging children to take risks and make mistakes (n=1), 2) having a loving and supportive relationship (n=1), and 3) talking about our feelings (n=1). In this context, T4 from the private school made a detailed explanation about theme. She stated that “I support the idea of providing social and emotional support to foster children’s creativity because, firstly, I believe we need to meet our students’ needs. Then, creativity will be supported. I also ensure that my students’ social and emotional needs are supported; that's why I dedicate a significant amount of time to addressing their needs. I make sure that I create a classroom environment where children are encouraged to take risks, and their mistakes are not only acceptable but also seen as valuable learning opportunities.”

In this theme, the second category was providing different types of materials. This category includes five codes: 1) waste materials (pompom, toothpick, and paper plate) (n=1), 2) less material (n=1), 3) Lego (n=1), 4) natural materials like sand (n=1), and 5) open-ended materials and loose parts (n=2). Related to this topic, one teacher from the same private school emphasized the use of Lego, while another focused on natural materials. T16 said, “I give Lego to my students and I tell them to build whatever they imagine supporting their creativity.” T17 also stated that “What I emphasize in creativity is that, during an activity, my goal is to use natural materials instead of ready-made materials like cardboard, scissors, and glue. For example, we go out to the garden with the children to collect soil with different textures using a sieve, and then encouraging them to create pictures from that soil is an art activity that supports their creativity. Art is not limited to just paint and paper, as it can be created using various materials, as demonstrated in this example.” About providing different types of materials T20 from different private school also mentioned that, “In my opinion, to foster children’s creativity, children should be provided with minimal materials. Fewer materials should be provided to children to make them think about their products. Encouraging them to think by offering fewer materials significantly supports children's creativity during the early years.”

The third category on this theme is providing diverse activities and it includes seven codes: 1) mind game (n=1), 2) play-based learning (n=2), 3) learning by touching (n=2), 4) create a game (n=3), 5) drama (n=4), 6) completing the story (n=4), and 7) flexible art activities (n=6). Several teachers shared the activities they conducted to enhance children's creativity. For example, T5 from private school commented that “I do not provide directions like, “Here is the sky, let's paint the sky blue. The tree is green, so let's paint the tree green.” Instead, I fully encourage my students’ creativity and imagination. If I am aware that a child knows the seven colors of the rainbow, there is no problem if they want to paint one of those seven colors as black. If my student wishes to include black as one of the rainbow colors, they are free to do so.” Other teacher from the different private school said that, “Let’s imagine I have an umbrella in my hand. The children already know that this object is an umbrella, but I approach it differently. I say to them, “Now I am going to transform this object, but I will do it only through my movements and drama without saying a word. Can you try

to guess what this object might be?” I can play a game like this. For example, I can put the umbrella on my arm and it could be a bag or this umbrella can place it on my head as a hairband. Children respond entirely based on their own imagination (T10, private school).” At the private school, T11 shared her unique approach to reading books with children. She mentioned, “While reading books, I occasionally pause at the halfway point, encouraging the children to unleash their imagination and creativity to continue the story. Following that, I suggest they also narrate the remainder of the story through drawings.” At the public school, T14 described their engaging circle time activities, where they immerse in drama. For instance, the children transform into balloons, and T14 poses questions like, “Where did the balloon go? What is the balloon doing right now?” The group then collaboratively shares ideas, fostering a collective burst of creativity during this interactive learning session.

The fourth category on this theme is supporting higher-order thinking skills and it has six codes: 1) making reflection (n=1), 2) making a philosophy circle (n=1), 3) providing an opportunity to solve the problem on their own (n=1), 4) brainstorming (n=2), 5) having a discussion (n=2) and, 6) asking open-ended questions (n=4). In approaching the topic, teachers from both private and public schools shared their strategies for fostering creativity in children. For example, T4 from private school mentioned that, “I ask higher-order thinking questions to challenge children's thinking such as why, how, and what if. I try to respond to their questions in a learner and researcher manner. I make sure that we have a long dialogue time during our philosophy circles where we talk about their feelings, creative ideas, and theories. It gives the class community to discuss, explore, and extend their thinking and see different points of view. Reflection is also one of the most important parts of the creative process, it gives children a chance to describe, explain, and justify their creative imagination.” T8 from the public school focuses on asking open-ended questions to stimulate creative thinking. Similarly, T11, also from the private school, emphasized the significance of introducing a topic by inviting children to share their thoughts and brainstorm collectively. T11 particularly values this process for encouraging creativity as it allows children to express various thoughts on the subject.



#### 4.2.6. The Frequency of Group Activities

Teachers were asked, “*How often do you do group activities in your class?*” To find out how often children engage in activities together. Answers to this question were categorized into the five following groups: more than one every day (n=1), once a day (n=8), about every two days (n=1), twice a week (n=2), not giving a specific time (n=8).

The majority of teachers (n=8) indicated that they engage in activities “once a day.” In contrast, an equal number of teachers (n=8) did not specify a particular frequency. One of the teachers said, ‘I cannot provide a specific time for it because the frequency of group activities changes according to the children’s needs’ (T5, private school). The other teacher also could not provide a specific time for the group activities because she believes she does not provide an opportunity related to group activities for her students (T1, public school).

The distribution of teachers from the private and public schools can be seen in Table 20.

**Table 20.** *The Frequency of Group Activities*

<b>The Frequency of Group Activities</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
More than one every day	1	0	1
Once a day	8	4	4
Every two days	1	1	0
Twice a week	2	1	1
Not giving a specific time	8	4	4

#### 4.2.7. Supporting Children in Thinking About Their Ideas

In the following, the teachers were asked “*How do you support children in thinking about their ideas in your class?*” to address creativity in the classroom. The teachers’ responses were categorized into asking open-ended questions, brainstorming, giving time for thinking, empowering to express themselves, listening actively, reading books and talking about the story, and giving time for exploration (see Table 21).

**Table 21.** *Supporting Children in Thinking about Their Ideas*

<b>The Ways to Support Children in Thinking about Their Ideas</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Asking open-ended questions	9	5	4
Brainstorming	7	4	3
Giving time for thinking	5	4	1
Empowering to express themselves	5	2	3
Listening Actively	5	3	2
Reading books and talking about the story	3	2	1
Giving time for exploration	2	1	1

*Note.* Each teacher gave more than one answer.

Most of the teachers (n=9) expressed their commitment to nurturing children's thinking by employing open-ended questions. T4 from the private school, regarding this approach, stated, "I encourage my children to contemplate their ideas through daily questions, including 'question of the day,' and by posing open-ended questions." Similarly, T16, also from a private school, employs Philosophy for Children (p4c), integrating open-ended questions into the curriculum. T16 exemplified this approach, sharing, "For instance, I ask questions like, 'If you had four arms, what would you do?' This method supports them in delving deeper into their thoughts, prompting them to generate solutions or reason about the solutions they come up with." These educators emphasize the power of open-ended inquiries to stimulate critical thinking and creative problem-solving.

Furthermore, seven teachers underscored the importance of providing opportunities for children to collectively brainstorm and explore their ideas. T5 from the private school shared their approach, stating, "We frequently engage in brainstorming sessions. For instance, when discussing children's rights, a student questioned whether animals also have rights, sparking a collaborative exchange of thoughts and questions among us. In another instance, during a conversation about plants, I asked, 'Can plants eat like humans?' This led to a lively discussion where children's ideas unfolded, demonstrating the richness of their perspectives." Similarly, T12 from a public school emphasized the utilization of a question-and-answer format for brainstorming and she said that, "We do brainstorm in a question-and-answer format, and I always make sure to write both the questions and the children's answers on a large sheet of paper or the board. I attach great importance to this, and I guide my

interns in the same way. For example, when we discuss how to clean our environment or what we can do to protect animal rights, I always write those answers either on the board or on a cardboard. Because making the children's answers tangible shows that we value their ideas more.”

Five teachers also emphasized the importance of giving children time to think about their ideas. T2 from the public school described their approach, stating, “I create a quiet environment for children to think. I say, ‘Okay, everyone, let's take a moment to think. Close your eyes and put your hands on your head.’ There is silence, and I give them 2 minutes. If they cannot find the answer, I say, ‘You can think a little more when your friends are talking.’ I give them thinking time.” Similarly, T4 from the private school emphasized implementing thinking routines and she stated that, “I implement thinking routines so that children can feel comfortable sharing their ideas, are empowered to express themselves, and develop their critical thinking skills.” Additionally, T19 from the private school expressed, “I give children time to think and explore, at least once, guiding them using words and sentence structures familiar from their experiences. I pay special attention to this aspect of their learning process.” These educators underscore the value of affording children the time and environment to reflect, fostering a supportive atmosphere for the development of their thoughts and ideas.”

Apart from those, five teachers stated the role of empowering children to express themselves to think about their ideas. T8 from the public school highlighted that, “I do reflection time every day. During this time, I guide my students with open-ended questions such as ‘What did we do today?’ ‘What else could we do?’ I encourage them to express and share their ideas with the whole class, and I try to support them in some way. Moreover, to provide opportunities for children to express themselves and to share their own ideas with others. I planned something to encourage them about this issue. the student selects what they want to talk about, and they decide within the classroom. Then they come and share this with their classmates. They start by researching the topic and sharing the information they have gathered. Afterward, they decide what kind of activity they'd like to do related to that topic on that day. Their classmates join in. For example, one of our students introduced oranges, and

we made orange cake in connection with that. In this manner, I support children to think about their own ideas. I create awareness about this issue.” T9, also from a public school, stated that, “I emphasize the importance of children expressing themselves, and understanding that different thoughts and perspectives can exist. I encourage them to notice differences, especially to comprehend them. I believe it's essential for them to realize that our ideas are not the only ones, that they are not the center, and that the world includes other people, including themselves.”

Furthermore, five teachers highlighted the significance of actively listening to children's ideas, feelings, and thoughts to support their ability to think critically. T4 from the private school stated that, “I am an active listener to build on children's ideas so that children can feel comfortable sharing their ideas, empowered to express themselves, and develop their critical thinking skills. Additionally, T11 from the private school mentioned a simple yet powerful approach, stating, “Sometimes, I simply ask them, 'What would you like to do?' I wait for their answers. I listen to them attentively to show that I value their thoughts and for them to understand.”

Moreover, three teachers underscored the importance of utilizing books and stories as a means to encourage children to contemplate their ideas. T1 from the public school shared their approach, stating, “We read a book the other day, and we had quite a discussion about it. We usually discuss books, turning it into a brief but immersive experience. We delve into whether the events happened as depicted, exploring the concepts of right and wrong. It prompts discussions on what we think should have been done differently.” Similarly, T10 from the private school emphasized the value of storytelling and reading, providing children with opportunities to ponder their ideas. T10 shared, “Telling many stories and reading a lot of books gives children the chance to think about their own ideas. In fact, for this reason, many times after reading a book, I have them perform a dramatization of it.”

Lastly, two teachers emphasized the vital role of giving children time to explore themselves. T19 from the private school shared a hands-on approach, stating, “Now, let's say I enter the classroom with a box, and I ask children to make guesses about what's inside, encouraging them to examine what's in my hand or identify the

materials I've brought to the classroom. I allow them to explore and synthesize information about it. They need to make discoveries related to the box. I do this without intervening or making comments, providing them the opportunity, and then I ask questions, and the process continues like that.”

#### **4.2.8. Encouraging Children to Ask Questions**

The teachers were asked, “*How do you encourage children to ask questions in your class?*” to gain insights into the strategies teachers use to promote questioning among students in the classroom. Most of the teachers (n=12) mentioned asking questions to encourage children to ask questions. However, T17 from the private school said, “I provide opportunities and encourage my students to ask questions to each other. For example, they bring different toys to the school every day and they introduce them to their friends. After that, I encouraged other children to ask questions to the friend who brought the toy.”

Furthermore, four teachers highlighted the practice of asking questions individually, while seven teachers emphasized the importance of group questioning to encourage children to ask questions. Two teachers who advocated for individual questioning and supporting children in asking questions shared their perspectives. T7 from the public school acknowledged the needs of shy children, stating, “Unfortunately, our shy children need a lot of help. First, I try not to push them too much. I focus on establishing one-on-one communication with them because they need to get used to me and the class. If you constantly pressure a shy child, they tend to withdraw even more. So, I wait for them to be willing to engage. I think about specific topics they might want to talk about or respond to, and then I ask them individually.” Similarly, T8 from the public school described efforts to encourage an introverted student by asking questions individually and engaging in one-on-one conversations, stating, “I have one student who is very introverted and does not want to participate in anything. To encourage him, especially I ask him questions individually. I try to have conversations with him one-on-one, like asking what they did at home as well.”

T4 from the private school, who highlighted the significance of asking questions in a group to encourage children to ask questions, provided the following insight: “I try

my best to create a culture of questioning in the classroom so that my students feel comfortable asking questions and exploring their interests. I model questioning and curiosity as an educator.”

In addition to the teachers who support children in asking questions, six teachers mentioned that children already ask questions so they do not need support to ask questions. One of the teachers said, “I really do not encourage my students to ask questions because they are incredibly outgoing and they always ask questions (T5, private school)”.

Five teachers expressed that they give value to children’s questions. T4 commented, “I show that I value all their questions by writing them down, drawing them, documenting them, and providing feedback. I make time for questions and questioning to develop habits and skills.” T14 also said, “I respond to every question children ask to support them in asking more questions. I do not interrupt them while they are asking questions.”

Furthermore, three teachers mentioned the importance of celebrating the mistakes of children to encourage them to ask questions. Two of them commented on this point as follows: T4 from private school stating, “I celebrate mistakes and always underline the importance of making mistakes. I tell them ‘You will call these mistakes in the future as an experience.’” T9 from public school also mentioned that, “Even if a child gives a wrong answer, I encourage them not to criticize or make fun of their friends. I emphasize that they might be looking at it from a different perspective, showing children the importance of being open to new ideas and perspectives.”

Three teachers emphasized the importance of verbal encouragement for children to ask questions. T20 from the private school also highlighted this, stating, “I tell the children, ‘I want to hear your voice. I am sure you have some thoughts or ideas about this topic,’ or I say, ‘We have not heard your voice today, and I want to hear it.’ I motivate them to speak and ask questions with this kind of verbal encouragement during the activity times.”

Apart from these, a small number of teachers (n=2) emphasized the role of creating curiosity in children to encourage them to ask questions. T6 and T15 from different public schools shared their views. T6 stated, “I identify the topics that students are enthusiastic about to create curiosity. It encourages children to ask questions.” T15 also stated that, “Creating curiosity in children is very important during conversation time; after that, immediately they can ask questions.”

The distribution of teachers from private and public schools were located in the following table (see Table 22).

**Table 22.** *Encouraging Children to Ask Questions*

<b>The Ways to Encourage Children to Ask Questions</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Asking Questions			
Among themselves	1	1	0
Individually	4	0	4
In a group	7	4	3
No Need to Ask Questions			
Already asking	6	4	2
Giving Value to Their Questions	5	1	4
Celebrating Mistakes	3	2	1
Encouraging Children Verbally	3	2	1
Creating Curiosity of Children	2	0	2

*Note.* Each teacher gave more than one answer.

#### **4.2.9. Exploring Strategies for Fostering Self-Directed Learning**

The teachers were asked, “*What do you do to promote self-directed learning in your class?*” to understand how teachers foster self-directed learning to enhance children's creativity. Most of the teachers responded to this question by providing materials to promote self-directed learning in their classroom (n=10). However, they mentioned that most of them simply stated that they provide materials to promote self-directed learning of children. As a result, this theme includes six categories: 1) not given material name (n=6), 2) books (n=3), 3) playdough or clay (n=2), 4) pictures and brochures (n=1), 5) Lego (n=1) and 6) preparing mud bucket (n=1). About this topic, T6 from the public school said, “I put different materials on the table, children use whatever they want to create something and learn by doing.” Another teacher also

mentioned, “I am putting pictures and brochures about the topic to gather children’s attention and to encourage them to learn something themselves (T8, public school).” Secondly, five teachers from four different schools emphasized the importance of providing children with time for free play, as they believe that during free play, children learn independently. T17 from a public school highlighted this approach, stating, “I listen to them while the children are talking with each other. Children learn a lot on their own during free play.” Additionally, two teachers advocated for allocating time for children to explore learning centers. T15 from a public school explained, “I prepare learning centers for the topic and give children time to explore materials in the center to gather information about the topic for the day.”

Moreover, two teachers emphasized the value of providing opportunities for children to solve problems independently. T5 from a private school stated, “I also refrain from interrupting them while they attempt to solve the problem.” Another two teachers highlighted the importance of peer education. T16 from a private school mentioned, “During the early years, peer education plays an important role in self-directed learning.” T20, also from a private school, added, “As teachers, we sometimes do not instruct them; they learn from each other. They thought self-directed learning included peer education.”

Finally, one teacher from a public school mentioned assigning experiments for children to conduct on their own, stating, “We have an experiment day once a week. I give each child an experiment and encourage them to learn independently. I am always there with them; I want them to feel safe” (T1). Additionally, T4 from a private school explained her approach, saying, “I teach them how to access resources. For example, they learn how to use the library, look at books, and search online with adult assistance. I also provide a variety of resources such as books and learning materials according to their needs and interests. I listen to their ideas and offer learning opportunities for them to investigate on their own. I encourage my children to set their own goals for their learning. I make sure that I ask supportive questions, provide feedback, and encourage my children to reflect on their own learning. I give opportunities for them to create their wonder journals, post on their electronic journals, and share them with their families.”



The distribution of teachers from the private and public schools can be seen in Table 23.

**Table 23.** *Promoting Self-Directed Learning of Children*

<b>The Ways to Promote Self-Directed Learning</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Providing Materials			
No material name	6	2	4
Books	3	2	1
Playdough or clay	2	0	2
Pictures and brochures	1	0	1
Legos	1	1	0
Mud Bucket	1	0	1
Giving Time for Free Play	5	4	1
Spending Time in Learning Centers	2	0	2
Solving the Problem on Their Own	2	1	1
Peer Education	2	2	0
Making Experiments	1	0	0

*Note.* Each teacher gave more than one answer.

#### **4.2.10. Asking Open-Ended Questions**

The teachers were asked, “*How often do you ask open-ended questions to your students?*” to provide an opportunity to foster children’s creativity through the use of open-ended questions. The teachers did not specify the frequency of asking open-ended questions. However, most of the teachers ask open-ended questions to children most of the time ( $n=13$ ) while several teachers ( $n=5$ ) primarily discussed when they ask open-ended questions like during story time ( $n=2$ ), at the beginning of the activity ( $n=2$ ) and at the end of the activity ( $n=1$ ). Additionally, one teacher said, “The frequency of asking open-ended questions may vary depending on my learning and teaching intentions, and the needs of my students. I use them to stimulate dialogues and encourage my children to think deeply about a concept and engage them with their learning” (T4, private school). She just said it. Another teacher said, “There is no specific time for asking open-ended questions to children because it is a continuous process throughout the day (T5, private school).” The distribution of teachers from the private and public schools can be seen in Table 24.

**Table 24.** *The Frequency of Asking Open-Ended Questions*

<b>The Frequency of Asking Open-Ended Questions</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Most of the Time	13	7	6
No Specific Time	1	1	0
During the Story Time	2	0	2
At the Beginning of the Activity	2	1	1
At the End of the Activity	1	0	1
Needs of the Children	1	1	0

#### **4.2.11. Promoting Ideas Exchange among the Children**

The teachers were asked, “*How do you promote idea exchange among the children in your class?*” to comprehend what is being done to enhance children’s creativity about this topic. Most of the teachers stated that they do whole group and small group activities to promote idea exchange among children (n=8). One teacher said, ‘I provide time to present children’s ideas and work with peers or the whole group (T4, private school).’ Another teacher said, ‘Children are eager to share their ideas with their peers, so I do small and whole group activities. This is so effective in promoting idea exchange among children’ (T6, public school). T8 from the public school mentioned assigning tasks in a group to encourage communication with their peers. T11 from the private school also stated giving responsibility within a group as it offers an opportunity for communication among group members.

Seven teachers emphasized the significance of peer learning during the early years to promote idea exchange among children. One of these teachers said, “I want children to help their friends, them to explain things to their friends if their friends do not understand (T2, public school)”. T15 from the public school gave an example of peer learning. She mentioned that, “For example, I have a ‘Child of the Week’ project, and I implement it every year, which I enjoy. Sometimes, the children come well-prepared with fantastic experiments, and sometimes they prepare presentations to explain unknown animals to their friends. They talk about themselves, share their experiences, and tell stories.”

Five teachers emphasized the importance of supporting children to communicate with each other and providing them with time for this purpose. T9 from the public

school said that she encourages children to talk by providing positive feedback to promote idea exchange among children. T16 from the private school also stated, that she strongly supports students in communicating with each other, it is so important to learn others' ideas. In addition to supporting communication between children, discussing problems with peers or in a group takes an important place (n=4), teaching children to listen to each other (n=2), and deciding on a new seating arrangement in the classroom (n=2) to promote idea exchange among children. T17 working at the private school mentioned, 'I frequently change the seating arrangements of children in the classroom who come from distant places and often cannot communicate with each other. This is to encourage those children who do not interact with each other to start communicating'. T13 from the public school stated that she has an approach to arranging the children's seating in a U-shape in the class to facilitate communication and idea exchange by promoting eye contact and active listening. The distribution of teachers from the private and public schools can be seen in Table 25.

**Table 25.** *Promoting Idea Exchange among Children*

<b>The Ways of Promote Idea Exchange among Children</b>	<b>n</b>	<b>Private Schools</b>	<b>Public Schools</b>
Whole Group and Small Group Discussions	8	3	5
Peer Learning	7	3	4
Communicating with Each Other	5	4	1
Talking about the problem	4	2	2
Encouraging Listening	2	1	1
Changing seating arrangement	2	1	1

*Note.* Each teacher gave more than one answer.

#### **4.2.12. Documenting Children's Work**

Teachers were asked, "How do you document your students' work? Do you file your students' work?" When "How do you document your students' work?" to know whether they make learning visible or not. Most of the teachers (n=12) mentioned that they hang their students' work on the wall. Six of them specified they display it on the wall within the classroom, while the other half of the teachers stated they display it on the wall outside of the classroom. Moreover, nine teachers indicated

they hang students’ work on the classroom board (n=8) and on the board outside of the classroom (n=1). Three teachers also stated they hang students’ work on the wall. In the following, four teachers said they held an exhibition to document students’ work. For example, T10 working at the private school mentioned “We have an exhibition at the end of the year during which we select students’ work to exhibit. Furthermore, one teacher (T5, private school) stated, “I display students’ work in their cubbies.” Another teacher (T9, public school) shared, “I take photos of my students’ work and I send them to their parents thus documenting their work.” Lastly, one teacher (T17, private school) stated, “I hang students’ work on the windows in the classroom.” The distribution of teachers from the private and public schools can be seen in Table 26.

**Table 26.** *Documenting Children’s Work*

<b>The Ways to Document Children’s Work</b>	<b>n</b>	<b>Private Schools</b>	<b>Public Schools</b>
On the Board			
In the class	8	3	5
Outside of the class	1	0	1
On the Wall			
In the class	6	6	0
Outside of the class	6	6	0
On the Door	3	3	0
Exhibition	4	3	1
On the Cubbies	1	1	0
Taking Photos	1	0	1
On the Window	1	1	0

*Note.* Each teacher gave more than one answer.

**4.2.13. Filing Children’s Work**

Teachers were asked, “Do you file your students’ work?” to comprehend how they manage students’ work within the classroom. Most of the teachers (n=13) stated they create portfolios for their students. However, two of these teachers (T3 and T4) specifically mentioned that they create digital portfolios for their students. T4 specified, “I document children's activities and learning stories digitally and also as a hardcopy. I make sure that we talk about them and reflect on them regularly. Our school also uses a digital portfolio called Toddle where we share our children's

learning experiences with their parents.” In addition to portfolios, most of the teachers mentioned that they place children’s work in the folder to send home. Some send these student folders home daily, while others send them weekly or monthly. For example, T9 from the public school specified “We have student activity folders that I send home. I encourage parents to have conversations with their children about their work.” Another teacher, T14 from the public school, said about this issue “I send the children’s work home daily because children want to take them home, so there are no exhibitions. If children want to bring their work, they can, and I can place their works in their folder.” T18 from the private school explained, “The school requests that we send children’s work home weekly. Therefore, we send children’s work home every Friday. However, we do not send all of the children’s work home, we display some of them on the wall.” The distribution of teachers from the private and public schools can be seen in Table 27. Moreover, the teacher interviewed by the researcher, who was the teacher whose learning classroom environment and materials were examined, presented a sample student portfolio. The researcher examined the works in these portfolios. Additionally, two teachers at PR-1 use a digital portfolio called Toddle. They did not directly show their digital portfolios, but they stated that the children's works they exhibited in class were included in the digital portfolio.

**Table 27. Filing Children’s Work**

<b>The Ways to File Your Children’s Work</b>	<b><i>n</i></b>	<b>Private Schools</b>	<b>Public Schools</b>
Portfolio			
Yes	11	2	9
No	7	6	1
Digitally	2	2	0
Folder	13	7	6

Children’s work details in their portfolio can be seen in the figures.





**Figure 23.** *Examples of activities from the digital portfolio (T4, private school)*



**Figure 24.** *Examples of activities from the portfolio (T5, private school)*

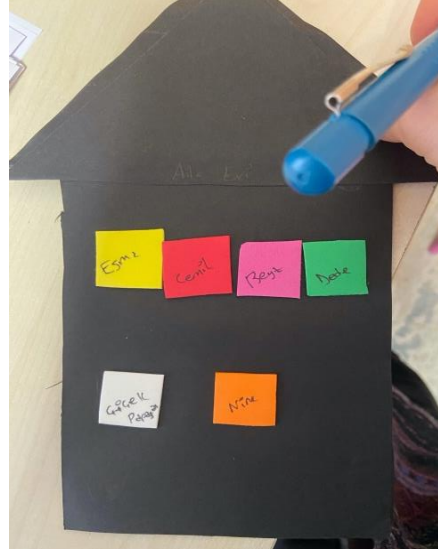


Figure 25. Examples of activities from the portfolio (T6, public school)

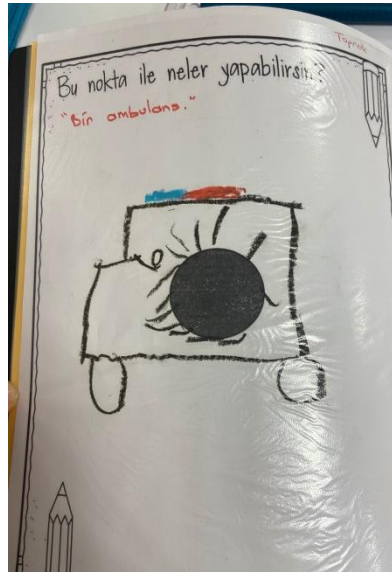




Figure 26. Examples of activities from the portfolio (T7, public school)



Figure 27. Examples of activities from the portfolio (T9, public school)



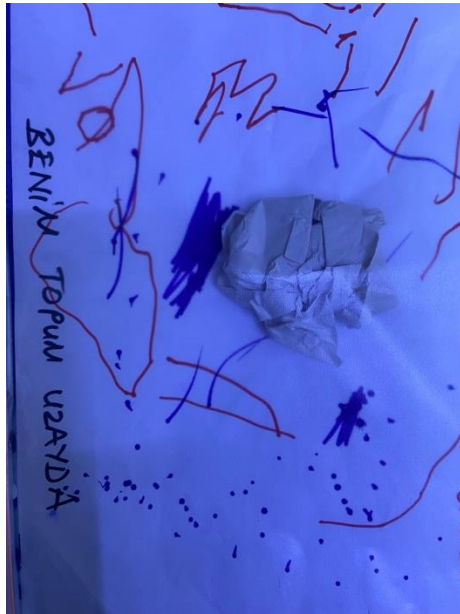
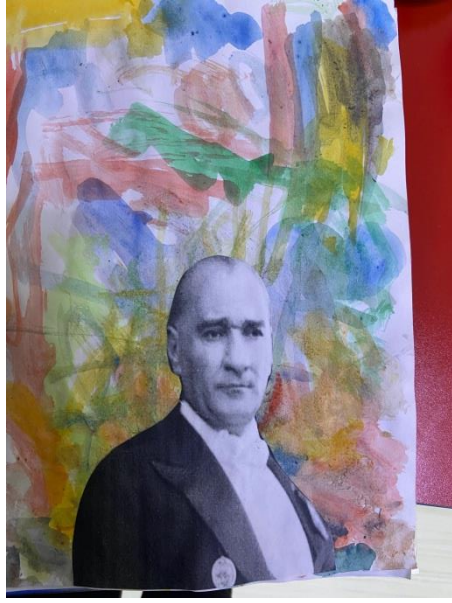


Figure 28. Examples of activities from the portfolio (T14, public school)

## CHAPTER 5

### DISCUSSION AND CONCLUSION

This chapter consists of a summary of the study, a discussion, and a conclusion of the study. The summary of the study section briefs the entire process of the study, while the discussion section provides explanations and interpretations of the results in relation to the aims of the study and related literature. The conclusion of the study consists of the implications and limitations of the study and suggests new directions for future research.

#### 5.1. Summary of the Study

The present study had the dual aims of examining a) the design of a classroom learning environment to support preschoolers' creativity, and b) the views of preschool teachers and teachers' self-reported practices working at public and private schools to encourage preschoolers' creativity. Therefore, qualitative methods were used to explain the research questions better and obtain in-depth information on the topic (Creswell, 2014). The study included 20 preschool teachers currently employed in both private and public preschools located within ten different neighborhoods across three districts in Ankara. The researcher ensured the trustworthiness of the present study through various methods, including data triangulation, thick descriptions, peer review, and member checking. The researcher developed semi-structured interviews and a checklist for assessing the physical environment and materials. This development process was guided by the SCALES guidelines, as well as relevant articles on promoting creativity among preschoolers in the educational setting, including the work of Richardson and Mishra (2018). Additionally, Cropley's lists (1997) in the paper "Fostering Creativity in the Classroom: General Principles were consulted to examine teachers' behaviors aimed at fostering creativity in preschoolers. In the formulation of interview questions for the participants, the

researcher also made use of The Analyzing Children's Creative Thinking (ACCT) Framework, as introduced by Fumoto et al. in 2012. This framework proved valuable in structuring the questions and ensuring a comprehensive approach to understanding children's creative thinking processes. The first part of the study was the Physical Environment and Materials Checklist of Factors Supporting Creativity in a Learning Environment. In this part, questions were asked to gather information about how suitable the physical conditions of learning environments and the materials present in the learning environment are for supporting children's creativity. The second part of the study included a) the Demographic Information Form and b) Semi-structured Interviews. The researcher used content analysis to identify, code, and categorize interview data and to follow primary patterns in the data.

## **5.2. Discussion of the Findings**

The discussion of the findings comprises a detailed analysis and interpretation of qualitative data in the context of the study's research objectives and the relevant literature. In the current study, the researcher collected and analyzed data sets, and then discussed the study results. In line with the literature (Mohammed, 2018), the results of the study showed that all the teachers in the current study are aware of the significance of creativity as one of the most important components in early childhood education. However, despite this awareness, it is observed that activities supporting creativity are generally not being conducted when examining children's activities in portfolios and the activities displayed in the classroom environment except for three teachers from two different private schools and when inspecting the environmental settings of the learning environments except for a few learning spaces outside the classroom. This result may be associated with the knowledge of participants who have taken creativity courses during their education. Only one teacher from a private school has participated in both university courses and extracurricular activities related to creativity. Additionally, eight teachers said taking courses related to creativity during their education, although they do not remember the specific details of those courses. This could be a reason for the observed result in the current study.

In this study, first of all, factors that support preschool children's creativity in a learning environment were analyzed to make a connection between preschool teachers' self-reported practices that foster the creativity of preschool children.

The availability and accessibility of various resources and materials that support the creativity of preschool children in the learning environment were one of the factors related to supporting children's creativity in the current study. Regarding the types of materials and resources, there are no big differences between public schools and private schools in terms of open-ended materials except for four classrooms from one public and two different private schools. Open-ended materials are ample in some classrooms, while notably, they are absent in others. Many classrooms in both private and public schools lack an adequate supply of open-ended materials. However, according to the findings of this current study, it should be stated that one of the public schools had a science and botany atelier, which was equipped with a wide variety of resources and open-ended materials aimed at stimulating young children's creativity, imagination, and curiosity. These materials were natural items like stones, seashells, rocks, acorns, and pine cones. In addition to the natural materials, there are various other resources such as books, blocks, puzzles, plants, animal toys, a light table, x-ray photographs, globes, binoculars, radios, microphones, flashlights, phones, calculators, overhead projectors, a human body model, and kinetic sand. According to the findings of this study, one of the teachers from the two classrooms in this school mentioned that they did not use this atelier extensively due to the large class size (n=21). This result is consistent with the previous study by Ruopp et al., (1979), who found there is correlation between the attention of teacher and the number of the students in the classroom when the class has the high number of students, the teacher cannot provide individual attention to the children. The fact that such a result came out in my study, and the teacher expressed that she had such difficulty, may be related to the fact that she did not have an assistant teacher.

Apart from the science and botany atelier, one of the private schools had an exploratorium, which was equipped with a diverse range of open-ended materials that inspired young children to give form to their creative concepts. Furthermore, the diversity of materials in private schools is slightly greater compared to public schools. However, in general, the diversity of open-ended materials is limited based on classroom distribution so these findings do not align with the literature. On the other hand, the literature shows that preschool children actively construct their own knowledge through their interactions with the people in their environment and the

world around them (Piaget, 1928). This means that to support young children's development and learning, they require hands-on experiences where they can touch, observe, explore, and interact with both objects and concepts (Copple & Bredekamp, 2009). As Maynard and Ketter (2015) pointed out, it is possible to develop creativity and learn by interacting with objects through touching, seeing, exploring, and manipulating them because open-ended materials provide many opportunities for preschoolers to express themselves in creative ways. As indicated in a study by Peterson and Harrison (2005), materials and resources in the classroom should be both accessible and diverse for children to use whenever they desire. This accessibility is significant because if resources are not easily accessible to young children in the classroom, it is hard for them to show their creativity (Duffy, 2006). According to the findings of the current study, while these materials are available in some classrooms, access to some of the materials is challenging for children in most of the classrooms except for four classrooms from one public and two different private schools. This is because the materials are either located in high places or stored in cabinets disorganized and mixed. It is difficult for children to access these materials and create anything without the assistance of an adult. However, in this current study, most of the teachers emphasized the importance of providing different materials to children. The discrepancy between teachers' answers and inspections of the materials in the classroom may be attributed to the fact that teachers provided ideal responses during the interviews, without considering their actual practices and the obstacles they encountered.

The visibility of children's works in the classroom was another factor considered in supporting preschool children's creativity. Two teachers from the same private school made children's work visible in the classroom by taking photos during the process of the activity and displaying children's comments in writing. This result may be linked to the fact that these teachers work with their teaching partners, allowing them to have more time to display their students' work both inside and outside the classroom. Moreover, these findings align with the research by Skinner (2007) who emphasized the significance of displaying all students' work in the classroom by writing students' comments and capturing photos of students' work during the process of the activity. Regarding this issue, Mishra and Richardson

(2018) also pointed out that making students' work visible in the classroom allows children to develop their creativity and send powerful messages to children about the value of their work (Mohammed, 2018). The results of the present study indicated that among twenty classrooms, in eight classrooms from the private schools, children's works were visible, while they were visible in three classrooms from the public schools. Teachers from private schools provide more opportunities for preschoolers to foster their creativity by making children's work visible compared to the teachers in public schools. The result of the study may be attributed to the fact that teachers in public schools do not have assistant teachers. Most public schools in the study have class sizes ranging from 15 to 30 students, and none of them have assistant teachers. Some teachers even have inclusive students in their classes. In such circumstances, it may have been particularly challenging for these teachers to make their students' work visible in their classroom. Moreover, when looking at the children's works which were displayed in the learning environments, students in the public schools were more exposed to limited coloring activities and worksheet assignments than students in private schools. Dababneh et al. (2010) found that excessive use of worksheets by teachers led to reduced creativity among students. For this reason, according to the literature, the use of worksheets has a negative impact on students' creativity. Unfortunately, this study showed that students in public schools are more exposed to these kinds of activities than students in private schools.

Having various learning centers was also evaluated as another factor influencing preschool children's creativity in this current study. Center-based settings play an important role in easy access to resources and the space for young children to have various creative and imaginative experiences (Duffy, 2006). Dere also (2019) emphasized in her study that the Turkish Ministry of National Education's Preschool Curriculum (2013) provides instructions related to learning centers. These learning centers, including block, dramatic play, mathematics, science, art, and books, should be present in the classroom environment to foster children's creativity. Furthermore, in the study by Dere, it was emphasized that the curriculum stated that integrating children's learning processes with these areas supports the development of their creativity. According to the findings of this current study, public schools have more

learning centers in the classroom than private schools. This result may be related to the fact that public schools may have specific curricular requirements set by the Ministry of Education. All private schools in this study also follow the requirements of the Ministry of Education Curriculum, but public schools may be more stringent in adhering to these requirements than private schools. These requirements could encourage the establishment of various learning centers to meet educational standards and objectives. Such centers might include areas dedicated to science, math, literacy, and other subjects. Moreover, in this current study, only three music and art centers were observed among twenty classrooms although these centers are so important to support young children's creativity because young children learn to think outside the box, express themselves creatively, and discover diverse approaches to tasks through music and art (Lafontanie, 2019). The result of the study may be related to a lack of knowledge among participants about the importance of these centers in fostering creativity.

A dramatic learning center was regarded as a factor in fostering young children's creativity in this current study. The findings of this study showed that while two classrooms from the private school had the dramatic play center, eight classrooms from the public school did. There were only ten dramatic play centers among the twenty classrooms. Additionally, three schools had dramatic playrooms. One of them was in a public school, while the other two dramatic playrooms were in different private schools. These findings did not support the literature because Mayesky (2009) stated the importance of dramatic play in fostering the creativity of children. She pointed out that dramatic play is an excellent means for supporting the imagination and the creativity of young children and so the dramatic play center is an ideal setting for young children to engage in creative and expressive play. The study conducted by Ghasempour and Mozafar (2014), which implemented an intervention program, demonstrated that engaging in creative drama significantly influences the creativity of children aged 5 to 7 years. In their study, 25 children were trained by creative drama, and subsequent assessments revealed increases in children's power of speech, expression, participation, concentration, and motivation. These elements, considered crucial in this study for comprehensively assessing the holistic effects of creative drama on children, showed improvement after the engagement in creative

dramas. Another study, which also implemented an intervention program, showed that the creativity of children aged 4 to 6 years old, who participated in creative dramatic activities, increased (Momeni, et al., 2017). Therefore, engaging in drama activities is very important to foster children's creativity. The low number of dramatic play centers in this current study may be attributed to the participants' lack of knowledge regarding the positive impact of dramatic play on the creativity of preschool children. This is evident as, during the interviews, several teachers mentioned the role of dramatic play in fostering children's creativity during the early years.

The block center was seen as a significant factor in nurturing the creativity of young children in this current study. The findings of the present study showed that there were block centers in a total of 13 classes within 20 classrooms. While 4 of these classes were in private schools, 9 classes were in public schools. The number of block centers in classes in private schools is less than the number of block centers in classes in public schools. Whereas, the study of Metin (2017) showed that the block center, which includes miniature real-life objects and unstructured materials as construction materials, provides the opportunity for imaginative constructions for children. Children benefit from the block center through social interaction and acquiring physical, social, and cognitive skills (NAEYC, 2012). There is a study that supports the idea of a block center in the classroom learning environment. This study found that the block play environment provides an opportunity for children to develop their creativity (Aksoy & Belgin Aksoy, 2023). In this study, it was observed that children, during the process of playing with blocks, create innovative and original products. For this reason, the researcher suggests to educators that preparing the block play environment is important to foster children's creativity. Moreover, some researchers highlight the significance of engaging in building block play during early childhood, emphasizing its role in fostering various aspects of children's development like developing imagination, enhancing manipulation skills, providing opportunities for creative and dramatic experiences (Pankratz. L. M., 2015; Provenzo & Brett, 1984; Wilson, 2018). Block play also plays a significant role in early childhood education programs in many countries (Masnipal, 2020). While studies emphasize the importance of block centers in classrooms for fostering



children's creativity during the early years, this current study's findings revealed that preschool classes without block centers are still available. The current study's findings also demonstrated that one reason for this is the lack of written block centers in the classroom. Two teachers from two different private schools have expressed their opinions on this matter. They said there is no specific written block center in the classroom but they had organized the materials according to the block center's arrangement. One of the teachers said being flexible and using every area of the classroom makes them feel more comfortable compared to segregating the classroom into distinct centers. It has also been concluded that public schools may have a higher rate of supporting children's creativity through block centers compared to private schools based on the number of block centers present in the schools. There is no specific reason mentioned in the literature regarding this issue, but it could be related to the budget constraints of private schools or a lack of awareness about the importance of blocks for children's development during the early childhood period.

The presence of various learning spaces, similar to the concept of learning centers, was also assessed as a factor that influences children's creativity. Duffy (2006) emphasized the vital role that different learning spaces play in nurturing children's creativity and imagination. According to the Turkish Ministry of National Education (MONE) in 2013, classrooms should ideally include various learning centers such as block, dramatic play, mathematics, science, art, and books. These learning centers offer diverse opportunities to foster children's creativity (Dere, 2019). Moreover, the environment is considered a third teacher for children (Skinner, 2007). The findings of the current study reveal that not all classrooms have each type of learning center due to differences in teacher beliefs, experiences, backgrounds, and space constraints within the classroom. This finding is consistent with the study by Dere (2019), who emphasized that teachers do not put in sufficient effort to create learning centers and use different types of materials in the classroom. However, even in cases where learning centers are absent, some classrooms have alternative spaces designed to serve similar purposes. For instance, while most classrooms maintain a book center, some may lack an extensive book collection but provide different types of books within a library, which is an alternative learning space separate from the classroom. According to the findings of this current study, one public school and two private

schools had fantasy rooms, yet their classrooms lacked dramatic play centers. In the literature, fantasy play can be expressed in different terms like pretense or pretend play (Bunce & Woolley, 2021). Creativity is defined as a skill to produce novel things (Schirmacher, 2002) and fantasy also includes the element of novelty and imagination, so there is a relationship between creativity and fantasy play (Bunce & Woolley, 2021). Moreover, Russ and Wallace (2013) mentioned that pretend play is a creative act because children use open-ended events during pretend play and they engage in creative endeavors for various purposes.

The dramatic play centers provide an opportunity for young children to enhance their creativity and imagination. Research showed that engaging in fantasy can foster imaginative thinking in children. In fact, fantasy activities stimulate both creativity and divergent thinking in young children, as noted in previous studies (Smilansky 1968; Lieberman 1977; Singer 1973). Research studies also confirmed that imaginative play experiences contributed to increased creative thinking in young children, as observed by teachers (Milgram et al., 1984; Pepler et al., 1981).

Young (2003) emphasized the importance of early years in developing a strong sense of creativity and imagination. He said young children can express themselves creatively through music, explore various sounds, create their own compositions, develop rhythms, and construct narratives. Consequently, young children must have dedicated, uninterrupted time to explore and gain a comprehensive understanding of musical instruments (Glover & Young, 1998). This is why studies have underscored the significance of free-play music.

Despite these insights, the findings of this current study demonstrated that there were only two music rooms among ten schools. One of them took place in a public school while the other on in a private school. The results of this current study regarding various learning centers can be related to the fact that schools may face resource constraints, including limitations in funding, space, and available materials. Establishing various learning centers requires financial investment and adequate space. One public school teacher, in particular, emphasized this issue, citing the lack of financial resources to purchase materials for the school. She noted that parents contribute by assisting in acquiring some materials.

The adequacy of classroom lighting is also considered a factor in supporting the creativity of young learners. The current study reported that seven private schools have ample natural lighting due to the size of their windows. However, nine public schools did not have sufficient natural lighting, due to factors such as the window size, curtain structure, the trees in front of the window, and obstructing the window. The findings regarding the availability of lighting in private schools align with Skinner's ideas (2007). He emphasized the significance of available lighting in the learning environment for creative activities because it affects the children's motivation to participate in and understand the activities. Another study also showed that the quality of lighting within the classroom positively affects students' learning performance and productivity; poor lighting makes students feel sleepy and prevents them from focusing on their subjects (S.A. Samani & S.A. Samani, 2012). Rea et al., (2001) highlighted the importance of natural light, which is recognized for its role in controlling the sleep/wake patterns and their study also showed that the quality of light, temperature, and air influence students' learning outcomes. The findings related to public schools regarding the adequacy of classroom lighting were not supported by the existing literature. This result may be attributed to the fact that public schools often have older infrastructure or building designs that do not prioritize natural lighting. The findings also indicated that the size and placement of windows were inadequate for allowing ample sunlight into the classrooms.

Another factor considered to impact children's creativity is the suitability of the classroom for small and whole-group activities. The result of this current study showed that except for one private school classroom, all classrooms from both public and private schools had enough space for small group activities. However, for whole group activities, only two private school classrooms and six public school classrooms had enough space out of twenty classrooms. In contrast, Hong et al., (2009) noted that creative student activities are affected by the availability of space for collaborative work. Another study emphasized the significance of open space within the classroom, stating that there should be enough room for young children to collaborate and move around safely (Mayesky, 2009). Kettler et al. (2021) pointed out that children learn through conversation, collaboration, and experience because the collaboration of young children with their peers provides chances for the

development of creativity. Given these findings, one possible explanation for the results of the present study could be that there is a higher number of children in the classroom. There are 16 classrooms, each with 15-30 children, which may not provide enough space for working as a whole class.

Furniture in the learning environment was another factor in fostering young children's creativity in this current study. The findings of this present study indicated that, although the furniture in classrooms in both public and private schools was generally small and easily movable, allowing for various arrangements, there was a large, house-shaped cabinet and a massive, unwieldy cabinet in one classroom in a private school and one of the public schools, there were two classrooms with a large and unwieldy cabinet, and it was observed that children placed their nap mats inside these cabinets. This means that if teachers need to change the placement of furniture, they can rearrange it within the classroom according to the children's needs and the curriculum. This finding is consistent with the research of Mishra and Richardson, (2018). They found that creativity is supported by the physical space, including furniture and workspaces, which is a significant factor. Another study also mentioned the variety and flexibility of the physical environment support children's creativity (Shafaei, 2017). Furthermore, flexibility in the classroom is proving an essential tool for teachers attempting to provide a variety of activities to meet the learning needs of all students (Barrett, 2015).

The presence of an inquiry-based learning space was considered as another factor that supports children's creativity. The result of this current study showed that there were inquiry-based learning spaces in only four out of twenty classrooms. Three of these classes were located in private schools, while only one was in public schools. Whereas, many studies in literature, showed the importance of inquiry-based learning for the development of children's creativity. Early Years Education's Curriculum can emphasize the importance of children's natural curiosity and their eagerness to make sense of their environment. Despite this, curiosity is not enough on its own. The attitude of preschool teachers is crucial to providing opportunities for children to learn through inquiry (Michalopoulou, 2014). For this reason, there should be a balance between teaching knowledge and skills and encouraging innovation for creative education (NACCCE, 1999). The fact that the participants in

this study did not include an inquiry-based learning space in their classrooms may lead us to contemplate the quality of the courses they took on creativity. It is also worth noting that most of the participants had 9 or more years of teaching experience. Therefore, it may not be correct to compare whether participants attach importance to this issue with their teaching experiences.

Another finding of this present study was that in one public school, despite the absence of inquiry-based learning environments in the classrooms, there existed a large dedicated learning space called the science and botany atelier for inquiry-based learning. However, unfortunately, one teacher working in this public school mentioned that they did not use this atelier extensively due to the large class size (n=21). Even when using this inquiry-based learning space, due to the high number of students in the class, she could not provide individual attention to the children. This finding is consistent with the previous study by Ruopp et al., (1979), who mentioned that the only true experiment regarding preschool class sizes indicated that children in smaller classes experienced greater advancements in knowledge, language, and social behavior. The finding of the current study is also consistent with those of another study conducted by Blatchford et al. (2011). In their research, they noted that students receive much more individual attention from their teachers at primary levels when the classroom size is small, fostering more active interaction between students and their teachers. The study demonstrated that small classes provide an opportunity for teachers to engage in one-to-one interaction with their students, allowing teachers to apply curriculum differentiation for the greater benefit of students (Blatchford et al., 2011). Given these findings, one possible explanation for the results of the present study could be that class size influences the implementation and success of innovative teaching methods, specifically within the context of inquiry-based learning. Another potential explanation for this result could be the presence of an assistant teacher. Having an assistant teacher might be crucial, especially in classrooms with a high number of students, such as 21 during the early childhood period. Managing larger class sizes can be a challenging task for a single teacher, as the increased number of students may hinder the ability to provide individualized attention. In such situations, additional support, whether through teaching assistants or smaller groups, is crucial for effectiveness.

Most of the teachers in this current study defined creativity as having different perspectives, imagination, and unique, original ideas. These findings are consistent with other research (Craft, 2011; Schirmacher, 2002; Torrance, 1995). On the other hand, just one teacher, working in a private school in the present study, defined creativity as the ability to solve problems. However, solving problems is also significant in defining creativity. Torrance (1995), a pioneer in the study of the creative process, highlighted that creativity involves generating original ideas and is intrinsically linked to problem-solving abilities. He also articulated that creativity entails finding diverse solutions to problems by formulating predictions, testing, re-testing, and hypothesizing to conclude.

The teachers were asked if they defined themselves as creative teachers. Among twenty teachers, 14 responded 'yes', while 5 answered 'no', and just one teacher mentioned that she partially considers herself a creative teacher because she feels that, at times, she is not consistently using open-ended activities. The findings of this current study revealed that preschool teachers working in private schools and those in public schools generally have confidence in their creativity. Whereas the study of Ambrose (2005) noted that no teacher is completely devoid of creativity or is perfectly creative and imagining successful teaching without relying on the creativity of teachers is quite challenging. Moreover, when reviewing children's work conducted by teachers who claimed to be creative with children, it was observed that most of these activities were not creative. Activities primarily involved predefined answers, limited coloring activities, and simple drawing exercises. Apart from these activities, it was inspected that the classroom environments of these teachers were not designed to enhance children's creativity. There were no areas in their classrooms where children could express themselves creatively, experience and explore, or engage in inquiry-based learning. However, upon examining the activities conducted by two teachers who genuinely considered themselves creative, it was thought that they encouraged children to think and explore. They organized activities that facilitated different perspectives. One of these teachers was particularly adept at making children's activities visible, documenting their thoughts, and making these visible. The purpose and goals of the activities, what the children said in these learning experiences, and how they were involved in the process were all

documented through photographs and notes. The results of this study show that every preschool teacher emphasizes the importance of developing creativity in the early years. However, it seems that preschool teachers in public schools do not fully understand the significance of fostering creativity in early childhood education for children. Despite recognizing the importance of developing creativity in the early years, this lack of understanding is evident. The discrepancy between teachers' stated views and the actual activities in which they engage children highlights this gap. These study findings may be related to teachers' motivation. While teachers are familiar with the theory, their lack of practical application may indicate this. This finding is consistent with the previous research by Nazir and Kurshaid (2014), who found that teachers working in public schools lack awareness concerning the importance of early childhood education for children. Moreover, several preschool teachers in this current study emphasized the significance of fostering creativity in children's brain development. This finding also aligns with the findings of Nazir and Kurshaid's study (2014), underlying the critical role of the early years in a child's cognitive, emotional, and physical growth. The environment during this period notably influences brain development, shaping a child's personality based on their experiences and teachings (Nazir & Kurshaid 2014). Additionally, one teacher from a private school mentioned not feeling creative, because she was never given opportunities to question during childhood. However, upon observing her activities that made with her students and how they made the children's activities visible, it was noted that they did similar content as another teacher who considered themselves creative and executed this successfully. As a result, this teacher, despite not considering herself as creative, was observed to engage in creative activities with her students.

Preschool teachers described creative children as innovative, imaginative, outgoing, clever, open-minded, problem solvers, curious, energetic, free-spirited, and inquisitive. These findings from the current study align with previous research (Aljughaiman & Reynolds, 2005; Andiliou & Murphy, 2010; Bachtold, 1974; Chan & Chan, 1999; Runco & Johnson, 1993, 2002; Zhou et al., 2013). Furthermore, two teachers mentioned that creative children tend to break the rules, reinforcing the findings of the study, which revealed that creative children exhibit various socially

undesirable traits like non-conformity, impulsivity, and disruptive behavior (Runco & Johnson, 2002; Westby & Dawson, 1995). Another study also found that teachers have a negative perception of creative children because they think creative children are more disruptive and it is difficult to control them within the classroom (Scott, 1999). In addition to these, research on the creative characteristics of children highlights traits such as having a sense of humor and being willing to take risks. However, in this study, none of the teachers mentioned these characteristics concerning creative children, despite studies emphasizing these common traits among creative individuals (Davis, 2004; Gregerson et al., 2012). This result may be related to participants not having taken any extracurricular courses on creativity.

The preschool teachers in this current study stated different ways to support preschoolers' creativity. Several teachers support children's social and emotional needs by encouraging take risks, make mistakes, have loving and supportive relationships, and talk about their feelings. These findings are consistent with the study of Smith (1996), who emphasized the creative benefits of a relaxed and respectful learning environment for children, stressing the importance of encouraging children to take risks and make mistakes within this emotional learning environment because this environment allows children to comfortably experiment with their ideas. For this reason, to further foster preschoolers' creativity, teachers should create an emotionally supportive learning environment that receives children's social and emotional needs. Moreover, these results find support in Duffy's research (2006), which stresses the significance of children feeling valued and integrated within the classroom community to foster risk-taking and learning from mistakes.

Another finding of this current study related to the ways of supporting children's creativity by providing diverse materials like construction materials, open-ended materials, waste materials, and natural materials to children. However, it should be noted that out of twenty teachers, only a few mentioned providing these materials to children to support their creativity. These findings are supported by Dere (2019), who emphasized the necessity of providing children with reach materials to foster children's creativity. The current study also showed that teachers use drama, play, books, and flexible art activities as different ways to foster children's creativity.



These findings are consistent with the findings of Dere (2019), who mentioned the importance of drama activities, play, and early literacy activities because these kinds of activities foster the creativity of students during their early years.

Supporting children in thinking about their ideas was also considered another factor in fostering children's creativity in this current study. The current study demonstrated that children engage in thinking about their ideas through brainstorming. Al-Blwi's study (2006) also demonstrated that brainstorming is a strategy used to encourage children to express their own ideas and share them with others. The brainstorming strategy also provides an opportunity to solve problems and develop creative solutions (Al-Khatib, 2012).

Promoting self-directed learning in children was identified as a crucial factor in the present study to improve children's creativity. In this present study, five teachers mentioned providing free play time for children to promote self-directed learning. This finding aligns with the findings of Erikson (1968), who explored the creative potential. This is related to realizing in the process of self-acquisition and finding own "I". Consequently, encouraging preschoolers to engage in play can cultivate their initiative, turning them into active participants who work collaboratively. Play has been defined as children's work (Papalia & Olds, 1990), and the significance of play in the cognitive development of children has been widely recognized (Howard-Jones, et al., 2002). Cheung (2018) highlighted play, where children have independence and the freedom to choose whatever they want to do and how to do it, which is important to enhance the creative thinking behaviors of children. Moreover, this finding of the current study also is supported by another study, which emphasizes the importance of play in promoting children's creativity. When play is unrestricted, spontaneous, and lacks a predetermined structure, fostering diverse outcomes, it encourages children's creative thinking and imagination (Ackermann et al., 2009).

In addition to supporting children's creativity with free play, two teachers stated giving time for children to solve problems on their own promotes self-directed learning in children. This finding also is supported by the study of Temple and

Rodero (1995), who advocated the integration of real-life problems into the classroom to encourage independent problem-solving. Additionally, existing studies underscore the importance of promoting self-directed learning by fostering greater tolerance of uncertainty, supporting risk-taking, and emphasizing learners' strengths rather than focusing solely on their weaknesses. Children with the opportunity to make mistakes and allow them to take risks helps increase their self-confidence and enable them to experiment with their ideas (Smith, 1996).

The asking of open-ended questions was considered another factor supporting the creativity of children in the preschool period. The finding of Cheung's study (2012) showed that teachers believe that asking open-ended questions is beneficial for the self-expression of children, exchanging thoughts, and creative thinking of children, which are teaching strategies for supporting children's creativity in the learning environment. Most of the teachers stated they ask open-ended questions most of the time because they believe that open-ended questions foster children's thinking skills creatively. The rest of the teachers also said to ask open-ended questions to children, but they stated specific times for asking questions. They said during story time, at the beginning of the activity, and the end of the activity. Consequently, all teachers ask open-ended questions to children in this current study. This result may be attributed to the ease of fostering children's creativity through the use of open-ended questions.

The teachers' documentation of children's learning experiences, the use of portfolios by teachers, and the activities within the portfolios were investigated. In the current study, among the twenty teachers, only two teachers from the same private school use documentation to make children's thinking visible. This involved capturing the learning process through photographs and making notes on what students said, felt, and experienced during learning activities. The making thinking visible approach gives more importance to the learning process than the product (Marshall, 1988). Thinking takes place mostly in our mind and it is invisible to others. Some methods help to make thinking visible by writing, drawing, or some other methods (Ritchhart & Perkins, 2008). In this current study findings show that among twenty teachers, just two teachers from the same private school use documentation to make children's thinking visible. Documentation gives an idea about children's learning experiences

by making students' thinking visible and it is important for the learning process of children (Castle, 2012). The finding of this current study is supported by a study conducted by Yılmaz and her colleagues (2021). This research focused on understanding the challenges faced by Turkish early childhood teachers in implementing pedagogical documentation. The study involved 22 participants from diverse early childhood programs who received training through two full-day workshops. Initially, they engaged in pedagogical documentation practices. Subsequently, the researcher provided feedback, and participants were revisited periodically for additional feedback sessions on their use of pedagogical documentation as a teaching tool. Yılmaz and his colleagues' (2021) findings showed that there were several challenges in teachers' documentation practices due to the necessity for assistant teachers, limited financial resources and materials, insufficient parental interest, and environments not conducive to effectively using pedagogical documentation. In conclusion, there was no documentation found in this study, except for two teachers, and these findings are supported by Yılmaz and his colleagues' study (2021). The findings of the current study also show that students in these classrooms can see how much value is placed on their experiences, voices, and themselves. This supports children's creativity. This idea is supported by Duffy (2006), who mentioned that children should feel like one of the members of the classroom by giving value, which provides the opportunity for children to be creative. Another finding of this study revealed that teachers do not document students' learning experiences effectively. Most of the teachers mentioned documenting students' work in various places within the learning environment, such as the board in the class, the board outside of the class, on the wall, on the door, on the cubbies, and the window. However, only one or two activities of the children were documented and these were typically finished works that did not reflect the learning process.

Another noteworthy finding in this present study related to the research concerns children's portfolios. While most teachers file their students' activities, it is challenging to find activities that specifically support children's creativity when examined. The activities in the portfolios typically include writing numbers on worksheets, merely drawing pictures, engaging in limited painting activities, and

participating in cut-and-paste exercises. Only three out of the teachers include activities that actively support children's creativity, engage them in critical thinking, and involve observational drawings, the use of various materials, and additional resources.

### **5.3. Conclusion**

The conclusion section includes the implications and limitations of the current study and provides recommendations for future research. The purpose of the current study was two-fold: a) to investigate the settings of the classroom learning environment and materials that support the creativity of preschool children, b) to examine the views and self-reported practices of preschool teachers regarding creativity. In this regard, this study contributes to the growing literature revealing teachers' self-reported practices aimed at fostering students' creativity and the physical and environmental aspects affecting preschoolers' creativity. The current study concluded that teachers consider creativity to hold an important place during the early years. However, when teachers' views on creativity were compared with the works they did with the children, a lack of consistency was found, except for the responses and works of three teachers. It was even observed that many teachers lacked significant knowledge about creativity. Additionally, it was found that, except for two classrooms in the same private school, there were no open-ended materials, natural materials, and learning spaces for children to enhance their creativity in their learning environment. It was also observed that materials and resources were not accessible for children whenever they wanted to use them for creative activities, except for four classrooms – three from private schools and one from public schools. Preschool teachers' views on creativity and how they support children's creativity were examined through semi-structured interviews. The practices of preschool teachers regarding creativity were investigated by examining students' works and using a checklist of the physical environment and materials that support creativity in a learning environment to gather information about whether the learning environment includes factors supporting creativity. In this context, semi-structured interviews provided valuable insights into what preschool teachers do to support children's creativity, while students' works and the checklist of the physical

environment and materials provided written documentation of teachers' practices related to creativity. The current study found that teachers believe they are creative, and they consider creativity to be crucial in early childhood education. It was also found that they think that they try to support children's creativity. However, their efforts to support children's creativity are not enough. They do not pay enough attention to fostering children's creativity by encouraging them to think about their ideas, exploring strategies for self-directed learning, promoting idea exchange among children, and documenting children's work to make it visible in their learning environment. Regarding the findings of the physical environment and materials checklist of factors supporting creativity in a learning environment, it can be concluded that open-ended materials supporting children's creativity are not prominently present in the learning environment. Even when present, many of these materials are stored in areas not easily accessible to children. It was also found that except for two classrooms in the same private school, children's works are not visible in the classroom environment. Learning centers are generally present but not in every class. It was observed that in one classroom of a private school, all centers were present, but the names of the centers were not visible. Different learning environments supporting children's creativity were inspected in schools, with libraries, dramatic playrooms, exploratorium, and science and botanic atelier being the most notable. In public schools, it was observed that the amount of natural light is not sufficient due to a lack of big windows, there is not enough space in classrooms for whole group activities, and, except for two classrooms in the same private school, there are no inquiry-based learning spaces in other learning classroom environment.

Based on the results of the study, it can be concluded that teachers need to receive training on what kind of activities they should undertake to support children's creativity and how learning environments and materials should be organized to foster children's creativity. There is a need for more emphasis on this topic in teacher training programs. In this context, the following section identifies implications for individuals engaged in early childhood education, such as pre-service and in-service teachers, program developers, administrators, and policymakers. These implications not only pertain to teachers but also extend to encompass the roles of program

developers, administrators, and policymakers. This acknowledgment underscores the multifaceted impact of these considerations on the entire educational ecosystem for young learners.

#### **5.4. Implications**

The findings of the current study described diverse views by using three sources are interview, a checklist, and the reviewing children's work in their portfolios. The results of the current study provide some practical implications for individuals involved in the field of early childhood education, such as in-service teachers, pre-service teachers, program developers, and policymakers.

For early childhood teachers, providing children with learning environments, materials, and activities that foster creativity is of great importance in shaping children's thinking skills, empowering them to cope with unexpected situations, and enabling them to adapt acquired knowledge to new situations and use information in different ways. Early childhood teachers need to have the knowledge and a comprehensive understanding of creativity in early childhood education to provide learning environments, materials, resources, and learning experiences that support children's creativity for children.

One of the primary conclusions of the study is that preschool teachers play a significant role in enhancing children's creativity through the design of learning environments and materials. Therefore, teachers should not only be aware of the importance of creativity in the early childhood period but also know how to support children's creativity. They need to understand how to design the classroom learning environment to foster the creativity of children, what materials should be available in the classroom, and how these materials should be accessible to children. Therefore, seminars and workshops can be organized for school administrators and preschool teachers before and after becoming teachers to inform them about how to support children's creativity, how to design the learning environment, and which materials contribute to enhancing children's creativity. Attendance to these organized training sessions should be mandatory. Additionally, to ensure that what is learned does not

remain only in theory, teachers should be required to apply what they have learned in practice.

This study examines self-reported practices and views of preschool teachers regarding supporting children's creativity, including demographic information and a physical environment checklist, shedding light on the relevant literature. The findings of this study can also provide insights into the techniques, materials, and spaces that preschool teachers use to support children's creativity in the classroom, serving as informative guidance for in-service teachers and pre-service teachers. Specifically, exploratorium, a science and botanic atelier, and spaces allocated for learning through exploration in the classroom can shed light on what teachers can do to enhance children's creativity.

Previous studies have emphasized the importance of making children's works visible to support children's creativity. However, the results of this current study indicated that, except for two classrooms in a private school, children's works were not visible in the learning environment. Therefore, support and encouragement for teachers on how to make children's works visible should be provided during pre-service and in-service teacher education.

An exemplary program, such as "Documentation Studio Türkiye", can be shared to guide teachers and teacher candidates on how learning can be made visible. They also share their practices about documentation, which is related to making students' learning and thinking visible, through technological channels such as social media accounts, videos, and their website. There are various resources, documentation of learning books, articles, Reggio Emilia Approach books, and inquiry books on their website.

Another major conclusion of this current study is that there is no space related to inquiry-based learning and self-directed learning spaces in classrooms except for two classrooms in the same private school. Turkish National Program for Early Childhood Education (MONE, 2013), does not emphasize the necessity for a center specially dedicated to inquiry-based learning, despite highlighting its priority. The

centers mentioned to be present in the classroom are science, art, dramatic play, music, books, and blocks in the Turkish National Program for Early Childhood Education. Curriculum developers can give more attention to creating a discovery center or inquiry-based learning center where children can use open-ended materials, natural materials, and waste materials to create whatever they want. It is also suggested that, along with theoretical information, more practical and concrete examples or recommendations about fostering children's creativity through activities, designing the learning environment to support children's creativity, and determining the types of materials that should be present in the classroom to enhance children's creativity can be added to the Turkish national early childhood curriculum. This addition aims to raise teachers' awareness about the importance of creativity in the early years.

### **5.5. Limitations and Recommendations**

There were some limitations in this current study. Despite these limitations, the aim of this study is not to generalize the findings but to gain a more in-depth understanding of preschool teachers' views, and self-reported practices regarding creativity, and the design of the learning environment by considering the factors influencing the creativity of children. At the same time, the results of this study may open several potential avenues for further research.

Another limitation of this current study could be that it was conducted with a small sample size. The study involved 20 preschool teachers to gather more diverse data through in-depth interviews. However, further studies with larger samples are recommended to gain more insight into this topic. Another limitation of this study is that the researcher did not have any opportunity to observe teachers' behaviors supporting creativity while practicing. Therefore, the current study compared the consistency of preschool teachers' statements about their efforts to foster children's creativity with the works in their children's portfolios. Hence, researchers are advised to conduct additional qualitative studies, with a specific emphasis on observational research. As future research, it would be meaningful to examine the techniques teachers use to enhance children's creativity along with real classroom



applications, and seeing the consistency between teachers' views and self-reported practices would be meaningful.

The fourth limitation of the current study was the homogeneity of the participants. Because there were no male teachers in this present study, further research with male teachers was recommended to gain insight into the impact of gender on teachers' views and self-reported practices in creativity.

Additionally, the participants in the current study are from a limited geographical area, Ankara, Turkey. Replicating the study to include a more extensive geographic representation would be advantageous. Given that the findings might only capture a fraction of preschool teachers' views and self-reported practices in creativity, this could be considered a limitation. Conducting further research with preschool teachers from diverse backgrounds, cities, or countries could offer a more comprehensive understanding of the topic.

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## APPENDICIES

### A. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE

**UYGULAMALI ETİK ARAŞTIRMA MERKEZİ**  
**APPLIED ETHICS RESEARCH CENTER**

**ORTA DOĞU TEKNİK ÜNİVERSİTESİ**  
**MIDDLE EAST TECHNICAL UNIVERSITY**

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iletisim@metu.edu.tr

**Konu:** Değerlendirme Sonucu **28 ŞUBAT 2023**

**Gönderen:** ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

**İlgi:** İnsan Araştırmaları Etik Kurulu Başvurusu

**Sayın Dr.Öğr.Üyesi Serap Sevimli ÇELİK**

Danışmanlığını yürüttüğünüz Gamze Günce ÇALIŞKAN'ın "Okul Öncesi Dönemdeki Öğrencilerin Yaratıcılığını Destekleyen Öğretmen Davranışlarının ve Sınıf Ortamının Fiziksel Koşullarının İncelenmesi" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek 0122-ODTÜİAEK-2023 protokol numarası ile onaylanmıştır.

Bilgilerinize saygılarımla sunarım.

**Prof. Dr. Sibel KAZAK BERUMENT**  
Başkan

**Prof. Dr. İ. Semih AKÇOMAK**  
Üye

**Doç. Dr. Ali Emre Turgut**  
Üye

**Dr. Öğretim Üyesi Şerife SEVİNC**  
Üye

**Dr. Öğretim Üyesi Murat Perit ÇAKIR**  
Üye

**Dr. Öğretim Üyesi Süreyya ÖZCAN KABASAKAL**  
Üye

**Dr. Öğretim Üyesi Müge GÜNDÜZ**  
Üye

## B. APPROVAL OF THE MINISTRY OF NATIONAL EDUCATION



T.C.  
ANKARA VALİLİĞİ  
Milli Eğitim Müdürlüğü

Sayı : E-14588481-605.99-72845291  
Konu : Araştırma İzni

22.03.2023

### ORTA DOĞU TEKNİK ÜNİVERSİTESİ REKTÖRLÜĞÜNE

İlgi: a) 16.03.2023 tarihli ve 364 sayılı yazınız.  
b) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 2020/2 nolu Genelgesi.

Üniversiteniz Sosyal Bilimler Enstitüsü Yüksek Lisans Öğrencisi Gamze Günce ÇALIŞKAN'ın "Okul Öncesi Dönemdeki Öğrencilerin Yaratıcılığını Destekleyen Öğretmen Davranışlarının ve Sınıf Ortamının Fiziksel Koşullarının İncelenmesi" konulu tezi kapsamında merkez ilçelere bağlı okul ve kurumlarda uygulanacak olan veri toplama araçları ilgi (b) Genelge çerçevesinde incelenmiştir.

Yapılan inceleme sonucunda, söz konusu araştırmanın Müdürlüğümüzde muhafaza edilen ölçme araçlarının; Türkiye Cumhuriyeti Anayasası, Milli Eğitim Temel Kanunu ile Türk Milli Eğitiminin genel amaçlarına uygun olarak, ilgili yasal düzenlemelerde belirtilen ilke, esas ve amaçlara aykırılık teşkil etmeyecek, eğitim-öğretim faaliyetlerini aksatmayacak şekilde okul ve kurum yöneticilerinin sorumluluğunda gönüllülük esasına göre uygulanması Müdürlüğümüzce uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Harun FATSA  
Vali a.  
Milli Eğitim Müdürü

Ek:  
Uygulama araçları (5 sayfa)  
Dağıtım:  
Gereği:  
ODTÜ  
Bilgi:  
9 Merkez İlçe MEM

**Bu belge güvenli elektronik imza ile imzalanmıştır.**

Adres : Emniyet Mah. Alparslan Türkeş Cad. 4/A Yenimahalle

Belge Doğrulama Adresi : <https://www.turkiye.gov.tr/meb-ehys>

Teléfono No : 0 (312) 306 89 30

E-Posta: [istanbul@meb.gov.tr](mailto:istanbul@meb.gov.tr)

Kep Adresi : [meb@td01.kp.tr](mailto:meb@td01.kp.tr)

İnternet Adresi: [ankara.meb.gov.tr](http://ankara.meb.gov.tr)

Faks: \_\_\_\_\_

Uyruu: Şef

Bu evrak güvenli elektronik imza ile imzalanmıştır. <https://syrasizoguz.meb.gov.tr/adresinden> 132a-5a31-3b64-a488-b998 koda ile teyit edilebilir.

## C. SEMI-STRUCTURED INTERVIEW PROTOCOL

### Görüşme Soruları

#### Demografik Sorular:

1. Çalıştığınız kurum türü:
2. Eğitim durumunuz:
3. Yaşınız:
4. Öğretmenlik deneyiminiz:
5. Çalıştığınız yaş grubu:
6. Sınıfınızdaki öğrenci sayısı:
7. Yardımcı öğretmeniniz var mı?
8. Lisans eğitiminiz esnasında yaratıcılık ile ilgili herhangi bir ders aldınız mı? Evet ise detaylarını kısaca paylaşır mısınız?
9. Yaratıcılıkla ilgili herhangi bir hizmet içi eğitimi aldınız mı? Evet ise detaylarını kısaca paylaşır mısınız?

#### Temel Sorular:

1. Yaratıcılığı nasıl tanımlarsınız? Yaratıcılık sizin için nedir?
2. Kendinizi yaratıcı bir öğretmen olarak tanımlar mısınız? Eğer cevabınız evet ise biraz anlatır mısınız? Cevabınız hayır ise niçin böyle düşünüyorsunuz?
3. Yaratıcılığın okul öncesi dönemdeki yeri nedir?
4. Sınıfınızda yaratıcı olarak tanımlayabileceğiniz çocuklar var mı? Varsa özellikleri nelerdir sizce?
5. Sınıfınızda çocukların yaratıcılıklarını desteklemek amacıyla neler yaparsınız? Örnek verebilir misiniz?
6. Sınıfınızda ne sıklıkla grup çalışmaları yaparsınız?
7. Sınıfınızda çocukların fikirleri üzerinde düşünmeleri için neler yaparsınız?
8. Sınıfınızda çocukları soru sormaları için nasıl cesaretlendirirsiniz?
9. Sınıfınızda çocukların kendi kendilerine öğrenmeleri için neler yaparsınız?
10. Öğrencilerinize ne sıklıkla açık uçlu sorular sorarsınız?
11. Sınıfınızda çocuklar arasında fikir alışverişi olmasını nasıl sağlarsınız?

12. Öğrencilerinizin yapmış olduğu etkinliklerin dokümantasyonunu nasıl yapıyorsunuz? Öğrencilerinizin etkinliklerini dosyalıyor musunuz?

**D. PHYSICAL ENVIRONMENT AND MATERIALS CHECKLIST OF FACTORS SUPPORTING CREATIVITY IN A LEARNING ENVIRONMENT**

**Bir Öğrenme Ortamında Yaratıcılığın Desteklenmesine Yardımcı Olan Faktörlerin Kontrol Listesi**

	<b>Kontrol Listesi Maddeleri</b>	<b>Değerlendirme Var/Yok</b>	<b>Fotoğraf</b>	<b>Kanıt/Notlar</b>
	<i>Fiziksel Çevre</i>			
1.	Öğrenme ortamında öğrenciler için çeşitli kaynaklar ve malzemeler mevcuttur. (Örneğin; Açık uçlu malzemeler; kil, köpük, şönil, şeffaf kağıt, tahta, çubuk, kozalak, taş deniz kabuğu, meşe palamudu, gramofon kağıdı, kitaplar, teknolojik araçlar, çeşitli boya kalemleri, oyun hamuru, Lego ve blok gibi inşa malzemeleri ve yap-boz.)			
2.	Sınıfta öğrenciler için çeşitli kaynaklar ve malzemeler erişilebilirdir. (Örneğin; açık uçlu malzemeler, kil, köpük, şönil, şeffaf kağıt, tahta çubuk, kozalak, taş, deniz kabuğu, meşe palamudu, gramafon kağıdı, kitaplar, teknolojik araçlar, çeşitli boya kalemleri, oyun hamuru, Lego ve blok			

	gibi inşa malzemeleri ve yap-boz.)			
3.	Öğrencilerin çalışmaları sınıfta görünür haldedir. (Örneğin; duvarda, sevgi alanında, dolap kapaklarında, ana kapı girişlerinde, sınıftaki camlarda).			
4.	Sınıfta çeşitli öğrenme merkezler mevcuttur. (Fen ve doğa merkezi, sanat merkezi, kitap merkezi, dramatik oyun merkezi, müzik merkezi, blok merkezi).			
5.	Sınıfta oyun merkezi mevcuttur. Oyun merkezinde bloklar, legolar, arabalar, bebekler, hayvanlar, mutfak araç-gereçleri vb. bulunur.			
6.	Öğrenme için sınıf ortamının haricinde kullanılan alanlar vardır. (Örneğin; sanat atölyesi, STEM atölyesi, müzik atölyesi gibi ).			
7.	Sınıftaki ışık miktarı uygundur. (Karanlık mı? Aydınlık mı ? Perde var mı yok mu? Doğal ışık mı yapay ışık mı? )			
8.	Sınıf, çocukların küçük gruplar halinde çalışabilmesi için uygundur.			
9.	Sınıf, çocukların büyük gruplar halinde çalışabilmesi için uygundur.			

<b>10.</b>	Sınıftaki mobilyalar rahat ve esnektir. Birden fazla düzenlemeye izin verir.			
<b>11.</b>	Sınıfta yapı inşa merkezi bulunur.			
<b>12.</b>	Sınıfta keşif alanları bulunur. (Açık uçlu doğal malzemelerin bulunduğu ve öğrencilerin günün belirli zamanlarında o merkeze gidip kendi kendilerine deneyimleyerek bir şeyler keşfettiği bir alan).			

## E. CONSENT FORM

### ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Sevgili Öğretmenimiz,

Bu çalışma, Orta Doğu Teknik Üniversitesi Temel Eğitim Bölümü Anabilim Dalı öğretim üyesi Dr. Öğr. Üyesi Serap Sevimli Çelik'in danışmanlığında, yüksek lisans programı öğrencisi Gamze Günce Çalışkan'ın tezi kapsamında yürütülmektedir. Çalışmanın amacı; okul öncesi dönemdeki çocukların yaratıcılıklarını desteklemek için sınıf tasarımının ne kadar uygun olup olmadığının ve yaratıcılığı destekleyen öğretmen davranışlarının incelenmesidir.

Çalışmaya katılım gönüllülük esastır. Görüşmede sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Araştırma bilimsel bir nitelik taşıdığından soruların sizin için en uygun şekilde cevaplanması araştırmanın güvenilirliği açısından önemlidir. Soruların doğru ya da yanlış cevabı olmadığı gibi sorulara kendi fikirlerinize ve deneyimlerinize göre cevap vermeniz beklenmektedir.

Görüşmeye katılarak, yürüttüğüm çalışmaya ve bilime yaptığınız katkılardan dolayı teşekkür eder, sağlıklı ve mutlu günler dilerim. Çalışma hakkında daha fazla bilgi almak için Orta Doğu Teknik Üniversitesi Temel Eğitim Bölümü öğretim üyelerinden Dr. Öğr. Üyesi Serap Sevimli Çelik (e-posta: ssevimli@metu.edu.tr) ya da araştırmayı yürüten Gamze Günce Çalışkan (e-posta: gunce29@gmail.com) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Soruları cevaplandırırken ses kaydı alınmasını kabul ediyorum. Öğrenme ortamının ve öğrencilerin etkinliklerinin fotoğraflarının çekilmesine izin veriyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum.

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz.)

İsim-Soyad

Tarih ----/----/----

İmza



## F. TURKISH SUMMARY/ TÜRÇE ÖZET

### OKUL ÖNCESİ ÇOCUKLARIN YARATICILIĞININ DESTEKLENMESİNDE ÖĞRETMENLERİN BİLDİRDİĞİ UYGULAMALARIN VE ÇEVRESEL ORTAMLARIN İNCELENMESİ

#### GİRİŞ

Öğretme ve öğrenme, küresel eğitim politikalarını, öğretmen uygulamalarını etkileyen ve 21. yüzyıl öğrencilerinin potansiyelini geliştiren önemli bir bileşeni içerir (Kaplan, 2019).

Yaratıcılık bunu başarmada çok önemli bir rol oynar çünkü insanlara hızla değişen dünyaya uyum sağlama ve mevcut bilgimizi yeni koşullara uygulayarak ve bilgiyi farklı şekillerde kullanarak sorunları çözme konusunda güç verir (Duffy, 2006).

Yaratıcılık karmaşık bir kavram olduğundan literatürde çeşitli şekillerde tanımlanır (Andriopoulos, 2000). Yaratıcılık araştırmaları alanında en tanınmış uzmanlardan biri olan Torrance (1995), yaratıcılığı bir süreç olarak tanımlar. Çünkü bu süreci anlamak, onu kolaylaştırabilen kişileri, büyümesini teşvik eden ortam türünü ve bu süreçte yer alması gereken ürünleri öngörebilmemize yardımcı olur. Stenberg ve Lubart (1995) yaratıcılığın, orijinal fikirlerin üretilmesini sadece uygun olmakla kalmayıp aynı zamanda mükemmel kalitede ürünler yaratmayı da içerdiğini düşünür. Mayesky'e (2009) göre ise yaratıcılık, birey ve diğerleri tarafından takdir edilen, benzersiz bir şey üretmeyi içeren bir düşünce ve davranış biçimi olarak görülür. Mullen (2020) yaratıcılığın, zanaat yapma, inşa etme veya görevleri tamamlama eylemi etrafında dönen doğuştan gelen bir yetenek olduğunu düşünür. Ayrıca hayal gücünün potansiyeli, olayları alışılmadık şekillerde algılamamızı ve yenilikçi problem çözme yaklaşımlarını keşfetmemizi sağlar. Tüm bu tanımlara baktığımızda yaratıcılığın özgün düşünceleri ifade ettiği, benzersiz olduğu, yenilik içerdiği ve bir süreç olduğu

sonucunu çıkarabiliriz. Bu hususların yanı sıra, bu süreci kimin yönetip sürdürdüğü, nasıl bir ortamda nasıl desteklendiği de önem kazanır.

Yaratıcılığı teşvik etmenin öneminin farkındalığı eğitimin her aşamasında artmaktadır (Siraj-Blatchford, 2007) çünkü öğrencilerin karmaşık problemleri çözerek ve yaratıcı düşünerek geleceğe hazırlanmaları gerekir (Wagner, 2010). Son 10 yıldır yapılan araştırmalar, öğrencilerin yaratıcılığını desteklemek için hem öğretmen davranışlarının hem de öğrenme ortamının önemini ortaya koyar. Yaratıcılık aynı zamanda bir eğitim amacı ve okullarda desteklenmesi gereken temel bir 21. yüzyıl becerisi olarak da tanımlanır (Chan ve Yuen, 2014). Çoğu araştırmacı, okul öncesi dönemin çocukların yaratıcılığını geliştirmede çok önemli olduğuna inanır (Gardner, 1982). Bu yıllarda tüm çocuklar yaratıcı potansiyellerini oyun oynayarak, şarkı söyleyerek, dans ederek, çizim yaparak ve hikaye anlatarak gösterirler (Alfonso-Benlliure, Melendez ve Gargia-Ballesteros, 2013). Öğretmenler, çocukların bu etkinlikleri yapmalarına olanak sağlamalıdır çünkü öğretmenlerin yaratıcılığın geliştirilmesinde önemli bir rolü vardır. Öğretmenler yeni fikirlere açık olmalı, bağımsız düşünmeye değer vermeli, düşüncelerinde esnek olmalı ve öğrencilerle onların yaratıcılıklarını destekleyecek insancıl bir ilişki kurmalıdır (Amabile, 1996; Cropley, 1997; Hennessey, 1995; Lubart, 1994; Stenberg ve Lubart, 1995). Bunlara ek olarak Cropley'e (1997) göre, öğrencilerin yaratıcılığını geliştirmek için öğretmenlerin öğrenciler arasında bağımsız öğrenmeyi teşvik etmesi, farklı düşünmenin önemini kavraması, çeşitli materyaller sağlaması, öğrencilerin hayal kırıklığıyla baş etmelerine yardımcı olması ve öğrencilerin önerilerini vurgulaması gerekir. Burnard ve diğerleri de (2006) oyunun, yeniliğin, risk almanın, kendi kendini yönetmenin, soru sormanın ve hayal gücünün kuvvetli olmasının yaratıcılık için önemli olduğunu belirtir. Öğretmenler, öğrencilerin yaratıcılığını teşvik etmek için bu özelliklerin farkına varılmasında rol almalıdır. Öğretmenler ayrıca öğrencilerin yaratıcılığını destekleyen bir öğrenme ortamında öğrenciler için kolaylaştırıcı, birlikte öğrenen veya öğrenciler için birer rehber olmalıdır (Richardson ve Mishra, 2018).

Öğretmenlerin okul öncesi dönemde öğrencilerin yaratıcılığını destekleyen rollerinin yanı sıra öğrenme ortamı da öğrencilerin yaratıcılığının gelişmesinde önemli bir rol

oyunmaktadır (Richardson ve Mishra, 2018). Öğrencilerin yaratıcılığını destekleyen öğrenme ortamı, öğrencilere açık uçlu materyaller ve ilgi çekici etkinlikler sunmalıdır (Cole, Sugioka ve Yamagata-Lynch, 1999). Öğrencilere sunulan etkinlikler, öğrencilerin yaşam deneyimleriyle ilişkili olmalıdır. Ayrıca etkinlikler, yaratıcılığı ve yaparak öğrenmeyi teşvik etmek için öğrenci merkezli olmalıdır (Richardson ve Mishra, 2018). Oyun etkinlikleri, drama etkinlikleri ve erken okuryazarlık etkinlikleri de okul öncesi öğrencilerinin yaratıcılığını teşvik eder, dolayısıyla yaratıcılık eğitimi programlarında bu tür etkinliklere yer verilir (Dere, 2019). Öğrenme ortamı, öğrencilerin yeni fikirlerini destekleyecek tartışma ve derinlemesine düşünme olanakları sağlamalıdır. Ayrıca, yaratıcılığı desteklemenin başka bir temel unsuru, öğrenme ortamındaki malzemelerin ve kaynakların bulunabilirliğidir, çünkü onlar yaratıcılığın altyapısını oluşturan unsurlardır (Warner ve Myers, 2009). Yaratıcılığın desteklenmesinde fiziksel alan da önemli bir rol oynamaktadır. Hong, Hartzell ve Greene (2009) öğrencilerin ortak çalışma yapmaları için alan kullanmanın öğrencilerin yaratıcılığını desteklediğini belirtmiştir. Bunlara ek olarak öğrenme ortamı, şefkatli ve saygılı bir atmosferin yaratılması için sınıf üyeleri arasındaki farklılıklara açık olmalıdır (Richardson ve Mishra, 2018).

Gardner (1982) okul öncesi dönemdeki çocukların yaratıcılık düzeylerinin yüksek olduğunu ancak okula gitmeye başladıklarında yaratıcılık yeteneklerinin azalma eğiliminde olduğunu belirtmiştir. Bu nedenle öğrencilerin yaratıcılığını geliştirmede öğretmen rollerinin ve öğrenme ortamının rolünün araştırılması oldukça önemlidir.

### **Problem Durumu ve Çalışmanın Önemi**

Yeni fikirler üretmeyle ilgili olan yaratıcılık, okul öncesi eğitim programının olmazsa olmazıdır (Dere, 2019). Dünya hızla değişiyor ve birçok alanda yaratıcı düşünen, sorunları farklı şekillerde çözen, bağımsız davranan bireylere ihtiyaç duyuluyor (Gürgen, 2006). Bu nedenle öğrencilerin yaratıcılığının öğretmenler ve öğrenme ortamı tarafından desteklenmesi gerekir. Araştırmacılar, bazı öğretmen davranışlarının önemini vurgulamaktadır. Bu davranışlar; yaratıcı fikir veya davranışlara karşı açık bir tutum ve hümanist yaklaşım sergilemek, düşünce ve davranışta esneklik sağlamak ve bağımsız düşünmeyi takdir etmek gibi öğretmen davranışlarını içermektedir (Amabile, 1996; Cropley, 1997; Hennessey, 1995;

Lubart, 1994; Sternberg ve Lubart, 1995). Bu nedenle Soh (2000), öğrencilerin yaratıcılığını teşvik eden dokuz öğretmen davranışını içeren Cropley'nin (1997) listesini kullanarak, “Yaratıcılığı Destekleyen Öğretmen Davranışları Endeksini” geliştirmiştir. Ancak, literatür öğrencilerin yaratıcılığını teşvik eden belirli öğretmen davranışlarını anlama konusunda sınırlı çalışmaya sahiptir (Soh, 2000). Araştırmalar, okul öncesi eğitimde yaratıcılığın önemini kabul etse de (Siraj-Blatchford, 2007), öğretmenlerin öğrencilerin yaratıcılığını geliştirmeye aktif olarak katkıda bulunan belirli öğretmen davranışlarını keşfetme ihtiyacını ortaya koymaktadır (Cropley, 1997). Bu nedenle, bu çalışma, okul öncesi öğretmenlerinin öğretim sürecinde çocukların yaratıcılığını nasıl destekledikleri hakkında bilgi edinmeyi amaçlamaktadır. Ayrıca öğrencilerin yaratıcılığının geliştirilmesinde öğretmen davranışlarının yanı sıra öğrenme ortamı da önemli bir yer tutar (Richardson ve Mishra, 2018). Son yıllarda yaratıcılık ile ilgili araştırmaların artmasına rağmen öğrenme ortamının çocukların yaratıcılığı üzerindeki etkisini araştırmaya yönelik pek fazla çalışma yapılmamıştır (Richardson ve Mishra, 2018). Henriksen, Mishra ve Mehta (2015) yaratıcılık araçlarına ilişkin incelemelerinde araçların yalnızca %3'ünün yaratıcılığın çevresel desteğini değerlendirdiğini keşfetmişlerdir. Çevrenin yaratıcılık üzerindeki etkisi göz önüne alındığında bu şaşırtıcı derecede küçük bir sayıdır (Beghetto ve Kaufman, 2014). Literatürde bu konuyla ilgili bir boşluk mevcut olduğundan bu çalışma, öğrencilerin yaratıcılığını destekleyen öğrenme ortamı koşulları hakkında bilgi edinmeyi amaçlamaktadır. Sonuç olarak bu çalışma, okul öncesi öğretmenlerinin öğrencilerinin yaratıcılığını desteklemek için bildirdikleri uygulamalar ile sınıfların fiziksel çevre koşulları ve materyallerinin okul öncesi dönemdeki çocukların yaratıcılığını ne kadar desteklediği konularında literatüre önemli bir katkı sağlayabilir.

Eğitimde yaratıcılığı ve yaratıcı düşünmeyi desteklemenin öneminin kabulü giderek artmaktadır (Siraj-Blatchford, 2007), dolayısıyla öğretmenlerden öğrencilerin yaratıcılığını geliştirmeleri beklenmektedir (Dikici ve Soh, 2015). Öğretmenler yaratıcılığın eğitimin en önemli parçalarından biri olduğunu biliyor. Bu doğru bir bakış açısıdır ancak öğretmenin sınıfta öğrencilerin yaratıcılığını geliştirip geliştirmediğini anlamak için yeterli değildir. Araştırmalar aynı zamanda bilginin, öğretmen profesyonelliğinin önemli bir bileşeni olduğunu ancak mesleki yeterliliğin

bilgiden daha fazlasını kapsadığını gösterir (Guerrero, 2014). Bu nedenle, öğrenme ortamını gözlemlemek ve öğrencilerin sınıftaki çalışmalarının görünürlüğünü değerlendirmek, öğretmenlerin öğrencilerin yaratıcılığını nasıl desteklediğini anlamamız için bize ipuçları sağlar.

Araştırmalar yaratıcılığın geliştirilebileceğini gösterir (Cheung ve Leung, 2013). Amabile (1996) bireylerin yaratıcı davranışlarının belirli öğretim stratejileriyle desteklenebileceğini belirtmiştir. Bu nedenle çocukların yaratıcı potansiyelini teşvik etmek ve geliştirmek önemlidir (Jeffrey ve Craft, 2004). Çocuğun içinde bulunduğu çevre ve çevresindeki insanlar, çocuğun yaratıcılığını desteklemekte önemli bir role sahiptir (Kemple ve Nissenberg, 2000; Wright, 2010). Özellikle okul öncesi öğretmenleri, zengin materyal ve etkinliklerle öğrenme ortamı sağlayarak çocukların yaratıcılığını geliştirme sürecinde önemli bir rol üstlenirler (Leggett, 2017; Wright, 2010). Cropley'e (1997) göre öğretmen, çocukların bağımsızlığını teşvik etmeli, farklı düşünmeye fırsat vermeli, çocukları hata yapma konusunda desteklemeli, çocukların öğrenmeleri üzerinde düşüncelerine izin vermeli, başarısızlıklarıyla nasıl başa çıkacaklarını öğretmeli, düşünceleri için zaman vermeli ve grup olarak çalışmalarını teşvik etmelidir. Bu çalışmanın yardımıyla, okul öncesi öğretmenlerinin yaratıcılığa ilişkin görüşleri derinlemesine incelenerek ve öğrenci etkinliklerine bakılarak öğrencilerin yaratıcılığını geliştirmeye yönelik öğretmen uygulamalarına ilişkin bir bakış açısı kazandırılması hedeflenmektedir. Mevcut çalışma, okul öncesi öğretmenlerinin öğrencilerinin yaratıcılığını desteklemek için neler yaptığını ortaya çıkarmayı ve diğer okul öncesi öğretmenlerine sınıf ortamında yaratıcılığı nasıl geliştirebilecekleri konusunda fikir sunmayı amaçlamaktadır.

Öğretmen davranışlarının yanı sıra öğrenme ortamı da çocukların yaratıcılığını desteklemek için çok önemlidir (Mohammed, 2018) çünkü hayal gücü ve yaratıcılık, etkisiz bir öğrenme ortamından olumsuz etkilenebilir ve engellenebilir (Tarr, 2004). Bu nedenle öğrenme ortamı çocuklara keşfetme, açık uçlu materyalleri kullanma, risk alma ve oyun oynama fırsatları sunmalıdır (Mohammed, 2018).

Bu çalışma, fiziksel çevre ve materyal kontrol listesi dahil olmak üzere çocukların yaratıcılığını destekleyen çeşitli faktörleri araştırıp ilgili literatüre dair bir bakış açısı sunar. Ayrıca, sınırlı sayıda çalışma Türk okul öncesi öğretmenlerinin okul öncesi

çağındaki öğrencilerin yaratıcılığını destekleme konusundaki uygulamalarını ve okul öncesi eğitim ortamlarındaki öğrenme ortamının fiziksel koşullarının çocukların yaratıcılığını nasıl etkilediğini araştırmıştır. Bu nedenle bu çalışma, konunun ulusal düzeyde bilgilendirilmesi ve anlaşılması açısından anlamlıdır. Okul öncesi öğretmenlerinin çocukların yaratıcılığını geliştirmek için neler yaptıklarını, yaratıcılığa ilişkin düşüncelerini ve okul öncesi eğitim ortamlarındaki öğrenme ortamının fiziksel koşullarının çocukların yaratıcılığını nasıl desteklediğini araştırır. Bu çalışma, bu konularda yapılacak olan araştırmalara ışık tutabilir.

### **Araştırmanın Amacı ve Araştırma Soruları**

Bu çalışmanın amacı; okul öncesi öğretmenlerinin bildirdiği uygulamalarını, sınıf öğrenme ortamını ve materyallerini okul öncesi dönemdeki çocukların yaratıcılığını destekleme açısından incelemektir. Bu amaçlar doğrultusunda bu çalışmada aşağıdaki araştırma sorularına yanıt aranmaktadır:

1. Okul öncesi çağındaki çocukların yaratıcılığını destekleyen fiziksel ortam ve materyaller nelerdir?
  - 1.a. Okul öncesi çağındaki çocukların yaratıcılığını destekleyen fiziksel çevre koşulları ve materyaller okul türüne göre ne ölçüde farklılık göstermektedir?
2. Devlet okullarında ve özel okullarda görev yapan okul öncesi öğretmenlerinin yaratıcılığa ilişkin görüşleri nelerdir?
  - 2.a. Okul öncesi çağındaki çocukların yaratıcılığını destekleyen faktörleri içeren öğretmenlerin bildirdiği uygulamaları okul türüne göre ne ölçüde farklılık göstermektedir?

## **YÖNTEM**

### **Araştırmanın Deseni**

Araştırmacı nitel bir araştırma tasarımı yürütmüştür. Nitel araştırmalar insanların sözlerini, eylemlerini ve kayıtlarını incelemeyi vurgular (Lunenburg ve Irby, 2008) ve bu çalışmada, okul öncesi öğretmenlerinin çocukların yaratıcılığını nasıl desteklediğini öğrenmek ve öğretmenlerin yaratıcılığa ilişkin görüşlerini belirlemek

amacıyla yarı yapılandırılmış görüşme yöntemi kullanıldığından katılımcıların kendi sözleri önemli bir yer tutar.

Bu çalışmada öğrencilerin çalışmaları ile öğretmenlerin öğrencilerin yaratıcılığını desteklemek için neler yaptığına dair yapılan açıklamalar arasında herhangi bir bağlantı olup olmadığını incelenmiştir. Ayrıca, fiziksel çevre ve malzeme kontrol listesi de sınıf ortamının fiziksel koşullarının ve malzemelerin okul öncesi dönemdeki çocukların yaratıcılığını destekleyip desteklemediğini dair bilgi edinmek için kullanılmıştır.

### **Katılımcılar**

Bu çalışmanın katılımcıları, Ankara ilindeki resmi ve özel okullarda görev yapan yirmi okul öncesi öğretmeninden oluşan erişilebilir evreni temsil etmektedir. Katılımcıların 10'u özel okullarda görev yaparken, diğer kalan 10'u da devlet okullarında aktif olarak görev yapan okul öncesi öğretmenlerini içermektedir. Katılımcılar, amaçlı örnekleme yöntemi kullanılarak seçilmiştir. Bu nedenle, öğretmen seçiminde araştırmaya istekli ve gönüllü olma, Ankara ilinin farklı ilçelerindeki çeşitli mahallelerden devlet ve özel okullarda okul öncesi öğretmenliği yapıyor olunması gibi kriterler kullanılmıştır.

### **Veri Toplama Süreci ve Veri Toplama Araçları**

Bu çalışmada veriler üç kaynaktan toplanmıştır: *Yarı Yapılandırılmış Görüşme Soruları*, *Fiziksel Ortam ve Materyaller Kontrol Listesi* ve *Öğrenci Portfolyolarının Analizi*. Çoklu veri toplama araçlarının kullanılması güçlü bir araştırma sürecine sahip olmak için fayda sağlar çünkü bu araçlar araştırmanın çeşitli yönlerini ortaya çıkarır (Patton, 1999).

### **Verilerin Analizi**

Bu çalışmada fiziksel ortam ve materyal kontrol listesi, görüşme soruları ve öğrenci portfolyolarının kontrol edilmesinden elde edilen veriler kullanılmıştır. Veri analiz sürecinin ilk aşaması olarak görüşmeler yazıya aktarılmıştır. Ardından bu ifadeler kodlanarak kategoriler elde edilmiştir ve bulgular tablolar aracılığıyla sunulmuştur. Bu süreçte içerik analizi yöntemi kullanılmıştır. Fiziksel çevre ve materyal kontrol

listesindeki veriler ile öğrencilerin portfolyoları ile ilgili veriler bilgisayara geçirilerek, veriler düzenlenmiş ve organize edilmiştir. Güvenirliği desteklemek amacıyla veri analizi sürecinde ikinci bir kişi daha aktif rol almıştır ve iki kodlayıcının bulguları karşılaştırılarak Miles ve Huberman'ın (1994) güvenilirlik formülü kullanılarak güvenilirlik katsayısı hesaplanmıştır.

## **BULGULAR**

Çalışmanın ilk aşamasında öğrenme ortamında yaratıcılığı destekleyen faktörlere ilişkin fiziksel ortam ve materyallerin kontrol listesi yer alır. İlk olarak bir öğrenme ortamında çocukların yaratıcılığını destekleyen faktörler analiz edilmiştir. Öğrenme ortamlarının fiziki koşullarının ve öğrenme ortamında bulunan materyallerin çocukların yaratıcılığını desteklemeye ne kadar yardımcı olduğuna ilişkin bilgi toplamak amacıyla sorular sorulmuştur.

Sınıfta öğrencilerin yaratıcılığını destekleyen çeşitli kaynakların ve materyallerin varlığı ve erişilebilirliği, öğrenci çalışmalarının sınıfta görünürlüğü, sınıfta çeşitli merkezlerin varlığı, oyun ve yapı-inşa merkezinin varlığı, ve oyun merkezindeki oyuncak türleri konusunda gözlemler gerçekleştirilmiştir.

Ayrıca sınıf dışında öğrenme amaçlı kullanılan başka ortamların olup olmadığı, sınıf içi aydınlatmanın yeterliliği, sınıf ortamının çocukların küçük ve büyük gruplar halinde çalışmalarına uygunluğu, sınıf mobilyalarının rahatlıkla hareket ettirilip ettirilmediği ve son olarak da sınıfta öğrencilerin gün içinde belirli saatlerde gidip bağımsız olarak keşfedebilecekleri ve deney yapabilecekleri açık uçlu doğal materyallerin bulunduğu bir alanın olup olmadığı ile ilgili gözlemler yapıp sorular sorulmuştur.

Sınıfta öğrencilerin yaratıcılığını destekleyen çeşitli kaynakların ve materyallerin varlığına ve erişilebilirliğine bakıldığında, sınıflarda en yaygın olarak bulunan malzemeler; kitap, şönil, oyun hamuru, yapı-inşa oyuncakları (n=15), bloklar, dil çubuğu, pastel boya (n=14) ve kil (n=11) olmuştur. Özel okullarda 8 sınıf ve devlet okullarında 5 sınıf olmak üzere toplamda 13 sınıfta, sınıf içinde yaratıcılığı



destekleyen materyaller bulunmaktadır. Ancak, bazı materyallere çocukların erişim sağlaması oldukça zordur çünkü malzemeler ya yüksek yerlerde bulunmakta ya da dolaplarda düzensiz ve karışık bir şekilde saklandığı gözlemlenmiştir. Bu durum, çocukların bu materyallere bir yetişkinin yardımı olmadan ulaşmasını ve kullanmasını zorlaştırır. Öğrencilerin çalışmalarının sınıfta görünürlüğüne bakıldığında, 20 sınıf içerisinde 8'i özel okullarında yer alan, 3'ü de devlet okullarında yer alan toplam 11 sınıfta öğrencilerin çalışmalarının görünür olduğu gözlemlenmiştir. Sınıftaki öğrenme merkezlerine bakıldığında ise, devlet okullarındaki sınıflarda özel okullara göre daha çok öğrenme merkezi olduğu gözlemlenmiştir. Bu merkezler; blok merkezi, kitap merkezi, dramatik oyun merkezi, bilim ve doğa merkezi, sanat merkezi ve müzik merkezidir. Bazı sınıflarda öğrenme merkezlerinin adı yazmasına rağmen o merkezle ilgili malzemelerin olmadığı gözlemlenirken öte yandan da bazı sınıflarda öğrenme merkezlerinin adı yazılmamış olmasına rağmen sınıfta öğrenme merkezi bulunduğu gözlemlenmiştir. 20 sınıf içerisinde sadece 3 müzik merkezi ve 3 sanat merkezi olduğunu da öğrenme merkezleri ile ilgili gözlemlenen bir diğer durum olmuştur. Sınıflardaki dramatik oyun merkezlerine bakıldığında, her sınıfta dramatik oyun merkezi olmadığı gözlemlenmesine rağmen merkezle ilgili oyuncakların bulunduğu gözlemlenmiştir. Sınıftaki dramatik oyun merkezi haricinde 3 okulda oyun odası bulunması da gözlemlenen diğer bir durum olmuştur.

Sınıf dışında öğrenme amaçlı kullanılan öğrenme alanlarının varlığı, okul öncesi dönemdeki çocukların yaratıcılığını destekleyen faktörler arasında değerlendirilmektedir. Bu nedenle bu çalışma, okullarda sınıf ortamı dışında hangi öğrenme ortamlarının bulunduğunu incelemek amacıyla yapılmıştır. Sınıf dışında en yaygın öğrenme mekanları kütüphane ve fen odası olmuştur. Devlet okullarından birinde bilim ve botanik atölyesi de bulunduğu gözlemlenmiştir. Bu atölyede taş, deniz kabuğu, kaya, meşe palamudu, çam kozalağı gibi pek çok doğal malzemenin de aralarında bulunduğu çok çeşitli malzemeler bulunmaktadır. Doğal malzemelerin yanı sıra kitaplar, bloklar, bulmacalar, bitkiler, plastik hayvan oyuncaklar, ışıklı masa, röntgen fotoğrafları, küreler, dürbünler, radyolar, mikrofonlar, el fenerleri, telefonlar, hesap makineleri, tepegözler, bir insan vücudu modeli ve kinetik kum gibi çeşitli eşya ve malzemeler de bulunmaktadır. Ayrıca domates, salatalık, biber ve

patlıcan ekerek büyümelerini gözlemledikleri bir alanın da bu atölyede mevcut olduğu gözlemlenmiştir. Özel okullardan birinde ise bir keşif odası bulunmaktadır. Bu keşif odasının çocukların yaratıcı fikirlerini hayata geçirmeye teşvik eden çeşitli açık uçlu materyallerle donatıldığı görülmüştür. Bu malzemeler arasında kurdeleler, iplikler, kumaşlar, ponponlar ve renkli bordürler bulunmaktadır. Bu keşif odasında açık uçlu materyallerin yanı sıra keçeli kalem, makas, kurşun kalem, oyun hamuru, sulu boya, boya fırçası, parmak boyası gibi çeşitli sanat malzemelerinin de bulunduğu gözlemlenmiştir.

Yaratıcılığı destekleyen bir başka faktör olarak kabul edilen sınıf aydınlatmasının yeterliliği 20 sınıf için kontrol edilmiş olup sadece 8 sınıfın yeteri kadar doğal ışık alabildiği gözlemlenmiştir. Bu sınıfların 7'si özel okullarda yer alırken 1'inin de devlet okullarında yer aldığı gözlemlenmiştir. Sınıfların büyük ve küçük grup etkinlikleri için yeteri kadar alana sahip olup olmadıkları incelendiğinde ise, bir sınıf haricinde tüm sınıfların küçük grup etkinlikleri için uygun olduğu gözlemlenirken, büyük grup etkinlikleri için sadece 8 sınıfın büyüklüğünün yeterli olduğu gözlemlenmiştir. Bu 8 sınıfın içerisinde 2'si özel okullarda yer alırken, 6'sı devlet okullarında yer almaktadır. Birkaç okulda yer alan sınıflardaki mobilyalar haricinde, mobilyaların genellikle birçok değişikliğe müsaade eden boyutlarda olduğu gözlemlenmiştir. Sınıftaki sorgulamaya dayalı öğrenme alanının da çocukların yaratıcılığını destekleyen bir diğer faktör olduğu düşünülmektedir. Araştırmaya dayalı öğrenme alanı 20 sınıftan yalnızca 4'ünde mevcut olduğu gözlemlenmiştir. Bunlardan 3'ü özel okullarda yer alırken 1'i devlet okulunda yer alan sınıfta bulunmaktadır.

Araştırmanın ikinci aşamasında ise, okul öncesi öğretmenlerinin çocukların yaratıcılığını teşvik etme konusundaki fikirleri hakkında bilgi toplamaktır. Öğretmenlere yaratıcılığı nasıl tanımladıkları sorulduğunda çoğu öğretmenin yaratıcılığı farklı bakış açılarına sahip olmak (n=7), özgün ve orijinal fikirlere sahip olmak (n=7) ve hayal gücüne sahip olmak (n=6) olarak tanımladığı ortaya çıkmıştır. Kendilerini yaratıcı bir öğretmen olarak görüp görmedikleri sorulduğunda ise, 14 öğretmenin kendisini yaratıcı öğretmen olarak gördüğü, 5 öğretmenin kendisini yaratıcı bir öğretmen olarak görmediği ve 1 öğretmenin de bazı zamanlarda

kendisinin yaratıcı olduğunu düşündüğü ortaya çıkmıştır. Okul öncesi dönemde yaratıcılığın rolü sorulduğunda ise öğretmenlere göre yaratıcılığın rolünün orijinal fikirleri (n=2), çocukların gelişim alanlarını (n=4), keşfederek öğrenmeyi (n=5) ve hayal gücünü desteklemek (n=4) olduğunu göstermiştir. Bunun yanı sıra, mevcut çalışmadaki öğretmenlerin her biri yaratıcılığın, okul öncesi dönemindeki önemini vurgulayarak bu dönemde çocukların yaratıcılığını geliştirmede okul öncesi öğretmenlerinin ve teşvik edici bir öğrenme ortamının önemini vurgulamıştır. Öğretmenlere sınıflarında yaratıcı çocuklar olup olmadığı sorulduğunda, çalışmadaki öğretmenlerin her biri sınıflarında yaratıcı çocuklar olduğunu belirtmiştir. Bu öğrencilerin karakteristik özellikleri sorulduğunda ise, bu çocukların daha çok yeni bir şeyler üretme eğiliminde oldukları, malzemeleri daha farklı şekillerde kullandıkları, kendilerini sözel olarak çok iyi ifade ettikleri, kendilerine özgü bir bakış açıları olduğu, hayal güçlerinin kuvvetli olduğu, dışa dönük, girişken, iletişim kurmaktan keyif alan, liderlik özelliklerine sahip olan, analitik düşünme becerilerine sahip olan, araştırmacı, açık görüşlü, problem çözen, çabuk öğrenen, merak uyandıran sorular soran, meraklı, çok hareketli, özgür ruhlu, çabucak sıkılabilen ve kuralları takip etmekte zorlanan çocuklar oldukları bulgularına varılmıştır.

Öğretmenlere öğrencilerinin yaratıcılıklarını nasıl destekledikleri sorulduğunda, çocukların yaratıcılıklarını geliştirmek için çocukları risk almaya ve hata yapmaya teşvik ettikleri (n=1), sevgi dolu ve destekleyici bir ilişki kurmaya çalıştıkları (n=1), duygu paylaşımı yapmaya özen gösterdikleri(n=1), artık malzemeler (n=1), doğal malzemeler (n=1), açık uçlu malzemeler kullandıkları (n=1), akıl oyunları oynadıkları (n=1), oyun tabanlı (n=2) ve dokunarak öğrenme (n=2) olanakları sağladıkları, drama yaptıkları (n=4), kendi kendilerine oyunlar ürettikleri (n=3), yarım bırakılan hikayelerin sonlarını tamamladıkları (n=4), çocukların yaratıcılığını kullanabilecekleri açık uçlu sanat etkinlikleri sundukları (n=6), felsefe çemberi yaparak düşündürmeye çalıştıkları (n=1), problemleri kendi başlarına çözebilmeleri için fırsat verdikleri (n=1), beyin fırtınası yaptıkları (n=2), tartışmalar yaptıkları (n=2), ve açık uçlu sorular sordukları (n=4) ortaya çıkmıştır. Çocukların kendi düşünceleri hakkında düşünmeleri için de onlara, açık uçlu sorular sordukları (n=9), beyin fırtınası yaptıkları (n=7), düşünme için onlara zaman verdikleri (n=5), kendilerini ifade edebilmeleri için onları güçlendirdikleri (n=5), etkin bir şekilde

dinledikleri (n=5), okunan kitaplar ve hikayeler hakkında konuştukları (n=3) ve keşfetmeleri için zaman ayırdıkları (n=2) belirtilmiştir. Öğretmenlerin çocuklara gün içerisinde bir çok zaman diliminde açık uçlu sorular sorduğu ortaya çıkmış hatta çocukların da açık uçlu sorular sormaları için çocukları nasıl destekledikleri sorulduğunda 12 öğretmenin kendilerinin çocuklara açık uçlu sorular sorarak ve onlara model olarak destekledikleri ortaya çıkmıştır. Öğretmenlerin 6'sı ise çocukların zaten soru sordukları için onları bu konuda desteklemek adına herhangi bir yonteme ihtiyaçları olmadığını ifade etmişlerdir. Öğretmenlerin 5'i çocukların sordukları sorulara önem vererek onların daha da çok soru sormalarını teşvik etmeye çalıştıklarını, öğretmenlerin 3'ünün de çocukları yapmış oldukları hataları kutlayarak ve çocukları sözel olarak destekleyerek soru sormaya teşvik ettikleri bulunmuştur. Bunların dışında 2 öğretmenin de çocuklarda merak uyandırarak onların sorular sormasını teşvik ettikleri belirtilmiştir. Öğretmenlere çocukların kendi kendilerine öğrenmeleri için neler yaptıkları sorulduğunda, çocuklara birçok materyal sundukları, serbest oyun zamanı verdikleri, sınıftaki öğrenme merkezlerinde zaman geçirmeleri için fırsat tanıdıkları, problemlerini kendileri çözebilmeleri için fırsat verdikleri, akran eğitimine başvurdukları ve deneyler yaptıkları ortaya çıkmıştır. Çocuklar arasında fikir alışverişini nasıl destekledikleri sorulduğunda ise, büyük ve küçük gruplarla grup tartışmaları yaptıkları, akran öğrenimi sağladıkları, çocukların birbirleriyle iletişim kurmaları için destekledikleri, var olan problemler hakkında konuştukları, birbirlerini dinlemeleri için teşvik ettikleri ve oturma düzenlerini değiştirdikleri belirtilmiştir. Öğretmenlerin öğrencilerinin çalışmalarının nasıl dokümantasyon ettikleri sorulduğunda, bir çok öğretmenin öğrencilerin çalışmalarını sınıf ortamında yer alan panolarda ve sınıflardaki duvarlarda sergiledikleri görülmüştür. Ayrıca 20 öğretmenin arasında 11'inin öğrenciler için portfolyo tuttuğu ve 2 öğretmenin de dijital portfolyo kullandığı görülmüştür.

## **TARTIŞMA**

Literatürle uyumlu olarak (Mohammed, 2018) çalışmanın sonuçları, çalışmadaki tüm öğretmenlerin, okul öncesi döneminin en önemli bileşenlerden biri olarak yaratıcılığın öneminin farkında olduklarını göstermiştir. Ancak bu farkındalığa rağmen, iki farklı özel okulda görev yapan üç öğretmen dışında portfolyolardaki

çocuk etkinlikleri ve sınıf ortamında sergilenen etkinlikler incelendiğinde ve sınıf haricinde bulunan birkaç öğrenme ortamı dışındaki öğrenme ortamlarının çevresel koşulları incelendiğinde genellikle yaratıcılığı destekleyen etkinliklerin yapılmadığı görülmüştür. Çalışmanın bu sonucu, katılımcıların eğitim süreçlerinde aldıkları yaratıcılık dersleri ile bilgi düzeyleri arasında bir ilişki olabileceğini göstermektedir. Araştırmaya katılan 20 öğretmen arasında sadece özel bir okuldan bir öğretmen, hem üniversite derslerine hem de yaratıcılıkla ilgili ders dışı etkinliklere katılmıştır. Bununla birlikte, sekiz öğretmen eğitimleri sırasında yaratıcılıkla ilgili dersler aldıklarını belirtmiş, ancak bu derslerin detaylarını hatırlamadıklarını ifade etmiştir. Bu durum, öğretmenlerin yaratıcılığın önemini bilmelerine rağmen, yaratıcılığı destekleyen etkinliklerin yeterince uygulanmadığı sonucunu açıklayabilir.

Okul öncesi öğretmenlerin yaratıcılığı destekleyen uygulamaları ile bağlantı kurmak için bu çalışmada öncelikle bir öğrenme ortamında okul öncesi dönemdeki çocukların yaratıcılığını destekleyen faktörlerin analizi yapılmıştır. Okul öncesi çağındaki çocukların, öğrenme ortamında yaratıcılığını destekleyen çeşitli kaynak ve materyallerin bulunması ve bunların ulaşılabilirliği bu çalışmada çocukların yaratıcılığının desteklenmesiyle ilgili faktörlerden biri olmuştur. Materyal ve kaynak türleri açısından bakıldığında, bir devlet okulunda ve iki farklı özel okulda bulunan dört sınıf haricinde, açık uçlu materyaller açısından devlet okulları ile özel okullar arasında büyük bir fark olmadığı görülmüştür. Bazı sınıflarda açık uçlu malzemeler bolken, dikkat çekici bir şekilde diğerlerinde bu malzemelerin eksik olduğu gözlemlenmiştir. Hem özel hem de devlet okullarındaki birçok sınıfta, yeterli miktarda açık uçlu malzeme bulundurulmadığı gözlemlenmiştir. Ancak, bu mevcut çalışmanın bulgularına göre belirtmek gerekir ki devlet okullarından birinde, okul öncesi çağındaki çocukların yaratıcılığını, hayal gücünü ve merakını uyarmayı amaçlayan geniş bir kaynak ve açık uçlu malzemelerle donatılmış bir bilim ve botanik atölyesi bulunmaktadır. Bu malzemeler; taşlar, deniz kabukları, kayalar, meşe palamudu ve çam kozalakları gibi doğal öğelerden oluşmaktadır. Doğal malzemelerin yanı sıra; kitaplar, bloklar, bulmacalar, bitkiler, küçük hayvan oyuncaklar, ışık masası, röntgen fotoğrafları, küreler, dürbünler, radyolar, mikrofonlar, el fenerleri, telefonlar, hesap makineleri, tepegözler, insan vücut modeli ve kinetik kum gibi çeşitli diğer kaynaklar da bulunmaktadır. Bu çalışmanın

bulgularına göre, bilim ve botanik merkezinin bulunduğu okuldaki öğretmenlerden biri, sınıf mevcudunun kalabalık olması nedeniyle bu atölyeyi yoğun olarak kullanmadıklarını belirtmiştir (n=21). Bilim ve botanik atölyesinin yanı sıra, özel okullardan birinde, okul öncesi çağındaki çocuklara yaratıcılık ile ilgili konseptlerini şekillendirme konusunda ilham veren çok çeşitli açık uçlu materyallerle donatılmış bir keşif merkezi olduğu gözlemlenmiştir.

Ayrıca özel okullardaki materyal çeşitliliği, devlet okullarına göre biraz daha fazla olduğu gözlemlenmiştir. Ancak genel olarak sınıf dağılımlarına göre açık uçlu materyallerin çeşitliliği sınırlı olduğundan bu bulgular literatürle örtüşmemektedir. Öte yandan literatür, okul öncesi çağındaki çocukların çevrelerindeki insanlarla ve çevrelerindeki dünyayla etkileşimleri yoluyla kendi bilgilerini aktif olarak yapılandırdıklarını gösterir (Piaget, 1928). Bu, okul öncesi çağındaki çocukların gelişimini ve öğrenmesini desteklemek için nesnelere dokunabilecekleri, gözlemleyebilecekleri, keşfedebilecekleri ve onlarla etkileşime girebilecekleri uygulamalı deneyimlere ihtiyaç duydukları anlamına gelir (Coppie ve Bredekamp, 2009). Maynard ve Ketter'in (2015) belirttiği gibi nesnelere dokunarak, nesnelere bakarak, keşfederek ve onları yönlendirerek etkileşim kurarak yaratıcılığı geliştirmek ve öğrenmek mümkündür çünkü açık uçlu materyaller okul öncesi dönemdeki çocuklara kendilerini yaratıcı yollarla ifade etmeleri için birçok fırsat sağlar. Peterson ve Harrison (2005) tarafından yapılan bir çalışmada da belirtildiği gibi sınıftaki materyal ve kaynaklar çocukların istedikleri zaman kullanabileceği şekilde erişilebilir ve çeşitli olmalıdır. Bu erişilebilirlik önemlidir çünkü eğer kaynaklar sınıfta çocuklar için kolayca erişilebilir değilse yaratıcılıklarını göstermeleri de zorlaşır (Duffy, 2006). Araştırmanın bulgularına göre, bu materyaller bazı sınıflarda mevcut olmakla birlikte, bir devlet okulunun ve iki farklı özel okulun dört sınıfı dışındaki sınıfların çoğunda çocuklar için bazı materyallere erişim oldukça zordur. Bunun nedeni ise, malzemelerin ya yüksek yerlerde bulunması ya da dolaplarda dağınık ve karışık bir şekilde saklanmasıdır. Çocukların bir yetişkinin yardımı olmadan bu materyallere erişmesi ve bir şeyler yaratması oldukça zordur. Ancak bu çalışmada öğretmenlerin çoğu çocuklara farklı materyaller sağlamanın önemini vurgulamıştır. Öğretmenlerin cevapları ile sınıftaki materyallerin incelenmesi arasındaki tutarsızlık, öğretmenlerin gerçek uygulamalarını ve karşılaştıkları

engelleri dikkate almadan, görüşmeler sırasında ideal yanıtlar vermelerine bağlanabilir.

Bu çalışmada öğrencilerin çalışmalarının sınıfta görünür olması, okul öncesi dönemdeki çocukların yaratıcılığının desteklenmesinde dikkate alınan bir diğer faktör olarak değerlendirilmiştir. Aynı özel okuldan iki öğretmen, etkinlik sürecinde fotoğraf çekerek ve öğrencilerin yorumlarını yazılı olarak sergileyerek öğrencilerin çalışmalarını sınıfta görünür hale getirmiştir. Bu bulgular, etkinlik sürecinde öğrencilerin yorumlarını yazarak ve öğrencilerin çalışmalarının fotoğraflarını çekerek tüm öğrencilerin çalışmalarının sınıfta sergilenmesinin önemini vurgulayan Skinner'ın (2007) araştırmasıyla uyumludur. Bu sonuç, bu öğretmenlerin öğretim ortaklarıyla birlikte çalışarak öğrencilerinin çalışmalarını hem sınıf içinde hem de sınıf dışında sergilemek için daha fazla zaman ayırmalarına olanak sağlamasıyla bağlantılı olabilir. Bu konuyla ilgili Mishra ve Richardson (2018) da öğrencilerin çalışmalarını sınıfta görünür hale getirmenin çocukların yaratıcılıklarını geliştirmelerine ve çocuklara çalışmalarının değeri konusunda güçlü mesajlar göndermelerine olanak tanıdığına dikkat çekmiştir (Mohammed, 2018). Araştırmanın sonuçları, özel okullarda bulunan 20 sınıftan 8'inde, devlet okullarında bulunan sınıfların ise 3'ünde öğrencilerin çalışmalarının görülebilir olduğu gözlemlenmiştir. Özel okullardaki öğretmenlerin, devlet okullarındaki öğretmenlere göre okul öncesi dönemdeki çocukların çalışmalarını görünür hale getirerek çocukların yaratıcılıklarını geliştirmeleri için daha fazla fırsat sundukları gözlemlenmiştir. Araştırmanın bu sonucu devlet okullarındaki öğretmenlerin, yardımcı öğretmenlerinin bulunmamasına bağlanabilir. Araştırmaya katılan devlet okullarının çoğunda sınıf mevcutları 15 ila 30 öğrenci arasında değişmektedir ve hiçbirinde yardımcı öğretmen bulunmamaktadır. Hatta bazı devlet okullarındaki öğretmenlerin sınıflarında kaynaştırma öğrencileri bile bulunmaktadır. Bu gibi durumlarda, öğrencilerinin çalışmalarını sınıflarında görünür kılmak bu öğretmenler için özellikle zorlayıcı olabilir. Ayrıca öğrenme ortamlarında sergilenen öğrenci çalışmalarına bakıldığında, devlet okullarındaki öğrencilerin özel okullardaki öğrencilere göre sınırlı boyama ve çalışma sayfası şeklindeki etkinliklere daha fazla maruz kaldıkları görülmüştür. Dababneh ve diğerleri (2010), öğretmenler tarafından çalışma sayfalarının aşırı kullanımının öğrencilerin yaratıcılığının azalmasına yol açtığını

bulmuştur. Bu nedenle literatüre göre çalışma yaprağı kullanımının öğrencilerin yaratıcılığını olumsuz yönde etkilediği görülür. Mevcut çalışma, devlet okullarındaki öğrencilerin bu tür etkinliklere özel okullardaki öğrencilere göre daha fazla maruz kaldığını göstermiştir.

Çeşitli öğrenme merkezlerine sahip olmak da bu çalışmada okul öncesi dönemdeki çocukların yaratıcılığını etkileyen bir diğer faktör olarak değerlendirilmiştir. Merkez temelli öğrenme ortamları çocukların kaynaklara kolay erişmesi ve çeşitli yaratıcı deneyimler yaşayabilmesinde önemli bir rol oynar (Duffy, 2006). Dere (2019) çalışmasında Milli Eğitim Bakanlığı Okul Öncesi Ders Programı'nda (2013) öğrenme merkezlerine ilişkin yönergelerin yer aldığını vurgular. Çocukların yaratıcılığını geliştirmek için blok merkezi, dramatik oyun merkezi, matematik merkezi, fen ve doğa merkezi, sanat merkezi ve kitap merkezlerinin sınıf ortamında bulunması gerektiğini belirtmiştir. Ayrıca Dere tarafından yapılan çalışmada müfredatta çocukların öğrenme süreçlerinin bu alanlarla bütünleştirilmesinin yaratıcılıklarının gelişimini desteklediği vurgulanmıştır. Mevcut çalışmanın bulgularına göre, devlet okullarının sınıflarında özel okullara göre daha fazla öğrenme merkezi bulunmaktadır. Bu sonuç, devlet okullarının Milli Eğitim Bakanlığı tarafından belirlenen özel müfredat gerekliliklerine sahip olabileceği gerçeğiyle ilişkili olabilir. Bu çalışmadaki tüm özel okullar aynı zamanda Milli Eğitim Bakanlığı Müfredatının gerekliliklerini de takip etmektedir, ancak devlet okulları bu gerekliliklere uyma konusunda özel okullara göre daha katı olabilir. Bu gereksinimler, eğitim standartlarını ve hedeflerini karşılamak için çeşitli öğrenme merkezlerinin kurulmasını teşvik edebilir. Üstelik bu çalışmada yirmi sınıftan yalnızca üçünde müzik ve sanat merkezi gözlemlenmiştir. Oysaki bu öğrenme merkezleri, çocukların yaratıcılığını destekleyen önemli merkezlerdir çünkü çocuklar kalıpların dışında düşünmeyi ve kendilerini yaratıcı bir şekilde ifade etmeyi daha çok bu merkezlerde öğrenirler (Lafontanie, 2019). Araştırmanın sonucu, katılımcıların bu merkezlerin yaratıcılığı geliştirmedeki önemi konusunda bilgi eksikliğiyle ilişkili olabilir.

Bu çalışmada dramatik oyun merkezi, çocukların yaratıcılığını teşvik eden bir diğer faktör olarak kabul edilmiştir. Mevcut çalışmanın bulguları, özel okuldaki iki sınıfta



dramatik oyun merkezi bulunurken, devlet okulundaki sekiz sınıfta dramatik oyun merkezi bulunduğunu göstermiştir. Yirmi sınıf arasında yalnızca on sınıfta dramatik oyun merkezi olduğu gözlemlenmiştir. Sınıfların haricinde ise; üç okulda dramatik oyun odaları olduğu gözlemlenmiştir. Bunlardan biri devlet okulunda yer alırken diğer iki dramatik oyun odası ise farklı özel okullarda yer almaktadır. Dramatik oyun merkezinin azlığı literatürü desteklememektedir çünkü Mayesky (2009) dramatik oyunun çocukların yaratıcılığını geliştirmek için öneminin büyük olduğunu belirtmiştir. Dramatik oyunun, çocukların hayal gücünü ve yaratıcılığını desteklemek için mükemmel bir araç olduğuna ve dolayısıyla dramatik oyun merkezinin, çocukların yaratıcı ve ifade edici oyunlara katılmaları için ideal bir ortam olduğuna da dikkat çekmiştir. Ayrıca, Ghasempour ve Mozafar (2014) tarafından müdahale programı uygulanan çalışmada, yaratıcı dramayla ilgilenmenin 5-7 yaş arası çocukların yaratıcılığını önemli ölçüde etkilediği ortaya konmuştur. 25 çocuğa yaratıcı drama eğitimi verilen çalışmada, daha sonra yapılan değerlendirmelerde çocukların konuşma, ifade, katılım, konsantrasyon ve motivasyon güçlerinde artış olduğu ortaya çıkmıştır. Müdahale programının uygulandığı başka bir araştırmada ise yaratıcı dramatik etkinliklere katılan 4-6 yaş arası çocukların yaratıcılıklarının arttığı gözlemlenmiştir (Momeni ve diğerleri, 2017). Bu nedenle çocukların yaratıcılığını geliştirmek için drama etkinliklerin varlığı oldukça önemlidir. Bu çalışmada dramatik oyun merkezlerinin sayısının az olması, katılımcıların dramatik oyunun okul öncesi çocukların yaratıcılığı üzerindeki olumlu etkisine ilişkin bilgi eksikliğine bağlanabilir. Görüşmeler sırasında sadece birkaç öğretmenin dramatik oyunun çocukların yaratıcılığını ilk yıllarda geliştirmedeki rolünden bahsetmesi bu durumu açıkça ortaya koymaktadır.

Bu çalışmada blok merkezi okul öncesi dönemdeki çocukların yaratıcılığını desteklemede önemli bir diğer faktör olarak görülmüştür. Bu çalışmanın bulguları, 20 sınıf içerisinde toplam 13 sınıfta blok merkezi bulunduğunu göstermiştir. Bu sınıfların 4'ü özel okullarda yer alırken, 9'u ise devlet okullarında yer almaktadır. Özel okullarda yer alan sınıflardaki blok merkez sayısı, devlet okullarında yer alan sınıflardaki blok merkez sayısından daha azdır. Metin'in 2017 yılında yapmış olduğu çalışma, gerçek hayatta nesnelere temsil eden ve yapılandırılmamış yapı malzemelerin yer aldığı blok merkezinin çocuklara hayali yapılar inşa etmeleri için

fırsat sağladığını göstermiştir. Çocuklar blok merkezinden, sosyal etkileşim yoluyla fiziksel, sosyal ve bilişsel beceriler kazanarak yararlanırlar (NAEYC, 2012). Sınıf ortamında blok merkezi fikrini destekleyen bir çalışma, blok oyun ortamının çocukların yaratıcılıklarını geliştirmelerine fırsat sağladığını ortaya koymuştur (Aksoy ve Belgin Aksoy, 2023) çünkü çocukların bloklarla oynama sürecinde yenilikçi ve özgün ürünler ortaya çıkardıkları görülmüştür. Bu nedenle araştırmacı, eğitimcilere blok oyun ortamının hazırlanmasının çocukların yaratıcılığını geliştirme açısından önemli olduğunu önermektedir. Üstelik bazı araştırmacılar, erken çocukluk döneminde blok oyunlarına katılmanın önemini vurgulayarak, hayal gücünü geliştirmek, manipülasyon becerilerini geliştirmek, yaratıcı ve dramatik deneyimler için fırsatlar sağlamak gibi çocukların gelişiminin çeşitli yönlerini desteklemedeki rolünü vurgulamaktadır (Pankratz. L.M., 2015; Provenzo ve Brett, 1984; Wilson, 2018). Bloklarla oynamak, aynı zamanda birçok ülkede erken çocukluk eğitim programlarında da önemli bir rol oynamaktadır (Masnipal, 2020). Araştırmalar, çocukların erken yaşlarda yaratıcılığını geliştirmek için sınıflarda blok merkezlerinin önemini vurgularken, bu çalışmanın bulguları, blok merkezi olmayan okul öncesi sınıfların hala mevcut olduğunu ortaya koyar. İki farklı özel okuldan iki öğretmen bu konuda görüşlerini dile getirerek sınıflarında belirli bir yazılı blok merkezinin bulunmadığını ancak materyalleri blok merkezinin düzenine göre düzenlediklerini belirtmişlerdir. Öğretmenlerden biri, sınıfı farklı merkezlere ayırmaktansa esnek olmanın ve sınıfın her alanını kullanmanın kendilerini daha rahat hissettirdiğini paylaşmıştır. Ayrıca okullardaki blok merkezlerinin sayısına bağlı olarak devlet okullarının blok merkezleri aracılığıyla çocukların yaratıcılığını destekleme oranının özel okullara göre daha yüksek olabileceği sonucuna varılmıştır. Literatürde bu konuyla ilgili spesifik bir nedenden söz edilmemekle birlikte, özel okulların bütçe kısıtlılığında ya da blokların çocukların erken çocukluk dönemindeki gelişimlerine önemini yeterince bilinmemesinden kaynaklanabileceği düşünülmektedir.

Mevcut çalışmada, öğrenme merkezleri konseptine benzer şekilde sınıf dışında çeşitli öğrenme alanlarının varlığı da çocukların yaratıcılığını etkileyen bir diğer faktör olarak değerlendirilmiştir. Duffy (2006), farklı öğrenme alanlarının çocukların yaratıcılığını ve hayal gücünü desteklemede oynadığı önemli rolü vurgulamıştır. Milli Eğitim Bakanlığı'nın (MEB) 2013 yılında çıkarmış olduğu okul öncesi eğitim

programına göre sınıflarda ideal olarak blok merkezi, dramatik oyun merkezi, matematik merkezi, fen ve doğa merkezi, sanat merkezi ve kitap merkezi gibi çeşitli öğrenme merkezleri bulunmalıdır çünkü bu öğrenme merkezleri çocukların yaratıcılığını geliştirmek için çeşitli fırsatlar sunmaktadır (Dere, 2019). Ancak öğrenme merkezlerinin bulunmadığı durumlarda bile bazı sınıflarda benzer amaçlara hizmet edecek şekilde tasarlanmış alternatif alanlar bulunduğu gözlemlenmiştir. Örneğin, çoğu sınıfta bir kitap merkezi bulunurken, bazılarında kapsamlı bir kitap koleksiyonu olmadığı fakat sınıftan ayrı alternatif bir öğrenme alanı olan kütüphanede farklı türde kitaplar bulunduğu gözlemlenmiştir. Bu çalışmanın bulgularına göre, devlet okullarından birinde ve özel okulların ikisinde fantezi odaları bulunurken, bu okullarda yer alan sınıflarda dramatik oyun merkezleri bulunmadığı gözlemlenmiştir. Literatürde fantezi oyunu, rol yapma veya taklit oyunu gibi farklı terimlerle ifade edilebilmektedir (Bunce ve Woolley, 2021). Yaratıcılık, yeni şeyler üretme becerisi olarak tanımlanır (Schirrmacher, 2002) ve fantezi aynı zamanda yenilik ve hayal gücü unsurunu da içerir, dolayısıyla yaratıcılık ile fantezi oyun arasında bir ilişki vardır (Bunce ve Woolley, 2021). Ayrıca Russ ve Wallace (2013) çocukların rol yapma oyunu sırasında açık uçlu etkinlikler kullanmaları ve çeşitli amaçlarla yaratıcı çabalarda bulunmaları nedeniyle rol yapma oyununun yaratıcı bir eylem olduğunu belirtmişlerdir.

Sınıf aydınlatmasının yeterliliği de öğrencilerin yaratıcılığını etkileyen bir faktör olarak kabul edilmektedir. Mevcut çalışmada, 7 özel okulun pencerelerinin boyutundan dolayı bol miktarda doğal aydınlatmaya sahip olduğu gözlemlenmişken 9 devlet okulunda pencere büyüklüğü, perde yapısı, pencere önündeki ağaçlar gibi faktörler nedeniyle yeterli doğal aydınlatma olmadığı gözlemlenmiştir. Bu çalışmada, özel okullarda aydınlatmanın yeterli ve kaliteli olduğuna ilişkin bulgular Skinner'ın (2007) fikirleriyle örtüşmektedir. Skinner, sınıf içerisindeki aydınlatmanın kalitesi çocukların etkinliklere katılma ve anlama motivasyonunu etkilediğinden yaratıcı etkinlikler için öğrenme ortamındaki mevcut aydınlatmanın önemini vurgulamıştır. Başka bir çalışma ise, sınıftaki aydınlatma kalitesinin öğrencilerin öğrenme performansını ve üretkenliğini olumlu yönde etkilediğini gösterirken; zayıf aydınlatmanın da öğrencilerin uykulu hissetmesine neden olduğunu ve konulara odaklanmalarını engellediğini belirtmiştir (S.A. Samani ve S.A. Samani, 2012). Rea

ve diğ erleri (2001), uyku/uyanıklık düzenini kontrol etmedeki rolüyle tanınan doğal ışığın önemine dikkat çekmiş ve çalışmaları aynı zamanda ışık, sıcaklık ve hava kalitesinin öğrencilerin öğrenme çıktılarına etkilediğini göstermiştir. Devlet okullarında sınıf aydınlatmasının yeterliliğine ilişkin bulgular negatiftir ve mevcut literatür tarafından da desteklenmemiştir. Bu sonuç, devlet okullarının genellikle eski altyapıya sahip olması veya doğal aydınlatmaya öncelik vermeyen bina tasarımlarına atfedilebilir. Bulgular ayrıca pencerelerin boyutu ve yerleşiminin sınıflara bol miktarda güneş ışığı girmesine izin vermede yetersiz olduğunu da gösterebilir.

Çocukların yaratıcılığını etkilediği düşünölen diğ er bir faktör de sınıfın küçük ve büyük grup etkinliklerine uygunluğudur. Bu çalışmanın sonucu, bir özel okulda yer alan sınıf dışında, hem devlet hem de özel okullardaki tüm sınıfların küçük grup etkinlikleri için yeterli alana sahip olduğunu göstermiştir. Ancak büyük grup etkinlikleri için yirmi sınıftan yalnızca özel okulda yer alan iki sınıfın ve devlet okullarında yer alan altı sınıfın yeterli alana sahip olduğu gözlenmiştir. Bu bulgular göz önüne alındığında, mevcut çalışmanın sonuçlarına ilişkin olası bir açıklama, sınıflarda daha fazla sayıda çocuğ un bulunması olabilir. Her birinde 15-30 çocuğ un bulunduğu 16 sınıf bulunmaktadır ve bunlar tüm sınıfın bir arada çalışması için yeterli alan sağlayamayabilir. Buna karşılık, Hong ve diğ erleri (2009), yaratıcı etkinliklerin işbirlikçi çalışmalardan ve sınıfta yeterli alanın bulunmasından etkilendiğini belirtmiştir. Başka bir çalışma, küçük çocukların işbirliği yapması ve güvenli bir şekilde hareket etmesi için yeterli alanın olması gerektiğini belirterek sınıftaki yeterli alanın önemini vurgulamıştır (Mayesky, 2009). Kettler ve diğ erleri (2021) çocukların konuşarak, işbirliği yaparak ve deneyimleyerek öğrendiklerini çünkü çocukların akranlarıyla işbirliğinin yaratıcılığın gelişmesi için fırsatlar sağladığını belirtmiştir.

Öğrenme ortamındaki mobilyalar, bu mevcut çalışmada okul öncesi çağındaki çocukların yaratıcılığını teşvik eden bir faktör olarak değerlendirilmiştir. Bu çalışmanın bulguları, hem devlet okullarında hem de özel okullarda sınıflardaki mobilyaların genellikle küçük ve kolayca hareket ettirilebilen ve çeşitli düzenlemelere izin veren nitelikte olduğunu göstermiştir. Bu, öğretmenlerin mobilyaların yerleşimini değiştirmesi gerekirse, bunu çocukların ihtiyaçlarına ve

müfredata uygun olarak sınıf içinde yeniden düzenleyebilecekleri anlamına gelmektedir. Bu bulgu, Mishra ve Richardson'un (2018) araştırması ile tutarlıdır. Bu çalışmada yaratıcılığın, öğrenme ortamında bulunan mobilyalar ve fiziksel alandan etkilenildiği bulunmuştur. Başka bir çalışmada da fiziksel ortamın çeşitliliği ve esnekliğinin çocukların yaratıcılığını desteklediğinden bahsedilmiştir (Shafaei, 2017). Ayrıca sınıftaki mobilyalar ile ilgili esneklik, tüm öğrencilerin öğrenme ihtiyaçlarını karşılamak ve çeşitli aktiviteler sağlamaya çalışan öğretmenler için önemli bir araç olduğu belirtilmiştir (Barrett, 2015).

Bu çalışmada, sınıf içerisinde sorgulamaya dayalı öğrenme alanının varlığı çocukların yaratıcılığını destekleyen bir diğer faktör olarak değerlendirilmiştir. Fakat bu çalışmanın sonucu, yirmi sınıftan yalnızca dördünde sorgulamaya dayalı öğrenme alanlarının bulunduğunu göstermiştir. Bu sınıflardan üçü özel okullarda yer alırken yalnızca biri devlet okullarında yer alır. Oysa literatürdeki pek çok çalışma, çocukların yaratıcılığının geliştirilmesinde sorgulamaya dayalı öğrenmenin önemini ortaya koymaktadır. Okul Öncesi Eğitim Müfredatı çocukların doğal meraklarının ve çevrelerini anlamlandırma isteklerinin önemini vurgulamaktadır fakat buna rağmen merak tek başına yeterli değildir. Okul öncesi öğretmenlerinin tutumu, çocuklara araştırma yoluyla öğrenme fırsatları sağlamada çok önemlidir (Michalopoulou, 2014). Bu nedenle yaratıcı eğitim için bilgi ve becerilerin öğretilmesi ile yeniliğin teşvik edilmesi arasında bir denge olmalıdır (NACCCE, 1999). Bu çalışmaya katılan öğretmenlerin 16 sınıf sınıflarında sorgulamaya dayalı öğrenme ortamına yer vermemiş olması, yaratıcılık konusunda aldıkları derslerin niteliği üzerinde düşünmemize yol açabilir. Ayrıca katılımcıların çoğunluğunun 9 yıl veya daha fazla öğretmenlik deneyimine sahip olduğunu da belirtmekte fayda var. Bu nedenle katılımcıların bu konuya önem verip vermediklerini öğretmenlik deneyimleriyle karşılaştırmak doğru olmayabilir.

Bu çalışmanın bir diğer bulgusu, araştırma yapılan devlet okullarından birinde, sınıflarda sorgulamaya dayalı öğrenme ortamları bulunmamasına rağmen, sorgulamaya dayalı öğrenmeye yönelik bilim ve botanik atölyesi adı verilen geniş bir özel öğrenme alanının bulunmasıdır. Ancak bu devlet okulunda çalışan bir öğretmen, sınıf mevcudunun kalabalık olması nedeniyle bu atölyeyi yoğun olarak

kullanamadıklarını belirtmiştir (n=21). Bu sorgulamaya dayalı öğrenme alanını kullanırken bile sınıftaki öğrenci sayısının fazla olması nedeniyle çocuklara bireysel ilgi sağlayamadığını ifade etmiştir. Bu bulgular göz önüne alındığında, mevcut çalışmanın sonuçlarına ilişkin olası bir açıklama, sınıf büyüklüğünün, özellikle araştırmaya dayalı öğrenme bağlamında yenilikçi öğretim yöntemlerinin uygulanmasını ve başarısını etkilemesi olabilir. Bu sonucun bir başka olası açıklaması da yardımcı öğretmenin varlığı olabilir. Özellikle erken çocukluk döneminde 21 gibi öğrenci sayısının fazla olduğu sınıflarda yardımcı öğretmenin bulunması önemli olabilir. Daha büyük sınıflarda bireysel ilgiyi etkili bir şekilde yönetmek ve sağlamak için tek başına bir öğretmen yeterli olmayabilir. Bu bulgu, Ruopp ve diğerlerinin (1979) sınıf mevcutlarıyla ilgili yapmış oldukları çalışmayla tutarlıdır. Onların çalışmalarında, mevcudu az olan sınıflarda yer alan çocukların bilgi, dil ve sosyal davranışlarda daha fazla ilerleme kaydettiği belirtilmiştir. Mevcut çalışmanın bulgusu, Blatchford ve diğerlerinin (2011) yaptığı başka bir çalışmanın bulgularıyla da tutarlıdır. Araştırmalarında, sınıf mevcudunun küçük olduğu ilköğretim düzeyindeki öğrencilerin öğretmenlerinden çok daha fazla bireysel ilgi gördüklerini, bunun da öğrenciler ve öğretmenler arasında daha aktif etkileşimi teşvik ettiği bulunmuştur. Mevcudu az olan sınıfların, öğretmenlere öğrencileriyle bire bir etkileşim kurma fırsatı sağladığı ve öğretmenlerin öğrencilerine daha fazla yarar sağlamak için müfredat farklılaştırması uygulamasına olanak sağladığını göstermiştir (Blatchford ve diğerleri, 2011).

Bu çalışmadaki öğretmenlerin çoğu, yaratıcılığı farklı bakış açılarına, hayal gücüne ve benzersiz, orijinal fikirlere sahip olmak olarak tanımlamıştır. Bu bulgular, diğer araştırmalarla tutarlıdır (Craft, 2011; Schirmacher, 2002; Torrance, 1995). Öte yandan bu çalışmada özel bir okulda görev yapan bir öğretmen, yaratıcılığı problem çözme yeteneği olarak da tanımlamıştır. Yaratıcılığın tanımlanmasında problem çözmek de önemlidir. Yaratıcı süreç araştırmalarında öncü olan Torrance (1995), yaratıcılığın orijinal fikirler üretmeyi içerdiğini ve doğası gereği problem çözme yetenekleriyle bağlantılı olduğunu vurgulamıştır.

Bu çalışmada öğretmenlere kendilerini yaratıcı öğretmen olarak tanımlayıp tanımlamadıkları sorulmuştur. Yirmi öğretmenden 14'ü 'evet' yanıtını verirken, 5'i

'hayır' yanıtını vermiştir ve yalnızca bir öğretmen kendisini kısmen yaratıcı bir öğretmen olarak gördüğünü çünkü zaman zaman açık uçlu etkinlikleri tutarlı bir şekilde kullanmadığını hissettiğini belirtmiştir. Bu çalışmanın bulguları, özel okullarda görev yapan okul öncesi öğretmenlerinin ve devlet okullarında görev yapan okul öncesi öğretmenlerinin genel olarak yaratıcılıklarına güven duyduklarını ortaya koymuştur. Ambrose'un (2005) çalışmasında ise hiçbir öğretmenin tamamen yaratıcılıktan yoksun ya da mükemmel derecede yaratıcı olamayacağı ve öğretmenlerin yaratıcılığına güvenmeden başarılı bir öğretimi hayal etmenin oldukça zor olduğu belirtilmiştir. Ayrıca yaratıcı olduğunu iddia eden öğretmenlerin çocuklarla yaptıkları etkinliklere bakıldığında bu etkinliklerin çoğunun çocukların yaratıcılığını destekleyen niteliklerde olmadığı gözlemlenmiştir. Bu etkinliklerin; önceden tanımlanmış yanıtları olduğu, sınırlı boyama etkinlikleri olduğu ve basit çizim alıştırmalarını içerdiği gözlemlenmiştir.

Bu etkinliklerin dışında bu öğretmenlerin sınıf ortamlarının çocukların yaratıcılığını geliştirecek şekilde tasarlanmadığı da gözlemlenmiştir. Çocukların kendilerini yaratıcı bir şekilde ifade edebilecekleri, deneyimleyebilecekleri, keşfedebilecekleri, sorgulamaya dayalı öğrenmeyi gerçekleştirebilecekleri hiçbir alanın sınıflarda olmadığı gözlemlenmiştir. Ancak kendilerini gerçekten yaratıcı gören iki öğretmenin yürüttüğü etkinlikler incelendiğinde, çocukları düşünmeye ve keşfetmeye teşvik ettikleri ve farklı bakış açılarını kolaylaştıran etkinlikler düzenledikleri görülmüştür. Bu öğretmenlerden biri özellikle çocukların etkinliklerini görünür kılma, düşüncelerini dokümantasyon yoluyla kaydetme ve bunları görünür kılma konusunda ustaca çalışmalar sergilediği gözlemlenmiştir. Etkinliklerin amaç ve hedefleri, çocukların bu öğrenme deneyimlerinde neler söylediği, sürece nasıl dahil olduğu fotoğraf ve notlarla belgelenmiştir. Ayrıca özel bir okuldaki bir öğretmen, çocukluğunda kendisine hiçbir zaman soru sorma fırsatı verilmediği için kendini yaratıcı hissetmediğini belirtmiştir. Ancak öğrencileriyle yaptığı etkinlikler ve çocukların etkinliklerini nasıl görünür hale getirdikleri incelendiğinde, kendilerini yaratıcı gören başka bir öğretmenle benzer içerikler oluşturdukları ve bunu başarıyla yürüttükleri kaydedilmiştir. Sonuç olarak, bu öğretmenin kendisini yaratıcı olarak görmemesine rağmen, öğrencileriyle yaratıcı etkinlikler gerçekleştirmekte olduğu gözlemlenmiştir.

Bulgular, bu çalışmadaki her okul öncesi öğretmeninin, erken çocukluk döneminde yaratıcılığın ne kadar önemli olduğunu vurguladığını göstermiştir. Ancak devlet okullarında görev yapan okul öncesi öğretmenleri, yaratıcılığın okul öncesi dönemdeki yerinin önemini bilmesine rağmen öğrencileriyle yapmış oldukları etkinlikler incelendiğinde çocukların yaratıcılıklarını destekleyen nitelikteki etkinliklerin yapılmadığı kaydedilmiştir. Bu durum öğretmenlerin bilgileri ve düşünceleri ile çocukları meşgul ettikleri faaliyetler arasında tutarlılık olmadığını göstermiştir ve bu araştırma bulguları öğretmenlerin motivasyonu ile ilgili olabilir. Öğretmenlerin teoriye aşina olmasına rağmen pratik uygulama eksikliği buna işaret ediyor olabilir. Bu bulgu, Nazir ve Kurshaid'in (2014) devlet okullarında çalışan öğretmenlerin çocuklar için erken çocukluk eğitiminin önemi konusunda farkındalıklarının olmadığını tespit eden araştırmasıyla tutarlıdır. Ayrıca, bu çalışmada bazı okul öncesi öğretmenleri çocukların beyin gelişiminde yaratıcılığın yerinin önemini vurgulamıştır. Bu bulgu aynı zamanda Nazir ve Kurshaid'in 2014 yılında yapmış oldukları çalışmanın bulgularıyla da uyumludur. Çalışmada çocuğun bilişsel, duygusal ve fiziksel gelişiminde ilk yılların kritik rolü vurgulanmıştır. Bu dönemdeki çevrenin, özellikle çocukların beyin gelişimini etkilediğini ve çocuğun kişiliğinin deneyimlerine ve öğretilerine göre şekillendirildiği vurgulanmıştır (Nazir ve Kurshaid 2014).

Bu çalışmadaki okul öncesi öğretmenleri yaratıcı çocukları; yenilikçi, yaratıcı, dışa dönük, zeki, açık fikirli, problem çözücü, meraklı, enerjik, özgür ruhlu ve araştırmacı olarak tanımlamışlardır. Mevcut çalışmadan elde edilen bu bulgular, önceki araştırmalarla uyumludur (Aljughaiman ve Reynolds, 2005; Andiliou ve Murphy, 2010; Bachtold, 1974; Chan ve Chan, 1999; Runco ve Johnson, 1993, 2002; Zhou ve diğerleri, 2013). Ayrıca iki öğretmenin yaratıcı çocukların kuralları çiğneme eğiliminde olduğunu söylemesi, yaratıcı çocukların uyumsuzluk, dürtüsellik ve yıkıcı davranışlar gibi sosyal açıdan istenmeyen çeşitli özellikler sergilediğini ortaya koyan çalışmanın bulgularını güçlendirmiştir (Runco ve Johnson, 2002; Westby ve Dawson, 1995). Başka bir araştırmada da öğretmenlerin yaratıcı çocuklara yönelik olumsuz bir algıya sahip oldukları çünkü yaratıcı çocukların daha fazla düzeni bozduklarını ve onları sınıfta kontrol etmenin zor olduğunu düşündükleri ortaya çıkmıştır (Scott, 1999).



Bu çalışmadaki okul öncesi öğretmenleri, çocukların yaratıcılığını desteklemenin farklı yollarını belirtmişlerdir. Bazı öğretmenler risk almayı, hata yapmayı, sevgi dolu ve destekleyici ilişkiler kurmayı ve duyguları hakkında konuşmayı teşvik ederek çocukların sosyal ve duygusal ihtiyaçlarını desteklediğini belirtmiştir. Bu bulgular, çocuklar için rahat ve saygılı bir öğrenme ortamının faydalarını ve bu duygusal öğrenme ortamında çocukları risk almaya ve hata yapmaya teşvik etmenin önemini vurgulayan Smith'in (1996) çalışmasıyla tutarlıdır çünkü bu ortam, çocukların fikirlerini rahatça deneme şansı verdiği için önemlidir. Bu nedenle okul öncesi çağındaki çocukların yaratıcılığını daha da geliştirmek için öğretmenlerin, çocukların sosyal ve duygusal ihtiyaçlarını karşılayan, duygusal açıdan destekleyici bir öğrenme ortamı oluşturmaları gerekir. Ayrıca, bu sonuçlar, risk almayı teşvik etmek ve hatalardan öğrenmeyi desteklemek için sınıf topluluğu içinde değerli ve bütünleşmiş hissetmenin önemini vurgulayan Duffy'nin (2006) araştırmasını desteklemektedir.

Bu çalışmanın bir diğer bulgusu ise çocuklara yapı-inşa malzemeleri, açık uçlu malzemeler, artık malzemeler, doğal malzemeler gibi çeşitli malzemeler sunularak çocukların yaratıcılığının desteklenebileceği olmuştur. Bu çalışmada yirmi öğretmenden sadece birkaçı bu materyalleri çocuklara yaratıcılıklarını desteklemek için sağladıklarından bahsetmiştir. Bu bulgular, çocukların yaratıcılığını geliştirmek için çocuklara erişilebilir materyaller sağlanmasının gerekliliğini vurgulayan Dere (2019) tarafından da desteklenmektedir. Mevcut çalışma aynı zamanda öğretmenlerin drama, oyun, kitap ve esnek sanat etkinliklerini çocukların yaratıcılığını geliştirmenin farklı yolları olarak kullandıklarını da göstermiştir. Bu bulgular, drama etkinliklerinin ve oyunun çocukların erken yaşta yaratıcılıklarını geliştirmesine olanak sağladığına değinen Dere'nin (2019) bulgularıyla tutarlıdır.

Bu çalışmada, çocukların kendi fikirleri üzerine düşünmelerinin desteklenmesi de çocukların yaratıcılığını geliştirmede bir başka faktör olarak değerlendirilmiştir. Mevcut çalışma, çocukların beyin fırtınası yoluyla fikirleri hakkında düşünmeye başladıklarını göstermiştir. Al-Blwi'nin çalışması (2006) aynı zamanda beyin fırtınasının çocukları kendi fikirlerini ifade etmeye ve bunları başkalarıyla paylaşmaya teşvik etmek için kullanılan bir strateji olduğunu da göstermiştir. Beyin

fırtınası stratejisi aynı zamanda sorunları çözmeye ve yaratıcı çözümler geliştirme fırsatı da sağlar (Al-Khatib, 2012).

Bu çalışmada çocukların kendi kendine öğrenmesini teşvik etmek çocukların yaratıcılığını geliştirmek için çok önemli bir faktör olarak değerlendirilmiştir. Bu çalışmada beş öğretmen, kendi kendine öğrenmeyi teşvik etmek için çocuklara serbest oyun zamanı sağlamaktan bahsetmiştir. Bu bulgu, yaratıcı potansiyeli araştıran Erikson'un (1968) bulgularıyla uyumludur. Bu, kendini edinme sürecinde farkına varmak ve kendi "Ben" ini bulmakla ilgilidir. Sonuç olarak, okul öncesi çağındaki çocukların oyuna katılmasını teşvik etmek onların inisiyatiflerini geliştirebilir ve onları işbirliği içinde çalışan aktif katılımcılara dönüştürebilir. Oyun, çocukların işi olarak tanımlanır (Papalia ve Olds, 1990) ve oyunun çocukların bilişsel gelişimindeki önemi geniş çapta kabul görür (Howard-Jones ve diğerleri, 2002). Cheung (2018), çocukların bağımsızlığa ve istedikleri şeyi nasıl yapacaklarını seçme özgürlüğüne sahip olduğu oyunun, çocukların yaratıcı düşünme davranışlarını geliştirmek için önemli olduğunu vurgulamıştır. Ayrıca bu çalışmanın bu bulgusu, çocukların yaratıcılığını geliştirmede oyunun önemini vurgulayan başka bir araştırmayla da desteklenmektedir. Oyun sınırsız, kendiliğinden ve önceden belirlenmiş bir yapıdan yoksun olduğunda, farklı sonuçları teşvik ettiğinde çocukların yaratıcı düşünmesini ve hayal gücünü teşvik eder (Ackermann ve diğerleri, 2009).

Serbest oyunla çocukların yaratıcılığını desteklemenin yanı sıra, bu çalışmadaki iki öğretmen çocuklara problemleri kendi başlarına çözmeleri için zaman vermenin çocuklarda kendi kendine öğrenmeyi teşvik ettiğini belirtmiştir. Bu bulgu, aynı zamanda bağımsız problem çözmeyi teşvik etmek için gerçek hayat problemlerinin sınıfa entegre edilmesini savunan Temple ve Rodero'nun (1995) çalışmasıyla da desteklenmektedir. Ayrıca, mevcut çalışmalar, belirsizliğe daha fazla tolerans gösterilmesini teşvik ederek, risk almayı destekleyerek ve öğrencilerin yalnızca zayıf yönlerine odaklanmak yerine güçlü yönlerini vurgulayarak da öz yönetimli öğrenmeyi teşvik etmenin önemini vurgulamaktadır çünkü çocuklara hata yapma fırsatı vermek ve risk almalarına izin vermek, özgüvenlerini artırmaya ve fikirlerini denemelerine imkan tanımaya yardımcı olur (Smith, 1996).

Bu çalışmada, açık uçlu soruların sorulması okul öncesi dönemde çocukların yaratıcılığını destekleyen bir diğer faktör olarak değerlendirilmiştir. Cheung'un (2012) araştırmasının bulgusu, öğretmenlerin öğrenme ortamında çocukların yaratıcılığını desteklemeye yönelik öğretim stratejileri olan açık uçlu sorular sormanın çocukların kendilerini ifade etmeleri, fikir alışverişinde bulunmaları ve çocukların yaratıcı düşünceleri açısından faydalı olduğuna inandıklarını göstermiştir. Öğretmenlerin çoğu, açık uçlu soruların çocukların düşünme becerilerini yaratıcı bir şekilde geliştirdiğine inandıkları için çoğu zaman açık uçlu sorular sorduklarını belirtmişlerdir.

Bu çalışmada, öğretmenlerin çocukların öğrenme deneyimlerinin dokümantasyonunu yapması, portfolyoların öğretmenler tarafından kullanımı ve portfolyolardaki etkinlikler araştırılmıştır. Mevcut çalışmada, yirmi öğretmen arasında aynı özel okuldan sadece iki öğretmenin çocukların düşüncelerini görünür kıldığı gözlemlenmiştir. Öğrencilerin düşüncelerini görünür kılmak, öğrenme sürecini fotoğraflarla yakalamayı ve öğrencilerin öğrenme etkinlikleri sırasında söyledikleri, hissettikleri ve deneyimledikleriyle ilgili notlar almayı içerir. Düşünmeyi görünür kılma yaklaşımı, üründen çok öğrenme sürecine önem verir (Marshall, 1988). Düşünme çoğunlukla zihnimize gerçekleşir ve başkaları tarafından görülmez. Yazmak ve çizmek düşünmeyi görünür kılmaya yardımcı olan yollardandır (Ritchhart ve Perkins, 2008). Bu çalışmanın bulguları, yirmi öğretmen arasında aynı özel okuldan sadece iki öğretmenin çocukların düşünmesini görünür kılmak için dokümantasyon kullandığını göstermektedir. Oysaki dokümantasyon kullanmak, öğrencilerin düşüncelerini görünür kılarak çocukların öğrenme deneyimleri hakkında fikir verir ve çocukların öğrenme süreçleri için önemlidir (Castle, 2012). Bu çalışmanın bulgusu Yılmaz ve diğerleri (2021) tarafından yapılan bir çalışma ile desteklenmektedir. Bu araştırma, Türk okul öncesi öğretmenlerinin pedagojik dokümantasyonun uygulanmasında karşılaştıkları zorlukların anlaşılmasına odaklanmıştır. Çalışma, iki tam gün süren atölye çalışmaları aracılığıyla eğitim alan, farklı erken çocukluk programlarından 22 katılımcıyı içerir. Başlangıçta, katılımcılar pedagojik dokümantasyon uygulamalarına katılmışlar. Ardından, araştırmacı geri bildirim sağlamış ve katılımcılar, pedagojik dokümantasyon aracını öğretim aracı olarak kullanımı üzerine ek geri bildirim oturumları için periyodik olarak ziyaret

edilmiştir. Yılmaz ve diğerlerinin (2021) çalışma bulguları, öğretmenlerin dokümantasyon uygulamalarında bir dizi zorluk yaşadıklarını göstermiş ve bunlar arasında yardımcı öğretmenlere duyulan ihtiyaç, sınırlı finansal kaynaklar ve materyaller, yetersiz ebeveyn ilgisi ve pedagojik dokümantasyon aracını etkili bir şekilde kullanmaya uygun olmayan ortamlar bulunmuştur. Sonuç olarak, bu çalışmada yirmi öğretmen arasında sadece iki öğretmenin dışında herhangi bir dokümantasyon tekniği kullanımı gözlemlenmemiştir. Bu bulgular, Yılmaz ve diğerleri tarafından yapılan çalışma (2021) ile de uyumlu bir şekilde desteklenmektedir. Özellikle, öğretmenlerin dokümantasyon tekniklerini kullanma konusundaki sınırlı eğilimleri, bu alandaki potansiyel ihtiyaçları ve gelişim fırsatlarını vurgulamaktadır. Bu durum, gelecekteki öğretmen eğitimi programları ve pedagojik yaklaşımlar için dikkate değer bir odak noktası olabilir.

Bu çalışmanın bulguları aynı zamanda dokümantasyon tekniği kullanılan sınıflardaki öğrencilerin deneyimlerine ve kendilerine ne kadar değer verildiğini gösterir ve bu da çocukların yaratıcılığını desteklemeye yardımcı olur. Bu fikir, Duffy'nin (2006), çocukların değer verilerek sınıfın bir üyesi olduğunu hissetmeleri, çocuklara yaratıcı olma fırsatı tanıdığını desteklemektedir.

Çalışmanın bir başka bulgusu ise, öğretmenlerin öğrencilerin öğrenme deneyimlerini etkili bir şekilde dokümantasyon ile belgelemediklerini göstermiştir. Öğretmenlerin çoğu, öğrenci etkinliklerini sınıfın ve sınıf dışındaki tahtada, duvarda, kapıda, dolaplarda ve pencerede yani öğrenme ortamının çeşitli yerlerinde görünür hale getirdiklerini belirtmişlerdir. Ancak, çocukların sadece bir veya iki etkinliğinin öğrenme ortamında görünür hale getirildiği ve bu etkinliklerinde genellikle öğrenme sürecini yansıtmayan çalışmalar olduğu gözlemlenmiştir. Bu çalışmada araştırmaya ilişkin dikkat çeken bir diğer bulgu ise, çocukların portfolyolarıyla ilgilidir. Öğretmenlerin çoğu öğrencilerinin etkinliklerini dosyalasa da, ne yazık ki, dosyalardaki etkinlikler incelendiğinde genellikle çocukların yaratıcılığını destekleyen etkinlikler olmadığı gözlemlenmiştir. Portfolyolardaki etkinlikler genellikle çalışma sayfalarına sayı yazma, sadece resim çizme, sınırlı boyama çalışma kağıtları ve kes-yapıştır çalışmalarını içerdiği gözlemlenmiştir. Öğretmenlerden sadece üçünün çocukların yaratıcılığını aktif olarak destekleyen,

onları eleştirel düşünmeye yönlendiren, gözlemsel çizimler yaptıkları, çeşitli materyal kullanımı ve ek kaynaklar içeren etkinliklere yer verdikleri gözlemlenmiştir.

### **SINIRLILIKLAR VE ÖNERİLER**

Bu çalışmada bazı sınırlamalar mevcuttur. Bu sınırlılıklara rağmen bu çalışmanın amacı; bulguları genelleştirmek değil, çocukların yaratıcılığını etkileyen faktörleri dikkate alarak okul öncesi öğretmenlerinin yaratıcılığa ilişkin görüşlerini, bildirdikleri uygulamalarını ve öğrenme ortamının fiziksel koşullarının daha derinlemesine incelemektir. Aynı zamanda, bu çalışmanın sonuçları daha ileri araştırmalar için birçok potansiyel yol açabilir.

Bu çalışmanın bir diğer sınırlılığı ise küçük bir örnekleme yapılmış olmasıdır. Araştırmaya, derinlemesine görüşmeler yoluyla daha çeşitli veriler toplamak amacıyla 20 okul öncesi öğretmeni katılmıştır. Ancak bu konunun daha iyi anlaşılabilmesi için daha geniş örneklemlerle çalışmaların yapılması önerilmektedir. Araştırmanın bir diğer sınırlılığı ise, araştırmacının öğretmenlerin uygulama sırasında yaratıcılığı destekleyen davranışlarını gözleme fırsatına sahip olmamasıdır. Bu nedenle mevcut çalışmada okul öncesi öğretmenlerinin çocukların yaratıcılığını geliştirmeye yönelik çabalarına ilişkin ifadelerinin tutarlılığı, öğrencilerin portfolyolarındaki çalışmalarla karşılaştırılmıştır. Bu nedenle araştırmacılara gözlemsel araştırmalara özel önem vererek ek nitel çalışmalar yürütmeleri tavsiye edilmektedir. Gelecek araştırmalarda öğretmenlerin çocukların yaratıcılığını geliştirmek için kullandıkları tekniklerin gerçek sınıf uygulamalarıyla birlikte incelenmesi ve öğretmenlerin bildirdiği görüşlerle uygulamaları arasındaki tutarlılığın görülmesi anlamlı olacaktır.

Araştırmanın dördüncü sınırlılığı katılımcıların homojenliğidir. Bu çalışmada erkek öğretmen bulunmadığından, cinsiyetin öğretmenlerin yaratıcılık konusundaki görüşleri ve uygulamaları üzerindeki etkisine dair fikir edinmek için erkek öğretmenlerle daha fazla araştırma yapılması önerilmektedir.

Bunlara ek olarak araştırmanın sadece Ankara ilinde bulunan okul öncesi öğretmenleri ile yapıldığı için bu çalışmanın daha geniş bir coğrafi alanı temsil

edecek şekilde tekrarlanması faydalı olacaktır. Farklı geçmişlerden, şehirlerden veya ülkelerden okul öncesi öğretmenleri ile yapılacak daha fazla araştırma daha derinlemesine bilgi sağlayabilir.

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