

EARLY CHILDHOOD PRE-SERVICE TEACHERS'  
DEVELOPMENT OF TEACHING DISPOSITIONS AND PRACTICES

A THESIS SUBMITTED TO  
THE GRADUATE SCHOOL OF SOCIAL SCIENCES  
OF  
MIDDLE EAST TECHNICAL UNIVERSITY

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR  
THE DEGREE OF DOCTOR OF PHILOSOPHY  
IN  
THE DEPARTMENT OF ELEMENTARY EDUCATION

SEPTEMBER 2016



Approval of the Graduate School of Social Sciences

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## **ABSTRACT**

### **EARLY CHILDHOOD PRE-SERVICE TEACHERS' DEVELOPMENT OF TEACHING DISPOSITIONS AND PRACTICES**

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September 2016, 210 pages

Knowledge and skills are necessary to teach a specific subject for a teacher but they do not assure effective implementation without possession and teacher education stakeholders must take into account all components of the teaching process, including pre-service teachers' professional teaching disposition. (Almerico, Johnston, Henriott & Shapiro, 2011). The current study aimed to explore the changes in the development of perceived dispositions of pre-service Early Childhood Education influenced by student teaching experience. A framework of convergent mixed methods research design was used as a guide to collect the data of study. The participants were 86 pre-service teachers from the Department of Early Childhood Education at a public university in Ankara, 14 university supervisors responsible for the student teaching experience, and 86 cooperating teachers from public and private schools who were assigned to pre-service teachers during their student teaching experience.

The results of the study showed that pre-service Early Childhood Education (ECE) teachers' perceived dispositions increased after their student teaching experience. To validate the outcome of the student teacher results, Teacher Disposition Index,

which was applied to the pre-service teachers, was conducted with both the cooperating teachers of the pre-service ECE teachers and their university supervisors; and both cooperating teachers' and university supervisors' evaluations showed that pre-service ECE teachers' teaching dispositions increased after the student teaching experience. The findings of the study have implications for pre-service teachers and teacher education program stakeholders in recognizing the importance of disposition development through student teaching experience.

**Keywords:** Disposition, Teaching Disposition, Assessment of Disposition, Pre-service ECE Teachers, Student Teaching Experience

## ÖZ

### OKUL ÖNCESİ ÖĞRETMEN ADAYLARININ MESLEKİ YATKINLIK GELİŞİMLERİ VE UYGULAMALARI

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Eylül 2016, 210 sayfa

Öğretmen adaylarının etkili birer öğretmen olarak yetiştirilebilmeleri için öğretmen yerleştirme programlarına dahil olan kişi ve kurumların öğretmen adaylarının tüm süreçlerini dikkate almaları gerektiği ve en önemlisi öğretmen adaylarının mesleki gelişimlerinde mesleki yatkınlıklarının ele alınması dikkate önemli bir husustur(Almerico, Johnston, Henriott & Shapiro, 2011). Bu çalışmanın amacı, eğitimine okul öncesi öğretmenliği bölümünde devam eden öğretmen adaylarının öğretmenlik uygulama deneyimlerinde kazanmış oldukları tecrübeler sonucunda mesleki yatkınlıklarındaki değişimi incelemektir. Bu amaca yönelik veriler toplanırken öğretmen adaylarının öğretmenlik uygulamalarında kazandıkları tecrübelerin onların mesleki yatkınlıklarına olan etkisini detaylı olarak anlayabilmek için yakınsayan paralel karma yöntem kullanılmıştır. Bunun için 86 Okul öncesi öğretmen adayından nicel ve nitel veriler toplanmıştır, öğretmen adaylarından toplanan nicel verileri doğrulayabilmek adına 86 mentor öğretmen ve 14 üniversite danışmanından da öğretmen adaylarının değerlendirilmesi istenmiştir.

Veri analiz sonuçlarına göre, öğretmenlik uygulamaları sonrasında okul öncesi öğretmen adaylarının mesleki yetkinliklerinin arttığı görülmüştür, mentor öğretmenlerden ve üniversite danışmanlarından toplanan verilerin analiz sonuçları da bu artışı doğrulamıştır. Bu çalışma sonucunda, öğretmen adaylarının etkili birer öğretmen olarak yetiştirilebilmeleri için öğretmen yerleştirme programlarının temel amacının öğretmen adaylarını bilgi ve becerilerle donatarak nasıl öğretim yapmalarını öğretmek olmasının yanı sıra, öğretmen adaylarının mesleki yetkinliklerini arttırmayı da temel amaç olarak ele almaları önerilmiştir.

**Anahtar Kelimeler:** Yetkinlik, Mesleki Yetkinlik, Mesleki Yetkinliğin Değerlendirilmesi, Okul Öncesi Öğretmen Adayları, Öğretmenlik Uygulamaları Deneyimi

To my parents: Ali and Ayşe Buldu...

To Levent Buldu, Hatice Buldu and Yasemin Dereli...

To Elif Buldu and our little princess...

## ACKNOWLEDGEMENTS

The completion of this dissertation has been a long process and I would like to take this opportunity to thank to the people who have helped me on this way. I would like to extend my sincere gratitude to my supervisor Assoc. Prof. Dr. Feyza TANTEKİN ERDEN for her invaluable guidance, encouragement, motivation and mentoring for many years. Also, I would like to thank my dissertation committee members, Prof. Dr. Cennet ENGİN DEMİR, Assoc. Prof. Dr. Çiğdem HASER, Assist. Prof. Dr. Arif YILMAZ, and Assist. Prof. Dr. Şenil ÜNLÜ ÇETİN.

I would like to my family because of their endless love and support. Thank you to my dear parents, Ali and Ayşe BULDU, for always encouraging me to set future goals, I am always honored to be your son. And my elder sisters and brother, Yasemin, Hatice and Levent BULDU for your encouragement and support during my education life. I would like to thank to Assoc. Prof. Dr. Mehmet BULDU, my cousin, for sharing his ideas about topic selection, recommendation and encouragement during phases of my study. Also, I would like to thank to my parents-in law Fevzi and Müzeyyen KAYA for their encouragement and support.

I can never forget my friends, Ümit GÜNER, Tuba EREN, Ahmet YAPAR, Evren ŞUMUER, Murat ÖZKAPTAN, Fatih and Özden ÖZKANOĞLU, Çağla and Halil ŞENDİL, and Bilgi and Ayşenur YILMAZ and would like to express my thanking for their friendship and emotional support to keep me on this path I have just completed. Thanks for being my friend.

Also, I must express my deepest gratitude to my wife, Elif BULDU, who stayed with me at every stage of this study and for providing me with limitless support and continuous encouragement. And lastly, I would like thank to my unborn princess who became a source of motivation for me with her mother.

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## CHAPTER I

### INTRODUCTION

Early childhood education (ECE) means strengthening young children through skills, knowledge, and values to develop the necessary reasoning ability and ability of judgment to live in a harmony with themselves, their families and the social and global environment in which they live (Elliot, 2002). For this reason, many countries pay extra attention to increasing the quality of early childhood programs. The female population in the workforce have increased due to economic changes and children need to be cared for by caregivers or in early childhood education institutions. This change also increased the number of early childhood education institutions. An old Chinese proverb, "Good teachers make strong nations," states the importance of the effectiveness the early childhood teachers, as they will provide the initial influence in the lives of children (Carol & Nita, 1990).

As the importance of early childhood learning has been recognized in Turkey, more attention has been paid to early childhood education by the government. The increasing provision of ECE in Turkey affected the increased numbers of early childhood teacher education programs in universities. Due to the developing consciousness that education is the most powerful tool for enhancing children's quality of life (Woodhear, 2000), the belief is that it is important, even essential, to provide quality early childhood programs for the future generations of Turkey.

Previous research studies (Midgley & Urdan, 2001; Pianta, 1999; Roeser, Eccles & Sameroff., 2000; Raider-Roth, Rodgers & Carol, 2006) have asserted that the quality of interaction between a teacher and his or her students is an indicator of student achievement, motivation, and engagement. The quality of this relationship and the

students' choices of how much they enjoy learning from different teachers do not depend on the teachers' knowledge or pedagogical skills; rather, it is due to how teachers interact with their students. Teacher characteristics, their relationships with students, their beliefs, attitudes, values, and philosophies are all components of teacher dispositions; and, these dispositions are critical components of effective teaching (Harper & Morris, 2008).

Think of two questions that could be asked of you by one of your friends: "Can you play the violin?" "Do you play the violin?" You can answer the first question with a "yes", and the second question with a "no". Replying "yes" to the first question means that you have ability to play the violin when you take it in your hand, but the second question is an implicitly asked question that intends to ask about your tendency to play and whether you are disposed to play the violin or whether you like to play it regularly. Having ability to play the violin does not ensure that one has the disposition to play it, just as having certain knowledge and skills does not mean that the person will use them. To use knowledge and skills effectively, the person should have certain dispositions. Harper and Morris (2008) defined dispositions as; the way an individual feels about and responds to daily events, and they also have a strong impact on the effectiveness of an early childhood teacher and his or her practice" (p.1).

There are various other definitions of dispositions. Katz (1993) defined disposition as "a pattern of behavior exhibited frequently and in the absence of coercion, constituting a habit of mind under some conscious and voluntary control, and that is intentional and oriented to broad goals" (p.10).

Wasicko (2002) asserted that teaching dispositions have an important role on the quality and effectiveness of the teacher, as do teachers' pedagogical and content knowledge/skills. For Wasicko, dispositions are attitudes, perceptions, and beliefs that form the basis of behavior, and he believes that dispositions lie inside people and it is not possible to measure dispositions directly. The Interstate New Teacher

Assessment and Support Consortium (InTASC) is a consortium in the United States that creates standards for new teachers to guide their preparation and professional development. InTASC has developed ten principles that address expected knowledge, skills and critical dispositions from teacher candidates. In the InTASC standards, critical dispositions are defined as “habits of professional action and moral commitments that underlie the performances [that] play a key role in how teachers do, in fact, act in practice” (InTASC, 2011, p. 6). Based on these principles, many researchers have conducted studies to assess pre-service and in-service teachers’ dispositions (Schulte et al., 2004; Keiser, 2005; Frederiksen, 2010; Taylor, 2010).

The National Council for the Accreditation of Teacher Education (NCATE) defines dispositions as; “values, commitments, and professional ethics that influence a teacher’s behavior toward his or her students, families, colleagues, and community” (NCATE, 2006, p.89). According to NCATE (2006), values such as fairness, responsibility, caring, social justice, and honesty which are related to attitudes and beliefs guides an individual’s dispositions; and these dispositions have an effect on teachers’ professional growth and also they affect the development, learning, and motivation of students.

Dispositions in teacher preparation are crucial because the “disposition to teach” is commonly identified as the primary quality of successful teachers (Taylor & Wasicko, 2000), and addressing dispositions in teacher education programs is an essential element of the preparation process of pre-service teachers. In this process, university supervisors and cooperating teachers play a critical role in growing up teachers; university supervisors and cooperating teachers observe, evaluate and provide feedbacks to the student teachers about their implementations in the field experience sessions. Taylor and Wasicko (2000) also stated that it is crucial for teacher educators to be conscious of the dispositions of quality teachers, so as to organize experiences that will help pre-service teachers to develop these characteristics and help them to realize if they have the “disposition to teach.” Katz

and Raths (1985) argued that “the goals of teacher education programs should include a class of outcomes called professional dispositions” (p. 301). This shows that attempts to construct dispositions in teaching and teacher education are not new. NCATE (2006) standards require that professional education programs prepare candidates who can apply their knowledge, skills, and professional dispositions in a manner that facilitates student learning. As stated by Schulte, Edick, Edwards, and Mackiel (2004), the situation that the pre-service teachers have content knowledge and skills related to pedagogy but lack the essential dispositions to teach is undesirable and difficult for teacher educators. Because, as Cantor (1990) stated, content knowledge and pedagogical skills alone are not enough-the manner or the way in which a teacher shares these skills and knowledge are also an important aspects of effective teaching.

Upon review of disposition assessment studies, it was observed that there were some variables addressed by researchers investigating teachers’ demographic information and their relation with disposition development. When viewed from this aspect, some variables were examined, such as age, school setting, grade level and teaching experiences. For instance, an age variable was investigated by Keiser (2005) to reveal its relationship with disposition development. On the other hand, setting was handled in the study of Frederiksen, Cooner and Stevens (2012), and they stated that setting, in which pre-service teachers play a part, makes a difference in their preparedness. Moreover, Mueller and Hindin (2011) stated that grade level is another important variable while assessing disposition development of pre-service and in-service teachers. Similar to grade level, the duration of the field experience of pre-service teachers was seen as another important variable while assessing pre-service teacher dispositions (Cole, 1995).

## **1.1 Statement of the Problem**

In previous decades, people working as teachers in early childhood programs had generally graduated from vocational high schools in Turkey, but in the last 10 years, the number of teachers graduating from early childhood education undergraduate programs has increased. Teacher quality started to become an important issue for the field because it is believed that teacher inputs have impacts on student outcomes; therefore, the country started to open courses in early childhood teacher education programs that educate pre-service teachers in professional development, pedagogical knowledge, and skills so that they would have quality teaching dispositions (NCATE, 2002). The quality of effective teachers' dispositions affects the quality of education; for this reason, examining the dispositions of pre-service early childhood education teachers is important research for enhancing the pre-service early childhood education teachers' development of meaningful skills and attitudes toward the field.

## **1.2 Purpose of the Study**

Each of us, as students, teachers, or teacher educators, have attended many courses, and we have witnessed that some of our teachers were very knowledgeable in their professional area, had classroom management skills, and knew how to teach. However, other teachers that we have had went through all the processes, but learning was not taking place, and we felt that there was just something missing. This missing ingredient may be something that distinguished the effective teacher from the ineffective one. The answer to the question, "Given the necessary knowledge and skills, what disposes a person to be an effective teacher?" lies in that singular concept adopted by professionals in teacher education: dispositions (Knopp & Smith, 2005, p. 2).

This study investigated the change whether the development of the perceived dispositions of pre-service early childhood education teachers was influenced by their student teaching experience. Specifically, this study sought to answer the following research questions:

**RQ1.** Is there a change in pre-service ECE teachers' disposition scores before and after their student teaching experience?

**1a.** Do pre-service ECE teachers' perceived dispositions differ in terms of their dispositions before and after their student teaching experience according to their age groups?

**1b.** Do pre-service ECE teachers' perceived dispositions differ in terms of their dispositions before and after their student teaching experience according to private and public school settings?

**1c.** Do 3rd year and 4th year pre-service ECE teachers differ in terms of their dispositions before and after their student teaching experience?

**1d.** Is there a difference in pre-service ECE teachers' dispositions according to the number of their student teaching experiences?

**RQ2.** Is there a change in cooperating teachers' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after the student teaching experience?

**RQ3.** Is there a change in university supervisors' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after the student teaching experience?

**RQ4.** Is there a change in pre-service ECE teachers' disposition scores after the student teaching experience on the basis of InTASC principles and disposition indicators?

**RQ5.** Is there a change in cooperating teachers' perceptions of pre-service ECE teachers' demonstrated dispositions after the student teaching experience on the basis of InTASC principles and disposition indicators?

**RQ6.** Is there a change in university supervisors' perceptions of pre-service ECE teachers' demonstrated dispositions after the student teaching experience on the basis of InTASC principles and disposition indicators?

**RQ7.** How do pre-service ECE teachers define "teaching disposition"?

**RQ8.** What evidence do pre-service ECE teachers provide to demonstrate the development of their teaching dispositions after their student teaching experience?

### **1.3 Significance of the Study**

Knowledge and skills are necessary for a teacher to teach a specific subject, but they do not assure an effective implementation without possession (Almerico, Johnston, Henriott & Shapiro, 2011). The ways that teachers share knowledge with students in the classroom and the way in which student learning is supported or led in a learning environment touch on the importance of assessing dispositions. To acquire the whole picture of a student teacher's teaching effectiveness, teacher education stakeholders must consider all components of the teaching process (Almerico, Johnston, Henriott & Shapiro, 2011), including the student teacher's professional teaching dispositions.

Although the focus of teacher education program is to teach teacher candidates and their knowledge and skills for effective instruction, developing and enriching teacher

candidates' teaching disposition is one of the main outcomes of the teacher education program for their professional practice and decision-making during their careers (Renzaglia, Hutchins, & Lee, 1997). The assessment of the professional teaching dispositions of pre-service teachers can be used to monitor to document the evidence of undesired dispositions of teacher candidates can provide early intervention advantages to teacher educators (Dee & Henkin, 2002).

In the light of the reviewed literature, disposition is recognized by researchers as an integral part of effective teacher education programs because early childhood education pre-service teachers start teacher education programs with their own educational experiences from elementary and high schools (Wasicko, 2007). During their elementary and secondary education years, they all expected to develop many opinions, beliefs, attitudes, and values about schooling. However, even though these beliefs, attitudes, and values are still critical, they are not enough to become high quality teachers; thus, they continue to build on these characteristics in their teacher education programs. Therefore, it is imperative that teacher education programs provide opportunities for pre-service teachers to develop the necessary dispositions to be effective teachers in the future.

Understanding the professional dispositions of early childhood pre-service teachers can assist ECE faculty in facilitating pre-service teachers' critical thinking about the knowledge and skills to which they are being exposed. Inquiring about these dispositions can provide ECE programs with precious information as they observe pre-service teachers trying to infer about what they are learning.

Furthermore, the results of this study, obtained from pre-service teachers' dispositions assessments, have implications for pre-service teachers. The findings of this study will help pre-service teachers to recognize who they are and what they believe, which will also have a long-term effect on their future careers and their future students. Developing the habit of thinking like a teacher while they are in

university rather than waiting until they start to teaching (Rike and Sharp, 2008) will help them become an effective teacher. Reflecting and acting on their professional teaching dispositions effectively will allow pre-service teachers to move toward becoming master, expert teachers. Moreover, such self-reflection allows pre-service teachers to clarify meaning of their present and past experiences, to be think over and to question their teaching dispositions and practices (Risko et al., 2002). In this regard, the current study investigated and described the change whether the development of perceived dispositions of pre-service early childhood education teachers were influenced by student teaching experience. The results of this study will contribute to teacher education programs to make sure their programs cover not only content knowledge and pedagogical skills of teacher candidates, but also their teaching disposition skills such as attitudes, beliefs, opinions, attitudes, and values.

#### **1.4 Definition of Terms**

Definitions of terms included in the text of this study are included to help readers to understand the terms clearly. With these definitions, readers of the current study will understand exactly what was meant when these key terms are used in the context.

*Pre-service Teacher:* University students who have enrolled in a teacher education program and have not yet completed their training to be a teacher.

*Disposition:* “A disposition is not some sort of a thing or mysterious unobservable property of a thing; rather, it is a concept that has its use in predictive statements. To ascribe a disposition to something or to someone is to say that the individual has a tendency to behave in certain ways when certain conditions are realized” (Ryle, 1949, p.32).

*Teacher Dispositions:* “Professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students,

families, colleagues, and communities. These positive behaviors support student learning and development” (NCATE, 2008, p.89).

*InTASC*: The Interstate Teacher Assessment and Support Consortium (InTASC) is a consortium of state education agencies and national educational organizations dedicated to the reform of the preparation, licensing, and on-going professional development of teachers (InTASC, 2011).

*NCATE*: The National Council for Accreditation of Teacher Education (NCATE) is the profession’s mechanism to help establish high quality teacher preparation. Through the process of professional accreditation of schools, colleges, and departments of education, NCATE works to make a difference in the quality of teaching and teacher preparation today, tomorrow, and for the next century (NCATE, 2008).

*Teacher Dispositions Index (TDI)*: A quantitative survey instrument developed by Schulte et al. (2004) to measure the dispositions of effective teachers and items of the survey tool are aligned with InTASC’s (1992) 10 principles.

*Student Teaching Experience*: Any time that a teacher candidate spends participating in a classroom with a mentor teacher and students. In this study, this definition includes both the practicum experience and student teaching (Frederiksen, 2010).

*University Supervisor*: The faculty member of a university who works with the pre-service teachers and cooperating teachers and who observes, evaluates, and provides feedback about the student teachers’ field experience plans and implementations.

## **1.5 Assumptions and Limitations**

The current study used a convenience sampling method and the participants were 86 pre-service ECE teachers, 86 cooperating teachers, and 14 university supervisors. It is assumed that the participants were honest in their self-assessment of their dispositions, and their reflection journals include real classroom stories.

Due to the sample size, the researcher did not make a generalization to a larger population of other teacher education programs. The results of the current study will be beneficial to other teacher education programs in identifying their teacher candidates' teaching dispositions, and this study may be replicated by other researchers.

This study also assumed that pre-service teachers can learn teaching dispositions through a combination of coursework in their teacher education program and student teaching experience in the field in order to transfer those dispositions effectively to their own classrooms in the future.

## **1.6 Summary of Chapter 1 and Preview of Additional Chapters**

The introductory chapter represents an overview of the current study, including a description of the statement of the problem, the statement of the problem, the purpose of the study, the research questions, the significance of the study, the definitions of terms, and the assumptions and limitations of the study. Chapter 2 reviews the literature, includes the history of dispositions, the definitions of dispositions, standards for professional development, and the assessment of dispositions with empirical research studies. The next chapter, methodology, includes a description of the research approach, research design, research questions, participants of the pilot and the main study, the data collection instrument, the adaptation process of the instrument, data collection types, data analysis used for

the study, and the internal and external validity of the study. Chapter 4, which analyzes the study's results, will delineate the findings of the collected data in detail. The quantitative and qualitative findings of the study are presented, as are the findings for each research question of the study. Chapter 5, which includes the conclusion and discussion, presents a summary of the findings and a discussion of the findings for each research question, a discussion of the reviewed literature along with the findings of the study. The final chapter includes the implications for further studies of dispositions.

## CHAPTER II

### LITERATURE REVIEW

Early childhood education is a period that provides young children an opportunity to develop attitudes and values that form the basis of their personalities because the values and attitudes developed in early years make strong and persistent roots for an individual's whole life (UNESCO, 2008). Research across several decades has shown that the earlier children start their education, the better they will perform in their entire education and this will provide more productive members to the society (NAEYC, 2005). From these perspectives, research shows that early childhood education is beneficial for young children because children have a rapid learning rate and have an insatiable desire for new information; they learn routines and expectations, which helps them build a structure for their future school careers and their entire lives (NAEYC, 2005). When children attend an early childhood education program, it helps them to develop social skills and they learn how to interact and relate with others. As research conducted in the last decades has accepted early childhood education as beneficial for children, we cannot say that all early childhood institutions supply quality education to young learners. However, children who are attending high-quality early childhood education programs benefit from it.

Quality in early childhood education is an indefinable concept that has been argued about by researchers all over the world, but, in general, two generally accepted indicators are stated as major topics of quality: structural factors and process quality, which are accepted features of a high quality early childhood education programs (Howes et al., 2008; Fler, 2000). Structural factors refer to the physical environment, curriculum, staff qualifications, program content and adult to child ratios (Ishimine, 2011). Structural factors are complemented with process quality, which refers to

staff-child interaction, staff communication, peer interaction, and clear communication with families (Dowsett et al., 2008; Ishimine et al., 2009). Both structural factors and process quality standards are generally determined by a country's department or ministry of education. However, being a high quality program not only depends on support from the government, but also depends on skilled staff and their personal qualities, which affect quality (Rowe, 2003). When we look at the structural factors and process quality, teachers are the most prominent complement of the quality of an early childhood education program because all the quality ingredients of a program are used and shaped by the teachers.

In this case we can say that the most important part of a high-quality early childhood program is qualified teachers, because all the components of a program are manipulated by the teachers, and it is important to consider what teacher candidates should have in their professional development. The Ministry of National Education (MoNE) of Turkey has standards about teacher competencies, which are important for effective and efficient teaching. The competencies were defined by MoNE (2006) as "knowledge, skills and attitudes required to perform the teaching profession effectively and efficiently" (p. vii).

Because there is a push for quality teachers in schools, teacher education programs focus on to grow high quality teachers and when studies from previous decades regarding the characteristics of effective teachers were considered, it can be seen that these studies usually focused on some aspects of teacher knowledge, pedagogical skills and dispositions (Taylor & Wasicko, 2000).

Ros-Voseles and Fowler-Hughey (2007) make the point that characteristics and dispositions are frequently used interchangeably and referred to in the same terms, but in fact they are not the same. They stated that skills such as "being organized," "having command of the classroom," and "asking probing questions," are teacher dispositions but not characteristics. Effective teaching involves more than effective

planning, instructional knowledge, and teaching skills (Ros-Voseles & Moss, 2007). Cantor (1990) stated that “having [is] not the same as doing,” which means that a teacher can have both knowledge and skills but without disposition he or she cannot make use of them. Experience of early childhood teachers enhances both the quality of the program and interactions with children and the researchers. Ross (1986), Singh (2006), Doppen (2007), and Mckinney et al. (2008) have found that the student teaching experience as the most important aspect of teacher education.

Mark Wasicko, who is the director of the National Network for the Study of Educator Dispositions, stated that dispositions are a lot more important than many people realize (NNSSED, 2009). There are several research studies on effective teaching and the goals of these studies were nearly the same: to discover the teacher behaviors that promote student performance, and Interstate New Teacher Assessment and Support Consortium (InTASC) specified dispositions of effective teacher principles under their Model Standards for Beginning Teacher Licensing and Development (CCSSO, 2011). The National Association for the Education of Young Children (2005) stated that dispositions are defined through all teaching staff continuously strengthening their leadership skills and relationships with others and works to improve the conditions of children and families within their programs, the local community or region, and beyond. Teaching staff participate in informal or formal ways in local, state, or regional public-awareness activities related to early care by groups, attending meetings, or sharing information with others, both in and outside the program (NAEYC, 2005).

## **2.1 History of Disposition**

In addition to defining the constructs of the disposition concept, looking at the history of the term *disposition* can provide comprehensive ideas about its development. In the literature, the term *disposition* was first used by Arnstine in 1967. However, in the field of education, this term was not used until the mid-80s. In 1985, Katz and

Raths used the term disposition and identified its aim in teacher education. Along with the use of the term disposition, scholars began to discuss not only attitude and behavior relationships, but also disposition was discussed in teacher education. The need for searching for a new term arose from the lack of connection between attitude and behavior in teacher education (Cook, 1992). According to Katz and Raths (1985), there is a strong connection between teachers' dispositions and their actions. This shift in the terms was very quick compared to other teacher education changes because it was included as one of the InTASC standards nearly seven years after disposition was introduced (Katz & Raths, 1985). In 1990s, the concept of disposition became apparent in the United States due to these standards being included in professional standards for teacher education (Stooksberry, Schussler & Bercaw, 2009).

These developed InTASC principles were important for the disposition concept and candidate teachers' performance. Ten years later, the definition of disposition was included by NCATE. NCATE (2002) defined disposition as a belief that guides teachers' behaviors and also affects student learning. However, over a long period of time, educators were not sure how to assess candidate teachers' dispositions because of the ambiguity of the definition of disposition (Freeman, 2007). After a series of revisions, InTASC released a new set of standards in 2011. The major differences between the two sets of standards were very simple. Although the previous model standards focused on the knowledge, skills, and dispositions of new teachers, the 2011 model InTASC standards emphasized the knowledge, skills, and dispositions of all teachers (Buchner, 2013). However, the new sets of standards did not refer to critical disposition to serve as checklist behaviors, therefore in 2011, InTASC's standards had not provided an appropriate and specific list of behaviors for candidate teachers' assessment and development.

According to the accreditation standards of NCATE (2008) disposition should be assessed systematically based on observable behaviors in educational settings.

Defining the constructs of disposition is necessary for assessing teacher candidate disposition because there are several definitions in the field. At least, researchers and educators have agreed that disposition is an internal filter for teachers and this filter is shaped by an individual's culture, prior experiences, beliefs, and cognitive abilities. According to Stooksberry, Schussler and Bercaw (2009), candidate teachers become easily aware of their disposition when they review how their pre-existing ideas affect their teaching. Moreover, Meidl and Baumann (2015) stated that disposition is an important concept in teacher education because many students are encouraged to think about their actions and ideas. Today, although there is still little consensus about the definition of disposition, educators mostly define it as the observable behaviors of teachers manipulated by their own beliefs and values. Meidl and Baumann (2015) asserted that the definition of disposition can change from program to program. For this reason, NCATE avoided providing a specific definition of the term disposition.

## **2.2 Definition of Disposition**

The literature declares various definitions of dispositions. The most generally accepted definition was developed by NCATE (2008), which defined disposition as a guide for many teacher educators as “professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities. These positive behaviors support student learning and development. NCATE expects institutions to assess professional dispositions based on observable behaviors in educational settings” (p. 89). Although today, this definition is still the most common definition among contemporary researchers in the field of education, the development of the definition of disposition has undergone a long process. This process is broadly presented below, year by year, with the definitions of the researcher.

**Observable Property Perspective:** When the literature was reviewed, the initial definition of disposition was defined by Arnstine (1967). The researcher sees disposition as an “*observable property*,” which is represented through a person’s abilities and actions, and he defines disposition as “not some sort of a thing or mysterious unobservable property of a thing; rather it is a concept that has its use in predictive statements. To ascribe a disposition to something or to someone is to say he has a tendency to behave in certain ways when certain conditions are realized. Ascribing a disposition, then, allows for the making of a prediction, although it may also be used as a sort of explanation” (p. 32). In a similar manner, Buss and Craik (1983), who viewed dispositions as a summary of acts that may be habitual (Taylor, 2010), defined dispositions as “summaries of act frequencies” (p. 105). Based on Buss and Craik’s definition, Katz and Raths (1985) defined dispositions as “an attributed characteristic of a teacher, one that summarizes the trend of a teacher’s actions in particular contexts” (p. 301). Katz (1993) declared that disposition is a term which is used to determine behavior categories, and she compared dispositions with traits, dispositions with skills, and dispositions with habits. According to Katz, traits are related to a person’s emotions, but disposition is a tendency of a person’s acts; she stated that a person can have skills, but requisite dispositions are needed to use those skills. Moreover, later on, many of the researchers defined dispositions based on teachers’ subsequent behaviors (Ritchhart, 2002; Schussler, 2006; Eberly, Rand & O’Conner, 2007; Wasicko, 2007; Shiveley & Misco, 2007; Burant et al., 2007; Villegas, 2007).

**Personal Qualities Perspective:** On the other hand, some of the researchers defined disposition based on the teachers’ personal qualities perspective. One of the definitions was created by Taylor and Wasicko (2000). The researchers defined dispositions as “personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, values and modes of adjustment” (p. 2). Cudahy, Finnan, Jaruszewicz, and McCarty (2002) also defined dispositions as the “teachers’ internally held and externally exhibited attitudes,

commitments, values, and ethics.” Weiner and Cohen (2003) defined dispositions as “one’s personal qualities or characteristics including attitudes, beliefs, interests, values and coping styles; determiners of behavior, constellations of personal meanings from which behaviors spring” (p. 1). Moreover, Damon (2007) also defined the development of disposition based on the teachers’ characteristics and personal choices.

***Habits of Mind Perspective:*** Sockett (2006) viewed dispositions as “the professional virtues, qualities and habits of mind and behavior held and developed by teachers on the basis of their knowledge, understanding and commitments to students, families, their colleagues and communities” (p. 23). Thornton (2006) defined dispositions as “habits of the mind including both cognitive and emotional characteristics that filter one’s knowledge, skills, and beliefs and impact the action one takes in the classroom or professional setting” (p. 62).

As seen from the definitions of disposition presented above, it can be concluded that there are multiple definitions of dispositions. Different perspectives formed these definitions year by year, such as the perspectives of observable behaviors, personal qualities, and habits of mind. However, most of the researchers in the field of education have agreed that dispositions are tendencies to behave in a particular manner and they are used for the prediction of future actions, and it also seems that most researchers have agreed on the importance of dispositions for teacher education programs to train effective future teachers.

### **2.3 Professional Organizations’ Standards**

It is important to consider what teacher candidates should have in their professional development. The Ministry of National Education has standards for teacher competencies named “Generic Teacher Competencies,” which are developed to identify the task definitions of teachers and determining clear objectives for their

professional development (MoNE, 2006). Generic Teacher Competencies were defined by MoNE (2006) as the “knowledge, skills and attitudes required to perform the teaching profession effectively and efficiently.”

The generic teacher competencies of Turkish National Education have six main competencies, 31 sub-competencies, and 233 performance indicators (MoNE, 2006, p. xii).

1. “Personal and Professional Values-Professional Development”
2. “Knowing the Student”
3. “Learning and Teaching Process”
4. “Monitoring and Evaluation of Learning and Development”
5. “School-Family and Society Relationships”
6. “Knowledge of Curriculum and Content”

Although the Turkish Ministry of National Education does not have standards specified as dispositions, the determined competencies include the criteria for teacher professional development and these main criteria also have subcriteria and indicators related to teaching dispositions, but there is not a specific framework for teaching dispositions for professional development.

NCATE and InTASC have well-known and much-used standards for teaching dispositions, and both NCATE and InTASC standards suggest that teacher education program members should make sure that teacher candidates have the desired knowledge, skills, and dispositions for being effective teachers (NCATE, 2008; InTASC, 2011).

NCATE (2008) provides standards for teacher candidates to have professional dispositions. Teacher education programs that used NCATE standards were mandated to evaluate student teachers’ disposition development based on

observable behaviors in educational settings as emphasized in NCATE's definition of dispositions. The inclusive goal of NCATE's assessment of the dispositions of pre-service teachers is to provide well-educated teachers for children (NCATE, 2002).

InTASC, one of the subcomponents of the Council of Chief State School Officers (CCSSO), also developed standards for teachers. InTASC (2011) established 10 standards about what teachers should know and how teachers should promote each student's learning. Each standard encompasses descriptions of essential knowledge, related performance, and critical dispositions (InTASC, 2011). In the InTASC standards, critical dispositions are defined as "habits of professional action and moral commitments that underlie the performances play a key role in how teachers do, in fact, act in practice" (p. 6).

InTASC specified dispositions of effective teacher principles under the Model Standards for Beginning Teacher Licensing and Development. The Model Standards for Beginning Teacher Licensing and Development include 10 principles and their corresponding dispositions (InTASC, 2011).

There are ten InTASC principles and critical dispositions for each principle (CCSSO, 2011, pp. 10-19).

*" Learner Development: The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.*

- *The teacher respects learners' differing strengths and needs and is committed to using this information to further each learner's development.*
- *The teacher is committed to using learners' strengths as a basis for growth, and their misconceptions as opportunities for learning.*
- *The teacher takes responsibility for promoting learners' growth and development.*

- *The teacher values the input and contributions of families, colleagues, and other professionals in understanding and supporting each learner's development.*

*Learning Differences: The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.*

- *The teacher believes that all learners can achieve at high levels and persists in helping each learner reach his/her full potential.*
- *The teacher respects learners as individuals with differing personal and family backgrounds and various skills, abilities, perspectives, talents, and interests.*
- *The teacher makes learners feel valued and helps them learn to value each other.*
- *The teacher values diverse languages and dialects and seeks to integrate them into his/her instructional practice to engage students in learning.*

*Learning Environments: The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.*

- *The teacher is committed to working with learners, colleagues, families, and communities to establish positive and supportive learning environments.*
- *The teacher values the role of learners in promoting each other's learning and recognizes the importance of peer relationships in establishing a climate of learning.*
- *The teacher is committed to supporting learners as they participate in decision making, engage in exploration and invention, work collaboratively and independently, and engage in purposeful learning.*
- *The teacher seeks to foster respectful communication among all members of the learning community.*
- *The teacher is a thoughtful and responsive listener and observer.*

*Content Knowledge: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.*

- *The teacher realizes that content knowledge is not a fixed body of facts but is complex, culturally situated, and ever evolving. S/he keeps abreast of new ideas and understandings in the field.*

- *The teacher appreciates multiple perspectives within the discipline and facilitates learners' critical analysis of these perspectives.*
- *The teacher recognizes the potential of bias in his/her representation of the discipline and seeks to appropriately address problems of bias.*
- *The teacher is committed to work toward each learner's mastery of disciplinary content and skills.*

*Application of Content: The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.*

- *The teacher is constantly exploring how to use disciplinary knowledge as a lens to address local and global issues.*
- *The teacher values knowledge outside his/her own content area and how such knowledge enhances student learning.*
- *The teacher values flexible learning environments that encourage learner exploration, discovery, and expression across content.*

*Assessment: The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.*

- *The teacher is committed to engaging learners actively in assessment processes and to developing each learner's capacity to review and communicate about their own progress and learning.*
- *The teacher takes responsibility for aligning instruction and assessment with learning goals.*
- *The teacher is committed to providing timely and effective descriptive feedback to learners on their progress.*
- *The teacher is committed to using multiple types of assessment processes to support, verify, and document learning.*
- *The teacher is committed to making accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs.*
- *The teacher is committed to the ethical use of various assessments and assessment data to identify learner strengths and needs to promote learner growth.*

*Planning for Instruction: The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas,*

*curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.*

- *The teacher respects learners' diverse strengths and needs and is committed to using this information to plan effective instruction.*
- *The teacher values planning as a collegial activity that takes into consideration the input of learners, colleagues, families, and the larger community.*
- *The teacher takes professional responsibility to use short- and long-term planning as a means of assuring student learning.*
- *The teacher believes that plans must always be open to adjustment and revision based on learner needs and changing circumstances.*

*Instructional Strategies: The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.*

- *The teacher is committed to deepening awareness and understanding the strengths and needs of diverse learners when planning and adjusting instruction.*
- *The teacher values the variety of ways people communicate and encourages learners to develop and use multiple forms of communication.*
- *The teacher is committed to exploring how the use of new and emerging technologies can support and promote student learning.*
- *The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to learner responses, ideas, and needs.*

*Professional Learning and Ethical Practice: The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.*

- *The teacher takes responsibility for student learning and uses ongoing analysis and reflection to improve planning and practice.*
- *The teacher is committed to deepening understanding of his/her own frames of reference (e.g., culture, gender, language, abilities, ways of knowing), the potential biases in these frames, and their impact on expectations for and relationships with learners and their families.*
- *The teacher sees him/herself as a learner, continuously seeking opportunities to draw upon current education policy and research as sources of analysis and reflection to improve practice.*

- *The teacher understands the expectations of the profession including codes of ethics, professional standards of practice, and relevant law and policy.*

*Leadership and Collaboration: The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.*

- *The teacher actively shares responsibility for shaping and supporting the mission of his/her school as one of advocacy for learners and accountability for their success.*
- *The teacher respects families' beliefs, norms, and expectations and seeks to work collaboratively with learners and families in setting and meeting challenging goals.*
- *The teacher takes initiative to grow and develop with colleagues through interactions that enhance practice and support student learning.*
- *The teacher takes responsibility for contributing to and advancing the profession.*
- *The teacher embraces the challenge of continuous improvement and change”.*

## **2.4 Assessment of Disposition**

Although there is not a common agreement about the definition of teaching dispositions, there are models in use about how dispositions are described (Thornton, 2006). For instance, Dispositions Assessments Aligned with Teacher Standards (DAATS) was designed by Lang and Wilkerson (2006) in order to assess teacher dispositions with the InTASC disposition indicators. Lang and Wilkerson (2006) constructed five steps for this model which were; “(1) Define purpose, use, propositions, content, and other contextual factors in order to determine the assessment purpose, (2) Develop a valid sampling plan to determine the best method to assess dispositions, (3) Create instruments aligned with standards and consistent with the sampling plan, ensuring that each instrument has well-designed items and statements, (4) Design and implement the system and aggregate data for decision-

making, which is crucial for data usage, and (5) Ensure the credibility and utility of the data to obtain evidence for reliability, validity and the usefulness of the data.” (p.6)

Thornton (2006) stated that several assessment models have emerged because of the emphasis on assessing teacher dispositions through the teacher accreditation process. In his study *Dispositions in Action: Do Dispositions Make a Difference in Practice?* Thornton (2006) explained the main concepts of five disposition assessment models: The first assessment model is the “Standards Language Model”. The focal point of this model is that “dispositions are directly related to teacher candidates’ behaviors in the school setting” (p. 54). This model collects data with rubrics, rating scales, and checklists, which are prepared according to national standards. The second assessment model is the “Professional Behaviors Model.” The focus of this model is on “teacher professional characteristics or behaviors such as attendance, work ethic, preparation, punctuality, sense of humor, and appropriate dress” (p.55). Assessment tools in this model are developed by groups of teachers and principals and they are developed in the wisdom of teaching practice. The third assessment model is the “Self-Reflections Model.” The focal point for this model is using self-assessments to deal with complexities and the psychological nature of dispositions. This model can be used for pre-, ongoing, and post-assessments of dispositions. Reflection journals and belief essays can be used to document the change in disposition development of teacher candidates. The fourth assessment model is the “Ethics and Equity Model.” The focus of this model is considering dispositions related to the moral and ethical dimensions of teaching and dispositions toward diversity (Major & Brock, 2003) stressed in this model. The fifth assessment model is the “Dispositions in Action Model.” The focal point for this model centers on thinking patterns and how an individual is disposed to act. Interviews and observations are used to collect data about the dispositions of teachers connected to teaching practices.

NCATE (2005) has been criticized for its dispositions as highlighted in its standards. They stated that dispositions should be assessed at the college level and this assessment can guide pre-service teachers to alter their already established dispositions. To be aware of the facilitation of dispositions, pre-service teachers must be open to interaction and experience in the learning and teaching environment. In the current study, the researcher used the “Standards Language Model” by using the TDI instrument aligned with InTASC principles and disposition indicators and the “Self-Reflections Model” by collecting reflections from journals written by pre-service ECE teachers.

## **2.5 Review of Empirical Research Studies on Dispositions**

When the previous literature was reviewed, there are number of example related to the importance of investigating pre-service teachers’ dispositions. According to Conderman and Walker (2015), professional dispositions are one of the most important areas in disposition development and teacher preparation programs. Previous studies revealed that there is a strong connection between teachers’ dispositions and success in their students’ learning (Notar et al., 2009). Although the concept of disposition is not new for teacher education, many studies on disposition in teacher education have been conducted in recent years.

### **2.5.1 Studies on Disposition Conducted with Preservice Teachers**

Richardson and Onwuegbuzie (2003) examined the attitudes of 147 individuals (pre-service teachers, interns, and college professors) toward selected dispositions. The purpose was to determine the necessity of dispositions for successful teaching performance. Quantitative methodologies were used and it was found that there was no significant difference between the number of years of experience and the level of disposition; there were also no significant differences between pre-service and in-service teachers’ disposition levels. The researchers found that attitudes toward

dispositions did not change in terms of the demographic characteristics of teachers, but 81% of the participants believed that dispositions play an important role for student achievement. When the diversity of students was considered, in their study, Lambert, Curran, Prigge, and Shorr (2005) examined changes in 479 pre-service teachers' dispositions toward the inclusion of students with disabilities. The researcher used quantitative methodologies to analyze the pre-service teachers' level of change from pre- to post-survey and found that an inclusion course can impact the dispositions of pre-service teachers toward including students with disabilities. When comparing the results of pre-service elementary and secondary teachers, it was found that pre-service elementary teachers were more positive about the inclusion of students with disabilities and pre-service secondary teachers showed more gains than pre-service elementary teachers.

A study conducted by Pauli (2006) examined the dispositional survey responses of pre-service student teachers who completed the student teaching experience by comparing their self-evaluation responses with the responses of their cooperating teachers and university supervisors at the end of the student teaching experience. It was a descriptive, non-experimental research design and used the survey data of 36 pre-service teachers who completed the student teaching experience at Dakota State University in Madison through in spring 2005. The researcher found that cooperating teachers and university supervisors rated student teachers' disposition higher than the student teachers' self-assessment rates, and the researcher also found that the university supervisors and cooperating teachers viewed student teacher dispositions in a similar manner.

Another study on dispositional development was conducted by Bell, Grant, and Fisky-Moody (2007). The study was conducted with 35 pre-service teachers enrolled to an undergraduate program and participated in the research study as a part of a university course. Two of the authors are the co-instructors of the course. The data were collected through three methods: survey, interviews and students' work

products. The results of the study showed that the teacher preparation programs should address four disposition areas: professionalism, commitment to lifelong learning, reflective and critical thinking, and commitment to diversity. Moreover, Waddell and Griffin's (2007) study, which includes external stakeholders, assessed teacher candidates' dispositions. To assess pre-service teachers' dispositions, Waddell and Griffin used the Disposition Rating Scale, which they developed for their study, and gathered data from 26 pre-service teachers registered in an introductory elementary education course and 33 pre-service teachers enrolled in a directed teaching course. Also, an introductory course instructor, a cooperating teacher and university supervisors completed the survey for pre-service teachers. After the analysis was conducted, Waddell and Griffin (2007) found that the pre-service teachers in the directed student teaching experience rated their dispositions higher than their cooperating teachers and university supervisors did they also found that there was a change in student teachers' disposition scores between the beginning and the end of the program.

Correia and Bleicher (2010) examined the development of intercultural awareness disposition of pre-service teachers in a student teaching setting. This study took place in California with a total of 130 undergraduate students. The data sources included 130 teacher candidates' electronic reflection journals. The researchers used a qualitative, interpretive research design. The results of this study revealed that students increased their intercultural awareness in multiple contexts including linguistic diversity, socio-economic challenges, home culture norms, and military life. Buchanan, Correia, and Bleicher (2010) concluded developing intercultural awareness of pre-service teachers is important for their effectiveness.

A study conducted by Serdyukov and Ferguson (2011) examined individual dispositions and pre-service teachers' perceptions in four different dispositional categories: personal, professional, moral, and attitudinal. The information was collected while the pre-service teachers moved through their teacher education

program. The researchers started their study by asking what kind of individuals enrolled in the teacher preparation program. As understood from the question, the study suggested that the personal characteristics of candidates were important for the development of dispositions. With the aim of identifying the personal and professional teacher attributes of candidate teachers while entering the program, a specific instrument was developed by the researchers. The results of this study showed that the most identified category was the professional category. Under this category, knowledgeable, collaborative, and responsible items were identified most frequently. The overall results of this study suggested that candidate teachers hold high standards for their professionalism considering selected attributes by students. Carroll (2012) described disposition as a performance of understanding that develops over time. Moreover, Carroll (2012) stated that the student population is getting more diverse, while teaching is becoming more collaborative among colleagues. Considering all these factors, very few candidate teachers pass this process smoothly; thus, Carroll (2012) underlined the importance of assessing pre-service teachers' dispositions.

To investigate experiences in universities, Pang and his colleagues (2014) developed an instrument for pre-service teacher disposition assessment. This instrument was distributed to pre-service students during their capstone experience at this university. The data were collected through three semesters. The results of the study showed that pre-service teachers in this university had a positive disposition, but there were some deficiencies in the skills of collaboration and life-long learning.

### **2.5.2 Development of Disposition in Teacher Education Programs**

According to Schussler (2006), assessing disposition is an increased need for professionalizing teacher education. Therefore, there has been a shift in teacher education programs. In harmony with this perspective, Hillman, Rothermel, and Scarano (2006) conducted a study to identify and evaluate pre-service teachers'

dispositions and these students reflected on their own behaviors. The instrument was distributed to 157 student teachers to develop a field-tested instrument. This instrument was developed by the feedback of both student teachers and faculty members. Another study conducted by Baldwin (2007) examined the ways in which and to what extent dispositions were included in the curriculum, taught, and assessed in programs, and also examined the methods of delivery and the assessment of dispositions from the perspective of 3 program directors, 24 faculty members, and 431 student teachers. Interviews, questionnaires, and documents were used to collect the data. A mixed-methods approach was conducted and the collected data was analyzed through descriptive and inferential statistics. Baldwin (2007) found that 92% of professors and 72% of pre-service teachers agreed that dispositions were taught in coursework; 75% of professors agreed that dispositions were taught in at least one course, for pre-service teachers this proportion was 72%; furthermore, more than 80% of professors agreed that they assessed 12 of 16 dispositions, and 80% of pre-service teachers agreed that 15 of 16 dispositions were assessed.

Kidd, Sanchez, and Thorp (2008) examined 19 pre-service teachers' perceptions of culturally responsive dispositions and teaching practices which are developed after program experiences. These pre-service teachers were engaged in a teacher preparation program designed to prepare teachers to work with culturally, linguistically, socioeconomically, and ability diverse young children and their families. The researcher analyzed the pre-service teachers' narratives with a post-then-pre qualitative retrospective approach. The findings of Kidd, Sanchez, and Thorp's (2008) study suggested that various experiences that affect with each other were useful in effecting changes in dispositions and teaching practices. The experiences included were about used materials, diverse student teaching experiences, interactions with different families, and reflections.

A study conducted by Thomas (2010) examined a teacher preparation program. The study investigated the pre-service teachers' dispositions in a reading methods course.

The researcher used a checklist to collect data from the student teachers in two sections of the course. The study findings revealed that these student teachers had a positive view of their own and their peers' dispositions. However, these student teachers' views were separated from their instructors' views on their disposition perspectives. In accordance with Thomas (2010), Brindle (2012) examined the assessment of pre-service teacher dispositions by teacher education programs in Iowa. The data was collected through a survey and quantitative methodology was conducted to explore the characteristics of teacher education programs to determine the differences in their assessment of student teacher dispositions. The data were analyzed using descriptive statistics and it was found that there were differences in how teacher education programs assessed teaching dispositions based on the type of the program's institution, geographic location, classification, and teacher education enrollment. The findings of the study suggested that multiple stakeholders provided educational programs with an excellent view of the student teachers' dispositions, which allowed the education programs to help their teacher candidates to identify their strong and weak dispositions.

Investigating disposition in teachers and candidate teachers tends to be challenging for researchers, because it is a highly debated topic among educators (Bercaw et al., 2012). The study conducted by Bercaw and her colleagues (2012) examined the different programs and their approaches to disposition development. For this purpose, the researchers collected data from 200 candidate teachers in two different institutions. The data were gathered through a survey, that was about where and how teacher candidates perceived the development of professional dispositions within their program. Moreover, to collect more detailed information about professional disposition, four case studies were conducted. The main data collection tool for this study is the survey method. The surveys were distributed to 222 candidate teachers from two different institutions. At the beginning of the semester for both programs, the survey was administered to pre-service teachers. In this survey, candidate teachers were expected to write their perceptions about

disposition development. After the survey data were analyzed, four case studies were conducted. The results of this study were very important for the field of study. Pre-service teachers from one institution thought that opportunities occurred mostly in the field, while pre-service teachers from other institution thought that opportunities occurred in the coursework. The researcher also suggested that the findings of the study can provide information as a mirror to see the strengths and the weaknesses of the program (Bercaw et al., 2012).

Rose (2013) claimed that no research had been done on promoting desirable dispositions in pre-service candidates across institutions. Therefore, Rose (2013) investigated institutions and their programs' perception on effectiveness to fill this void. The researcher asked three major questions in his study about the strategies used in institutions to promote desirable disposition. The survey developed by the researcher was sent to 330 institutions. The aim of the survey was to evaluate the effectiveness of the strategies used by institutions. These strategies were categorized under four major strategies: direct instruction, student writing and self-analysis, conversation, and observation-stimulation case studies. The results of the study showed that the perceived effectiveness for the strategies and their use was changeable. Moreover, instructor feedback was the most highly ranked strategy among the other strategies. The results of this study are important for suggesting certain strategies to develop the dispositions of candidate teachers, such as video and case studies.

On the other hand, Meidl and Baumann (2015) conducted a study to define a set of behaviors and dispositions in a teacher preparation program. According to Meidl and Baumann (2015), there were many pre-service students who enrolled in community service projects, but it was not clear how these projects provided information about the dispositional development of candidate teachers. For this purpose, the researchers conducted a qualitative study. The data were collected from 20 pre-service teachers participating in the student group. The pre-service teachers engaged

in different work to renovate over a school, such as painting, building shelves, and sanding doors. The data of this study was gathered through interviews, field notes, and document analysis. The findings were important for the field of education. During the project, the pre-service teachers realized that students need more things in an authentic setting. Moreover, they realized that there was a disconnection between the teacher education program and the realities of actual school life for teachers. One of these studies was conducted by Conderman and Walker (2015). The study aimed to investigate professional dispositions in teacher education programs to reveal what candidate teachers understand about dispositions and how dispositions can be assessed. The researchers emphasized that candidate teachers and teacher educators should understand the actual meaning of disposition. In this regard, Conderman and Walker (2015) investigated candidate teachers' and their instructors' understanding of self-assessment of their own dispositions. The study was conducted with 248 undergraduate elementary and special education teacher candidates and their instructors through five semesters. The results of the study revealed that student teachers and their instructors shared similar understandings. For example, being late to class and written homework that did not meet the standards of the program were important points that student teachers and instructors agreed on.

In conclusion, considering the existing studies of teacher dispositions that have been conducted, it can be said that teacher education programs must emphasize the importance of teaching dispositions. The research studies that were reviewed here have shown that the use of field experiences can enhance pre-service teachers' development of dispositions. As teacher educators, those involved in teacher education programs at universities must not only have knowledge and skills in their teaching philosophy, but must also provide appropriate dispositions in order to impact their teacher candidates.

### 5.2.3 INTASC and NCATE Principles

In recent years, NCATE and the Teacher Education Accreditation Council (TEAC) developed new standards for disposition and skills for pre-service and in-service teachers (Rose & Terndrup, 2007). At the same time, the literature has a considerable body of research on specific methods to foster desirable dispositions in teacher education (Austin, 2004; Wilkerson & Lang, 2007).

Using the instrument that has items aligned with InTASC Principles and Disposition Indicators, Keiser (2005) examined the difference between pre-service teachers' and cooperating teachers' ratings about the degree to which pre-service teachers had professional, curriculum-centered dispositions and student-centered dispositions. Keiser collected data from 79 student teachers and their assigned cooperating teachers with the InTASC-based instrument called Teacher Disposition Index (TDI) developed by Schulte et al. (2004). To identify the differences between the pre-service teachers and cooperating teachers, she conducted a series of t-tests and ANOVAs. Keiser found that pre-service teachers self-assessed their dispositions positively in terms of both professional curriculum-centered dispositions and student-centered dispositions. Their student-centered dispositions were found to be higher than their professional, curriculum-centered dispositions. A comparison of pre-service teachers and cooperating teachers' responses revealed that cooperating teachers rated student teachers' dispositions lower than their self-assessed scores. Keiser's findings suggested that the assessment of external stakeholders can provide student teachers with multiple perspectives about their exhibition of targeted teaching dispositions.

For that purpose, Welch and her colleagues (2010) stated that teacher preparation programs need accreditation from NCATE, because the researchers claimed that these programs should be evaluated in terms of assessing knowledge, skills, and

dispositions. Moreover, they emphasized the problem that dispositions and personal values are defined differently by other educators in the field and NCATE. To understand this contradiction better, they conducted a study on the relationship between the dispositions of candidate teachers and their personal values. The data for this study was collected with the Rokeach Value Scale. For the study, 99 interns and 125 cooperating teachers provided data through a computer-based survey. The survey included demographic information, satisfaction with career choice and school location, personal values, and disposition subtitles. The results of the study showed that the cooperating teachers had a strong agreement on eight disposition subtitles about candidate students. Moreover, the results revealed that there was a significant relationship between personal values and eight dispositions for student teachers and successful teachers.

Another study conducted by Frederiksen, Cooner, and Stevenson (2011) examined the assessment of teacher dispositions in pre-service teachers to determine whether there was a significant difference between the perceived dispositions in pre-service teachers in urban settings versus non-urban settings and to describe the changes in perceived dispositions throughout pre-service teachers' internship experiences. The participants were 44 pre-service teachers who were attending the master teaching program at Colorado State University during the 2009-2010 academic year. The researchers collected both quantitative and qualitative data depending on the InTASC Principles and Disposition Indicators, so that responses of teacher candidates could be validated with their teaching experience. The researchers used a triangulation mixed method design. The findings of this study showed that there was no difference between urban and nonurban setting in terms of student-centered and curriculum-centered dispositions of participants. However, when narratives of the participants were analyzed, some differences found between two different settings. The urban settings in tendency to emphasize "student-centered" dispositions while the non-urban teachers highlighted "professional, curriculum-centered" dispositions.

#### **5.2.4 Dispositional Studies with Early Childhood Education**

A study on assessing pre-service teachers' dispositions was conducted by Rike and Sharp (2008). For this study, they developed the Early Childhood Education Behaviors and Disposition Checklist and collected data from pre-service teachers. The results of this study showed that specific behaviors and dispositions are generally related to being effective practitioners. Also, they found that the cultivation of positive aspects of pre-service teachers is possible. Investigating dispositions in teacher education is not limited to the pre-service teachers. There have also been studies that have explored teacher education programs.

Another study was conducted by Cummins and Asempapa (2013) to investigate the hypothesis that dispositions can be fostered and encouraged through teaching interventions within a teacher education program. For this purpose, the main research question was determined as whether courses in teacher interventions can change the knowledge of pre-service students' dispositions. The researchers collected data from 99 early childhood pre-service teachers during the fall and spring semesters. The data was collected by faculty members as pre- and post-assessments. The results of the study revealed that pre-service teachers' knowledge and understanding demonstrated some improvements in three disposition areas, which were collaboration, professionalism, and inclusivity.

## CHAPTER III

### METHOD

The purpose of this study was to investigate and describe the changes in the development of perceived dispositions of pre-service Early Childhood Education (ECE) teachers were influenced by the student teaching experiences. When examining the past research about disposition, it can be seen that disposition has been studied with several theoretical perspectives and methodologies. Most of the quantitative studies regarding disposition have focused on assessing it. Schulte, Edick, Edwards, and Mackiel (2004) developed the Teacher Disposition Index (TDI) to assess dispositions regarding InTASC standards. Similarly, Singh and Stoloff (2008) developed the Eastern Teacher Disposition Index aligned with InTASC standards. Wilkerson and Lang (2007) developed DAATS model to assess dispositions according NCATE (National Council for Accreditation of Teacher Education) standards. On the other hand, qualitative studies conducted about disposition, which have focused on disposition with knowledge and skills as a third component of teacher education programs and knowledge, skills, and dispositions have been stated as essential components of teacher education and quality of teacher (Thornton, 2006).

#### **3.1. Research Approach**

To find answers to the research questions, mixed methods research was employed; both quantitative and qualitative data were gathered from the participants.

Creswell and Plano Clark (2007) defined mixed methods as:

*“Research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research*

*process. As a method, it focuses on collecting, analyzing, and mixing both qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (p. 5).*

In this section of the study, the methodology used for this study will be described. The research design, the sample used, the instrument used to collect the data of the study, procedures, methods to collect the data, and the means of data analysis for the study are explained in detail.

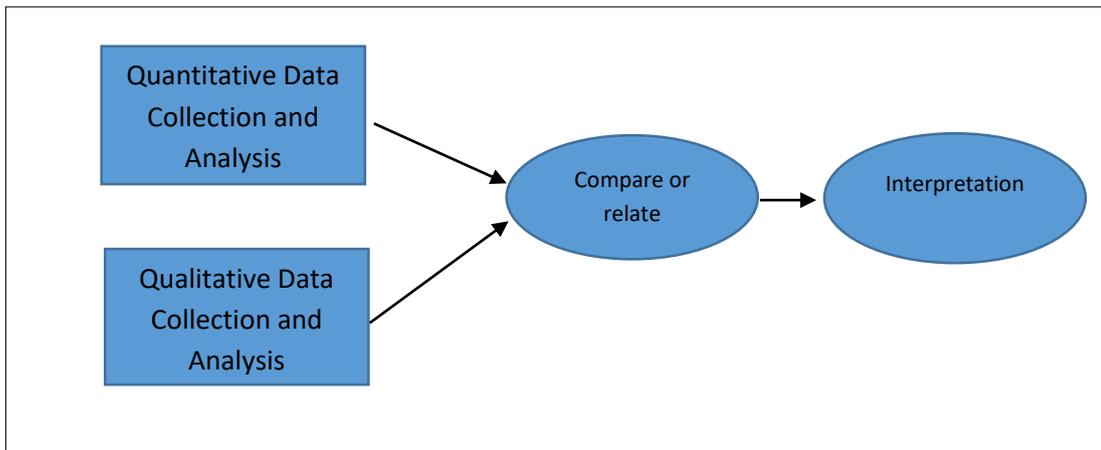
### **3.2. Research Design**

“A mixed methods design involves the collection, analysis, and “mixing” of both quantitative and qualitative data to best understand a research problem” (Cresswell, 2011, p. 558). While determining the type of mixed method to use in a study, Cresswell (2011) suggests to the researcher to ask four questions:

- 1. What priority or weight does the researcher give to the quantitative and qualitative data collection?* Priority or weight means that one form of data is given more attention or emphasis in the study; however, quantitative and qualitative data are sometimes treated equally.
- 2. What is the sequence of collecting the quantitative and qualitative data?* Determine whether the qualitative data (or quantitative data) comes first and second in the data collection or whether they are collected concurrently.
- 3. How does the researcher actually analyze the data?* Determine if the researchers combine the data in one analysis or keep the analyses separate.
- 4. Where in the study does the researcher “mix” the data?* The two forms of data might be combined, linked, or mixed during data collection, between data collection and data analysis, during data analysis, or in the interpretation of a study” (p. 539).

According to Cresswell (2009), there are two types of data gathering processes in mixed methods research-sequential or convergent. Sequential designs use one form

of data collection that follows and informs the other one. There are two types of sequential designs: explanatory and exploratory sequential mixed methods design (Cresswell, 2011). Explanatory sequential mixed methods design involves quantitative data collection and then qualitative data collection to help to validate and explain or elaborate on the quantitative data. On the other hand, exploratory sequential mixed methods design consists of collecting qualitative data first and then gathering quantitative data to explain the relationship found in the qualitative data (Cresswell, 2011). Instead of collecting data sequentially, convergent mixed methods design requires collecting, merging and analyzing both quantitative and qualitative data simultaneously; the researcher collects both data types, analyzes them separate from each other, compares the results and then makes interpretations as to whether the results support or contradict each other. Also, Cresswell (2011) stated that convergent mixed method design gives equal priority to both quantitative and qualitative data; the researcher collects both of these data at the same time or concurrently during the study; and the researcher compares the results from the both data analysis to make interpretations. In the current study, a convergent mixed method design (Figure 3.1) was selected to use both quantitative and qualitative approaches for collecting and analyzing the data sets simultaneously. Pre- and post-application of the instrument via TDI and reflection journals were administered to the pre-service ECE teachers to assess the changes in their teaching disposition perceptions before and after their student teaching experiences. Thus, a convergent mixed method design was more suitable to conduct the current study.



*Figure 3.1 Convergent Mixed Method Design*

Source: (Cresswell, 2011)

### **3.3. Research Questions**

**RQ1.** Is there a change in pre-service ECE teachers' disposition scores before and after their student teaching experience?

**1a.** Do pre-service ECE teachers' perceived dispositions differ in terms of their dispositions before and after their student teaching experience according to their age groups?

**1b.** Do pre-service ECE teachers' perceived dispositions differ in terms of their dispositions before and after their student teaching experience according to private and public school settings?

**1c.** Do 3rd year and 4th year pre-service ECE teachers differ in terms of their dispositions before and after their student teaching experience?

**1d.** Is there a difference in pre-service ECE teachers' dispositions according to the number of their student teaching experiences?

**RQ2.** Is there a change in cooperating teachers' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after the student teaching experience?

**RQ3.** Is there a change in university supervisors' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after the student teaching experience?

**RQ4.** Is there a change in pre-service ECE teachers' disposition scores after the student teaching experience on the basis of InTASC principles and disposition indicators?

**RQ5.** Is there a change in cooperating teachers' perceptions of pre-service ECE teachers' demonstrated dispositions after the student teaching experience on the basis of InTASC principles and disposition indicators?

**RQ6.** Is there a change in university supervisors' perceptions of pre-service ECE teachers' demonstrated dispositions after the student teaching experience on the basis of InTASC principles and disposition indicators?

**RQ7.** How do pre-service ECE teachers define "teaching disposition"?

**RQ8.** What evidence do pre-service ECE teachers provide to demonstrate the development of their teaching dispositions after their student teaching experience?

### **3.4. Participants**

#### **3.4.1. Pilot Study Participants**

Prior to the main study, a pilot study was carried out with 436 pre-service early childhood teachers from three different universities in Ankara. Those three universities were selected due to their accessible population of which individuals were convenient to contact and easy transportation for the researcher, and those pre-service teachers were selected because they had student teaching experience in early childhood education settings.

#### **3.4.2. Main Study Participants**

The participants included in the study were (1) pre-service early childhood teachers at a public university in Ankara who were about to complete their program, junior and senior students doing internships in classrooms during the fall semester of the 2015-2016 academic year. (2) Those pre-service teachers' assigned cooperating teachers in the classrooms who are mentoring them during their teaching practices. (3) assigned university supervisors (research assistants) who are regularly checking and giving feedback to the student teachers' practicum reports before they go to classrooms, observing them in the preschool setting and giving feedback to them throughout the whole process.

##### **3.4.2.1 School Experience Course**

Student teachers take a school experience course for 13 weeks and the aim is to provide student teachers the opportunity for hands-on teaching experience in the classrooms. Each week they gather in the classroom one hour per week at the university as a theoretical part of the lesson and they go to classroom experiences one day per week from 08:30 to 17:30 for school experience including class

observations, adaptation to school and classroom conditions, and planning and preparation for teaching. (Course Syllabuses: APPENDIX I and J)

### **3.5. Sample Size**

The whole available sample was used, consisting of:

-86 student teachers enrolled in the section of school experience lesson during the fall 2015 semester.

-86 cooperating teachers who were mentoring student teachers in the classroom and whom were invited and agreed to participate.

-14 university supervisors of the student teachers who were also working as research assistants in the ECE department.

Despite the fact that the entire sample was used in the current study, it was not considered as being restricted to the population because the study can be replicated by other researchers in similar programs in different locations

### 3.5.1. Student Teachers

Table 3.1

*Demographic Information of Student Teachers*

Table 3.1

Variable	Level	Frequency (N)	Percent (%)
Gender	Female	85	98,8
	Male	1	1,2
Age	18-24	80	93
	25-30	6	7
School Type	Public	39	45,3
	Private	47	54,7
Child Age	0-3	5	5,8
	3-4	17	19,8
	4-5	42	48,8
	5-6	22	25,6
Experience	1	40	46,5
	2	36	41,9
	3	6	7,0
	4	1	1,2
	5	3	3,5
Graduated	Vocational High School	20	23,3
	Two-Year Degree	3	3,5
	High School	63	73,3
Current Department	Child Development	0	0
	Early Childhood Education	86	100
	Child Development	0	0
Grade Level	3	46	53,5
	4	40	46,5
	Sum	86	100

There was just one male student among the teacher candidates who participated in the study. Females formed the majority of the candidates in the study.

When examining the distribution of teacher candidates in terms of age, the majority was composed of the age group between 18 and 24 (93%) and the rest, 7%, were from the age group between 24 and 30.

The majority of the teacher candidates performed their teaching experience in private schools (54.7 %) and the rest of them did it in public schools.

Of the children in the classrooms of the teacher candidates, the age group between 4 and 5 was the largest with 48.8%. The rest of them was as follows: the age group between 5 and 6 with 25.6 %, age group between 3 and 4 with 19.8%, and the age group between 0 and 3 with 2.3%.

The majority of the teacher candidates (46.5%) had teaching experience for one semester, while 41.9% had two semesters, 7% three semesters, 1.2% four semesters, and 3.5% five semesters.

Most of the teacher candidates (73.3%) had a high school degree, 23.3% had graduated from vocational high school, and 3.5% had graduated from a two-year degree program.

All the teacher candidates will graduate from the early childhood education department. Hence, early childhood education will not be dealt with as a variable on teacher candidates in the next analyses.

Most of the teacher candidates were in their third year of the program (53.5%) and the rest were in their fourth year.

### 3.5.2. Cooperating Teachers

Table 3.2

*Demographic Information of Cooperating Teachers*

Variable	Level	Frequency (N)	Percent (%)
Gender	Female	86	100
	Male	0	0
Age	18-24	12	14
	25-34	47	54,7
	35-49	24	27,9
	50-64	3	3,5
School Type	Public	40	46,5
	Private	46	53,5
Child Age	0-3	2	2,3
	3-4	21	24,4
	4-5	30	34,9
	5-6	33	38,4
Experience	0-1	4	4,7
	1-5	25	29,1
	5-10	28	32,6
	10-25	24	27,9
	25+	5	5,8
Graduation	High School	3	3,5
	Two-Year Degree	3	3,5
	Bachelor's Degree	73	84,9
	Post Graduate	7	8,1
Graduated Department	Child Development	10	11,6
	Early Childhood Education	72	83,7
	Other	4	4,7
	Sum	86	100

According to the distribution of teachers that participated in the study in terms of gender, it can be said that it is composed of women only. Therefore, gender will not be dealt as a variable on next analyzes carried out according to teacher.

Most of teachers, 54,7 %, are composed of people aged between 25 and 34, 27,9 % of them are aged between 35-49, 14 % are youth group between 18-24, and finally 3,5 % of them are aged between 50-64.

When examined the distribution of teachers in terms of schools they are working, it can be seen that 54 % of participants are composed of teachers working in private schools and others are working in public schools.

Age groups teachers taught are aged between 5-6 in the ratio of 38,4 %, between 4-5 in 34,9 %, between 3-4 in 24,4 %, and between 0-3 in the ratio of 2,3 %.

32,6 % of teachers have experience between 5 and 10 years, 29,1 % between 1 and 5 years, 27,9 % of them are experienced between 10 and 25 years and lastly 5,8 % of them are composed of teachers experienced 25 years or more.

Considering the distribution of teachers according to their educational backgrounds, most of them, in the ratio of 84,9 %, have bachelor's degree, 8,1 % of them have master degree, and the others were graduated from high school or have two-years degree.

When looking at the distribution of teachers in terms of the most recent graduation departments, it can be said that most of them, in the ratio of 83,7 %, were graduated from the department of early childhood education, some of them with 11,6 % were graduates of child development and 4,7 % of them are from other departments.

### 3.6. Data Collection Instrument

The Teacher Disposition Index (TDI) was selected as the survey tool. TDI is a quantitative instrument developed by Schulte et al. (2004) at the University of Nebraska, Omaha, to measure dispositions suggested by the Interstate New Teacher Assessment and Support Consortium (InTASC, 1992). TDI measures two dimensions in a 45 item survey which are student-centered with 25 items and professionalism and curriculum-centered with 20 items. Student teachers were requested to mark their level of agreement on the 5-point Likert-Scale with the choices: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Because the scale was used with the student teachers (Appendix D), cooperating teachers and university supervisors (Appendix E), the subject and the verb of the items were changed, like “I” to “My student teacher.”

In the literature, TDI appears to be the most used instrument that has been determined to be reliable and valid in assessing teacher candidate dispositions (Schulte, Edick, Edwards, & Mackiel, 2004). Schulte et al. (2004) administered content validity with a group of 13 reviewers who were in the field of education with a mean of 22.5 years of education. Then they administered the TDI to 105 student teachers. They analyzed the collected data by using factor analysis, coefficient alpha, frequency distributions, correlation analyses, and an independent t-test. Schulte, Edick, Edwards, and Mackiel (2004) found that the reliability estimate of the 25-item student-centered subscale was .98 and the reliability estimate of the 20-item professional, curriculum-centered subscale was .97 (the factor loadings of the two subscales in the original format of TDI are provided in Appendix B). In the item development panel, the dispositions of effective teachers were introduced and sample items were provided for each of the InTASC Principles to be assessed by TDI. The group members of the item development panel did not develop any items for three principles. This was explained by Schulte, Edick, Edwards, and Mackiel (2004) as;

*“The students did not formally develop items for principles 4, 8, and 10 because we believed that the items developed for principles 1 and 2 related to principle 4, items developed for principles 2 and 3 related to principle 8, and items developed for principles 7 and 9 related to principle 10” (p. 6).*

For the current study, the researcher added a demographics section to the adapted version of the instrument. For the student teachers, age, school experience setting (private/public), grade level, and the number of student teaching experiences were added and used in the analysis.

### **3.7. Adaptation of Teacher Disposition Index (TDI) to Turkish**

Before adapting the scale, first, the required permission was obtained from the developer of the scale via e-mail. Then the 45 items of the scale were translated into Turkish by three experts. One of the translators was the researcher, the second one was a research assistant in the department of Early Childhood Education, and the third one was an assistant professor in another department who was blind to the scale. After comparing all three translated versions of the scale, 100% agreement was reached between the three translators.

In the next step, the Turkish version of TDI was translated back to English by an expert who was blind to the original scale from the department of foreign languages with an excellent command of English and Turkish. The differences between the original and the translated forms of the scale were not noteworthy.

Finally, the Turkish version of the scale (Appendix D) was sent to two experts who were working in the Early Childhood Departments of two different universities. One of the experts was an associate professor and the other was an assistant professor with an excellent command of Turkish and English. The experts were asked to comment and give suggestions about the appropriateness of the items in the Turkish context. Then the adaptation process was completed with the latest changes.

### 3.8. Data Collection

Table 3.3

#### *Data Collection Steps and Timeline*

	Data Collection Type	Date	The Number of Participants
1	Pilot Data	April 1-30, 2015	436 Pre-service ECE Teachers
2	Reflection Journals (Definitions)	October 12-14, 2015	86 Pre-service ECE Teachers
3	TDI Pre-Test for Student teachers	October 19-21, 2015	86 Pre-service ECE Teachers
4	TDI Pre-Test for Cooperating Teachers	October 20-22, 2015	86 Cooperating Teachers
5	TDI Pre-Test for University Supervisors	October 19-24, 2015	14 University Supervisors
6	Reflection Journals (Implementations)	December 28-30, 2015	86 Pre-service ECE Teachers
7	TDI Post-Test for Student teachers	January 4-6, 2016	86 Pre-service ECE Teachers
8	TDI Post-Test for Cooperating Teachers	January 5-7, 2016	86 Cooperating Teachers
9	TDI Post-Test for University Supervisors	January 4-8, 2016	14 University Supervisors

#### 3.8.1. Quantitative Data

The Turkish version of the TDI, a Likert-type survey, was given to the participants of the study both at the beginning and at the end of the 2015-2016 fall semester; to the student teachers, cooperating teachers, and university supervisors for taking responses of these three dimensions for the quantitative data of the study. To validate the changes of the perceived dispositions of the student teachers,

quantitative data were gathered from both their cooperating teachers and their university supervisors.

### **3.8.2. Qualitative Data**

The qualitative data were gathered from the student teachers only. To identify the teaching disposition profile at the beginning of the student teaching experience, three open-ended questions were asked to the student teachers and they responded in written form (Appendix F). In the last month of their student teaching experiences, the student teachers were asked to write reflection journals about seven open-ended questions designed by Frederiksen (2010) and translated into Turkish for the qualitative analysis (Appendix G). Translation process were similar with the quantitative instrument; required permission was obtained from the developer of the questions via e-mail, they translated into Turkish by three experts and compared with each other, and they translated back to English by an expert who was blind to the original form of the questions from the department of foreign languages with an excellent command of English and Turkish. The difference between the original questions and the translated version of the questions were not noteworthy.

## **3.9. Data Analysis**

### **3.9.1. Quantitative Analysis**

The quantitative data gathered through TDI were analyzed through SPSS23. When considering the data of the study as a whole, it was determined that some of the data was not distributed normally. Therefore, in the subsequent analysis of the relationships between the demographic variables of the student teachers, cooperating teachers, and university supervisors, a nonparametric test was conducted. For this reason, the Kruskal-Wallis test, which is the non-parametric alternative to a one-way between-groups analysis of variance (ANOVA), was

conducted, because it allows researchers to compare the scores on some continuous variables for three or more groups by converting scores to ranks (Pallant, 2007). While comparing pairs, a Mann-Whitney U test was conducted as an alternative to the t-test for independent samples, to test for the differences between two independent groups. Pallant (2007) stated that the Mann-Whitney U test converts the scores to ranks across two groups and tests whether the ranks for two groups differ significantly. Finally, a Wilcoxon Signed Rank Test was conducted to analyze the pre- and post-tests as an alternative to a paired sample t-test.

### **3.9.2. Qualitative Analysis**

Qualitative data was gathered through open-ended question reflection journals. The handwritten journals were transmitted to a Word format and prepared for data analysis. Merriam (2009) states that Unit of Analysis is the starting point for analyzing qualitative data to find answers to the research questions of a study and to describe the phenomenon. Therefore, the researcher chosen unit of analysis as a chunk which consists of meaningful expressions and examined the evidence of pre-service ECE teachers' classroom practices in terms of their teaching dispositions; a word, a sentence, sentences or a paragraph which represents a meaningful data for the study were determined. The data were read numerous times by the researcher and the coding process started according to a set of predetermined and emerging codes derived from the 10 InTASC Principles and Disposition Indicators. Brown (2005) stated that whenever humans are used as a part of measuring a phenomena, the reliability and consistency of the results should be considered, therefore the reliability of the coding applied to the reflection journals was controlled with an inter-rater reliability process. The inter-rater was informed about the topic and some basic resources were provided to read and understand the subject, and then information about the codes were given before conducting the analysis. Subsequently, the reliability of the coding conducted on the reflection journals was controlled by a second coder. Twenty-two of the pre-service teachers' reflection journals, which was about 20% of all the

reflection journals, were selected and examined by the researcher and a second coder who was a PhD student and research assistant in the department of Early Childhood Education at METU. Then the percentage of agreement between the two raters was calculated by the formula constructed by Miles and Huberman (1994): the number of agreements / (total number of agreements + disagreements). The inter-rater reliability was calculated as 0.86 for this data set; which is an acceptably high inter-rater reliability according to Vanderstoep and Johnston (2009); their range for this acceptance is 0.80 to 1.00.

### **3.10. Internal and External Validity**

Onwuegbuzie and Johnson (2006) stated that when conducting mixed methods research, it is important to know that the weakness of one method can be compensated with the strengths of another method. The precautions that were conducted to overcome the internal and external validity threats are explained in this section.

#### **3.10.1. Internal Validity**

Frankeal and Wallen (2006) defined internal validity as possible observed differences on the dependent variable related to the independent variables rather than any other variables. Moreover, Abernethy et al. (1999) explained internal validity as “Internal validity asserts that variations in the dependent variable result from variations in the independent variable(s)—not from other confounding factors” (p. 16). Frankeal, Wallen, and Hyun (2012) stated that predicting or determining the possible threats related to the internal validity of the study can help the researchers to minimize them. The current study was vulnerable to some threats, like subject characteristics, mortality, location, and instrumentation. The precautions taken to combat these threats are provided in detail below.

According to Fraenkel and Wallen (2006), the threat of subject characteristics refers to the effects of participant characteristics on the measured variable. To minimize the effects of this threat for the current study, pre-and post-tests were conducted for student teachers who shared the same or similar characteristics based on having school experience lessons and having student teaching experience in the field. In addition, the reflection journals taken from the same group of student teachers both at the beginning and at the end of the student teaching experience were taken into consideration.

Another threat to internal validity was mortality, which refers to the loss of participants (Frankeal, Wallen & Hyun 2012). Both quantitative and qualitative data were collected in the school experience lesson, which requires compulsory attendance for student teachers. So, mortality was not a threat for the current study.

Location was not a threat for the current study because the researcher administered the scale to the participants in their own classroom, which was used for the school experience lessons at the university.

Instrumentation was the last threat for the current study, which included instrument decay, data collector characteristics, and collector bias (Frankeal, Wallen & Hyun 2012). Instrument decay can occur when an instrument is changed or scored differently (Frankeal, Wallen & Hyun 2012). The Teacher Disposition Instrument was adapted to Turkish, but the researcher did not change the original scoring, so instrument decay was not seen as a threat for the internal validity of the current study. Furthermore, all the data was gathered by the researcher, so the collector characteristics threat was controlled. And finally, the data collector bias, which was stated by Frankeal, Wallen, and Hyun (2012) as the data collectors' distortion of the data consciously or unconsciously for a desired result, was handled by the researcher. The researcher explained the purpose of the study in detail and did not interfere with the participants' responses.

### **3.10.2. External Validity**

Frankeal and Wallen (2006) defined external validity as the extent to which the results of a study can be generalized, thus determining the external validity of the study. The researcher selected the representative sample for the study and used purposive sampling because the researcher wanted to describe the characteristics of the participants in detail. This may have minimized the external validity of the current study because the results were obtained only from pre-service ECE teachers attending a public university in Ankara, Turkey. However, most of the universities in Turkey use the same training program scheduled by the Turkish Council of Higher Education, and the pre-service teachers from other universities have similar conditions and lessons that are desirable when attempting to make generalizations about all pre-service ECE teachers in Turkey.

## CHAPTER IV

### RESULTS

The present chapter is organized in three sections that contain the exploratory and confirmatory factor analysis of the data collection instrument; quantitative results, which are represented as descriptive and inferential statistics; and the qualitative findings.

#### **4.1 Validity and Reliability Evidence for Data Collection Instrument**

##### **4.1.1 Exploratory Factor Analysis**

Exploratory factor analysis was conducted to evaluate how the TDI scale was consistent in the Turkish context by using SPSS 23. Before establishing an exploratory factor analysis, assumptions like sample size and the factorability of the correlation matrix were checked. Considering sample size, Tabachnick and Fidell (2007) stated that “it is comforting to have at least 300 cases for factor analysis” (p. 613), on the other hand, Bryant and Yarnold (1995) and Garson (2008) stated that the participants to items ratio should be no lower than 5. The sample size assumption was assured because the instrument has 45 items and the sample size of the pilot study was 436.

For factorability, the correlation matrix results showed that all the values of the coefficients were above .3, which was a good indicator of the strength of the relationships among items (Pallant, 2007). According to Tabachnick and Fidell (2007), Kaiser’s Measure of Sampling Adequacy (KMO) index ranges from 0 to 1 and should be at least .6, and if the KMO value is between 0.5-0.7, it can be considered normal; if it is between 0.7-0.8, good; between 0.8-0.9, very good, and above 0.9 is considered

perfect (Field, 2009). Also, Pallant (2007) suggested that Bartlett's Test of Sphericity should be significant ( $p < .05$ ) for the factor analysis to be considered as appropriate.

Table 4.1

*The Results of KMO and Bartlett's Test*

KMO of Sampling Adequacy	Approx. Chi-Square	Barlett's Test of Sphericity df	P Value
0,958	9221,713	990	0,000

For the Turkish Teacher Disposition Index, Kaiser's Measure of Sampling Adequacy (KMO) value was calculated as 0.958 and can be considered perfect (Field, 2009). Bartlett's Test of Sphericity value was found as significant with BTS value = 990 (Chi-square = 9221.713 and  $p = .0$ ).

Pallant (2007) indicated that communalities show how much variance each of the item has and if any item has a low value (less than .3), it indicates that the item does not fit well with the other items.

Table 4.2

*Communalities for Turkish Teacher Disposition Index Scale Items*

Item No	Initial	Extraction
D1	1,00	0,571
D2	1,00	0,647
D3	1,00	0,566
D4	1,00	0,622
D5	1,00	0,537
D6	1,00	0,548
D7	1,00	0,593
D8	1,00	0,603
D9	1,00	0,580

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Table 4.2 (cont'd)

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D10	1,00	0,513
D11	1,00	0,612
D12	1,00	0,627
D13	1,00	0,575
D14	1,00	0,636
D15	1,00	0,583
D16	1,00	0,482
D17	1,00	0,610
D18	1,00	0,518
D19	1,00	0,526
D20	1,00	0,602
D21	1,00	0,596
D22	1,00	0,641
D23	1,00	0,627
D24	1,00	0,599
D25	1,00	0,571
D26	1,00	0,529
D27	1,00	0,590
D28	1,00	0,583
D29	1,00	0,628
D30	1,00	0,535
D31	1,00	0,573
D32	1,00	0,536
D33	1,00	0,632
D34	1,00	0,536
D35	1,00	0,550
D36	1,00	0,654
D37	1,00	0,648
D38	1,00	0,611
D39	1,00	0,629
D40	1,00	0,588

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Table 4.2 (cont'd)

D41	1,00	0,643
D42	1,00	0,613
D43	1,00	0,610
D44	1,00	0,702
D45	1,00	0,641

The item values seen in Table 4.2 show that all the values were above .3, and this means that the items of the scale fit well with each other.

After checking and meeting the needed assumptions of the factor analysis, the Principle Component Analysis was conducted for the Exploratory Factor Analysis to gather information about the interrelationships among variables (Pallant, 2007).

Table 4.3

*Exploratory Factor Analysis Results About the Initial Eigenvalues of TDI*

Factor	Initial Eigenvalues	% of Variance	Cumulative %
1	4,449	9,997	9,997
2	4,120	9,156	19,153
3	3,183	7,072	26,225
4	3,058	6,795	33,021
5	2,604	5,787	38,808
6	2,594	5,765	44,573
7	2,530	5,621	50,194
8	2,105	4,677	54,871
9	1,925	4,278	59,149

Considering Kaiser's criteria, there are 9 components that have eigenvalues greater than 1 and explain 59.149% of the total variance as indicated in Table 4.3, but determining factor numbers by eigenvalues greater than 1 may lead to establishing

too many factors; therefore, using a scree plot to decide the number of factors will give the best result (Costello & Osborne, 2005).

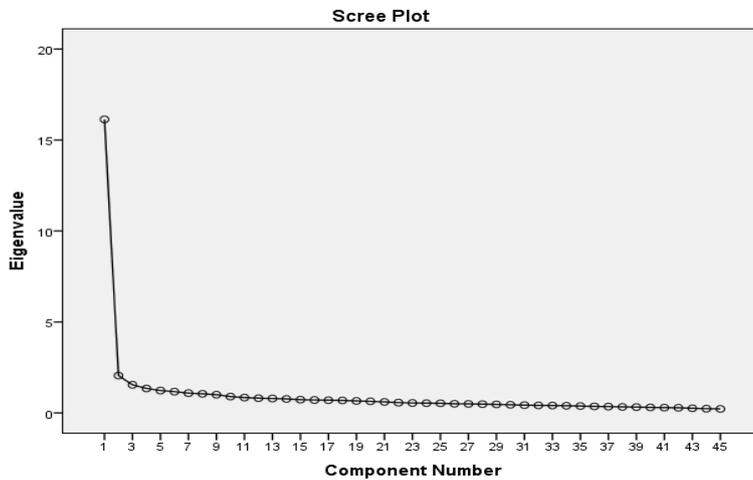


Figure 4.1 Scree Plot of TDI

As seen in Figure 4.1, according to the scree plot, there is a breaking point on the third component, which means that TDI has two factors above the breaking point.

Based on the two factors seen in the scree plot, the exploratory factor analysis was reconducted to identify the factor structure. A principal component analysis with the Varimax Kaiser’s Normalization rotation method was conducted with two restricted factors.

Table 4.4

*Repeated Exploratory Factor Analysis Results About TDI Initial Eigenvalues*

Factor	Initial Eigenvalues	% of Variance	Cumulative %
1	9,106	20,236	20,236
2	9,084	20,186	40,422

As seen in Table 4.4, the first component explains 20.236% of the total variance and the second component explains 20.186% of the total variance. According to Kline’s

(1994) recommendation that at least 40% of the total variance is reached, the two factors of TDI explain 40.422% of the total variance.

After determining the number of factors, the items of the factors are interpreted according to their communality values and factor loadings. According to Pallant (2007), if any item has a value lower than .3, it indicates that it does not fit well with the other items and should be removed from the scale. On the other hand, Çokluk, Şekercioğlu, and Büyüköztürk (2010) suggested that before deciding to remove problematic items from the scale, researchers should not remove them. Most of the communality values of the items were more than .3, except for items D1, D3, D6, D7, D24, D25, D33, and D34. By looking at their factor loadings, these items were not removed from the scale. Table 4.5 shows the communality values.

Table 4.5

*Communalities*

Item No	Initial	Extraction
D1	1,00	0,275
D2	1,00	0,328
D3	1,00	0,251
D4	1,00	0,311
D5	1,00	0,421
D6	1,00	0,267
D7	1,00	0,268
D8	1,00	0,363
D9	1,00	0,418
D10	1,00	0,409
D11	1,00	0,490
D12	1,00	0,412

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Table 4.5 (cont'd)

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D13	1,00	0,304
D14	1,00	0,549
D15	1,00	0,523
D16	1,00	0,331
D17	1,00	0,525
D18	1,00	0,469
D19	1,00	0,437
D20	1,00	0,302
D21	1,00	0,372
D22	1,00	0,491
D23	1,00	0,546
D24	1,00	0,292
D25	1,00	0,198
D26	1,00	0,397
D27	1,00	0,479
D28	1,00	0,393
D29	1,00	0,450
D30	1,00	0,358
D31	1,00	0,388
D32	1,00	0,513
D33	1,00	0,260
D34	1,00	0,287
D35	1,00	0,409
D36	1,00	0,466
D37	1,00	0,470
D38	1,00	0,496

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Table 4.5 (cont'd)

D39	1,00	0,523
D40	1,00	0,453
D41	1,00	0,370
D42	1,00	0,408
D43	1,00	0,441
D44	1,00	0,564
D45	1,00	0,516

As a result of the factor analysis, two factors were determined and they were named based on the original TDI scale developed by Schulte et al. (2004), which were student-centered subscale and professional, curriculum-centered subscale.

Table 4.6

*Factor Loading of Student-Centered Subscale and Professional, Curriculum-Centered Subscale*

		Rotated Factor Loadings	Mean	St. Deviation
<b>Factor 1: Student-Centered Subscale</b>				
D3	I demonstrate qualities of humor, empathy, and warmth with others.	0,421	4,09	0,893
D6	I am committed to critical reflection for my profession growth.	0,477	4,11	0,798
D7	I believe that all students can learn.	0,394	4,15	0,908
D8	I cooperate with colleagues in planning instruction	0,515	4,21	0,823
D9	I actively seek out professional growth opportunities.	0,624	3,92	0,849
D10	I uphold the laws and ethical codes governing the teaching profession.	0,529	4,29	0,745
D11	I stimulate students' interests.	0,595	4,16	0,770
D13	I value both long term and short term planning	0,396	4,27	0,757

Table 4.6 (cont'd)				
D14	I stay current with the evolving nature of the teaching profession.	0,687	4,1	0,835
D15	I select material that is relevant for students.	0,617	4,4	0,659
D17	I am successful in facilitating learning for all students.	0,709	3,69	0,791
D18	I demonstrate and encourage democratic interaction in the classroom and school.	0,572	4,19	0,780
D19	I accurately read the non-verbal communication of students.	0,635	3,84	0,790
D20	I engage in discussions about new ideas in the teaching profession.	0,535	4,02	0,862
D22	I select material that is interesting to students	0,565	4,37	0,726
D23	I provide appropriate feedback to encourage students in their development.	0,664	4,13	0,768
D24	I understand that teachers' expectations impact student learning.	0,397	4,34	0,779
D25	I view teaching as a collaborative effort among educators.	0,406	4,08	0,878
D26	I engage in research-based teaching practices.	0,621	3,83	0,987
D27	I create connections to subject matter that are meaningful to students.	0,576	4,19	0,768
D30	I communicate caring, concern, and a willingness to become involved with others.	0,463	4,28	0,787
D31	I listen to colleagues' ideas and suggestions to improve instruction.	0,457	4,29	0,743
D34	I maintain a professional appearance.	0,503	3,79	0,921
D37	I communicate effectively with students, parents, and colleagues.	0,572	4,24	0,813
D40	I work well with others in implementing a common curriculum.	0,539	4,21	0,784
<b>Factor 2: Professional, Curriculum-Centered Subscale</b>				
D1	I believe a teacher must use a variety of instruction strategies to optimize student learning.	0,499	4,79	0,519

Table 4.6 (cont'd)

D2	I understand that students learn in many different ways.	0,551	4,74	0,571
D4	I am a thoughtful and responsive listener.	0,407	4,30	0,733
D5	I assume responsibility when working with others.	0,548	4,48	0,741
D12	I believe it is important to involve all students in learning.	0,592	4,69	0,562
D16	I believe the classroom environment a teacher creates greatly affects students' learning and development.	0,518	4,67	0,587
D21	I view teaching as an important profession.	0,590	4,77	0,539
D28	I understand students have certain needs that must be met before learning can take place.	0,566	4,39	0,688
D29	I am sensitive to student differences.	0,620	4,61	0,603
D32	I take initiative to promote ethical and responsible professional practice.	0,629	4,40	0,713
D33	I am punctual and reliable in my attendance.	0,439	4,28	0,814
D35	I believe it is my job to create a learning environment that is conducive to the development of students' self-confidence and competence.	0,588	4,51	0,686
D36	I respect the cultures of all students.	0,678	4,66	0,618
D38	I honor my commitments.	0,593	4,50	0,670
D39	I treat students with dignity and respect at all times.	0,646	4,54	0,647
D41	I am willing to receive feedback and assessment of my teaching.	0,570	4,37	0,746
D42	I am patient when working with students.	0,544	4,23	0,858
D43	I am open to adjusting and revising my plans to meet student needs.	0,528	4,37	0,751
D44	I communicate in ways that demonstrate respect for the feelings, ideas, and contributions of others.	0,651	4,51	0,638
D45	I believe it is important to learn about students and their community.	0,668	4,70	0,583

The construct validity of TDI was provided by the exploratory factor analysis. For the reliability analysis, Cronbach's alpha coefficient value of the 25-item student-centered subscale was calculated as .93 and Cronbach's alpha coefficient value of the 20-item professional, curriculum-centered subscale was calculated as .92, which means that both of the two subscales of adapted TDI had strong internal consistency (Pallant, 2007).

#### **4.1.2 Confirmatory Factor Analysis**

After a two-factor pattern was established by exploratory factor analysis. To ensure construct validity and confirmation of the factor structure, a confirmatory factor analysis was conducted with the data obtained from the main study through LISREL 8.8 software program. According to the exploratory factor analysis, items 3, 6, 7, 8, 9, 10, 11, 13, 14, 15, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 30, 31, 34, 37, and 40 loaded on the student-centered dimension and items 1, 2, 4, 5, 12, 16, 21, 28, 29, 32, 33, 35, 36, 38, 39, 41, 42, 43, 44, and 45 loaded on the professional, curriculum-centered dimension based on the hypothesized model. The hypothesized model for the TDI based on the confirmatory factor analysis results is given in Figure 4.2.

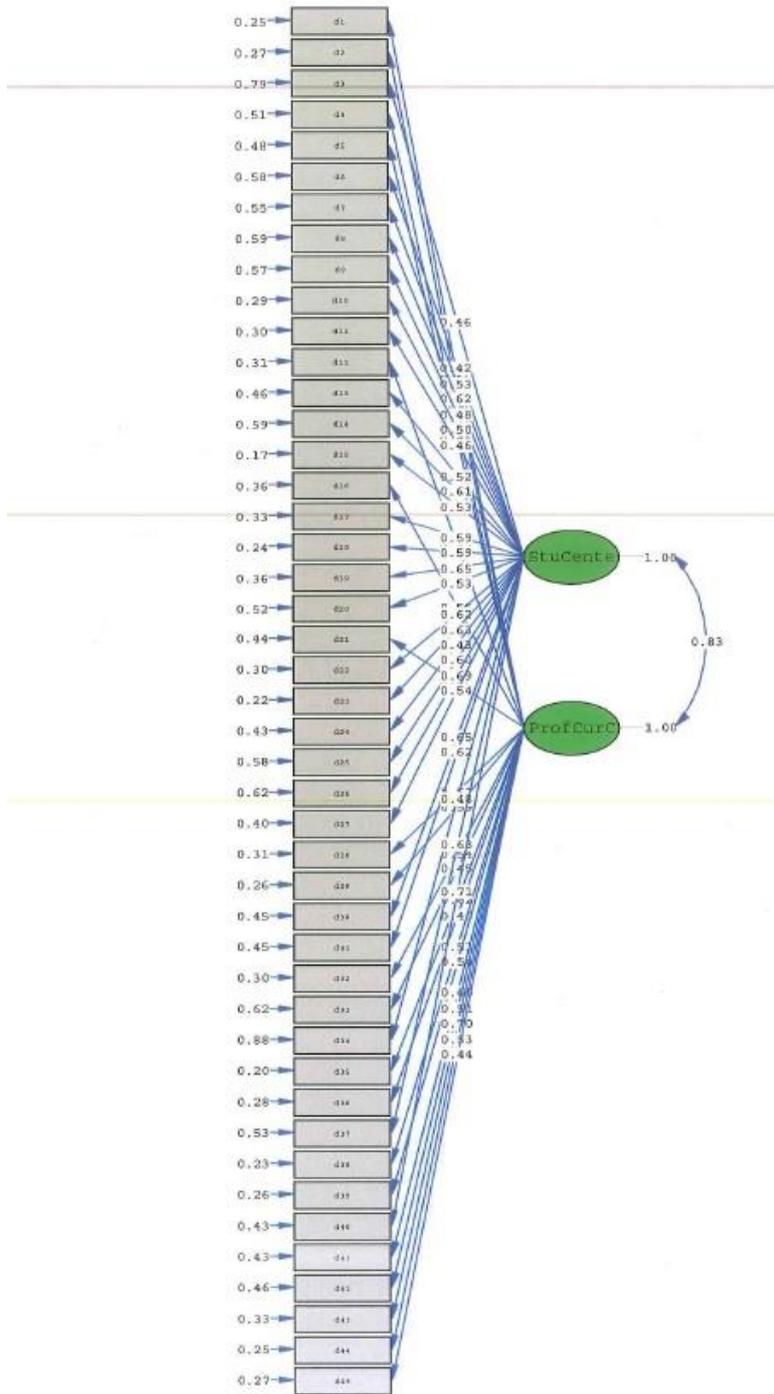


Figure 4.2 Hypothesized Model and Confirmatory Factor Analysis Results of Adapted TDI

In the current study, the fit indexes of the confirmatory factor analysis are indicated in Table 4.7.

Table 4.7

*Fit Indexes for Confirmatory Factor Analysis*

Model	df	X2	X2/df	NNFI	CFI	RMSEA
Two-Factor Model	844	1707.56	2.02	0.94	0.94	0.086

Note: df=degrees of freedom, NNFI=non-normed fit index, CFI=comparative fit index, RMSEA= root mean square error of approximation.

Table 4.7 indicates the goodness of fit statistics between the adapted TDI and the data set. A two factor model was determined and tested via CFA. Both the NNFI and CFI values were calculated as more than .90 (both of them have a value of .94) and indicated a good fit (Kline, 1998). The RMSEA value was calculated as 0.086; according to Steiger (1990), if the RMSEA value is lower than 0.1, it can be accepted as evidence for a good fit. For the Normed Chi Square value, Kelloway (1998) indicated that the value ratio between 2 and 5 shows a good fit to the data, and the Normed Chi Square value in this study was found as 2.02. According to these values, it can be concluded that a two-factor model for the adapted TDI scale has a good fit.

#### 4.2 Quantitative Analysis

According to Field (2009), the rationale behind hypothesis testing relies on normally distributed data; if the data is not distributed normally, researchers cannot apply parametric tests. The Kolmogorov-Smirnov test is one of the ways to determine whether the data is normally distributed or not. According to Pallant (2007), a non-significant result, which means the significance value, is more than .05, it indicates normality. Table 4.8 represents the results of the tests of normality results of the

Kolmogorov-Smirnov test applied to the pre- and post-TDI scores of the student teachers, cooperating teachers, and university supervisors.

Table 4.8

*Test of Normality with Kolmogorov-Smirnov Test*

		Factors	Statistic	df	P Value
Student	Pre	Student Centred Subscale	.07	86	.20
		Curriculum Centered Subscale	.11	86	.008*
Teacher	Post	Student Centred Subscale	.11	86	.008*
		Curriculum Centered Subscale	.17	86	.00*
Cooperating	Pre	Student Centred Subscale	.07	86	.00*
		Curriculum Centered Subscale	.11	86	.00*
Teacher	Post	Student Centred Subscale	.11	86	.00*
		Curriculum Centered Subscale	.17	86	.00*
University	Pre	Student Centred Subscale	.07	86	.20
		Curriculum Centered Subscale	.07	86	.20
Supervisor	Post	Student Centred Subscale	.15	86	.00*
		Curriculum Centered Subscale	.18	86	.00*

\*P<0,05

As shown in Table 4.8, some of the data are distributed normally, while some are not. When the data of the study was considered as a whole, it was determined that some of the data was not distributed normally. Therefore, in the subsequent analysis of the relationship between the demographic variables of the student teachers, cooperating teachers, and university supervisors, a nonparametric test was conducted. For this reason, the Kruskal-Wallis test, which is the non-parametric alternative to a one-way between-groups analysis of variance (ANOVA), was conducted because it gives opportunity to researchers to compare the scores on some continuous variable for three groups or more than three groups by converting

scores to ranks (Pallant, 2007). While comparing pairs, a Mann-Whitney U test was conducted as an alternative to the t-test for independent samples to test for the differences between two independent groups. Pallant (2007) stated that the Mann-Whitney U test converts the scores to ranks across two groups and tests whether the ranks for two groups differ significantly. Finally, a Wilcoxon Signed Rank Test was conducted to analyze the pre- and post-tests as an alternative to the paired sample t-test.

#### 4.2.1 How did student teachers assess their disposition development before and after their student teaching experience?

**RQ 1.** Is there a change in pre-service ECE teachers' disposition scores before and after their student teaching experience?

With the purpose of examining the changes in perceived dispositions throughout pre-service ECE teachers' student teaching experience, a non-parametric statistical analysis, the Wilcoxon Signed Rank Test was conducted. Table 4.9 shows the changes in the perceived dispositions of student teachers by comparing the pre- and post-test scores of student teachers on the TDI scale.

Table 4.9

*The Results of the Wilcoxon Signed Rank Test for Student Teacher Responses to the TDI Questionnaire*

		Frequency (N)	Mean Rank	Z	P Value
Student-Centered Subscale Post- Pre	Negative Ranks	7	12,57	-7,570	0,000
	Positive Ranks	77	45,22		
	Ties	2			

Table 4.9 (Cont'd)

Curriculum	Negative Ranks	11	16,45		
Centered	Positive Ranks	73	44,98		
Subscale Post-Pre	Ties	2		-6,592	0,000

Hinkle, Wiersma, and Jurs (1998) stated that the Wilcoxon Signed Rank Test is commonly applied in designs that involve either repeated-measures of subjects or pre- and post-tests when it is not suitable to use a t-test for dependent samples. The Z value obtained from the Wilcoxon Signed Rank Test for the student-centered subscale was -7.570 and for the professional, curriculum-centered subscale was -6.592, and the p values were 0.000.

Considering these results, the hypothesis “Student teaching experience does not make a significant difference between student teachers’ perceived student-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience” was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that there is a statistically significant difference between student teachers’ perceived student-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience. Negative ranks show that student teaching experience is not useful for student teachers in terms of their student-centered disposition development. On the other hand, positive ranks show that student teaching experience is useful for student teachers in terms of their student-centered disposition development. Based on the negative ranks, student teachers’ post-test TDI scores were significantly higher than their pre-test TDI scores. It can be concluded that pre-service ECE teachers perceived that their student-centered disposition levels increased through their student teaching experience.

Also, the hypothesis “Student teaching experience does not make a significant difference between student teachers’ perceived professional, curriculum-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience” was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that there is a statistically significant difference between student teachers’ perceived professional, curriculum-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience. The negative ranks show that having teaching experience is not useful for student teachers in terms of their professional, curriculum-centered disposition development; on the other hand, the positive ranks show that having teaching experience is useful for student teachers in terms of their professional, curriculum-centered disposition development. Based on the negative ranks, the student teachers’ post-test TDI scores were significantly higher than their pre-test TDI scores. It can be concluded that pre-service ECE teachers perceived that their professional, curriculum-centered disposition levels increased through their student teaching experience. To conclude, pre-service ECE teachers’ perceived dispositions increased after their student teaching experience. To validate the outcome of the student teacher results, the same instrument was conducted to both the cooperating teachers of the pre-service ECE teachers and their university supervisors.

#### ***4.2.1.1 Relationship Tests Between the Demographic Information of the Student Teachers and the TDI Sub-Dimensions after Student Teaching Experience***

##### ***4.2.1.1.1 Relationship between Student Teachers’ Age Group and Student-Centered and Professional, Curriculum-Centered Dimensions***

**RQ.1a.** Do pre-service ECE teachers’ perceived dispositions differ in terms of their dispositions before and after their student teaching experience according to their age groups?

In the current study, the answers obtained from the 45 questions of student-centered and professional, curriculum-centered quantitative data, the age variable is a qualitative data consisting of two groups: 18-24 years old and 25-30 years old. A Mann-Whitney U test was conducted as an alternative to the t-test for independent samples to test for the differences between two independent groups. Table 4.10 represents the relationship between the student teachers' age group and their student-centered dispositions and professional, curriculum-centered dispositions.

Table 4.10

*Results of the Mann-Whitney U Test for the Age Group Responses of the Student Teachers to TDI*

	Age	Frequency (N)	Mean Rank	Mann- Whitney U	P Value
Student Centered Subscale	18-24	80	44,71	143,00	0,100
	24-30	6	27,33		
Curriculum Centered Subscale	18-24	80	44,61	151,50	0,132
	24-30	6	28,75		

The Mann-Whitney U test value for the student-centered dispositions was 143.00 and for the professional, curriculum-centered dispositions was 151.50, and the p values were .0100 and .0132, respectively. According to these results, the hypothesis "There is no statistically significant difference between the student teachers' age group and their student-centered disposition development" was accepted. Furthermore, the hypothesis "There is no statistically significant difference between the student teachers' age group and their professional, curriculum-centered disposition development" was also accepted. The results indicated that pre-service ECE teachers' perceived dispositions did not differ in terms of their student-centered

and professional curriculum-centered dispositions according to their age groups after their student teaching experience.

**4.2.1.1.2 Relationship Between the Settings of the Student Teaching Experience and Student-Centered and Professional, Curriculum-Centered Dimensions**

**RQ. 1b.** Do pre-service ECE teachers’ perceived dispositions differ in terms of their dispositions before and after their student teaching experience according to private and public school settings?

In the current study, answers obtained from 45 questions of student-centered and professional, curriculum-centered quantitative data, the school type variable is a qualitative data consisting of two groups: public and private. A Mann-Whitney U test was conducted as an alternative to the t-test for independent samples to test for the differences between two independent groups. Table 4.11 shows the relationship between the school type where the student teachers had their student teaching experience and their student-centered and professional, curriculum-centered dispositions.

Table 4.11

*Results of the Mann-Whitney U Test for School Type Responses of Student Teachers to TDI*

	School Type	Frequency (N)	Mean Rank	Mann-Whitney U	P Value
Student Centered Subscale	Public	40	38,20	708,00	0,066
	Private	46	48,11		
Curriculum Centered Subscale	Public	40	36,24	629,50	0,012
	Private	46	49,82		

The value obtained from the Mann-Whitney U test for student-centered dispositions was 708.00 and for professional, curriculum-centered dispositions was 629.50, and the p values were .06 and .01, respectively. Considering these results, the hypothesis “There is no significant difference between the school types where student teachers had their student teaching experience in terms of their student-centered disposition development” was accepted. The Mann-Whitney U test results indicated that there was not a significant difference between the school types where student teachers had their student teaching experience in terms of their student-centered disposition development. On the other hand, the hypothesis “There is no significant difference between the school types where student teachers had their student teaching experience in terms of their professional, curriculum-centered disposition development” was rejected with  $p = 0.012 < \alpha = 0.05$  and the results indicated that the school types where the student teachers had their teaching experience were significantly different, and it can be concluded that for the student teachers who had their teaching experience in private schools, their professional, curriculum-centered disposition scores were significantly higher than those who had their teaching experience in public schools.

#### ***4.2.1.1.3 Relationship Between Student Teachers’ Grade Level and Student-Centered and Professional, Curriculum-Centered Dimensions***

**RQ. 1c.** Do 3rd year and 4th year pre-service ECE teachers differ in terms of their dispositions before and after their student teaching experience?

In the current study, answers obtained from 45 questions of student-centered and professional, curriculum-centered quantitative data, the grade level variable is qualitative data consisting of two groups: junior (3rd year) and senior (4th year). Table 4.12 represents the relationship of the student teachers’ grade levels and their student-centered and professional, curriculum-centered disposition development.

Table 4.12

*Results of the Mann-Whitney U Test for Grade Level and the Responses of Student Teachers to TDI*

	Grade Level	Frequency (N)	Mean Rank	Mann-Whitney U	P Value
Student-Centered Subscale	3	46	48,72	680,00	0,038
	4	40	37,50		
Professional, Curriculum-Centered Subscale	3	46	49,55	641,50	0,015
	4	40	36,54		

To test whether there was a significant difference between the 3rd and 4th year student teachers' post-test scores, a Mann-Whitney U test was applied. The value obtained from the Mann-Whitney U test for student-centered dispositions was 680.00 and for professional, curriculum-centered dispositions was 641.50, and the p values were .038 and .015, respectively. Considering these results, the hypothesis "There is no statistically significant difference between the student teachers' grade levels and their student-centered disposition development at the end of their student teaching experience" was rejected with  $p = 0.038 < \alpha = 0.05$ . The Mann-Whitney U test results indicated that there is a statistically significant difference between the grade levels of the student teachers in terms of student-centered disposition development. Also, the hypothesis "There is no statistically significant difference between student teachers' grade levels and their professional, curriculum-centered disposition development at the end of their student teaching experience" was rejected with  $p = 0.015 < \alpha = 0.05$ . The Mann-Whitney U test results indicated that there was a statistically significant difference between the grade levels of student teachers in terms of professional, curriculum-centered development.

It can be concluded from the results that the level of change in the teaching disposition development of junior (3rd year) student teachers' disposition development was higher than senior (4th year) student teachers' disposition development at the end of their student teaching experience.

**4.2.1.1.4 Relationship Between Student Teachers' Teaching Experiences and Student-Centered and Professional, Curriculum-Centered Dimensions**

**RQ. 1d.** Is there a difference in pre-service ECE teachers' dispositions in correlation to the number of their student teaching experiences?

In the current study, answers obtained from 45 questions of student-centered and professional, curriculum-centered quantitative data, the student teaching experience variable is qualitative data consisting of five groups: 1, 2, 3, 4, and 5 semesters. Table 4.13 represents the relationship between the student teachers' number of student teaching experiences and their student-centered and professional, curriculum-centered disposition development.

Table 4.13

*Results of Kruskal-Wallis Test for the Teaching Experiences of Student Teachers*

	Experience	Frequency (N)	Mean Rank	Chi-Square	P Value
Student-centered Subscale	1	40	47,51	10,056	0,039
	2	36	36,40		
	3	6	60,50		
	4	1	81,00		
	5	3	28,67		

Table 4.13 (Cont'd)

	1	40	48,48		
Professional, Curriculum-Centered	2	36	36,36		
Subscale	3	6	52,75	5,406	0,248
	4	1	45,50		
	5	3	43,67		

$p < .05$

A Kruskal-Wallis test is the non-parametric alternative of one-way between-groups analysis of variance and it allows the researchers to compare the scores on some continuous variable for three or more groups (Palland, 2007). According to Palland (2007), if the significance level value is less than .05, then researcher can conclude that there is a statistically significant difference in continuous variable across groups. "You can examine the mean rank for the groups to tell you which of the groups had the highest overall ranking that corresponds to the highest score on your continuous variable" (Palland, 2007, p. 234). The results indicate that the chi-square value for the student-centered subscale is 10.056 and for the professional, curriculum-centered subscale is 5.406, and the  $p$  values are 0.039 and 0.248, respectively. So, considering these results, the hypothesis "There is no statistically significant difference between student teachers' teaching experience and their student-centered disposition development at the end of their student teaching experience" was rejected with  $p = 0.039 < \alpha = 0.05$ . The results indicated that the number of student teaching experiences made a significant difference in terms of student-centered disposition development. On the other hand, the hypothesis "There is no statistically significant difference between student teachers' teaching experience and their professional, curriculum-centered disposition development at the end of their student teaching experience" was accepted with  $p = 0.248 > \alpha = 0.05$ . The Kruskal-Wallis test results indicated that there was not a significant difference between the number of student

teaching experiences in terms of professional, curriculum-centered disposition development.

To find the group of student teachers that made a difference in terms of student-centered disposition development among student teachers' teaching experiences, Group 4, which had the highest mean rank average (four semesters of student teaching experience), was removed from the set of data and a Kruskal-Wallis test was conducted again. Table 4.14 represents the relationship of the student teachers' number of student teaching experiences and their student-centered disposition development after removing Group 4.

Table 4.14

*Results of the Kruskal-Wallis Test for the Teaching Experience of Student Teachers (After Removing Group 4)*

	Experience	Frequency (N)	Mean Rank	Chi-Square	P Value
	1	40	47,44		
Student Centered Subscale	2	36	36,38	7,873	0,049
	3	6	60,33		
	5	3	28,67		

$p < .05$

After removing Group 4, which had the highest mean rank, the results indicated that the chi-square value for the student-centered subscale was 7.873 and the  $p$ -value was 0.049. Considering these results, the hypothesis "There is no statistically significant difference between student teachers' teaching experience and their student-centered disposition development at the end of their student teaching experience" was rejected with  $p = 0.049 < \alpha = 0.05$ . The results again indicated that student teaching experience made a significant difference in terms of student-

centered disposition development after removing Group 4 with the highest mean rank.

Again, Group 3 with the highest mean rank average (three semesters of student teaching experience) was removed from the data set and a Kruskal-Wallis test was conducted again to find the group of student teachers that made a difference in terms of student-centered disposition development among student teachers' teaching experiences. Table 4.15 represents the relationship of the student teachers' number of student teaching experiences and their student-centered disposition development after removing Group 3.

Table 4.15

*Results of the Kruskal-Wallis Test for the Teaching Experience of Student Teachers (After Removing Group 3)*

	Experience	Frequency (N)	Mean Rank	Chi- Square	P Value
Student Centered Subscale	1	40	45,56	5,040	0,080
	2	36	34,85		
	5	3	27,67		

$p < .05$

After removing Group 3, which had the highest mean rank, the results indicated that the chi-square value for the student-centered subscale was 5.040 and the p value was 0.080. Considering these results, the hypothesis "There is no statistically significant difference between student teachers' teaching experience and their student-centered disposition development at the end of their student teaching experience" was accepted with  $p = 0.089 > \alpha = 0.05$ . The results indicated that there was not a significant difference in terms of student-centered disposition development after removing Group 3 with the highest mean rank.

It can be concluded from the results that removing student teachers who had three and four semesters of teaching experience from the data set, the student teachers who had one, two, and five semesters of student teaching experience did not make a significant difference in terms of student-centered disposition development, but student teacher who had three and four semesters of student teaching experience made a significant difference in terms of student-centered disposition development.

#### **4.2.3 How Did the Cooperating Teachers Assess the Student Teachers' Disposition Development Before and After Their Student Teaching Experience?**

**RQ2.** Is there a change in cooperating teachers' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after the student teaching experience?

As mentioned previously, the cooperating teachers also evaluated the perceptions of disposition demonstrated by their student teachers with the same instrument. Another Wilcoxon Signed Rank Test, a nonparametric statistical analysis, was conducted to examine any changes in the student teachers' disposition development and whether there was a significant difference between the pre- and post-TDI scores of the student teachers evaluated by the cooperating teachers. Table 4.16 presents the changes in the perceived disposition development of student teachers according to the cooperating teachers by comparing the pre- and post-test scores of the student teachers on the TDI scale.

Table 4.16

*The Results of the Wilcoxon Signed Rank Test for the Cooperating Teachers from the TDI Questionnaire*

		Frequency (N)	Mean Rank	Z	P Value
	Negative				
Student-Centered Subscale Post-Pre	Ranks	20	21,10	-4,592	0,000*
	Positive	48	40,08		
	Ranks	18			
	Ties				
	Negative				
Curriculum-Centered Subscale Post-Pre	Ranks	20	29,23	-3,983	0,000*
	Positive	51	38,66		
	Ranks	15			
	Ties				

\* $P < .05$

As mentioned before, a Wilcoxon Signed Rank Test, a nonparametric statistical analysis, was conducted to assess whether student teachers showed any progress according to their cooperating teachers regarding their TDI scores from the pre- and post-tests. The Z value obtained from the Wilcoxon Signed Rank Test for the student-centered subscale was -4.592 and for the professional, curriculum-centered subscale was -3.989, and the p values were 0.000.

Considering these results, the hypothesis "Cooperating teachers assert that there is no statistically significant difference between student teachers' student-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience" was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that, according to the cooperating teachers, there was a statistically significant difference between the student

teachers' student-centered disposition levels at the beginning of the student teaching experience and at the end of the student teaching experience. Negative ranks show that having teaching experience is not useful for student teachers in terms of their student-centered disposition development; on the other hand, positive ranks show that having teaching experience is useful for student teachers in terms of their student-centered disposition development. Based on the negative ranks, the student teachers' post-test TDI scores were significantly higher than their pre-test TDI scores. It can be concluded that according to the cooperating teachers' responses to TDI, the pre-service ECE teachers' student-centered disposition levels increased through their student teaching experience.

Also, the hypothesis "Cooperating teachers assert that there is no statistically significant difference between student teachers' professional, curriculum-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience" was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that there was a statistically significant difference between the student teachers' professional, curriculum-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience. The negative ranks showed that having teaching experience was not useful for the student teachers in terms of their professional, curriculum-centered disposition development; on the other hand, the positive ranks showed that having teaching experience was useful for student teachers in terms of their professional, curriculum-centered disposition development. Based on the negative ranks, the student teachers' post-test TDI scores were significantly higher than their pre-test TDI scores. It can be concluded that according to the cooperating teachers' responses to TDI, the pre-service ECE teachers' professional, curriculum-centered disposition levels increased through their student teaching experience.

To conclude, the cooperating teachers' evaluations showed that the pre-service ECE teachers' teaching dispositions increased after their student teaching experience.

#### 4.2.4 How Did University Supervisors Assess Student Teachers' Disposition Development Before and After Their Student Teaching Experience?

**RQ3.** Is there a change in university supervisors' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after the student teaching experience?

As mentioned in the Method chapter, university supervisors also evaluated the perceptions of dispositions demonstrated by their student teachers with the same instrument. A further Wilcoxon Signed Rank Test, a nonparametric statistical analysis, was conducted to examine any changes in the student teachers' disposition development and whether there was a significant difference between the pre- and post-TDI scores of the student teachers as evaluated by their university supervisors. Table 4.17 presents the changes in the disposition development of the student teachers according to the university supervisors by comparing the pre- and post-test scores of the university supervisors on the TDI scale.

Table 4.17

*The Results of the Wilcoxon Signed Rank Test for the Cooperating Teachers from the TDI Questionnaire*

		Frequency (N)	Mean Rank	Z	P Value
Student-Centered Subscale Post-Pre	Negative Ranks	16	17,44		
	Positive Ranks	68	48,40	-6,718	0,000*
	Ties	2			
Curriculum Centered Subscale Post-Pre	Negative Ranks	10	16,45		
	Positive Ranks	72	44,98	-7,107	0,000*
	Ties	4			

$p < .05$

As demonstrated in the table, the Z value obtained from the Wilcoxon Signed Rank Test for the student-centered subscale was -6.718 and for the professional, curriculum-centered subscale was -7.107, and the p values were 0.000.

Considering these results, the hypothesis “University supervisors’ perception of there is no statistically significant difference between student teachers’ student-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience” was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that, according to university supervisors, there is a statistically significant difference between the student teachers’ student-centered disposition levels at the beginning of the teaching experience and at the end of the teaching experience. The negative ranks show that having teaching experience was not useful for the student teachers in terms of their student-centered disposition development; on the other hand, the positive ranks show that having teaching experience was useful for student teachers in terms of their student-centered disposition development. Based on the negative ranks, the student teachers’ post-test TDI scores were significantly higher than their pre-test TDI scores. It can be concluded that according to the university supervisors’ responses to TDI, pre-service ECE teachers’ student-centered disposition levels increased through their student teaching experience.

Also, another hypothesis “University supervisors’ perception of there is no statistically significant difference between student teachers’ professional, curriculum-centered dispositions at the beginning of the student teaching experience and at the end of the student teaching experience” was rejected with  $p = 0.000 < \alpha = 0.05$ . Wilcoxon Signed Rank Test results indicated that there was a statistically significant difference between the student teachers’ professional, curriculum-centered disposition levels at the beginning of the student teaching experience and at the end of the student teaching experience. The negative ranks showed that having

teaching experience was not useful for student teachers in terms of their professional, curriculum-centered disposition development; on the other hand, the positive ranks showed that having teaching experience was useful for student teachers in terms of their professional, curriculum-centered disposition development. Based on the negative ranks, the student teachers' post-test TDI scores were significantly higher than their pre-test TDI scores. It can be concluded that according to the university supervisors' responses to TDI, the pre-service ECE teachers' professional, curriculum-centered disposition levels increased through their student teaching experience. To conclude, the university supervisors' evaluations represented that pre-service ECE teachers' teaching dispositions increased after student teaching experience.

#### **4.3. Analyses According to InTASC Principles Aligned with TDI Items**

In the current study, the data gathered from student teachers, cooperating teachers, and university supervisors were also analyzed according to InTASC Principles. All the items in the TDI instrument were aligned with 7 principles and they were grouped according to their alignment before conducting the tests. (Item alignments with the InTASC Principles are provided in APPENDIX B.)

The descriptive statistics generated according to the responses of the student teachers, cooperating teachers, and university supervisors to the TDI instrument are shown in Table 4.18.

Table 4.18

*Descriptive Statistics of InTASC Principles*

	Principle	N	Min	Max	Mean	Std Deviation	P Value
Student Teacher	Pre						
	P1	86	9,00	20,00	15,24	2,46	0,00
	P2	86	12,00	30,00	24,69	3,42	0,00
	P3	86	16,00	30,00	24,83	3,09	0,00
	P5	86	10,00	20,00	15,67	2,41	0,00
	P6	86	5,00	15,00	11,24	2,04	0,00
	P7	86	13,00	40,00	31,39	5,02	0,00
	P9	86	26,00	70,00	54,66	7,66	0,00
	Post						
	P1	86	12,00	20,00	17,96	1,90	0,00
	P2	86	18,00	30,00	27,94	2,38	0,00
	P3	86	18,00	30,00	27,65	2,23	0,00
	P5	86	12,00	20,00	17,94	1,90	0,00
	P6	86	9,00	15,00	13,05	1,33	0,00
P7	86	24,00	40,00	35,87	3,70	0,00	
P9	86	42,00	70,00	62,27	6,48	0,00	
Cooperating Teacher	Pre						
	P1	86	9,00	20,00	17,73	2,69	0,00
	P2	86	16,00	30,00	26,39	3,74	0,00
	P3	86	15,00	30,00	26,56	3,54	0,00
	P5	86	10,00	20,00	18,20	2,42	0,00
	P6	86	9,00	15,00	13,38	1,77	0,00
	P7	86	20,00	40,00	35,59	5,23	0,00
	P9	86	39,00	70,00	62,26	8,63	0,00
	Post						
	P1	86	15,00	20,00	18,97	1,39	0,00
	P2	86	22,00	30,00	28,38	2,21	0,00
	P3	86	22,00	30,00	28,63	2,05	0,00
	P5	86	14,00	20,00	19,22	1,37	0,00
	P6	86	9,00	15,00	14,15	1,22	0,00
P7	86	29,00	40,00	37,89	2,93	0,00	

Table 4.18 (Cont'd)

	P9	86	50,00	70,00	66,58	4,89	0,00	
	P1	86	6,00	20,00	14,55	3,55	0,00	
	P2	86	11,00	30,00	21,36	4,74	0,00	
	P3	86	12,00	30,00	21,33	4,42	0,00	
	Pre	P5	86	8,00	20,00	15,20	3,05	0,00
		P6	86	5,00	15,00	11,19	2,25	0,00
		P7	86	14,00	40,00	28,38	5,75	0,00
University		P9	86	29,00	70,00	51,58	9,52	0,00
		P1	86	9,00	20,00	17,96	2,60	0,00
Supervisor		P2	86	11,00	30,00	26,72	3,99	0,00
		P3	86	14,00	30,00	26,40	3,66	0,00
	Post	P5	86	9,00	20,00	18,12	2,15	0,00
		P6	86	5,00	15,00	13,23	1,91	0,00
		P7	86	16,00	40,00	35,37	4,71	0,00
		P9	86	26,00	70,00	61,55	8,49	0,00

The distribution of the InTASC Principles is provided in Table 4.18. The p values are smaller than .05, and it can be said that the principles are not distributed normally. However, while analyzing the student teachers' responses, cooperating teachers' responses, and university supervisors' responses the researcher created normality tests for each group separately.

#### 4.3.1. Analysis of Student Teachers' Disposition Development After Student Teaching Experience in Terms of InTASC Principles

**RQ4.** Is there a change in pre-service ECE teachers' disposition scores after the student teaching experience on the basis of InTASC principles and disposition indicators?

As mentioned before, the rationale behind hypothesis testing relies on normally distributed data; if the data is not distributed normally, researchers cannot apply parametric tests (Fidel, 2009). A Kolmogorov-Smirnov test is one of the ways to determine whether the data is normally distributed or not. Table 4.19 shows the results of the tests of the normality results of the Kolmogorov-Smirnov test applied to the pre- and post-TDI scores of student teachers in terms of the InTASC Principles.

Table 4.19

*Test of Normality with Kolmogorov-Smirnov Test*

		Statistic	df	p-Value
Principle 1	Pre	.12	86	.004*
	Post	.18	86	.00*
Principle 2	Pre	.11	86	.005*
	Post	.21	86	.00*
Principle 3	Pre	.11	86	.008*
	Post	.19	86	.00*
Principle 5	Pre	.11	86	.011*
	Post	.17	86	.00*
Principle 6	Pre	.16	86	.00*
	Post	.20	86	.00*
Principle 7	Pre	.11	86	.005 *
	Post	.13	86	.001*
Principle 9	Pre	.11	86	.012 *
	Post	.13	86	.001*

\*p < .05

Pallant (2007) claims that a non-significant result, which means that the significance value is more than .05, indicates normality. As shown in Table 4.19, the data gathered

from the student teachers were not distributed normally, because they are less than .05.

To evaluate the change in perceived dispositions throughout the pre-service ECE teachers' student teaching experience, a nonparametric statistical analysis, the Wilcoxon Signed Rank Test, was applied. Table 4.20 shows the changes in the perceived dispositions of the student teachers on the basis of the InTASC Principles by comparing the pre- and post-test scores of the student teachers on the TDI scale

Table 4.20

*The Results of the Wilcoxon Signed Rank Test for the Student Teacher Responses to TDI on the Basis of the InTASC Principles*

		Frequency (N)	Mean Rank	Z	P Value
Principle 1	Negative Ranks	4	13,50	-	0,000*
	Positive Ranks	73	40,40		
	Ties	9			
Principle 2	Negative Ranks	10	16,50	-	0,000*
	Positive Ranks	70	43,93		
	Ties	6			
Principle 3	Negative Ranks	7	29,29	-	0,000*
	Positive Ranks	70	39,97		
	Ties	9			
Principle 5	Negative Ranks	6	20,00	-	0,000*
	Positive Ranks	68	39,04		
	Ties	12			
Principle 6	Negative Ranks	7	23,29	-	0,000*
	Positive Ranks	67	38,99		
	Ties	12			

Table 4.20 (Cont'd)

	Negative Ranks	14	15,21		
Principle 7	Positive Ranks	67	46,39	-	0,000*
	Ties	5		6,825	
	Negative Ranks	10	19,75		
Principle 9	Positive Ranks	75	46,10	-	0,000*
	Ties	1		7,148	

\* $p < .05$

As a result of the Wilcoxon Signed Rank Test,  $z$  and  $p$  values are provided in Table 20. Considering these values, the hypothesis “Student teaching experience does not make a significant difference between the perceived dispositions of pre-service ECE teachers before and after student teaching experience on the basis of InTASC Principles” was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that there was a statistically significant difference between the pre-service ECE teachers’ perceived dispositions before and after student teaching experience. Negative ranks showed that having teaching experience was not useful for student teachers in terms of teaching disposition development; on the other hand, positive ranks showed that having teaching experience was useful for student teachers in terms of their teaching disposition development. Based on negative ranks, the student teachers’ post-test TDI scores were significantly higher than their pre-test TDI scores on the basis of the InTASC Principles. It can be concluded that the pre-service ECE teachers perceived that their teaching disposition levels increased through their student teaching experience on the basis of the InTASC Principles. The three InTASC Principles and Disposition Indicators that changed the most after student teaching experience were: Planning for Instruction, Learner Development, and Content Knowledge.

### 4.3.2 Analysis of Student Teachers' Disposition Development After Student Teaching Experience in Terms of InTASC Principles Regarding Cooperating Teacher Responses

**RQ5.** Is there a change in cooperating teachers' perceptions of pre-service ECE teachers' demonstrated dispositions after the student teaching experience on the basis of InTASC principles and disposition indicators?

A further Kolmogorov-Smirnov test was conducted on the data obtained from the cooperating teachers to determine whether the data was normally distributed or not. Table 4.21 shows the results of the normality tests of the Kolmogorov-Smirnov test for the pre- and post-TDI scores of the cooperating teachers' responses on the basis of the InTASC Principles.

Table 4.21

#### *Test of Normality with Kolmogorov-Smirnov Test*

		Statistic	<i>df</i>	<i>p-Value</i>
Principle 1	Pre	.20	86	.004*
	Post	.31	86	.00*
Principle 2	Pre	.18	86	.005*
	Post	.24	86	.00*
Principle 3	Pre	.16	86	.008*
	Post	.29	86	.00*
Principle 5	Pre	.23	86	.011*
	Post	.34	86	.00*
Principle 6	Pre	.21	86	.00*
	Post	.31	86	.00*
Principle 7	Pre	.20	86	.005*
	Post	.26	86	.00*

Table 4.21 (Cont'd)

Principle 9	Pre	.18	86	.012 *
	Post	.26	86	.00*

\* $p < .05$

As shown in Table 4.21, it can be concluded that the data gathered from the cooperating teachers were not distributed normally because the  $p$  values of all the principles are lower than .05.

A further Wilcoxon Signed Rank Test was conducted to evaluate whether the pre-service ECE teachers showed a significant difference between the pre- and post-test scores of the cooperating teachers' responses in terms of the pre-service ECE teachers' teaching disposition development. Table 4.22 shows the teaching disposition development of the pre-service ECE teachers on the basis of the InTASC Principles by comparing the pre- and post-test scores of the cooperating teachers' responses.

Table 4.22

*The Results of the Wilcoxon Signed Rank Test for the Cooperating Teacher Responses to the TDI Based on the InTASC Principles*

		Frequency (N)	Mean Rank	Z	P Value
Principle 1	Negative Ranks	13	18,81	-	0,000*
	Positive Ranks	39	29,06		
	Ties	34			
Principle 2	Negative Ranks	13	19,08	-	0,000*
	Positive Ranks	47	33,66		
	Ties	26			

Table 4.22 (Cont'd)

Principle 3	Negative Ranks	9	10,17	-	0,000*
	Positive Ranks	43	29,92	5,461	
	Ties	34			
Principle 5	Negative Ranks	15	16,77	-	0,000*
	Positive Ranks	35	29,24	3,775	
	Ties	36			
Principle 6	Negative Ranks	16	17,88	-	0,000*
	Positive Ranks	36	30,33	3,747	
	Ties	34			
Principle 7	Negative Ranks	20	22,43	-	0,000*
	Positive Ranks	43	36,45	3,842	
	Ties	23			
Principle 9	Negative Ranks	17	19,21	-	0,000*
	Positive Ranks	45	36,14	4,565	
	Ties	24			

\* $p < .05$

The  $z$  and  $p$  values of the Wilcoxon Signed Rank Test are provided in Table 4.22. Considering these values, the hypothesis “According to the cooperating teachers, student teaching experience does not make a significant difference between the teaching disposition levels of the pre-service ECE teachers before and after student teaching experience on the basis of InTASC Principles” was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that there was a statistically significant difference between the pre-service ECE teachers’ teaching disposition levels before and after their student teaching experience. Negative ranks show that having teaching experience was not useful for the student teachers in terms of teaching disposition development; on the other hand, positive ranks show that

having teaching experience was useful for the student teachers in terms of their teaching disposition development. Based on the negative ranks, the cooperating teachers' post-test TDI scores were significantly higher than their pre-test TDI scores on the basis of the InTASC Principles. It can be concluded that the cooperating teachers asserted that the pre-service ECE teachers' teaching disposition levels increased through the student teaching experience on the basis of the InTASC Principles.

#### **4.3.3 Analysis of the Student Teachers' Disposition Development After Student Teaching Experience in Terms of the InTASC Principles Regarding University Supervisor Responses**

**RQ6.** Is there a change in university supervisors' perceptions of pre-service ECE teachers' demonstrated dispositions after the student teaching experience on the basis of InTASC principles and disposition indicators?

Another Kolmogorov-Smirnov test was conducted on the data obtained from the university supervisors to determine whether the data was normally distributed or not. Table 4.23 shows the results of the tests of normality results of the Kolmogorov-Smirnov test for the pre- and post-TDI scores of the university supervisors' responses on the basis of the InTASC Principles.

Table 4.23

*Test of Normality with Kolmogorov-Smirnov Test*

		Statistic	<i>df</i>	<i>p-Value</i>
Principle 1	Pre	.18	86	.00*
	Post	.21	86	.00*
Principle 2	Pre	.12	86	.002*
	Post	.23	86	.00*

Principle 3	Pre	.07	86	.20**
	Post	.16	86	.00*
Principle 5	Pre	.12	86	.002*
	Post	.19	86	.00*
Principle 6	Pre	.18	86	.00*
	Post	.18	86	.00*
Principle 7	Pre	.10	86	.031*
	Post	.17	86	.00*
Principle 9	Pre	.10	86	.033*
	Post	.18	86	.00*

\*\* $p > .05$ , \* $p < .05$

As demonstrated in Table 4.23, the  $p$  values of all the principles are lower than .05, except for the pre-test scores of Principle 3. When we considered the data as a whole, it can be concluded that the data gathered from the cooperating teachers were not distributed normally. So, another Wilcoxon Signed Rank Test was conducted to evaluate whether the pre-service ECE teachers showed a significant difference between the pre- and post-test scores of the university supervisors' responses in terms of the pre-service ECE teachers' teaching disposition development. Table 4.24 shows the teaching disposition development of the pre-service ECE teachers on the basis of the InTASC Principles by comparing the pre- and post-test scores of the university supervisors' responses.

Table 4.24

*The Results of the Wilcoxon Signed Rank Test for the University Supervisor Responses to TDI on the Basis of the InTASC Principles*

		Frequency (N)	Mean Rank	Z	P Value
Principle 1	Negative Ranks	9	20,22	-	0,000*
	Positive Ranks	66	40,42		
	Ties	11			
Principle 2	Negative Ranks	9	15,50	-	0,000*
	Positive Ranks	70	43,15		
	Ties	7			
Principle 3	Negative Ranks	9	11,83	-	0,000*
	Positive Ranks	67	42,08		
	Ties	10			
Principle 5	Negative Ranks	8	12,81	-	0,000*
	Positive Ranks	61	37,91		
	Ties	17			
Principle 6	Negative Ranks	10	22,10	-	0,000*
	Positive Ranks	64	39,91		
	Ties	12			
Principle 7	Negative Ranks	8	13,94	-	0,000*
	Positive Ranks	75	44,99		
	Ties	3			
Principle9	Negative Ranks	14	13,50	-	0,000*
	Positive Ranks	70	48,30		
	Ties	2			

\* $p < .05$

The  $z$  and  $p$  values of the Wilcoxon Signed Rank Test are provided in Table 4.24. Considering these values, the hypothesis “According to university supervisors, the student teaching experience does not make a significant difference between the teaching disposition levels of the pre-service ECE teachers before and after their student teaching experience on the basis of the InTASC principles” was rejected with  $p = 0.000 < \alpha = 0.05$ . The Wilcoxon Signed Rank Test results indicated that there was a statistically significant difference between the pre-service ECE teachers’ teaching disposition levels before and after their student teaching experience. Negative ranks show that having teaching experience was not useful for the student teachers in terms of teaching disposition development; on the other hand, positive ranks show that having teaching experience was useful for the student teachers in terms of their teaching disposition development. Based on the negative ranks, the university supervisors’ post-test TDI scores were significantly higher than their pre-test TDI scores on the basis of the InTASC Principles. It can be concluded that the university supervisors asserted that the pre-service ECE teachers’ teaching disposition levels increased through their student teaching experience on the basis of the InTASC Principles.

To conclude, when the pre-service ECE teachers teaching disposition development was examined on the basis of the InTASC Principles generally, the student teachers, cooperating teachers, and university supervisors said that student teaching experience increased the teaching disposition of the pre-service ECE teachers.

#### **4.4. Qualitative Analysis**

Qualitative data were collected in two phases; one phase to determine teaching disposition profiles and the other phase to find out about the implementation of the pre-service ECE teachers’ teaching dispositions in the classroom during their student teaching experience. During both phases, open-ended questions were given to the participants and they were asked to write reflection journals. The data obtained from

these two phases were analyzed separately and then findings were mixed in order to interpret them.

#### **4.4.1. Phase I of the Qualitative Analysis**

At the beginning of the semester, to determine the teaching disposition profiles of the pre-service ECE teachers, they were asked to write a reflection journal about how they described disposition, what the concept *teaching disposition* meant for them, and whether it was important to have a teaching disposition to be an effective teacher. By answering these questions with their short descriptions, the researcher was able to see the teaching disposition profiles of the pre-service ECE teachers with the pre-service teachers' definitions and their understanding of teaching disposition.

The data sources of the study had several connections with the InTASC Principles in terms of the given definitions and explanations of the pre-service ECE teachers, and all the responses of the pre-service ECE teachers were coded according to the 10 InTASC Principles and Disposition Indicators. The given definitions constructed evidence of the pre-service ECE teachers' knowledge about disposition indicators, which are learner development, learning differences, learning environment, content knowledge, application of content, assessment, planning for instruction, instructional strategies, professional learning and ethical principles, and leadership and collaboration. Table 4.25 lists the InTASC Principles with their frequencies in the reflection journals.

Table 4.25

*Reflection Responses of the Pre-Service ECE Teachers Ranked by the InTASC Principles and Disposition Indicators According to Frequencies*

INTASC Principle	Frequency	%
Principle 9: Professional Learning and Ethical Practice	172	22.81
Principle 8: Instructional Strategies	116	15.38
Principle 5: Application of Content	99	13.12
Principle 10: Leadership and Collaboration	81	10.74
Principle 3: Learning Environments	69	9.15
Principle 1: Learner Development	59	7.82
Principle 2: Learning Differences	58	7.69
Principle 4: Content Knowledge	39	5.17
Principle 6: Assessment	36	4.77
Principle 7: Planning for Instruction	25	3.31

As represented in Table 4.25, the pre-service ECE teachers’ responses were related with professionalism, teaching strategy, creativity, collaboration with others, creating learning environment, learning and development, individual differences of learners, content knowledge to make learning meaningful, monitoring learner progress, and making plans to support learning. The responses from “more reflected” to “less represented” are listed below.

***InTASC Principle 9: Professional Learning and Ethical Practice:*** Most of the participating pre-service ECE teachers commented on the importance of professional learning and ethical practices while defining and giving information about teaching dispositions, such as ECE teachers should be researchers, open to self-improvement and self-effort, hardworking, innovators, have moral rules, follow the field’s innovations, learn to teach, and be professional. Some of the definitions of teaching disposition from the pre-service ECE teachers are:

**ST7:**

*Teaching disposition is not only being disposed to teach something. It is also being disposed to learn while teaching. To teach new things, teachers need to renew themselves.*

**ST65:**

*A person who has a teaching disposition struggles to develop himself and learn how he can be more effective for children.*

**ST23:**

*For example, we can say that teaching disposition is being open-minded, having a high opinion of children, thinking about different solutions, educating himself and being willing to search.*

**Principle 8: Instructional Strategies:** This was another most mentioned principle and disposition indicator. The pre-service ECE teachers' responses touched on the issues of classroom management, creative thinking, handling problem situations, and what to teach and how to teach an issue in different ways were used while describing teaching disposition as reflected in their responses:

**ST56:**

*Teaching disposition means: becoming qualified to take the necessary responsibilities for teaching, being open to communication and collaboration, being competent in relaying information in such a way that he/she can catch their attention and that is appropriate for children's developmental levels, being open to learning and encouraging to search and offering his or her knowledge with interesting and different methods.*

**ST85:**

*Actually, one's teaching disposition can be evaluated by how much he or she can teach in front of children. I believe that proper technique and strategy can only be created by a person who has teaching skill and disposition.*

**ST6:**

*A person who has a teaching disposition must love teaching and should be creative. That means he/she must not implement an activity in only one way. For example, if children can learn much more with art activities, he/she should integrate different subjects with it.*

**Principle 5: Application of Content:** Participant definitions about teaching disposition were about teachers' understanding of central concepts and creating learning experiences that are meaningful for students. Participant responses were:

**ST20:**

*When one talks about 'teaching disposition,' that is what directly comes to my mind: Everyone cannot teach what he/she understands. He/she knows, but cannot relay information to another. Because being a teacher is the art of teaching. It is the art of relaying what one knows to others. If you are conditioned to it, then you are predisposed to teaching.*

**ST8:**

*First of all, it is loving the children and job. As I mentioned before, it is applying theoretical information to practice.*

**ST8:**

*Teaching disposition is the skill of using the competence and fund of knowledge required for teaching. It means that using what he/she has learned about his/her subject area effectively and practically.*

**Principle 10: Leadership and Collaboration:** The participant responses about opportunities for taking leadership roles and collaborating with others are listed below.

**ST40:**

*A person who has thee disposition to teach must have a conscience and mercy before anything else. He/she is able to respect others from different cultures, family lives, and economic environments. When necessary, he/she can make sacrifices and should always cooperate with families and other colleagues.*

**ST49:**

*Teacher predisposition includes statements like being extraverted, aware of social skills, following the developments in his/her subject area, and having teamwork skills.*

**ST69:**

*Having a teaching disposition is very important to be an effective teacher. A teacher should have some qualifications. A teacher should have good communication with students, parents, and colleagues.*

**Principle 3: Learning Environments:** Participant responses about organizing a supportive learning environment that encourages social interaction and the self-motivation of students were:

**ST38:**

*Personal skills, communication skills, being self-giving to children, understanding them, and offering a convenient learning environment to them are indicators of teaching disposition.*

**ST34:**

*Teaching disposition can be explained as one's having effective communication skills and offering a democratic learning environment as well as his/her desire for teaching.*

**ST68:**

*Teaching disposition is the ability to successfully perform an effective teaching process, communicate effectively, improve oneself, and create a student-centered classroom environment for children.*

**Principle 1: Learner Development:** The participant responses while defining teaching disposition about learners' developmentally appropriate learning experiences were:

**ST38:**

*Teaching disposition requires understanding child psychology, having enough knowledge about children's developmental features, and having the capacity to prepare appropriate activities for the development of children.*

**ST56:**

*Teaching disposition means being qualified in relaying information in such a matter that they can catch children's attention, by using diverse methods, and that are appropriate for children's developmental levels.*

**ST85:**

*In my opinion, teaching disposition is relaying information and skills within the frame of having and exhibiting a positive attitude to children. Knowing their developmental*

*features and levels and thinking about how far you can take them a step further indicates a predisposition for this job.*

**Principle 2: Learning Differences:** Participant responses about being conscious about individual differences were:

**ST7:**

*In my opinion, teaching disposition requires idealistic behavior. If one is not an idealist, his/her possibility of being a teacher is very low. His/her primary ideal must be teaching something to others. Besides being predisposed, he/she must love teaching. He/she must be able to know the characteristics of every student and behave according to them.*

**ST34:**

*He/she must decide on and perform the most effective teaching method depending on the level, age, economic status, and culture of the children.*

**ST40:**

*A person who has a disposition to teaching is the one who loves sharing knowledge, respects humanity and the environment, and realizes diversity. A person who has a teaching disposition must have a conscience and mercy before anything else. He/she is able to respect others from different cultures, family lives, and economic environments.*

**Principle 4: Content Knowledge:** The participant responses about understanding content areas to make knowledge relevant to learners were:

**ST15:**

*Teaching disposition includes loving teaching, having enough equipment relevant to his/her subject area, and creating practical solutions for classroom situations.*

**ST69:**

*The term teaching disposition means having the required information and skills for teaching and fulfilling his/her job in accordance with them.*

**ST51:**

*Teaching disposition can be explained as to what extent a teacher does his/her job and whether or not he/she has the necessary fund of knowledge and competence.*

**Principle 6: Assessment:** The participant responses while defining teaching disposition about knowing assessment methods to engage students in their own progress and to guide decision making of them were:

**ST25:**

*The person who has a teaching disposition must be aware of his/her responsibilities. Besides he/she must have teamwork skills, observe children well, have knowledge for evaluating his observations properly, have respect for diversity, be tolerant and good-humored, and love children.*

**ST53:**

*Teaching disposition is the ability to lower oneself's teaching level to children's developmental level. It is the competence of understanding the children's level while communicating with them, being motivated, being focused, and exploring the skills of the students as a good observer.*

**ST73:**

*For me, teaching disposition is the competence of teaching something to children. It is the skills of observing children and adjusting all of his/her implementations according to them.*

**Principle 7: Planning for Instruction:** The participant responses while defining teaching disposition while planning for each student's learning goals were:

**ST85:**

*In my opinion, teacher predisposition is relaying information and skills within the frame of having and exhibiting a positive attitude to children. Knowing their developmental features and levels and thinking about how far you can take them a step further indicates a predisposition for this job.*

**ST46:**

*Teaching disposition includes some statements like being devoted, planful, hardworking, and caring about children's diversity.*

**ST38:**

*Teaching disposition is a statement that explains whether one is appropriate for teaching or not. Understanding children and being attentive to them increases a teacher's disposition to teach. Being responsible, being open to improvement, and*

*having the capacity to prepare appropriate activities for the developmental levels of the children.*

#### **4.4.2. Phase II of the Qualitative Analysis**

All the participants were asked to complete open-ended questions at the end of the student teaching experience to gather qualitative data. The reflection journal responses of 86 pre-service ECE teachers were coded inductively according to the InTASC Principles. Table 4.27 below represents the frequencies of the reflection responses of the 86 teacher candidates.

Table 4.26

*The Frequencies of the Reflection Journal Responses of Pre-Service ECE Teachers According to the InTASC Principles and Disposition Indicators*

INTASC Principle	Frequency	%
Principle 8: Instructional Strategies	254	17.39
Principle 6: Assessment	213	14.58
Principle 4: Content Knowledge	173	11.84
Principle 5: Application of Content	148	10.13
Principle 1: Learner Development	145	9.93
Principle 7: Planning for Instruction	140	9.58
Principle 2: Learning Differences	107	7.32
Principle 10: Leadership and Collaboration	102	6.98
Principle 9: Professional Learning and Ethical Practice	93	6.36
Principle 3: Learning Environments	85	5.82

***INTASC Principle 8: Instructional Strategies:*** *“The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply*

knowledge in meaningful ways” (INTASC, 2011, p.17). Most of the pre-service ECE teachers commented on the application of their classroom management skills, how they handled problems, creative thinking, different ways of teaching young children, and how they motivated children in the classroom.

**ST7:**

*While reading a book to the children, I ask them to complete some parts of it. In this way, their imagination has been improved. Leaving some parts blank makes me understand how they think differently, how they react to other ideas, and how they should make comments.*

**ST58:**

*In the school that I am working in for the internship, there was a student whose development has fallen a bit behind from the others. Even though he is older than the others, he is slower and has difficulties while temporizing during the activities. I always tried to implicate him in the process. By contacting him closely, I tried to make him gain something from the activities. By asking questions, I tried to encourage him and tried to make the learning process meaningful for him. In my activities, I used more visuals and descriptive items for him to reinforce the topic.*

**ST10:**

*During the activity, if I feel that a child’s attention is distracted, I try to make more eye contact with him. By asking open-ended questions, I try to get him to focus on the activity. Generally, I use this method and I think it is working for now. After this, if I feel that the child is uninterested again, I can give him some missions according to his interests and will. During the activity, I can ask him to help me.*

**ST10:**

*In the free time, some children come together and try to build something with Legos. Every child has a different point of view. That’s why they are making more complex buildings. I have guided them by asking open-ended questions during the activities. By doing this, I am helping them to see different views and make them aware of different things that they can build.*

**Principle 6: Assessment:** *“The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher’s and learner’s decision making” (INTASC, 2011, p.15).* The other principle that was mostly mentioned by the participants in their reflective journals

was the application of assessment. The pre-service ECE teachers commented on observation, questioning, giving feedback, and trying to determine student understanding and performance.

**ST15:**

*I tried to make the process more fun and permanent by making patterns with some materials and fruits. At the end of the activity, I asked them to form their own patterns and with this process I tried to understand if they had learned the subject or not. Most of them were successful.*

**ST25:**

*First, I tried to learn what topics the child is interested in while talking to him/her. I observed him/her during each activity and examined which activities s/he participates in, which subjects attract his/her attention, and what s/he says to his/her friends about the activity.*

**ST47:**

*I gave a little bit of knowledge to the children before the activity and asked them questions to find out what they knew about the subject. After the activity, I used assessment questions to evaluate whether they had learned or not.*

**ST52:**

*I would collect information by observing the child and learn his/her fields of interest with this information. According to these fields of interest, I would organize my activities and help him/her to participate actively. I would learn if s/he learned or not with assessment and evaluation techniques. I would use my special assessment papers or observe him/her because he has difficulties with communication and does not answer other question types.*

**Principle 4: Content Knowledge:** *“The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content” (INTASC, 2011, p.13).* The participant pre-service ECE teachers reflected upon whether they knew the subject area and how they could present subject matter in a meaningful way for students.

**ST12:**

*The last method we learned was a recalling method and I use it in almost every activity because I believe that open-ended questions enlarge children's points of view and increase their capability of thinking.*

**ST17:**

*Suggesting is a method that is used to give children the idea and show them what they can do without an intervention. I like to use it because I think it is appropriate for child-centered education.*

**ST49:**

*I implemented an activity that was about transportation vehicles. This subject is in all the children's lives and each child sees or uses a different type of transportation vehicle. I implemented an activity that included language and math. The activity was appropriate to 3-year-old children, so I mentioned just a basic means of transport and talked with a simple language.*

**Principle 5: Application of Content:** *"The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues" (INTASC, 2011, p.14).* The participants responded about how they maximize content learning for their students.

**ST15:**

*I tried to teach patterns by using daily life objects. I started with two patterns because the children had not done a pattern before and they are just four years old. During the first time, they had difficulties, but I prepared many other pattern activities during my internship.*

**ST50:**

*Children can think more critically when they are included in the process and not just telling them the process. It is important to direct children by asking them questions. I took them to the garden to pick up leaves for the concept of autumn. They examined leaves with their magnifying glasses and picked them up. I asked them some questions and expected them to give me the meaning of what they saw.*

**ST67:**

*The last activity I did was about science and we conducted an experiment. I did not explain the subject directly. Instead, I asked them some questions and tried to*

*constitute some concepts with those questions. The experiment was about pressure. I showed them some methods to feel pressure instead of telling them what pressure is or how it occurs. They inflated balloons, whiffled their hands, and so on. And finally, I asked some questions about how they felt, what happened, and so on.*

**Principle 1: Learner Development:** *“The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences” (INTASC, 2011, p.10).* The participant responses reflected upon understanding the developmental level of their students and how they selected developmentally appropriate strategies to meet the needs of their students.

**ST47:**

*In my activities, I used interesting materials according to the children’s improvements and developments. I allowed the children to create stories in their activities. I believe that children can comply with the daily routine if the teachers know them and direct them to suitable activities and materials.*

**ST68:**

*I am a teacher candidate who is supporting the full learning model. I think that it can be more helpful for children to provide their active participation with small steps and give feedback to them at suitable times. I also believe that, thanks to this model, more progress can be made academically.*

**ST86:**

*I implemented an activity to emphasize the words that are used in daily life like traffic rules or daily words about kindness. I did this because I thought and believed that children can learn more easily by doing and implementing themselves.*

**Principle 7: Planning for Instruction:** *“The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context” (INTASC, 2011, p.16).* The participant responses were about how they make plans to achieve appropriate curriculum goals and to support each student in learning these predetermined goals.

**ST13:**

*In my first activity, the children were working on completing a human figure in small groups. They wanted to do different things, but then they met in a common point and applied. It was nice. In the next activity, I will pay attention to the directions related to the place attachment of gender identity and I will try to help them find solutions to their conflicts.*

**ST22:**

*I ask questions of the child who is not interested in the activity. I have observed that a child can pay attention to the activity when s/he focuses on the questions. While preparing my activities, I take care to use attention grabbing materials. When preparing my next activity, I will use puppets or other remarkable objects.*

**ST62:**

*First, I would observe the child. I would take notes about his behavior and then try to understand what he likes. While preparing the activity, I would think about how I could contribute to him and would plan according to that. I would observe what he is interested in: art, music, or physical activities.*

*Think of a child who is not communicating, and avoids communicating with his friends and teacher. That's why I consider the social-emotional progress in the activities. I would support the process with individual activities.*

**Principle 2: Learning Differences:** *"The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards" (INTASC, 2011, p.11).*

The participants responded about how they handle the individual differences of learners.

**ST17:**

*I have a student named Caglar in my class. He has different aspects of physical development according to his peers although he is four years old. His height and weight are less than they should be. He is not talkative because he is not like his peers physically. He also shows dissimilarity in terms of language development. It would affect his participation positively to support him and provide him with ways to socialize with his friends during daily routines. It would be best to be in communication with him continuously and practice different learning techniques and then behave according to the feedbacks provided by him.*

**ST48:**

*There was a 5-year-old child who has an autistic disorder. I was adding extra sentences to my speech to help him/her to participate in the daily routine after telling the entire class what to do. I was trying to be more patient with him/her because s/he has problems in language development. I was repeating what s/he said. I think that the best way for him/her to learn are activities that require active participation. I was trying to allow him/her to speak during the assessment questions after the activity so I could evaluate what s/he learned.*

**ST57:**

*Let's think about a child who is an introvert and refuses to communicate with his/her teachers and friends. For him/her, I attach more importance to writing activities than social and emotional developmental areas. Moreover, I support the process with personal activities. In time, most of the children can be encouraged to participate in daily routines. It would be worse to force children into this process. I would try to prepare fun and interesting activities for the classroom. Observation is the best way to know what a child learns.*

**ST82:**

*I had a child with Down's syndrome in my class and s/he had difficulties participating in the class activities because sometimes s/he had difficulty understanding and sometimes s/he had susceptibility. Moreover, s/he had slower physical development than other children. To make him/her participate in activities, I repeated what they should do frequently and sometimes I talked to and helped him/her personally. When s/he is sensitive, I allowed him/her to rest and talked to him/her and helped him/her to do parts of the activities s/he could not do before.*

**Principle 10: Leadership and Collaboration:** *"The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession"* (INTASC, 2011, p.19). The participant responses were about how they take an active role in working with others in the school and how they share responsibility with the school staff.

**ST83:**

*Through the internship period, my cooperating teacher was always with me and she supported me a lot. She always supported me during my implementations. She joined the activities and gave me feedback at the end of my implementations. Most of the*

*time she helped me in my student teaching process and I think working with my cooperating teacher was very beneficial for me, I would work with her again.*

**ST50:**

*There was a child who did not want to join the activities and was naughty. Sometimes s/he could be a bad role model for his/her peers verbally. First, I would contact his/her family to understand whether there was a problem at home or not.*

**ST68:**

*In such cases, hyperactive children come to my mind. There is no specific reason but nowadays, I think it is a very common problem in preschools. If I have such a child, I would recognize him/her closely, gather information about him/her. In the scientific dimension, I do required research, and have contact with the people who are experts in this field. After this, I write the adaptation part to my daily activities for this child.*

**ST71:**

*However, if I were the real teacher of that child with special needs, through a few meetings with the parents, I would try to understand the problem deeply and if it was necessary, I would direct them to specialists and with the help of their direction, I would regulate the activities for that child.*

**Principle 9: Professional Learning and Ethical Practice:** *“The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner” (INTASC, 2011, p.18).* The participant responses were about how the student teaching experience supported their professional development and self-improvement.

**ST49:**

*There was a child who was uninterested in activities, did not like to make physical movements and generally preferred to loaf around, in our classroom, too. At first, the child was not interested in my activities, just like with the classroom teacher’s activities. In such cases, I look for the fault in myself because I feel like I couldn’t grab the attention of the children with the activities.*

**ST73:**

*My cooperating teacher was the coordinator of a project named **Eco-school**, which was being carried out in the school. In this context, she asked me to prepare a brochure that was related to the school project. Seeing a school project and helping with it was very beneficial for my professional development.*

**ST81:**

*My class teacher became a role model for me at the beginning of the activity and she directed and supported me to continue with the activity. With her cooperation, she contributed to my adaptation process and I think I learned a lot of things from her.*

**Principle 3: Learning Environments:** *“The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.” (INTASC, 2011, p.12).* The participants responded about how they organize the learning environment for students and provide positive social interaction between classroom members.

**ST49:**

*I prepared an activity about complying with social life and respecting other’s rights. I prepared a conversation circle and asked for children’s opinions about classroom rules to make this process more democratic. Finally, we painted this process and opinions and hung them up at the entrance of the classroom.*

**ST42:**

*I think it is necessary to provide some stimulus in the learning environment to encourage children to think critically. In an environment that requires different perspectives, supports children’s views.*

**ST75:**

*I tried to include him/her in the activities by using positive language. I tried to express my opinions about how s/he can do things, and how I find his/her products successful in different ways. Sometimes it worked and sometimes not. Because this situation may be related to the child’s character, I tried to prepare a learning environment in which s/he can feel more relaxed or that s/he belonged there.*

To sum up, in the first phase of qualitative analysis, to reveal the teaching disposition profile of pre-service ECE teachers, the reflection journals about their definition of

teaching disposition and their understanding of the teaching disposition concept were analyzed. The findings showed that the teaching disposition profiles of the pre-service ECE teachers were represented by the most frequently highlighted InTASC Principles and Disposition Indicators in the reflection journals, which were Professional Learning and Ethical Practice (22.81%) and Instructional Strategies (15.38%). Furthermore, the Application of Content (13.12%), Leadership and Collaboration (10.74%), Learning Environments (9.15%), Learner Development (7.82%), Learning Differences (7.69%), Content Knowledge (5.17%), Assessment (4.77%), and Planning for Instruction (3.31%) were the other principles and disposition indicators highlighted by the pre-service ECE teachers.

In the second phase of the qualitative analysis, the data obtained from the seven open-ended questions were analyzed to reveal the teaching dispositions of the pre-service ECE teachers during their student teaching experience implementations. The results showed that the most implemented teaching disposition aligned with the InTASC principles and disposition indicators in the participant responses were Instructional Strategies (17.39%) and Assessment (14.58%). Furthermore, Content Knowledge (11.84%), Application of Content (10.13%), Learner Development (9.93%), Planning for Instruction (9.58%), Learning Differences (7.32%), Leadership and Collaboration (6.98%), Professional Learning and Ethical Practice (6.36%), and Learning Environments (5.82%).

## CHAPTER V

### Conclusion and Discussion of the Findings

The current study examined the changes in the development of the perceived dispositions of pre-service early childhood education teachers after their student teaching experience. The findings of research question 1 suggested that the pre-service ECE teachers' perceived dispositions increased after their student teaching experience, and research question 4 had the same findings that the pre-service ECE teachers perceived that their disposition levels increased after their student teaching experience on the basis of the InTASC Principles and Disposition Indicators. Therefore, research questions 1 and 4 were interpreted together because they have the same findings and their findings cannot be discussed separately. Research questions 2 and 5 investigated the cooperating teachers' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after student teaching experience. The findings of research question 2 showed that according to the cooperating teachers' responses to the survey, the pre-service ECE teachers' disposition levels increased after their student teaching experience; research question 5 has the same findings on the basis of the InTASC Principles and Disposition Indicators, so research questions 2 and 5 will be interpreted together. Furthermore, research questions 3 and 6 investigated the university supervisors' perceptions of dispositions demonstrated by their pre-service ECE teachers before and after student teaching experience. The findings of research question 3 showed that according to the university supervisors' responses to the survey that pre-service ECE teachers' disposition levels increased after student teaching experience; research question 6 also has the same findings on the basis of the InTASC Principles and Disposition Indicators; therefore, these two questions' results will be discussed together. Research question 7, which investigated the disposition profile of the pre-service

teachers, and research question 8, which investigated the provided evidence of demonstrated dispositions from the reflection journals, are discussed separately.

## **5.1 Conclusion and Discussion of Findings Related to Research Question 1 and 4**

### **Changes in Perceived Dispositions of Pre-Service ECE Teachers**

The research question 1 was answered by analyzing the scores of the pre-service ECE teachers on the student-centered and professional, curriculum-centered disposition subscales, and the findings suggest that pre-service ECE teachers' perceived dispositions increased after student teaching experience. The researcher also conducted an analysis on the scores of the pre-service ECE teachers on TDI, which has items aligned with the InTASC Principles; the results revealed that the student teaching experience makes a significant difference between the perceived dispositions of pre-service ECE teachers before and after their student teaching experience on the basis of the InTASC Principles.

The results of the study support the hypothesis that pre-service ECE teachers' perceived dispositions increase after student teaching experience; this result that gaining experience changes the dispositions of student teachers was not a surprise and there has been existing research that supports this result. Student teaching experience has been determined to be the most important aspect of educating future teachers (Doppen, 2007 & Singh, 2006). However, Metcalf, Hammer, and Kahlich (1996) found that lab experiences with written case studies in the classroom were more effective than field experience in terms of prospective teachers' professional development. Wilson (1996) supports the results of the current study by indicating that student teaching experiences provide an increase in pre-service teachers' self-efficacy. Bullough et al. (2002) found that pre-service teachers felt that they gained control over what they taught through student teaching experience, and this experience provided them with increased engagement in instructional planning. Rock

and Levin (2002) found that student teaching experience makes student teachers more thoughtful and reflective and it provides them with the opportunity to grasp theories of teaching and learning. Malone, Jones, and Stallings (2002) found that student teaching experience increased student teachers' understanding of the subject that they were teaching, and provided opportunities to develop empathy, tolerance, and patience. Singh and Stoloff (2006) supported the positive effects of student teaching experience by asserting that student teaching experience makes a considerable impact on student teachers' beliefs about teaching and learning, and they also stated that student teaching experience is a vital component of teacher preparation.

Also, the reviewed literature shows that student teaching experience has the most important role that influences student teachers' developing dispositions (Wilson, Floden, & Ferrini-Mundy, 2002), which corroborates the results of the current study. Furthermore, this result seems to be consistent with other research that found that the disposition scores of student teachers increased after their student teaching experience (Prosak & Donald, 2014; Masunaga & Lewis 2011).

When considering the positive changes in the dispositions of pre-service teachers on the basis of the InTASC Principles and Disposition Indicators, the highest level of change occurs in the principle Planning for Instruction. This change might be due to the fact that the coursework of the pre-service teachers emphasized that it is very important to be prepared for their students before their field experience and it was compulsory to submit their practicum reports to their university supervisors responsible for their teaching experience sessions. This was supported by the description of this principle that "The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context" (InTASC, 2011, p. 9). The study conducted by Ball, Knobloch, and Hoop (2007) also supported this finding that experiences, prior

knowledge, and student interests guide student teachers' instructional planning. The second highest level of changes in dispositions occurred in the principle Learner Development. The increase might be due to the fact that the pre-service ECE teachers met with different age groups and they saw how learners vary individually in terms of cognitive, language, social, emotional, and physical development, and they took more responsibility for promoting students' growth and development (InTASC, 2011). The third highest level of changes in the pre-service teachers' dispositions occurred in the principle Content Knowledge. The increase in their content knowledge dispositions might be due to the fact that the student teachers learned how to make content knowledge accessible for students in the classroom by supporting students' creativity, problem solving, and critical thinking skills.

#### **5.1.1 Findings Related to Research Question 1a**

##### **Changes in Perceived Dispositions of Pre-Service ECE Teachers According to Their Age Groups**

The results indicated that there was no statistically significant difference between the student teachers' age groups and their student-centered and professional curriculum-centered dispositions. As seen from the results, the age variable (age groups: 18-24 and 25-30) had no acceptable effect on the pre-service ECE teachers' dispositions. This result was supported by Schulte, Edick, Edwards, and Mackiel (2004), who were the developers of TDI, and who also identified no statistically significant difference between age groups and teaching dispositions when they applied their instrument to 105 pre-service teachers. The reason for this result may be because of the distribution of age groups: 80 pre-service ECE teachers were in the 18-24 age group and only 6 pre-service ECE teachers were in the 25-30 age group; or as in Fessler and Christensen's (1992) epigram, the student teachers' place in the teacher career cycle exerted a stronger influence than their place in the life cycle. Also, the current result seems to be consistent with Keiser's study (2005), which was

conducted to determine the congruence between student teachers' self-perceptions and their cooperating teachers' perceptions that they exhibited while student teaching sessions. Keiser's study (2005) showed that the ages of student teachers have no statistically significant effects on their teaching dispositions.

### **5.1.2 Findings Related to Research Question 1b**

#### **Changes in Perceived Disposition of Pre-Service ECE Teachers According to Private and Public School Settings**

The Mann-Whitney U test results indicated that there was not a significant difference between the school types where student teachers had their student teaching experience in terms of their student-centered disposition development. On the other hand, the student teachers who had their teaching experience in private schools, had professional, curriculum-centered disposition scores that were significantly higher than those who had their teaching experience in public schools. The reason why there was no significant difference between the school type where pre-service ECE teachers have their student teaching experience and their student-centered disposition development may be that both private and public pre-school centers take the child at the center of their educational philosophy. Both private and public preschool centers conduct child initiated curriculums that focus on individual student's learning and the teacher's role is to facilitate the development of students in regard to students' needs and interests to make learning meaningful for them. On the other hand, the significant difference between school type and professional, curriculum-centered disposition development could be due to different curricula implemented at different school types.

In Turkey, preschool education is provided in kindergartens, preparatory classrooms in elementary schools, application classrooms of vocational high schools, and nursery schools. The participants of the current study had their teaching experience through

private and public kindergartens. Although both private and public pre-school centers are committed to the Ministry of National Education, they vary across curriculum. Private kindergartens can implement their customized curriculum within the limits of the law determined by MoNE; on the other hand, public kindergartens have to implement the same curriculum that was determined by MoNE and this may be the main reason for the difference. This statistically significant difference between student teaching experience setting and perception of teaching disposition is similar to the findings of the study conducted by Frederiksen, Cooner, and Stevens (2012). They examined the effects of experience and settings on the perception of the teaching disposition of student teachers and they determined that teachers who work in non-urban school settings expected to gain professional, curriculum-centered dispositions; whereas, urban school settings highlighted student-centered dispositions. Frederiksen et al. (2012) stated that the setting in which pre-service teachers take part can also make a difference in preparedness when it comes to working with diverse populations of students; they also stated that after student teaching experience, and when student teachers work in realistic school settings, they are more competent in some aspects of planning, instruction, management, and assessment. Also, the findings about school setting in the present study support Rakich's (2014) study, which determined that educational setting was an important aspect to consider while examining teaching effectiveness and teaching dispositions. Also, Rakich (2014) stated that his findings were consistent with the view that teaching dispositions are socially constructed and the social environment of teachers affects the perceptions and actions of them.

### **5.1.3 Findings Related to Research Question 1c**

#### **Changes in Perceived Dispositions of Pre-Service ECE Teachers According to Their Grade Level**

The results of the current study showed that there were statistically significant differences between the grade levels of student teachers in terms of both their student-centered and professional, curriculum-centered dispositions. It is interesting to note that the level of change in the teaching disposition development of junior (3rd year) student teachers' disposition development was higher than senior (4th year) student teachers' disposition development at the end of the student teaching experience. A possible explanation for this result may be the previous student teaching experiences that senior student teachers had, because they had already developed dispositions from past student teaching experiences and their level of change in teaching disposition will be lower than the junior student teachers who are having their first student teaching experiences. The Early Childhood Education programs of universities in Turkey require the pre-service teachers to complete three field experiences before graduation; one of them is completed during the 3rd year and two of them are completed during the 4th year of the bachelor degree. In other words, junior students are attending the field experience for the first time, and changes in their disposition development may be higher than in the seniors who have already developed some teaching dispositions. In the current study, the core element is the experience, while comparing the level of changes in the disposition development of 3rd and 4th year pre-service ECE teachers. Bennings et al. (2008) stated that teacher candidates start education programs with already established values, beliefs, and moral codes from their families and school experiences, which influence what they learn in their teacher education programs, but these influences are not considered while assessing their disposition development (Mueller & O'Connor, 2007). On the other hand, previous research has shown that student teaching experiences play a powerful role in student teachers' disposition

development (Wilson, Floden, & Ferrini-Mundy, 2002). This result of the study seems to be in line with Mueller and Hindin's (2011) findings about the effects of previous teaching experience on inclusion; Mueller and Hindin's (2011) study was conducted with 60 sophomore and 40 junior student volunteers and they stated that field experience was the most important and powerful component of teacher preparation.

#### **5.1.4 Findings Related to Research Question 1d**

##### **Changes in Perceived Dispositions of Pre-Service ECE Teachers According to Number of Student Teaching Experience**

The purpose of the current study was to investigate and describe any changes in the development of the perceived dispositions of pre-service early childhood education teachers as influenced by student teaching experience, and the effects of the number of student teaching experiences are represented in the Results section. Student teaching experience is the most important component for teacher preparation programs because it provides student teachers to have the opportunity to apply and reflect on their content, professional and pedagogical knowledge, and skills as well as dispositions in a variety of settings (Pottinger, 2009). From this explanation, it can be said that more student teaching experience provides pre-service teachers more chance to develop teaching dispositions. However, there is a lack of research that has looked directly into examining the effects of the number of student teaching experiences on disposition development. As represented in the Results section, a Kruskal-Wallis test was conducted to find the relationship between the pre-service ECE teachers' number of student teaching experiences and their disposition development. The results showed that number of student teaching experiences made a significant difference in terms of student-centered disposition development. To find the group of pre-service teachers who made a significant difference, the group that had the highest mean rank was removed from the data set and a Kruskal-

Wallis test was conducted again to determine the group that caused the difference, and this process continued up to finding no significant difference between the number of student teaching experiences and student-centered disposition development. After removing Group 4 with the highest mean rank from the data set, the result did not change, and then Group 3 with the second highest mean rank was removed from the data set and the test conducted again; the results showed that the rest of the groups, which had 1, 2, and 5 semesters of student teaching experience, did not make a significant difference. It can be concluded from the results that after removing the student teachers who had 3 and 4 semesters of teaching experience from the data set, the student teachers who had 1, 2, and 5 semesters of student teaching experience did not make a significant difference in terms of student-centered disposition development, but student teachers who had 3 and 4 semesters of experience made a significant difference in terms of student-centered disposition development. A possible explanation for this result might be the demonstration of understanding how students learn and develop, understanding how learning occurs, how all students differ in learning, and how to use prior experience to support student learning development after several student teaching experiences. Also, with the gained experience during student teaching sessions, student teachers improve their planning, organization, and preparation to engage all students actively in learning and their professional dispositions may develop after several student teaching experiences. This result seems to be similar to those of Covert and Clifton (1983), who hypothesized that student teachers who participated in 13 weeks of student teaching experience would develop dispositions toward being a teacher that would increase to a greater degree than those of student teachers who attended student teaching sessions for only two weeks. They examined only three professional dispositions, which were motivation toward teaching, attitudes toward teaching, and self-concept as a teacher candidate, and they found that the student teachers who had 13 weeks of student teaching experience had significantly higher mean scores in the areas they assessed than the student teachers who had only two weeks of student teaching experience. As stated above, there is a lack of research that

examines the effects of the number of student teaching experiences on disposition development, but there are studies that represent the relationship between the length of student teaching experience and other aspects of being an effective teacher. For instance, efficacy and critical thinking dispositions indicate a close relationship and they are stated as predictors of student teachers' academic performance (Yüksel & Alçı, 2012). However, the current study findings do not support the previous research about the effects of the length of student teaching experience on different aspects of teaching. For example, unlike the current study's results, Addison (2010) examined the relationship between the length of student teaching experience and teacher efficacy and the components of the study included the number of hours the student teacher spent teaching in the classroom and the number of years of in-service experience, but did not find a significant relationship between the length of the student teaching experience and teaching efficacy. On the other hand, contrary to Addison (2010), Cole (1995) compared the student teachers who completed lengthy field experiences with those who had short clinical visits and he concluded that the student teachers with longer placements had enough time to understand the school climate and culture and were enabled to become a part of the classroom experience. It can be said that the results of the current study are in agreement with Cole's (1995) findings that state that increasing the duration of the field experience of student teachers allows them to become acclimated to the school's climate, which may also support their effective teaching.

## **5.2 Conclusion and Discussion of the Findings Related to Research Questions 2 and 5**

### **Changes in Perceived Dispositions of Cooperating Teachers Demonstrated by Pre-Service ECE Teachers**

Data were gathered from the cooperating teachers to validate the self-reported data of the student teachers and the analysis of the data gathered from the cooperating

teachers at the beginning and at the end of the student teaching experience of the student teachers showed similar findings with the findings of the student teachers' data. According to the cooperating teachers' responses to TDI, pre-service ECE teachers' disposition levels increased through their student teaching experience.

The researcher also conducted an analysis of the scores of the cooperating teachers about the perception of the teaching dispositions demonstrated by their student teachers on TDI, which has items aligned with the InTASC Principles, and the findings of the study indicate that the cooperating teachers asserted that the pre-service ECE teachers' teaching disposition levels increased through their student teaching experience on the basis of the InTASC Principles and Disposition Indicators.

The results of the current study support the hypothesis that the cooperating teachers' perceptions of the dispositions demonstrated by their pre-service ECE teachers increased after their student teaching experience. Based on the current results, the data collected from the cooperating teachers was used to determine if their views of the pre-service ECE teachers' demonstrated dispositions were similar to the pre-service ECE teachers' self-assessed scores. There are similar results to the results of the current study in the existing literature. Brindle (2012), Singh, and Stoloff (2008) and Whitsett et al. (2007) all stated that teacher education programs required pre-service teachers to self-assess their dispositions, and Wasicko (2007) suggested that self-assessment should be combined with external evaluations to provide valid data for student teachers' dispositions. Brindle (2012) examined the assessment of pre-service teacher dispositions by teacher education programs in Iowa and suggested that multiple stakeholders provide educational programs with an excellent view of the student teachers' dispositions, which allows education programs to help their teacher candidates to identify their strong and weak dispositions. The current result is also in accordance with the studies conducted by Keiser (2005) and Waddell and Griffin (2007) that used different stakeholders to assess student teachers' dispositions. In the current study, the results of the InTASC based analysis showed

that pre-service ECE teachers' mean rank differences were higher than the cooperating teachers' mean rank differences, which means that the pre-service ECE teachers rated themselves higher than the cooperating teachers did. This result supports the findings of Keiser (2007), who compared pre-service teachers' self-assessment of their espoused dispositions and assessment of the observed dispositions of cooperating teachers. Keiser (2005) found that student teachers rated themselves higher than cooperating teachers in terms of student-centered dispositions. Furthermore, Waddell and Griffin's (2007) study, which includes external stakeholders, assessed teacher candidates' dispositions, and they found that the pre-service teachers in the directed student teaching experience rated their dispositions higher than did their cooperating teachers and university supervisors. Also, as in the current study, Waddell and Griffin (2007) found that there was a change in student teachers' disposition scores between the beginning and the end of the program.

Another study conducted by Pauli (2006) examined the dispositional survey responses of the pre-service student teachers who had completed the student teaching experiences by comparing their self-evaluation responses with the responses of their mentor teachers and university supervisors at the end of the student teaching experience. In contrast to Keiser (2005), the researcher found cooperating teachers and university supervisors rated student teachers' dispositions higher than student teachers' self-assessment rates, and the researcher also found that the university supervisors and cooperating teachers view the student teacher dispositions in a similar manner. Also, Ignico and Gammon (2010) examined the professional disposition scores of pre-service physical education teachers over time and found a strong alignment between cooperating teacher and student teacher ratings in the upper-level classes.

When considering the positive changes in the dispositions of pre-service teachers observed by the cooperating teachers on the basis of the InTASC Principles and

Disposition Indicators, the highest level of change occurred in Learning Difference. This change might be due to the fact that the student teachers went to the classrooms with the consciousness that individual differences are important and all children can learn, and that through the student teaching experience in a real learning environment their awareness may be changed in a positive manner during the student teaching experience with the varied needs of each student in their classrooms. Frederiksen, Cooner, and Stevenson (2012) supported this result by asserting that the student teaching experience provides student teachers exposure to children with different backgrounds or socio-economic statuses that require the student teachers to increase their awareness of students with learning differences. The second highest level of change in the dispositions occurred in the principle of Professional Learning. According to InTASC's (2011) description of this principle, student teachers engage in ongoing professional learning by evaluating their practices and choices. This change might be due to the fact that student teaching experience provides student teachers with opportunities to gain understanding about the realities and complexities of teaching (Zeichner, 1990) and the more student teachers have experiences in classroom settings, the more their professional development increases. The third highest level of change in the pre-service teachers' dispositions observed by cooperating teachers occurred in the principle Learner Development, which was also in the top three principles rated by student teachers. The increase in pre-service teachers' Learner Development dispositions might be due to the fact that the cooperating teachers observed their student teachers' gaining experience about how to handle different age groups and due to the support of their mentoring and regular feedback, the student teachers' teaching showed progress in promoting students' growth and development.

### **5.3 Conclusion and Discussion of the Findings Related to Research Questions 3 and 6**

#### **Changes in Perceived Dispositions of University Supervisors Demonstrated by Pre-Service ECE Teachers**

The data showed that university supervisors, who regularly observe and give feedback to pre-service ECE teachers, rated student teachers in a similar manner as the cooperating teachers. The university supervisors' responses to TDI revealed that the pre-service ECE teachers' disposition levels increased after their student teaching experience.

Additionally, the researcher conducted an analysis of the scores of the cooperating teachers about the perception of the teaching dispositions demonstrated by their student teachers on TDI, which has items aligned with the InTASC Principles, and the findings indicated that the university supervisors asserted that pre-service ECE teachers' teaching disposition levels increased after their student teaching experience on the basis of the InTASC Principles and Disposition Indicators.

The results of the current study support the hypothesis that university supervisors' perception of the dispositions demonstrated by their pre-service ECE teachers increased after student teaching experience. Based on the current results, the data collected from the university supervisors to determine if their view of the pre-service ECE teachers' demonstrated dispositions were similar to the pre-service ECE teachers' self-assessed scores. As suggested by Wasicko (2007) that self-assessment should be combined with external evaluations, both the university supervisors and cooperating teachers' rating scores validated the student teachers' self-assessment scores. This result of the current study shows that university supervisors rated pre-service ECE teachers' teaching dispositions in a similar manner. Also, the current result is in accordance with the studies conducted by Keiser (2005), Pauli (2006),

Ratliff (2006), Waddell and Griffin (2007), and Edgington and Cox (2015) using different stakeholders to assess student teachers' dispositions. Pauli (2006) examined the dispositional survey responses of pre-service student teachers who had completed student teaching experience by comparing their self-evaluation responses with the responses of their university supervisors and cooperating teachers at the end of their student teaching experience. Pauli (2006) found that university supervisors and cooperating teachers viewed student teachers in a similar manner, and that both of them rated student teachers' dispositions higher than the self-assessments of the student teachers. Furthermore, Keiser (2005), who compared pre-service teachers' self-assessments of their espoused dispositions and the assessments of the cooperating teachers' observed dispositions, found that student teachers rated themselves higher than cooperating teachers in terms of student-centered dispositions. Another study conducted by Ratliff (2006) investigated the validity of the Eastern Kentucky University Dispositions Instrument by examining its relationship with teaching effectiveness, which was measured by university supervisors using the Student Teacher Assessment Instrument, and found that by using evaluation forms and feedback, university supervisors assisted student teachers to refine their teaching abilities to be more effective teachers in the future. Edgington and Cox's (2015) study, "Implementing Professional Dispositions and Behavior with Pre-Service Teachers: One Program's Journey," found that many pre-service teachers who experienced difficulty in their student teaching experience were able to make transitions from theory to practice with the help of university supervisors and cooperating teachers.

When considering the positive changes in the dispositions of pre-service teachers assessed by university supervisors on the basis of the InTASC Principles and Disposition Indicators, the highest level of change occurred in Professional Learning. A possible explanation for this result may be the positive effect of student teaching experience by providing opportunities to student teachers to enhance their professional learning. This result is in agreement with the results obtained by

Reynolds, Ross, and Rakow (2003). The researchers found that because of longer experiences in Professional Development Schools (PDS), student teachers in PDS were more confident and more engaged in their self-evaluations about teaching. The second highest level of changes in dispositions occurred in the principle Planning for Instruction. This result supports the findings of Ball, Knobloch, and Hoop (2007) that past experiences about teaching, prior knowledge, and the interests of students guide pre-service teachers' instructional planning during student teaching experience. The principle Learning Difference was the third highest rated principle by university supervisors. As referenced in the cooperating teacher results, this result seems to be consistent with the ideas of Frederiksen, Cooner, and Stevenson (2012). They stated that the student teaching experience provides pre-service teachers with exposure to children with different backgrounds, which requires pre-service teachers to increase their awareness of students with learning differences.

#### **5.4 Conclusion and Discussion of the Findings Related to Research Question 7**

##### ***Student Teachers' Definitions of Teaching Disposition***

In the first phase of the qualitative analysis, pre-service ECE teachers were asked to write reflection journals about how they define dispositions, what the concept *teaching disposition* means for them, and whether it is important to have a teaching disposition to be an effective teacher. Through their writings in their reflection journals, the researcher investigated the teaching disposition profiles of pre-service ECE teachers with pre-service teachers' definitions about their understanding of teaching disposition. The pre-service ECE teachers' answers in their reflection journals constructed evidence of being knowledgeable about the disposition indicators, which are learner development, learning differences, learning environment, content knowledge, application of content, assessment, planning for instruction, instructional strategies, professional learning and ethical principles, and leadership and collaboration. The responses of the pre-service ECE teachers from

“more reflected” to “less reflected” InTASC Principles and Disposition Indicators are discussed below with their quotations of defining teaching dispositions.

***InTASC Principle 9: Professional Learning and Ethical Practice*** was the most mentioned (22.81%) principle by the pre-service ECE teachers in their reflection journals while defining and providing information about teaching dispositions. A possible explanation for this might be that the student teachers cited as learning new things that teaching is important for their ongoing professional development. The pre-service ECE teachers stated that teachers need to renew themselves to teach new things to students and this requires being disposed to learn while teaching. NCATE’s original disposition definition supports this result, which is as follows: The values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator’s own professional growth.

***Principle 8: Instructional Strategies*** was another most mentioned (15.38%) principle and disposition indicator. It seems possible to explain this result that pre-service ECE teachers’ responses touched on issues of classroom management, creative thinking, handling problem situations, and what and how to teach something in different ways were used while describing teaching disposition as reflected in their journals. Frederiksen’s (2010) study supports this result; she asserted that the internship experience allows student teachers to have an increased awareness about Instructional Strategies dispositions.

***Principle 5: Application of Content*** was the third most mentioned (13.12%) principle in the pre-service ECE teachers’ definitions of teaching disposition. A possible explanation for this result might be that the pre-service ECE teachers cited that teachers’ understanding of central concepts and creating learning experiences that are meaningful for students were emphasized in their definitions.

Furthermore, other principles that were mentioned in the pre-service ECE teachers' journals while defining teaching disposition were Leadership and Collaboration (10.74%), Learning Environments (9.15%), Learner Development (7.82%), Learning Differences (7.69%), Content Knowledge (5.17%), Assessment (4.77%), and Planning for Instruction (3.31%).

## **5.5 Conclusion and Discussion of the Findings Related to Research Question 8**

### ***Demonstrated Teaching Dispositions in Journal Reflections***

Considering validity issues of mixed method research different assessment tools were used in this study; pre-service teachers' self-assessed reports, cooperating teacher and university supervisors also assessed the pre-service teachers' demonstrated teaching dispositions to validate pre-service ECE teachers rating scores, and also demonstrated evidence, which represented the disposition development of pre-service teachers, were gathered through the responses of the pre-service ECE teachers by answering open-ended questions in their reflection journals.

Based on the quantitative results, the self-assessed scores of the pre-service ECE teachers showed a significant increase in their perceived disposition levels after their student teaching experience on the basis of the InTASC Principles and Disposition Indicators and the demonstrated evidence about the development of teaching dispositions that the pre-service ECE teachers commented on in their reflection journals also showed that they developed dispositions after their student teaching experience on the basis of the InTASC Principles.

The top three InTASC Principles and Disposition Indicators that changed after the student teaching experience were Planning for Instruction, Learner Development, and Content Knowledge. The highest level of change occurred in the principle **Planning for Instruction**. The second highest level in the change in dispositions

occurred in the principle **Learner Development**, and the third highest level of change in the pre-service teachers' dispositions occurred in the principle **Content Knowledge**. Furthermore, in their journal reflections, the three most commonly mentioned InTASC principles and disposition indicators by pre-service ECE teachers were Instructional Strategies, Assessment, and Content Knowledge. **Instructional Strategies** was the most reflected principle that pre-service ECE teachers demonstrated evidence for in their reflection journals. In their reflection journals, the pre-service ECE teachers commented on their applications about classroom management skills, how they solved problems, how they supported the creative thinking of their students in the classroom, how they used different ways of teaching to young children, and how they motivated the students in the classroom. **Assessment** was the second most reflected principle that pre-service ECE teachers demonstrated evidence for in their reflection journals. The pre-service ECE teachers commented on observation, questioning, giving feedback, and how they assessed student understanding and performance in their reflections. **Content Knowledge** was the third most reflected principle that pre-service ECE teachers demonstrated evidence for in their reflection journals. The pre-service ECE teachers demonstrated evidence about their understanding of the central concept and how they created learning environments for their students to make it more meaningful.

When considering both results, the highest level of change in teaching dispositions in the principle Planning for Instruction and the most reflected principle, Instructional Strategies, match up with each other because both principles include instructional planning based on knowledge of the content area, the application of content, and development of the students.

The quantitative results revealed that the highest level of change in perceived teaching dispositions occurred in the principle Planning for Instruction and the qualitative analysis revealed that the principle Instructional Strategies was the most commonly mentioned principle that by pre-service ECE teachers demonstrated

evidence for in their reflection journals. When considering the validation of the quantitative results supported by the qualitative results of the current study that student teaching experience increases the development of the perceived dispositions of pre-service ECE teachers after their student teaching experience. It was not a surprise that the disposition development of pre-service ECE teachers would increase after their student teaching experience, and another common ground of validation of the current result was that in both the quantitative and qualitative analyses, the principle Content Knowledge was significant in the top three rated and mentioned InTASC Principles and Disposition Indicators by the pre-service ECE teachers. In the reflection journals, pre-service ECE teachers demonstrated evidence about their understanding of the content and how they created learning environments for their students to make learning more meaningful.

The principle Learner Development was found to be one of the most rated principles in the quantitative analysis, however, the principle Assessment was found to be the most reflected evidence in the qualitative analysis. There was significant evidence that the principle Learner Development has developed after the student teaching experience, but it was not mentioned as much as the principle Assessment in the reflection journals. This was also similar for the principle Assessment, because although it was obvious that there was a significant change in the pre-service ECE teachers' Assessment dispositions after their student teaching experience, it was not rated as high as Learner Development dispositions. This discrepancy might be due to the fact that the pre-service ECE teachers might not have walked the talk about their teaching dispositions. They rated their perceptions of Learner Development disposition indicators about how learners vary individually in terms of cognitive, language, social, emotional, and physical development in the survey, and they demonstrated evidence in their reflection journals about Assessment that they had assessed these aspects of learners. The student teaching experience provided opportunities to the pre-service teachers to gain experience about learner

development and it also increased the pre-service teachers' assessment disposition awareness.

## **5.6 Educational Implications and Recommendations**

The purpose of the current study was to investigate and describe any changes in whether the development of the perceived dispositions of pre-service early childhood education teachers were influenced by their student teaching experience. It was found that the pre-service ECE teachers' perceived dispositions increased after their student teaching experience. To validate the outcome of student teachers' self-assessed results, the same instrument was implemented with both the cooperating teachers of the pre-service ECE teachers and their university supervisors. Furthermore, open-ended questions were given to the student teachers and they responded to these questions in reflection journals that were gathered to validate their development of teaching dispositions with demonstrated evidence from their implementations during their student teaching experience. Also, the current study makes it clear that student teaching experience must be facilitated to make pre-service teachers become more aware of their teaching dispositions.

Considering the findings of this study and the previous work concerning teaching disposition assessment and related issues, some suggestions can be offered to teacher education stakeholders.

It is critical to understand the value of assessing pre-service teachers' dispositions for teacher education programs to criticize the effectiveness of their educational programs; in this way, teacher educators can identify the areas of growth for specific pre-service teachers and make plans to assist the pre-service teachers in strengthening their dispositions, and these strengthened dispositions will make them effective teachers in the future.

The findings from the current study have implications for teacher education programs. The narratives of the pre-service ECE teachers in the section about defining teaching disposition showed that the principle mentioned most often was Professional Learning; they emphasized in their narratives that being an effective teacher requires having the disposition to teach. Diez (2006) named five principles to guide the practice of assessing dispositions, one of which is the “process of assessing dispositions has moral meanings for teacher educators and for their practices,” which means that teacher educators expect student teachers to have specific dispositions to be effective teachers in the future; this requires teacher educators to consider how to be models for pre-service teachers and it also requires teacher educators to consider how they assess their own performance for expected dispositions (Buchner, 2013). The literature review revealed that there is a lack of research about teaching dispositions in Turkey. To prepare effective teachers, teacher educators should demonstrate knowledge, skills, and positive dispositions to pre-service teachers (Taylor, 2010). In our teacher education programs, dispositions have not been given the same attention as knowledge and skills, but they are also critical for effective teaching (Bland, 2014). Ostorga (2003) claimed that dispositions cannot be identified easily because they are related to people’s beliefs and feelings. The reviewed literature shows that there is not a specific definition of dispositions in the teacher education literature (Varol, 2011), and Turkish teacher education stakeholders should develop an operational definition of teaching disposition for pre-service teachers to evaluate them effectively and to prepare them with expected teaching dispositions.

In addition, regarding teacher education programs, the results of this study provide useful information to those involved in teacher education programs. A clear understanding of teaching dispositions for pre-service teachers and how they differ from each other due to their educational/professional backgrounds has implications for the preparation of effective teachers. In addition to teacher education programs, this study revealed that the Turkish Council of Higher Education should be aware of

the importance and necessity of training programs for all teacher candidates about teaching dispositions so that teacher education programs under the Council of Higher Education can understand the importance of this issue.

Awareness of teaching dispositions has to begin with teacher education stakeholders and student teachers who are studying to be teachers, to make this happen, teacher educators should focus on making teaching dispositions a part of coursework and student teaching experiences; for instance, teacher educators have pre-service teachers watch videos of teachers' classroom practices in the coursework to exemplify the desired teaching dispositions.

It is important to note that the findings of the current study should be interpreted attentively and need to be verified by other researchers in the future. This study contributes to the literature by presenting the perceptions of pre-service ECE teachers of a public university in Ankara. This sample does not represent all pre-service teachers in Turkey and the results of the current study are limited in generalizability. Therefore, this study can be replicated with a larger sample size of more pre-service teachers from different universities and departments.

It would also be important to replicate the study with a more diverse sample. Despite an attempt to attain a representative sample of early childhood teachers in Ankara, there is reason to doubt that this was fully achieved. Moreover, the sample in this study does not represent all pre-service ECE teachers in Turkey. It should be noted here that the results of the current study are limited in generalizability because of the sample chosen for this study. Therefore, it is important to replicate the current study with a more diverse and representative sample of ECE teachers in Turkey. Furthermore, examining teaching dispositions should not be limited to student teaching experience only; it should begin with the teacher candidates entrance into the teacher education program from their beginning courses to the end of their program. It might be advisable to conduct follow-up studies after graduation when

research subjects have their own students to see how those teachers have translated their theoretical knowledge into teaching practices.

## REFERENCES

- Abernethy, M.A., Chua, W.F., Lockett, P.F. and Selto, F.H. (1999). Research in managerial accounting: learning from others' experiences. *Accounting and Finance*, 39, 1-27.
- Addison, A., W. (2010). A Study of the Effects of the Length of Student-Teaching Experiences on New Teacher Efficacy. Ph.D. Dissertation, *Electronic Theses and Dissertations*. Paper 1752. Retrieved from <http://dc.etsu.edu/etd/1752>.
- Almerico, G., Johnston, P., Henriott, D., & Shapiro, M. (2011). Dispositions assessment in teacher education: Developing an assessment instrument for the college classroom and the field. *Research in Higher Education Journal*, 11, 1–19.
- Applefield, J., Huber, R., & Moallem, M. (2001). Constructivism in theory and practice: Toward a better understanding. *High School Journal*, 84(2), 35-54.
- Arnstine, D. (1967). *Philosophy of education: Learning and schooling*. New York: Harper & Row.
- Austin, L. (2004). A constructivist approach to facilitating intrapersonal change in pre-service teachers. *College Student Journal*, 38, 309-314.
- Baldwin, A. (2007). *The curriculum, instruction, and assessment of dispositions in preservice teacher education*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3279243)
- Ball, A. L., Knobloch, N.A. & Hoop, S. (2007). The instructional planning experiences of beginning teachers. *Journal of Agricultural Education*, 48(2), 56-65.
- Bell, E. D., Grant, K., & Fisky-Moody, P. (2007). The Reflective Dispositional Coaching Process: An Action Research Project. *Journal of College Teaching & Learning*, 4 (3), 41- 46.

- Bennings, J., Diex, M., Dottin, E., Feiman-Nemser, S., Murrell, P., & Sockett, H. (2008). *Making professional conduct in education more intelligent: Using knowledge and skills to enhance moral sensibilities* (dispositions). Paper presented at the annual meeting of the American Association of Colleges of Teacher Education, New Orleans, LA.
- Bercaw, L. A., Summers, D. G., Colby, S. A., & Payne, M. (2012). Mirror images: Teacher candidates' perceptions of disposition development. *Action in Teacher Education*, 34 (5-6), 514-525.
- Bland, L. L. (2014). *Exploring the relationship between assessed dispositions and assessed student teaching success of a teacher education candidate from an NCATE accredited teacher preparation program*. Kansas State University, ProQuest Dissertations Publishing.
- Brindle, S. E. (2012). *An exploratory study on the assessment of pre-service teacher dispositions by teacher education programs in Iowa*. Drake University, ProQuest Dissertations Publishing.
- Brown, J. D. (1996). *Testing in language programs*. Upper Saadle River, NJ, USA: Prentice Hall Regents.
- Brown, E. T. (2005). The influence of teachers' efficacy and beliefs regarding mathematics instruction in the early childhood classroom. *Journal of Early Childhood Teacher Education*, 26, 239–257.
- Bryant, F. B. & Yarnold, P. R. (1995). Principal components analysis and exploratory and confirmatory factor analysis. In L. G. Grimm & R R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 99-136). Washington, DC: Amerikan Psychological Association.
- Buchanan, M., Correia, M. G., & Bleicher, R. E. (2010). Increasing preservice teachers' intercultural awareness through service-learning. *Journal of Research on Service-Learning and Teacher Education*, 1(1), 1-19.

- Buchner, J. (2013). Identifying and assessing program-specific dispositions of Concordia University Wisconsin undergraduate teacher candidates: A mixed-methods study. Milwaukee, WI: Cardinal Stritch University. ProQuest Dissertations Publishing, 2013.3601503.
- Bullough, R. V., Young, J., Erickson, L., Burrell, J. R., Clark, D. C., Egan, M. W., Berrie, C. F., Hales, V., and Smith, G. (2002). Rethinking field experience: Partnership teaching vs. single-placement teaching. *Journal of Teacher Education*, 53 (1), 68-80.
- Burant, T. J., Chubbuck, S. M., & Whipp, J. L. (2007). Reclaiming the moral in the dispositions debate. *Journal of Teacher Education*, 58(5), 397-411.
- Buss, D. M., & Craik, K. H. (1983). The act frequency approach to personality. *Psychological Review*, 90, 105-126.
- Cantor, N. 1990. From thought to behavior: "Having" and "doing" in the study of personality and cognition. *American Psychologist* 45(6): 735-50.
- Carol, S., Nita B. (1990). *Early Childhood education: An introduction*. NY: Marill.
- Carroll, D. (2012). Examining the development of dispositions for ambitious teaching: One teacher candidate's journey. *The New Educator*, 8 (1), 38-64.
- Cole, K.M. (1995). *Novice teacher efficacy and field placements*. Paper presented at the annual meeting of the Mid-South Educational Research Association. Biloxi, MS.
- Colker, L. J. (2008). *Twelve characteristics of effective early childhood teachers*. NAEYC, 2008.
- Combs, A.W.; Avilz, D. & Purkey, W. (1971) *Helping Relationships-Basic Concepts for the Helping Professions* Allyn and Bacon, Inc. Boston, MA.

- Conderman, G., & Walker, D. A. (2015) Assessing dispositions in teacher preparation programs: Are candidates and faculty seeing the same thing. *The Teacher Educator*, 50 (3), 215-231.
- Cook, D. (1992). Psychological impact of disability. In R. Parker, & E. Szymanski (Eds.), *Rehabilitation counseling basics and beyond*. Austin: PRO-ED.
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, 10 (7).
- Council of Chief State School Officers (CCSO). (2011). Interstate teacher assessment and support consortium (InTASC) model core teaching standards: A resource for statedialogue. Washington, DC. Retrieved from [http://www.ccsso.org/Resources/Publications/InTASC\\_Model\\_Core\\_Teaching\\_Standards A Resource for State Dialogue \(April 2011\).html](http://www.ccsso.org/Resources/Publications/InTASC_Model_Core_Teaching_Standards_A_Resource_for_State_Dialogue_(April_2011).html)
- Covert, J. R., & Clifton, R. A. (1983). An examination of the effects of extending the practicum on the professional dispositions of student teachers. *The Alberta Journal of Educational Research*, 29(4), 297-307.
- Creswell, J. W. and V. L. Plano Clark (2007). *Designing and conducting mixed methods research*. Thousand Oaks, California, London, Sage.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2011). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.
- Cudahy, D., Finnan, C., Jaruszewicz, C., & McCarty, B. (2002, November). *Seeing dispositions: Translating our shared values into observable behavior*. Paper presented at the meeting of the First Annual Symposium on Educator Dispositions, Richmond, KY.

- Cummin, L. & Asempapa, B. (2013). Fostering teacher candidate dispositions in teacher education programs. *Journal of the Scholarship of Teaching and Learning*, 13(3), 99-119.
- Çokluk, O., Şekercioglu, G., & Büyüköztürk, S. (2010). *Sosyal Bilimler İçin Çok Değişkenli İstatistik: SPSS ve Lisrel Uygulamaları*, Ankara: Pegem A Yayıncılık.
- Damon, W. (2007). Dispositions and teacher assessment: The need for a more rigorous definition. *Journal of Teacher Education*, 58(5), 365-369.
- Da Ros-Voseles, D., & Moss, L. (2007). The role of dispositions in the education of future teachers. *Young Children*, 62(5), 90-96.
- Dee, J. & Henkin, A. (2002). Assessing dispositions toward cultural diversity among preservice teachers. *Urban Education*, 37, 22-39.
- Dewey, J. (1922). *Human nature and conduct*. New York: The Modern Library.
- Diez, M. E. (2006). Assessing dispositions: Five principles to guide practice. In H. Sockett (Ed.), *Teacher dispositions: Building a teacher education framework of moral standards* (pp. 49-68). Washington, DC: AACTE Publications.
- Doppen, F. (2007). The influence of a teacher preparation program on preservice social studies teachers' beliefs: A case study. *Journal of Social Studies Research*, 54-63.
- Dowsett, C. J., Huston, A. C., Imes, A. E., & Gennetian, L. (2008). Structural and process features in three types of child care for children from high and low income families. *Early Childhood Research Quarterly*, 23, 69–93.
- Eberly, J. L., Rand, M. K., & O'Connor, T. (2007). Analyzing teachers' dispositions towards diversity: Using adult development theory. *Multicultural Education*, 14(4), 31-36.

- Edgington, W. D. & Cox, M. (2015). Implementing professional dispositions and behavior with pre-service teachers: One program's journey. *National Teacher Education Journal*, 8(3), 47-54.
- Elliott, B. (2002). *Measuring Performance: The Early Childhood Educator in Practice*. Albany NY: Delmar Thomson Learning.
- Essa, E. L. (1999). *Introduction to early childhood education*. Albany, New York: Delmar.
- Fessler, R., & Christensen, J. C. (1992). *The teacher career cycle: Understanding and guiding the professional development of teachers*. Needham Heights, MS: Allyn & Bacon.
- Field, A. (2009). *Discovering statistics using SPSS*. Thousand Oaks: Sage Publications.
- Fleer, M. (2000). *An early childhood research agenda: Voices from the field. Research Fellow 2000*. Department of Education, Training and Youth Affairs.
- Fraenkel, J. R., & Wallen, N. E. (2006). *How to design and evaluate research in education (6th ed.)*. Boston: McGraw Hill.
- Frankel, J. R. & Wallen, N. E. (2009). *How to design and evaluate research in education*. New York: McGraw Hill Companies, Inc.
- Fraenkel, J. R., & Wallen, N. E., Hyun, H. (2012). *How to design and evaluate research in education (8th ed.)*. New York: McGraw Hill Pub.
- Frederiksen, H. (2010). *Assessing dispositions in pre-service teachers: Does setting or experience affect dispositions? A mixed-method study*. Colorado State University, ProQuest Dissertations Publishing, 3433689.
- Frederiksen, H., Cooner, D. & Stevenson, C. (2012). Assessing the teacher dispositions in pre-service teachers. *Journal of College Teaching and Learning*, 9(1), 39-52.

- Freeman, L. (2007). An overview of dispositions in teacher education. In M. Diez & J. Raths. (Eds.), *Dispositions in teacher education* (pp. 3-29). Charlotte, NC: Information Age Publishing.
- Garson, D. G. (2008). *Factor Analysis: Statnotes*. Retrieved from North Carolina State University Public Administration Program. Retrieved from: <http://www2.chass.ncsu.edu/garson/pa765/factor.htm>.
- Harper, S. & Morris, W. (2008). Training solutions: Early childhood dispositions for teachers and trainers. Montana Early Childhood Project Newsletter.
- Hillman, S. J., Rothermel, D., & Scarano, G. H. (2006). The assessment of preservice teachers' dispositions. *The Teacher Educator*, 41 (4), 234-250.
- Hinkle, D.E., Wiersma, W., & Jurs, S.G. (1998). *Applied statistics for the behavioral sciences*. Boston: Houghton Mifflin Company.
- Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R. (2008). Ready to learn? Children's pre-academic achievement in pre-Kindergarten programs. *Early Childhood Research Quarterly*, 23, 27–50.
- Ignico, A., & Gammon, K. (2010). A longitudinal study of the professional dispositions of teacher candidates. *Natural Science*, 2(2), 991-94.
- Interstate New Teacher Assessment and Support Consortium (INTASC). (2011). *Model standards for beginning teacher licensing and development*. Washington, DC: Council of Chief State School Officers.
- INTASC Standards*. (1992). Retrieved from Council of Chief State School Officers: <http://www.ccsso.org/content/pdfs/corestrd.pdf>
- Ishimine, K. (2011). Quality and early childhood education and care: a case study of disadvantage. *Australian Educational Researcher*, 38(3), 257-274.

- Ishimine, K., Tayler, C., & Thorpe, K. (2009). Accounting for quality in Australian childcare: A dilemma for policy makers. *Journal of Education Policy*, 24(6), 717–732.
- Katz, L.G. & Raths, J.D. (1985). Dispositions as goals for teacher education. *Teaching and Teacher Education*, 1(4), 301-307.
- Katz, L. G. (1993, April). *Dispositions: Definitions and implications for early childhood practices* (Perspectives from ERIC/EECE: A Monograph Series, No. 4). Retrieved from ERIC database. (ED360104)
- Keiser, K. (2005). *Between theory and practice: Student teachers' espoused and observed Dispositions*. University of Nebraska, ProQuest Dissertations Publishing. 3220662.
- Kelloway, K. E. (1998). *Using Lisrel for Structural Equation Modeling: A Researcher's Guide*. London: Sage.
- Kidd, J. K., Sanchez S.Y. & Thorp, E. K. (2008). Defining moments: Developing culturally responsive dispositions and teaching practices in early childhood pre-service teachers. *Teaching and Teacher Education*, 24, 316-329.
- Kline. R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford.
- Knopp, T.Y. & Smith, R.L. (2005) *A Brief Historical Context for Dispositions in Teacher Education*. In R.L. Smith, D. Starbek & J. Hurst. *The passion of teaching: Dispositions in the schools* (pp. 1-13). Lanham, MD: Scarecrow education.
- Lambert, C., Curran, C. M., Prigge, D. J. & Shorr, D. (2005). *Addressing inclusion in an era of education reform: dispositions of secondary and elementary pre-service educators in the pipeline*. ERIC Document Reproduction Service No. ED490026.

- Lang, W.S., & Wilkerson, J.R. (2006). *Measuring teacher dispositions systematically using INTASC principles: Building progressive measures of dispositions*. Presented at AACTE, San Diego, CA.
- Major, E. & Brock, C. (2003). Fostering positive dispositions toward diversity: Dialogical explorations of a moral dilemma. *Teacher Education Quarterly*, 30(4), 7-26.
- Malone, D. Jones, B. J., & Stallings, D. T. (2002). Perspective transformation: Effects of a service-learning tutoring experience on prospective teachers. *Teacher Education Quarterly*, 29 (1), 61-81.
- Masunaga, H. & Lewis, T. (2011). Self-perceived dispositions that predict challenges during student teaching: A data mining analysis. *Issues in Teacher Education*, 20(1), 35-49.
- McKinney, S. E., Haberman, M., Stafford-Johnson, D., & Robinson, J. (2008). Developing teachers for high-poverty schools: The role of the internship experience. *Urban Education*, 68-82.
- Meidl, T., & Baumann, B. (2015). Extreme make over: disposition development of pre-service teachers. *Journal of Community Engagement and Scholarship*, 8 (1), 90- 97.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (2<sup>nd</sup> ed.). San Francisco (CA): John Wiley & Sons.
- Metcalf, K. K., Hammer, R. & Kahlich, P. A. (1996). Alternatives to field-based experience: The comparative effects of on-campus laboratories. *Teaching and Teacher Education*, 12, 271-283.
- Midgley, C. & Urdan, T. (2001). Academic self-handicapping and achievement goals: A further examination. *Contemporary Educational Psychology*, 26, 61-75.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.

Ministry of National Education General Directorate of Teacher Training (2006). *Generic Teacher Competencies*.

Misco, T., & Shiveley, J. (2007). Making sense of dispositions in teacher education: Arriving at democratic aims and experiences. *Journal of Educational Controversy*, 2(2).

Mueller, M. & Hindin, A. (2011). An analysis of the factors that influence preservice elementary teachers' developing dispositions about teaching all children. *Issues in Teacher Education*, 20 (1), 17-34.

Mueller, J., & O'Connor, C. (2007). Telling and retelling about self and "others": How preservice teachers (re)interpret privilege and disadvantage in one college classroom. *Teaching and Teacher Education*, 23(6), 840-856.

National Association for the Education of Young Children (2005). *Program Standards: Preparing Early Childhood Professionals*, Washington, D.C.

National Council for the Accreditation of Teacher Education. (2002). *Professional standards for the accreditation of schools, colleges, and departments of education*. Washington, DC: Author.

National Council for the Accreditation of Teacher Education. (2006). *Professional standards for the accreditation of schools, colleges, and departments of education*. Washington, DC: Author.

National Council for Accreditation of Teacher Education. (2008). *Professional standards for the accreditation of schools, colleges, and departments of education*. Washington, DC: Author.

- National Network for the Study of Educator Dispositions (NNSED). (2009). *Why teacher dispositions are a crucial aspect of student success*. Retrieved on November 23, 2011, from [www.educatordispositions.org](http://www.educatordispositions.org).
- Notar, C. E., Riley, G. W., Taylor, P. W., Thornburg, R. A., & Cargill, R. L. (2009). Dispositions: Ability and assessment. *International Journal of Education*, 1, 2–14.
- Onwuegbuzie, A.J. and Johnson, R.B. (2006). The Validity Issue in Mixed Research, *Research in the Schools*, 13 (1), 48-63.
- Osguthorpe, R. D. (2008). On the reasons we want teachers of good disposition and moral character. *Journal of Teacher Education*, 59(4), 288-299.
- Ostorga, A.N. (2003). The role of values in the development of dispositions. Second Annual Symposium on Educator Dispositions, Richmond, KY.
- Pallant, J. (2007). *SPSS Survival manual: A step by step guide to data analysis using SPSS for windows (3rd ed.)*. Berkshire, England: Open University Press.
- Pang, Y., Nichols, K., Terwilliger, C., & Walsh, M. (2014). Assessment of pre-service teachers' dispositions for programmatic improvement. *National teacher Education Journal*, 7 (1), 53- 60.
- Pauli, C. R. (2006). *Pre-service Teacher Dispositions: A Preliminary Investigation of the Perceptions of Student Teachers, University Supervisors, and Cooperating Teachers After the Student Teaching Experience*. Ph.D. Dissertation, Capella University. ProQuest Dissertations Publishing, 3223878.
- Piaget, J. (1958). *The growth of logical thinking from childhood to adolescence*. New York: Basic Books.
- Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. Washington, DC: American Psychological Association.

- Prosak, L.A. & Donald, S. M. (2014). The effect of strengths intervention on preservice teacher dispositions during the student teaching experience. *The Ohio Journal of Teacher Education, 28*(2).
- Pottinger, C. (2009). *Exploring dissonance in demonstrated teaching dispositions as self-reported by cooperating teachers and perceived by teacher candidates*. Capella University, ProQuest Dissertations Publishing, 2009. 3354656.
- Rakich, S. S. (2014). Perceptions about teacher dispositions and practices. Ph.D. Dissertation, Claremont Graduate University/San Diego State University. ProQuest Dissertations Publishing, 2014. 3668743.
- Raider-Roth, M. (2005a) Trusting what you know: negotiating the relational complexities of classroom life, *Teachers College Record, 107*(4), 587–627.
- Raider-Roth, Miriam B.; Rodgers, Carol R. (2006). Presence in teaching. *Teachers and Teaching: Theory and practice*. Vol. 12, 265-287.
- Ratliff, L. J. (2006). The relationship between teacher education candidates' scores on the eastern Kentucky university dispositions instrument and their effectiveness as student teachers. Ph.D. Dissertation, University of Mississippi. ProQuest Dissertations Publishing. 3246042.
- Renzaglia, A., M. Hutchins, and S. Lee. 1997. The impact of teacher education on the beliefs, attitudes, and dispositions of preservice special educators. *Teacher Education and Special Education, 20*(4), 260-177.
- Reynolds, A., Ross, S., & Rakow, J. (2002). Teacher retention, teaching effectiveness, and professional preparation: A comparison of professional development school and non-professional development school graduates. *Teaching and Teacher Education, 28*9-303.
- Richardson, D., & Onwuegbuzie, A. J. (2003). Attitudes toward dispositions of teachers. *Academic Exchange Quarterly, 8*(3), 31-35.

- Rike, C.J. & Sharp, L.K. (2008). Assessing preservice teachers' dispositions: A critical dimension of professional preparation. *Childhood Education, 84*(3), 150-155.
- Risko, V. J., Vukelich, C., Roskos, K. & Carpenter, M. (2002). Preparing teachers for reflective practice: Intentions, contradictions and possibilities. *Language Arts, 80*(2), 134-145.
- Ritchhart, R. (2001, April). From IQ to IC: A dispositional view of intelligence. *Roeper Review, 23*(3), 143.
- Ritchhart, R. (2002). *Intellectual character: What it is, why it matters and how to get it*. San Francisco, CA: Jossey-Bass.
- Rock, T. C. & Levin, B. B. (2002). Collaborative action research projects; Enhancing teacher development in professional development schools. *Teacher Education Quarterly, 29* (1), 7-21.
- Roeser, R.W., Eccles, J.S., & Sameroff, A.J. (2000). School as a context of social-emotional development: A summary of research findings. *Elementary School Journal, 100*, 443-471.
- Rose, S. (2013). How do teacher preparation programs promote desired dispositions in candidates? *Sage Open, 3* (1), 1-8.
- Rose, S. W., & Terndrup, J. (2007). *Doing it the Hawkeye way: Iowa teacher prep's model of articulating and assessing dispositions in pre-service teachers*. Paper presented at the Fourth Annual Symposium on Educator Dispositions. Highland Park, Kentucky: Northern Kentucky University.
- Ross, E. (1986). Becoming a social studies teacher: Teacher education and the development of preservice teacher perspectives. *College and University Faculty Association of the National Council for the Social Studies*. New York.
- Ros-Voseles, D., & S. Fowler-Haughey. 2007. The role of dispositions in the education of future teachers. *Young Children, 62* (5), 90–98.

Ros-Voseles, D., & Moss, L. (2007). The role of dispositions in the education of future teachers. *Young Children* 62, (5), 90-98.

Rowe, K. (2003). *The importance of Teacher Quality as a key determinant of students' experiences and outcomes of schooling*. Paper presented at the Australian Council for Educational Research (ACER) Research Conference 2003 (Building Teacher Quality: What does the research tell us?), Melbourne.

Ryle, G. (1949). *The concept of mind*. London: Hutchinson.

Schulte, L., Edick, N., Edwards, S. & Mackiel, D. (2004) *The development and validation of the Teacher Dispositions Index*. Unpublished manuscript, Department of Education, university of Nebraska, Omaha, Nebraska.

Schussler, D. L. (Spring 2006). Defining dispositions: Wading through murky waters. *The Teacher Educator*, 41(4), 251-268.

Serdyukov, P., & Ferguson, B. T. (2011). Teacher dispositions: What kind of candidates do we have in a teacher preparation program, and how can we make them better. *Journal of Research in Innovative Teaching*. 4 (1), 106- 119.

Shiveley, J. & Misco, T. (2010). *A four-step process for integrating and assessing dispositions in teacher education*. Journal of Clearing House, Helderf Publications.

Singh, D. K. & Stoloff, D. L. (2006). *What do teacher candidates have to say about their clinical experiences?* Paper presented at the annual meeting of the Association of Teacher Educators (ATE), Atlanta, GA.

Singh, D., & Stoloff, D. (2008). Assessment of teacher dispositions. *College Student Journal*, 42(4), 1169-1180.

- Sockett, H. (2006). Character, rules, and relations. In H. Sockett (Ed.), *Teacher dispositions: Building a teacher education framework of moral standards* (pp. 9–25). Washington, DC: American Association of Colleges for Teacher Education.
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research, 25*, 173-180.
- Stooksberry, L. M., Schussler, D. L. & Bercaw, L. A. (2009). Conceptualizing dispositions: intellectual, cultural, and moral domains of teaching. *Teachers and Teaching: theory and practice, 15*(6), 719-736.
- Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education.
- Taylor, K. R. (2010) *The Development of an Instrument to Measure Teacher Education Candidates' Dispositions*. Southern Illinois University Carbondale, ProQuest Dissertations Publishing. 3426685.
- Taylor, R., & Wasicsko, M. (2000, November). The dispositions to teach. Paper presented at the Southern Region Association of Teacher Educators Conference, Lexington, KY.
- Thomas, U. (2010). Disposition and Early Childhood Education Preservice Teachers: Where to Start. *Current Issues in Education, 13*(2).
- Thornton, H. (2006). Dispositions in action: Do dispositions make a difference in practice? *Teacher Education Quarterly, 33*(2), 53-68.
- UNESCO, (2008). *The contribution of early childhood education to a sustainable society*. PARIS.
- Vygotsky, L. (1962). *Thought and language*. Cambridge, MA: MIT Press.

- Waddell, J. R., & Griffin, L. L. (2007). An instrument for assessing teacher candidate dispositions. Paper presented the Sixth Annual Symposium on Educator Dispositions, Cincinnati, OH.
- Wasicko, M. M. (2002). *Assessing educator dispositions: A perceptual psychological approach*. Washington, DC: ERIC – The Education Resources Information Center (ED 193).
- Wasicsko, M. M. (2007). Dispositions—A perceptual approach. In M.E. Diez & J. Rath (Eds.), *Dispositions in Teacher Education* (pp. 3-29). Charlotte, NC: Information Age Publishing, Inc.
- Wasicsko, M. (2007). The perceptual approach to teacher dispositions: The effective teacher as an effective person. In *Dispositions in teacher education*, ed. M. E. Diez and J. Rath, 55–91. Charlotte, NC: Information Age Publishing.
- Weiner, H., & Cohen, A. R. (2003). Dispositions in teacher education programs: An opportunity for reform. Presented at the *Second Annual National Conference on Teacher Dispositions*. Richmond, Kentucky.
- Welch, F. C., Pitts, R. E., Tenini, K. J., Kuenlen, M. G., & Wood, S. G. (2010). Significant issues in defining and assessing teacher dispositions. *The Teacher Educator*, 45 (3), 179-201.
- Wilkerson, J. R., & Lang, W. S. (2007). *Assessing teacher dispositions: Five standards-based steps using the DASSM model*. New York, NY: Corwin Press.
- Whitley, C. (2010). *An examination of faculty perceptions regarding teacher dispositions in Texas colleges and universities* (Unpublished doctoral dissertation) Lamar University, Beaumont, TX.
- Whitsett, G., Roberson, T., Julian, K., & Beckham, L. (2007). First year teachers' reported levels of functioning on selected professional dispositions. *Education*, 128(11), 95-102.

- Wilson, J. D. (1996). An evaluation of the field experiences of the innovative model for the preparation of elementary teachers for science, mathematics, and technology. *Journal of Teacher Education, 47*(1), 53–59.
- Wilson, S., Floden R., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. *Journal of Teacher Education, 53*(3), 190-204.
- Woodhear, M. (2000) Towards a global paradigm for research into early childhood, in: H. Penn (Ed.) *Early childhood services: theory, policy and practice* (Philadelphia, PA, Open University Press), 15–35.
- Vanderstoep, W. V., & Johnston, D. D. (2009). Research methods for everyday life: Blending qualitative and quantitative approaches. John Wiley & Sons, Inc.
- Varol, V. (2011). Teacher Educators' Perceptions About Teacher Dispositions. (Unpublished Doctoral Dissertation). The Florida State University, Tallahassee, FL.
- Villegas, A. (2007). Dispositions in teacher education: A look at social justice. *Journal of Teacher Education, 58*(5), 370-380.
- Yuksel, G. & Alci, B. (2012) Self-Efficacy and Critical Thinking Dispositions as Predictors of Success in School Practicum. *International Online Journal of Educational Sciences, 4*(1), 81-90.
- Zeichner, K. (1990). Changing directions in the practicum: Looking ahead in the 1990s. *Journal of Education for Teaching, 16*(2), 105–132.

## APPENDICES

### APPENDIX A

#### Teacher Disposition Index (Original Copy)

#### TEACHER DISPOSITION INDEX

Please mark your level of agreement with each of the statements listed below.

	1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree
1. I believe a teacher must use a variety of instruction strategies to optimize student learning.	1	2	3	4	5
2. I understand that students learn in many different ways.	1	2	3	4	5
3. I demonstrate qualities of humor, empathy, and warmth with others	1	2	3	4	5
4. I am a thoughtful and responsive listener	1	2	3	4	5
5. I assume responsibility when working with others	1	2	3	4	5
6. I am committed to critical reflection for my profession growth	1	2	3	4	5
7. I believe that all students can learn	1	2	3	4	5
8. I cooperate with colleagues in planning instruction.	1	2	3	4	5
9. I actively seek out professional growth opportunities.	1	2	3	4	5
10. I uphold the laws and ethical codes governing the teaching profession.	1	2	3	4	5
11. I stimulate students' interests.	1	2	3	4	5
12. I believe it is important to involve all students in learning.	1	2	3	4	5
13. I value both long term and short term planning.	1	2	3	4	5
14. I stay current with the evolving nature of the teaching profession.	1	2	3	4	5
15. I select material that is relevant for students.	1	2	3	4	5
16. I believe the classroom environment a teacher creates greatly affects students' learning and development.	1	2	3	4	5
17. I am successful in facilitating learning for all students.	1	2	3	4	5
18. I demonstrate and encourage democratic interaction in the classroom and school.	1	2	3	4	5
19. I accurately read the non-verbal communication of students.	1	2	3	4	5
20. I engage in discussions about new ideas in the teaching profession.	1	2	3	4	5
21. I view teaching as an important profession.	1	2	3	4	5
22. I select material that is interesting to students.	1	2	3	4	5
23. I provide appropriate feedback to encourage students in their development.	1	2	3	4	5
24. I understand that teachers' expectations impact student learning.	1	2	3	4	5
25. I view teaching as a collaborative effort among educators.	1	2	3	4	5
26. I engage in research-based teaching practices.	1	2	3	4	5

27.	I create connections to subject matter that are meaningful to students.	1	2	3	4	5
28.	I understand students have certain needs that must be met before learning can take place.	1	2	3	4	5
29.	I am sensitive to student differences.	1	2	3	4	5
30.	I communicate caring, concern, and a willingness to become involved with others.	1	2	3	4	5
31.	I listen to colleagues' ideas and suggestions to improve instruction.	1	2	3	4	5
32.	I take initiative to promote ethical and responsible professional practice.	1	2	3	4	5
33.	I am punctual and reliable in my attendance.	1	2	3	4	5
34.	I maintain a professional appearance.	1	2	3	4	5
35.	I believe it is my job to create a learning environment that is conducive to the development of students' self-confidence and competence.	1	2	3	4	5
36.	I respect the cultures of all students.	1	2	3	4	5
37.	I communicate effectively with students, parents, and colleagues.	1	2	3	4	5
38.	I honor my commitments.	1	2	3	4	5
39.	I treat students with dignity and respect at all times.	1	2	3	4	5
40.	I work well with others in implementing a common curriculum.	1	2	3	4	5
41.	I am willing to receive feedback and assessment of my teaching.	1	2	3	4	5
42.	I am patient when working with students.	1	2	3	4	5
43.	I am open to adjusting and revising my plans to meet student needs.	1	2	3	4	5
44.	I communicate in ways that demonstrate respect for the feelings, ideas, and contributions of others.	1	2	3	4	5
45.	I believe it is important to learn about students and their community.	1	2	3	4	5

## APPENDIX B

### Factor Loadings for Original Copy of Teacher Disposition Index with INTASC Principle Alignments

	<i>Student-Centered Subscale</i>	<i>Factor 1</i>	<i>Factor 2</i>
1	I believe a teacher must use a variety of instructional strategies to optimize student learning. (P2)	.769	.349
2	I understand that students learn in a many different ways. (P3)	.819	.322
3	I demonstrate qualities of humor, empathy, and warmth with others. (P5)	.820	.305
4	I am a thoughtful and responsive listener. (P6)	.646	.464
5	I assume responsibility when working with others. (P7)	.688	.485
6	I believe that all students can learn. (P2)	.667	.433
7	I believe it is important to involve all students in learning. (P3)	.822	.420
8	I believe the classroom environment a teacher creates greatly affects students' learning and development. (P2)	.807	.391
9	I view teaching as an important profession. (P9)	.896	.274
10	I understand that teachers' expectations impact student learning. (P3)	.768	.386
11	I view teaching as a collaborative effort among educators. (P7)	.669	.381
12	I understand students have certain needs that must be met before learning can take place. (P2)	.743	.431
13	I am sensitive to student differences. (P3)	.750	.460
14	I communicate caring, concern, and a willingness to become involved with others. (P6)	.713	.421
15	I am punctual and reliable in my attendance. (P9)	.631	.393
16	I maintain a professional appearance. (P9)	.637	.376
17	I believe it is my job to create a learning environment that is conducive to the development of students' self-confidence and competence. (P2)	.713	.447
18	I respect the cultures of all students. (P3)	.784	.400
19	I honor my commitments. (P9)	.706	.468
20	I treat students with dignity and respect at all times. (P5)	.727	.424
21	I am willing to receive feedback and assessment of my teaching. (P9)	.690	.456
22	I am patient when working with students. (P5)	.692	.471
23	I am open to adjusting and revising my plans to meet student needs. (P7)	.723	.462
24	I communicate in ways that demonstrate respect for the feelings, ideas, and contributions of others. (P9)	.779	.462
25	I believe it is important to learn about students and their community. (P7)	.855	.337

	<b><i>Professionalism, Curriculum-Centered Subscale</i></b>	<b><i>Factor 1</i></b>	<b><i>Factor 2</i></b>
1	I am committed to critical reflection for my professional growth. (P9)	.406	.631
2	I cooperate with colleagues in planning instruction. (P7)	.441	.668
3	I actively seek out professional growth opportunities. (P9)	.323	.721
4	I uphold the laws and ethical codes governing the teaching profession. (P9)	.494	.611
5	I stimulate students' interests. (P1)	.430	.754
6	I value both long term and short term planning. (P7) .	.498	.594
7	I stay current with the evolving nature of the teaching profession. (P9)	.203	.748
8	I select material that is relevant for students. (P1)	.381	.762
9	I am successful in facilitating learning for all students. (P3)	.317	.740
10	I demonstrate and encourage democratic interaction in the classroom and school. (P5)	.420	.696
11	I accurately read the non-verbal communication of students. (P6)	.432	.521
12	I engage in discussions about new ideas in the teaching profession. (P9)	.218	.713
13	I select material that is interesting for students. (P1)	.445	.723
14	I provide appropriate feedback to encourage students in their development. (P2)	.499	.614
15	I engage in research-based teaching practices. (P9)	.233	.721
16	I create connections to subject matter that are meaningful to students. (P1)	.459	.704
17	I listen to colleagues' ideas and suggestions to improve instruction. (P7)	.487	.589
18	I take initiative to promote ethical and responsible professional practice. (P9)	.449	.762
19	I communicate effectively with students, parents, and colleagues. (P9)	.483	.611
20	I work well with others in implementing a common curriculum. (P7)	.427	.670

*Note.* After each item the aligned with INTASC (1991) principle is specified, such as P5 for Principle 5.

## APPENDIX C

### Permission to use the Teacher Dispositions Index

September 29th, 2015

Dear Dr. Schulte,

As a graduate student at Middle East Technical University and a faculty member of Elementary Education Department, I am researching and writing my PhD dissertation on assessing the development of dispositions of Early Childhood Education pre-service teachers regarding their student teaching experiences in the field. Your article, The Development and Validation of the Teacher Disposition Index was very informative and your instrument very well done. I want to use using your instrument in my dissertation study. I would like your permission to modify and translate it into Turkish.

If you consent to my using the instrument, could you please reply to this e-mail indicating permission to use the instrument and to also include a copy of it as an appendix to my dissertation? You will be cited in the dissertation and in future articles regarding its use.

Thank you for your time and consideration and for creating a professional instrument that will assist teacher education programs in assessing pre-service teacher dispositions.

Sincerely,

Metehan Buldu  
Research Assistant  
Middle East Technical University  
Faculty of Education  
Early Childhood Education Department  
06800, Ankara/Turkey

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Dear Metehan,

You have our permission to use the Teacher Dispositions Index in your dissertation. Thank you for your interest in our research. Best wishes with your dissertation.

Take care,  
Laura Schulte

## APPENDIX D

Turkish adapted Teacher Disposition Index for pre-service ECE teachers

# ÖĞRETMEN ADAYLARI İÇİN ÖĞRETMENLİK MESLEĞİNE YATKINLIK ÖLÇEĞİ

## KİŞİSEL BİLGİLER

Lütfen size uygun seçeneği  ile işaretleyiniz.

<b>Cinsiyet:</b>		<b>Katılımcı Yaş Grubu:</b>		
<input type="checkbox"/> Bay	<input type="checkbox"/> Bayan	<input type="checkbox"/> 18-24	<input type="checkbox"/> 24-30	<input type="checkbox"/> >30
<b>Uygulama Yaptığı Okul Türü:</b>		<b>Katılımcı Sınıf Düzeyi</b>		
<input type="checkbox"/> Devlet	<input type="checkbox"/> Özel	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
<b>Öğretmenlik Uygulama Tecrübesi</b>				
<input type="checkbox"/> 1 Dönem	<input type="checkbox"/> 2 Dönem	<input type="checkbox"/> 3 Dönem	<input type="checkbox"/> 4 Dönem	<input type="checkbox"/> 5 Dönem
<b>Devam Edilen Bölüm:</b>				
<input type="checkbox"/> Çocuk Gelişimi	<input type="checkbox"/> Okulöncesi Eğitimi	<input type="checkbox"/> Eğitim [Diğer]	<input type="checkbox"/> Diğer .....	

\* Aşağıda listelenen ifadelerin her biri ile ilgili katılım düzeyinizi 1 = Kesinlikle katılmıyorum 2 = Katılmıyorum 3 =Kararsızım 4 = Katılıyorum 5 = Kesinlikle katılıyorum arası  atarak belirtiniz.

MESLEKİ YATKINLIK	1	2	3	4	5
1. Bir öğretmenin öğrencilerin en üst düzeyde öğrenmelerini sağlamak için çeşitli öğretim yöntemleri/stratejileri kullanması gerektiğine inanıyorum.					
2. Öğrencilerin bir çok farklı yollarla öğrenebileceğinin farkındayım					
3. Başkalarına karşı esprili, empatik ve sıcakkanlı davranıyorum.					
4. Anlayışlı ve duyarlı bir dinleyiciyim.					
5. Başkalarıyla çalışırken sorumluluk alırım.					
6. Mesleki gelişimim için eleştirel düşünce biçimine sahibim.					
7. Tüm öğrencilerin öğrenebileceğine inanıyorum.					

8. Eğitim sürecini planlarken meslektaşlarımla işbirliği yaparım.						
9. Mesleki gelişim fırsatlarını aktif olarak araştırırım.						
10. Öğretmenlik mesleğine ilişkin kanun ve etik kurallara uyuyorum						
11. Öğrencilerin ilgilerini harekete geçiriyorum.						
12. Tüm öğrencileri öğrenmeye dahil etmenin önemli olduğuna inanıyorum.						
13. Hem kısa vadeli hem de uzun vadeli planlamaya önem veriyorum.						
14. Öğretmenlik mesleğinin gelişen doğasına uyum sağlıyorum.						
15. Öğrenciler için uygun materyalleri seçerim.						
16. Öğretmenin oluşturduğu sınıf ortamının öğrencilerin öğrenme ve gelişimini büyük oranda etkilediğine inanıyorum.						
17. Tüm öğrenciler için öğrenmeyi kolaylaştırmada başarılıyım.						
18. Sınıfta ve okulda demokratik etkileşim sergiliyorum ve öğrencileri buna teşvik ediyorum.						
19. Öğrencilerin sözel olmayan iletişimlerini doğru şekilde okurum.						
20. Öğretmenlik mesleğinde yeni fikirler hakkındaki tartışmalara katılıyorum.						
21. Öğretmenliği önemli bir meslek olarak görüyorum.						
22. Öğrenciler için ilgi çekici materyaller seçerim.						
23. Öğrencileri gelişimleri konusunda teşvik etmek için uygun geribildirimlerde bulunuyorum.						
24. Öğretmenlerin beklentilerinin öğrencinin öğrenimini etkilediğini anlıyorum.						
25. Öğretmenliği eğitimciler arasında işbirlikçi bir çaba olarak görüyorum.						
26. Araştırma temelli öğretim uygulamalarına katılıyorum.						
27. Öğrenciler için anlamlı olabilecek şekilde konular arasında bağlantılar kuruyorum.						
28. Öğrenme eylemi gerçekleşmeden önce öğrencilerin karşılanması gereken belirli ihtiyaçlarının bulunduğunu anlıyorum.						
29. Öğrenci farklılıklarına karşı duyarlıyım.						
30. Başkalarıyla etkileşimde bulunmak için ilgili, alakalı ve istekli davranışlar sergiliyorum.						
31. Sınıf içi uygulamalarımın iyileştirilmesi için meslektaşlarımla fikir ve önerilerini dinliyorum.						
32. Mesleki uygulamaların etik ve güvenilir olması için sorumluluk alırım.						
33. Derse devamlılık konusunda dakik ve güvenilirim.						
34. Profesyonel bir görünüş sergiliyorum.						

35. Öğrencilerin özgüven ve yetkinliklerinin gelişimi için faydalı bir öğrenme ortamı oluşturmanın benim görevim olduğuna inanıyorum.						
36. Tüm öğrencilerin kültürlerine saygı duyuyorum.						
37. Öğrenciler, ebeveynler ve meslektaşlarımla etkili biçimde iletişim kuruyorum.						
38. Sorumluluklarımı yerine getiriyorum.						
39. Öğrencilerime her zaman hassas ve saygılı davranırım.						
40. Ortak bir eğitim programının uygulanmasında diğerleriyle iyi bir şekilde çalışırım.						
41. Öğretmenliğim konusunda geribildirim ve değerlendirme almaya hevesliyim.						
42. Öğrencilerle çalışırken sabırlıyım.						
43. Öğrencilerin ihtiyaçlarını karşılamak için planlarımı yeniden gözden geçirmeye ve düzenlemeye açığım.						
44. Başkalarının hislerine, fikirlerine ve sağladıkları katkılara saygı duyan bir şekilde iletişim kurarım.						
45. Öğrenciler ve içinde yaşadıkları toplum hakkında bilgi sahibi olmanın önemli olduğuna inanıyorum.						

## APPENDIX E

Turkish adapted Teacher Disposition Index for cooperating teachers and university supervisors of pre-service ECE teachers

### ÖĞRETMEN ADAYLARININ ÖĞRETMENLİK MESLEĞİNE YATKINLIĞINI DEĞERLENDİRME ÖLÇEĞİ (Mentor Öğretmen & Sorumlu Danışman Formu)

Öğretmen Adayının Adı/Soyadı: .....

Lütfen size uygun seçeneği  ile işaretleyiniz.

\* Aşağıda listelenen ifadelerin her biri ile ilgili katılım düzeyinizi 1 = Kesinlikle katılmıyorum 2 = Katılmıyorum 3 = Kararsızım 4 = Katılıyorum 5 = Kesinlikle katılıyorum arası  atarak belirtiniz.

Sınıftaki stajyer öğretmen;	1	2	3	4	5
1. Öğrencilerin en üst düzeyde öğrenmelerini sağlamak için çeşitli öğretim yöntemleri/stratejileri kullanır.					
2. Öğrencilerin bir çok farklı yollarla öğrenebileceğinin farkındadır.					
3. Başkalarına karşı esprili, empatik ve sıcakkanlı davranır.					
4. Anlayışlı ve duyarlı bir dinleyicidir.					
5. Başkalarıyla çalışırken sorumluluk alır.					
6. Mesleki gelişimi için eleştirel düşünce biçimine sahiptir.					
7. Sınıf içindeki tutumlarıyla tüm öğrencilerin öğrenebileceğine inandığını göstermektedir.					
8. Eğitim sürecini planlarken meslektaşlarıyla işbirliği yapar.					
9. Mesleki gelişim fırsatlarını aktif olarak araştırır.					
10. Öğretmenlik mesleğine ilişkin kanun ve etik kurallara uyar.					
11. Öğrencilerin ilgilerini harekete geçirir.					
12. Tüm öğrencileri öğrenmeye dahil etmenin önemli olduğu inancıyla hareket eder.					

13. Hem kısa vadeli hem de uzun vadeli planlama yapar.									
14. Öğretmenlik mesleğinin gelişen doğasına uyum sağlar.									
15. Öğrenciler için uygun materyalleri seçer.									
16. Öğrencilerin öğrenim ve gelişimlerinin olumlu etkileyen sınıf ortamı oluşturur.									
17. Tüm öğrenciler için öğrenmeyi kolaylaştırmada başarılıdır.									
18. Sınıfta ve okulda demokratik etkileşim sergiler ve öğrencileri buna teşvik eder.									
19. Öğrencilerin sözel olmayan iletişimlerini doğru şekilde okur.									
20. Öğretmenlik mesleğinde yeni fikirler hakkında yapılan tartışmalara katılır.									
21. Öğretmenliği önemli bir meslek olarak görür.									
22. Öğrenciler için ilgi çekici materyaller seçer.									
23. Öğrencileri gelişimleri konusunda teşvik etmek için uygun geribildirimleri verir.									
24. Öğretmenlerin beklentilerinin öğrencinin öğrenimini etkilediğinin farkındadır.									
25. Öğretmenliği eğitimciler arasında işbirlikçi bir çaba olarak görür.									
26. Araştırma temelli öğretim uygulamalarına katılır.									
27. Öğrenciler için anlamlı olabilecek şekilde konular arasında bağlantılar kurar.									
28. Öğrenme eylemi gerçekleşmeden önce öğrencilerin karşılanması gereken belirli ihtiyaçlarının bulunduğunu bilir.									
29. Öğrenci farklılıklarına karşı duyarlıdır.									
30. Başkalarıyla etkileşimde bulunmak için ilgili, alakalı ve istekli davranışlar sergiler.									
31. Sınıf içi uygulamalarının iyileştirilmesi için meslektaşlarının fikir ve önerilerini dinler.									
32. Mesleki uygulamaların etik ve güvenilir olması için sorumluluk alır.									
33. Derse devamlılık konusunda dakik ve güvenilir biridir.									
34. Profesyonel bir görünüş sergilemektedir.									
35. Öğrencilerin özgüven ve yetkinliklerinin gelişimi için faydalı bir öğrenme ortamı oluşturur.									
36. Tüm öğrencilerin kültürlerine saygı duyar.									
37. Öğrenciler, ebeveynler ve meslektaşlarıyla etkili biçimde iletişim kurar.									
38. Sorumluluklarını yerine getirir.									
39. Öğrencilere her zaman hassas ve saygılı davranır.									

40. Ortak bir eğitim programının uygulanmasında diğerleriyle iyi bir şekilde çalışır.						
41. Öğretmenliği konusunda geribildirim ve değerlendirme almaya heveslidir.						
42. Öğrencilerle çalışırken sabırlıdır.						
43. Öğrencilerin ihtiyaçlarını karşılamak için planlarını yeniden gözden geçirmeye ve düzenlemeye açıktır.						
44. Başkalarının hislerine, fikirlerine ve sağladıkları katkılara saygı duyan bir şekilde iletişim kurmaktadır.						
45. Öğrenciler ve onların içinde yaşadıkları toplum hakkında bilgi edinir.						

## APPENDIX F

### Three open-ended questions for determining pre-service ECE teachers' disposition profile

- 1- "Öğretmenliğe yatkınlık" ibaresini açıklayınız?
- 2- Sizin için "Öğretmenliğe yatkınlık" ifadesi neleri içermektedir?
- 3- Öğretmenliğe yatkın olmak etkili bir öğretmen olmak için önemli midir?  
Neden?

## APPENDIX G

### Open Ended Questions for Reflection Journals

- 1- Çocuklara öğrettiğiniz, çocukların doğrudan kendi yaşantılarıyla ilişkili olan bir konuyu açıklar mısınız? Onların öğrenmelerini pekiştirmek için nasıl bir aktivite uyguladınız? Çocukların bu konuyu öğrenebildiklerini nasıl anlarsınız?
- 2- Öğretmenlik uygulamaları yaptığınız sınıfta diğer tüm çocuklardan farklı bir öğrenci olduğunu düşünün. Nasıl bir öğrenci olduğunu açıklayın. Bu çocuğun sınıfınızdaki günlük rutinelere katılımından emin olabilmek için neler yapardınız? Bu çocuğun en iyi nasıl öğrendiğini nasıl belirlersiniz?
- 3- Öğretmenlik uygulamaları yaptığınız sınıftaki çocukları eleştirel düşünmeye teşvik eden bir strateji söyleyebilir misiniz? Bu öğretme stratejisini uyguladığınız aktiviteye örnek verir misiniz? Uyguladığınız bu aktivitede öğrencilerin tepkileri nasıldı?
- 4- Öğretmenlik uygulamaları yaptığınız sınıfta etkinliklere ilgisiz bir öğrenci olduğunda onun motivasyonunu arttırmak için neler yaptınız? Motivasyonunu arttırmak için uyguladığınız yöntem işe yaradı mı? Bundan sonraki süreçte bu çocukla ilgili tutumunuz nasıl olacak?
- 5- Sınıfta uyguladığınız, çocukların birlikte çalıştığı bir aktiviteyi açıklar mısınız? Size göre bu çalışmanın iyi yönleri nelerdi? Bir sonraki uygulamada bu çalışmayla ilgili neleri değiştireceksiniz?
- 6- Öğretme yöntemiyle ilgili en son öğrendiğiniz şey nedir? Bu yöntemi Öğretmenlik uygulamaları yaptığınız sınıfta uyguladınız mı? Neden uyguladınız ya da uygulamadınız?
- 7- Öğretmenlik uygulamaları yaptığınız okulda, bir meslektaşınızla en son yaptığınız işbirliğini açıklar mısınız? Nasıl bir işbirliği yaptınız? Nasıl bir tavsiye veya yardım aldınız? Bu kişiyle bundan sonraki süreçte tekrar bir işbirliği yapar mısınız?

## APPENDIX H

### Permission to Use Open-ended Questions

Dear Dr. Frederiksen

As a graduate student at Middle East Technical University and a faculty member of Elementary Education Department, I am researching and writing my PhD dissertation on assessing the development of dispositions of Early Childhood Education pre-service teachers regarding their student teaching experiences in the field. I would like your permission to use your open ended questions that you asked in your PhD dissertation.

If you consent to my using the instrument, could you please reply to this e-mail indicating permission to use the open ended questions from your dissertation.

Thank you for your time and consideration and for creating a professional instrument that will assist teacher education programs in assessing pre-service teacher dispositions.

Metehan Buldu  
Research Assistant  
Middle East Technical University  
Faculty of Education  
Early Childhood Education Department  
06800, Ankara/Turkey

Hello Metehan,

Thank you for contacting me in regards to the open ended questions used in my dissertation work. I am happy to share those with you and you have my full permission to use them for your work. I would ask that you share your findings and finished paper when you complete it.

Thank you,

Heidi Frederiksen, Ph.D.  
Assistant Professor  
Co-Chair, Center for Educator Preparation  
School of Education  
(970) 491-6534

## APPENDIX I

### Syllabus of 3<sup>rd</sup> Grade Pre-service ECE Teachers

#### ECE 303 School Experience FALL 2015

##### **Course Description:**

Field experience and teaching practice (minimum 13 weeks) including class observation, adaptation to classroom conditions, planning and preparation for teaching. Guided teaching practice in Early Childhood Education. Discussion of these applications in class (1 hour per week seminar at the university).

##### **Course Objectives**

- Students will comprehend the MONE Early Childhood Education Curriculum for children of 36-72 months-old
- Students will prepare developmentally appropriate activity plans for children between the ages of 36-72 months-old
- Students will have teaching experiences in the field
- Students will be able to prepare all expected documents of MONE Early Childhood Education Curriculum for children of 36-72 months-old

##### **Course Requirements/ Expectations:**

###### *1. Professionalism*

**Plagiarism:** All assignments you hand in should be the result of your effort only. Academic dishonesty, including any form of cheating and plagiarism will not be tolerated and will result in failure of the course and/or formal disciplinary proceedings usually resulting in suspension or dismissal. Cheating includes but is not limited to such acts as; offering or receiving unpermitted assistance in the exams, using any type of unauthorized written material during the exams, handing in any part or all of someone else's work as your own, copying from the Internet. Plagiarism is a specific

form of cheating. It means using someone else's work without giving credit. Plagiarism is a literary theft. Therefore, you have to acknowledge the sources you use in your assignments.

**Attendance:** *Full attendance* is required both for practicum and meetings. Make-up is accepted if only the student has an official or medical excuse (reported) and the instructor and the school should approve the make-up date. ***More than two make-ups will not be accepted. The unexcused absence for first meeting will result in the final grade being lowered one letter grade.*** In this practicum course you will be the teacher of the classroom for the whole day. Practice teaching will take one day per week and cannot be done in two half days. The day that you will practice teaching cannot be changed.

**Written work:** Your assignments are expected to be neat in appearance. Spelling, grammar and syntax are important. All written material must be typed (12 pt) with spacing at one and a half lines. It is therefore of the utmost importance that you proofread your papers before handing them in. Students in order to satisfy the requirements of the course should hand in a portfolio including the assignments at the end of the semester.

**Late work:** All assignments must be handed on due dates to the related research assistant, *late submissions will not be accepted.* The only exception for late work would be unexpected excused absence, such as a medical or family emergency (with a medical report). All reports will be sent through e-mail to the related assistant on their due dates. Moreover a hard copy for all assignments will be submitted, as well.

## 2. Assignments:

### **School Observation;**

For the first week a report about the school will be submitted. This report will include;

#### 1. Observation

- ✓ General Information about the school
  - number of classes,
  - number of teachers,
  - number of students in total and per classroom,
  - school staff number,

- brief information about the history of the school (public, private or MONE)
- ✓ Daily Schedule of the Classroom (**Appendix 1**)
- ✓ Classroom Map (**Appendix 2**)
- ✓ Physical Environment of the School and the Classroom (How many floors? area of the school, classroom and the playground – in m<sup>2</sup> -, colors used, wall decorations, carpeting, furniture, shelves, safety and security precautions, material storage and organization, lighting, corners and etc.)
- ✓ Checklist for Materials Inventory (**Appendix 3**)
- ✓ Outdoor Map (**Appendix 4**)
- ✓ Your Evaluations about Physical Environment of the Classroom

#### **Monthly Plan;**

At the beginning of each month (October, November, December) a monthly plan should be prepared by depending on **Apx. 3 (Monthly Plan Format)** of 2013 National Early Childhood Education Curriculum. In addition to these monthly plans, **Apx. 5 (Monthly Concept Chart) and Apx. 6 (Monthly Objective-Indicators Chart)** will be prepared and they will be submitted all together to assistants. Totally, students are expected to submit **3 Monthly Plan, 3 Monthly Concept Chart and 3 Monthly Objective-Indicators Chart** during the semester.

#### **Activity Plans (10X2=20Activity Plans);**

Students are expected to prepare **2 (two)** activity plans for each week (Apx. 4 in 2013 National Early Childhood Curriculum Book). These activities will be prepared according to 2013 National Early Childhood Education Curriculum. Syllabus includes the format of the activity plans. Whole group, individual and small group activities along with integrated activities should be in balance during the semester. **Activity Plans should be submitted on Fridays till 15:00 as a hard copy and in an online format. There should be a parent involvement activity in each activity plan.**

**Parent involvement activities should be written according to Epstein's parent involvement types.** In each week, two different parent involvement type should be

used. For whole semester, there should be equal number for each parent involvement type.

**TYPE 1--PARENTING:** Assist families with parenting and child-rearing skills, understanding child and adolescent development, and setting home conditions that support children as students at each age and grade level. Assist schools in understanding families.

**TYPE 2--COMMUNICATING:** Communicate with families about school programs and student progress through effective school-to-home and home-to-school communications.

**TYPE 3--VOLUNTEERING:** Improve recruitment, training, work, and schedules to involve families as volunteers and audiences at the school or in other locations to support students and school programs.

**TYPE 4--LEARNING AT HOME:** Involve families with their children in learning activities at home, including homework and other curriculum-linked activities and decisions.

**TYPE 5--DECISION MAKING:** Include families as participants in school decisions, governance, and advocacy through PTA/PTO, school councils, committees, and other parent organizations.

**TYPE 6--COLLABORATING WITH THE COMMUNITY:** Coordinate resources and services for families, students, and the school with businesses, agencies, and other groups, and provide services to the community.

### **Daily Educational Schedule (10);**

From the 3<sup>rd</sup> week a daily educational schedule should be added to daily plans. This daily schedule will be related to previous week. You should include each part of the day such as the time to begin, play time, daily routines and the names of your activities (*Apx. 9 of 2013 National Early Childhood Education Curriculum Book*). The most important part of this Schedule is the *Daily Assessment Part*. It should be written in detail.

### **Child Observation Form;**

This form is given in the *Apx. 1 of 2013 National ECE Curriculum Book*. One child from the class will be chosen and s/he will be observed during the semester. This form should include critical indicators of child's development. At the end of each

month *Development Observation Form* will be filled and submitted to related assistants. Totally, *3 Development Observation Form* will be submitted for October, November and December.

### **Child Development Report;**

This form is given in the *Apx. 2 of 2013 National ECE Curriculum Book*. At the end of the semester, by using your Child Observation Forms you will write an overall report about the child. This Report will be submitted with portfolio. There will be only **one Child Development Report**.

### **Portfolio will include:**

- ✓ Information about the institution (Brief explanations regarding the physical properties of the school, history of the school, staff characteristics, educational policy, curriculum approach, Teacher Observation Checklist and etc.)
- ✓ All documents you have prepared during the course (Appendices 1,2,3,4,5,6, and 9 from New Curriculum Book)
- ✓ An overall reflection paper about the seminar course (min.3 pages-max.5 pages).
- ✓ Performance assessment forms filled by the classroom teacher.
- ✓ Attendance forms signed by the institution (administrator or teacher).

### **Schedule of Practicum Reports**

<b>Week</b>	<b>Date</b>	<b>Assignment</b>
<b>1</b>	13 October	<b>OBSERVATION</b>
<b>2</b>	20 October	<b>OBSERVATION</b>
<b>3</b>	27 October	<b>OBSERVATION</b>
<b>4</b>	03 November	<b>Activity Plans</b>
<b>5</b>	10 November	<b>Activity Plans</b>
<b>6</b>	17 November	<b>Activity Plans</b>
<b>7</b>	24 November	<b>Activity Plans</b>
<b>8</b>	01 December	<b>Activity Plans</b>
<b>9</b>	08 December	<b>Activity Plans</b>
<b>10</b>	15 December	<b>Activity Plans</b>
<b>11</b>	22 December	<b>Activity Plans</b>
<b>12</b>	29 December	<b>Activity Plans</b>
<b>13</b>	05 January	<b>Activity Plans</b>

### Schedule of Seminar Course

Week	Assignment
12 October	<b>Preschool Curriculum Discussion</b>
19 October	<b>Preschool Curriculum Discussion</b>
26 October	<b>Preschool Curriculum Discussion</b>
02 November	<b>Preschool Curriculum Discussion</b>
09 November	<b>Preschool Curriculum Discussion</b>
16 November	<b>Group Discussion</b>
23 November	<b>Group Discussion</b>
30 November	<b>Group Discussion</b>
07 December	<b>Group Discussion</b>
14 December	<b>Group Discussion</b>
21 December	<b>Group Discussion</b>
28 December	<b>Group Discussion</b>
04 January	<b>Group Discussion</b>

### Evaluation Criteria for the Course

Course requirements	% of final grade
<b>20 Activity Plans + 10 Daily Schedules</b> (3 points each activity plan)	70
<b>Portfolio</b> 20 Activity Plan Revisions + 10 Daily Schedules School Observation (3x3) 3 Monthly Plans 3 Child Observation Form 1 Child Development Report 3 Monthly Objectives-Indicators Chart 3 Monthly Concept Chart 1 General Discussion for Seminar Course	30

## APPENDIX J

### Syllabus of 4<sup>th</sup> Grade Pre-service ECE Teachers

#### ECE 411 Practice Teaching FALL 2015

##### **Description:**

Field experience and teaching practice (minimum 12 weeks) including class observation, adaptation to classroom conditions, planning and preparation for teaching. Guided teaching practice in Early Childhood Education. Discussion of these applications in class (2 hours per week seminar at the university).

##### **Course Objectives**

- Students will comprehend the MONE Early Childhood Education Curriculum for children of 36-72 months-old
- Students will prepare developmentally appropriate activity plans for children between the ages of 36-72 months-old
- Students will have teaching experiences in the field
- Students will be able to prepare all expected documents of MONE Early Childhood Education Curriculum for children of 36-72 months-old

##### **Course Requirements/ Expectations:**

###### *3. Professionalism*

**Plagiarism:** All assignments you hand in should be the result of your effort only. Academic dishonesty, including any form of cheating and plagiarism will not be tolerated and will result in failure of the course and/or formal disciplinary proceedings usually resulting in suspension or dismissal. Cheating includes but is not limited to such acts as; offering or receiving unpermitted assistance in the exams, using any type of unauthorized written material during the exams, handing in any

part or all of someone else's work as your own, copying from the Internet.

Plagiarism is a specific form of cheating. It means using someone else's work without giving credit. Plagiarism is a literary theft. Therefore, you have to acknowledge the sources you use in your assignments.

**Attendance:** *Full attendance* is required both for practicum and meetings. Make-up is accepted if only the student has an official or medical excuse (reported) and the instructor and the school should approve the make-up date. ***More than two make-ups will not be accepted. The unexcused absence for first meeting will result in the final grade being lowered one letter grade.*** In this practicum course you will be the teacher of the classroom for the whole day. Practice teaching will take one day per week and cannot be done in two half days. The day that you will practice teaching cannot be changed.

**Written work:** Your assignments are expected to be neat in appearance. Spelling, grammar and syntax are important. All written material must be typed (12 pt) with spacing at one and a half lines. It is therefore of the utmost importance that you proofread your papers before handing them in. Students in order to satisfy the requirements of the course should hand in a portfolio including the assignments at the end of the semester.

**Late work:** All assignments must be handed on due dates to the related research assistant, *late submissions will not be accepted.* The only exception for late work would be unexpected excused absence, such as a medical or family emergency (with a medical report). All reports will be sent through e-mail to the related assistant on their due dates. Moreover a hard copy for all assignments will be submitted, as well.

#### **4. Assignments:**

##### **School Observation;**

For the first week a report about the school will be submitted. This report will include;

##### 1. Observation

- ✓ General Information about the school
  - number of classes,
  - number of teachers,
  - number of students in total and per classroom,

- school staff number,
- brief information about the history of the school (public, private or MONE)
- ✓ Daily Schedule of the Classroom (**Appendix 1**)
- ✓ Classroom Map (**Appendix 2**)
- ✓ Physical Environment of the School and the Classroom (How many floors? area of the school, classroom and the playground – in m<sup>2</sup> -, colors used, wall decorations, carpeting, furniture, shelves, safety and security precautions, material storage and organization, lighting, corners and etc.)
- ✓ Checklist for Materials Inventory (**Appendix 3**)
- ✓ Outdoor Map (**Appendix 4**)
- ✓ Your Evaluations about Physical Environment of the Classroom

### **Monthly Plan;**

At the beginning of each month (October, November, December) a monthly plan should be prepared by depending on **Apx. 3 (Monthly Plan Format)** of 2013 National Early Childhood Education Curriculum. In addition to these monthly plans, **Apx. 5 (Monthly Concept Chart) and Apx. 6 (Monthly Objective-Indicators Chart)** will be prepared and they will be submitted all together to assistants. Totally, students are expected to submit **3 Monthly Plan, 3 Monthly Concept Chart and 3 Monthly Objective-Indicators Chart** during the semester.

### **Activity Plans (11X2=22 Activity Plans);**

Students are expected to prepare **2 (two)** activity plans for each week (Apx. 4 in 2013 National Early Childhood Curriculum Book). These activities will be prepared according to 2013 National Early Childhood Education Curriculum. Syllabus includes the format of the activity plans. Whole group, individual and small group activities along with integrated activities should be in balance during the semester. **Activity Plans should be submitted on Mondays till 17:00 as a hard copy and in an online format. There should be a parent involvement activity in each activity plan.**

*Parent involvement activities should be written according to Epstein's parent involvement types.* In each week, two different parent involvement type should be used. For whole semester, there should be equal number for each parent involvement type.

**TYPE 1--PARENTING:** Assist families with parenting and child-rearing skills, understanding child and adolescent development, and setting home conditions that support children as students at each age and grade level. Assist schools in understanding families.

**TYPE 2--COMMUNICATING:** Communicate with families about school programs and student progress through effective school-to-home and home-to-school communications.

**TYPE 3--VOLUNTEERING:** Improve recruitment, training, work, and schedules to involve families as volunteers and audiences at the school or in other locations to support students and school programs.

**TYPE 4--LEARNING AT HOME:** Involve families with their children in learning activities at home, including homework and other curriculum-linked activities and decisions.

**TYPE 5--DECISION MAKING:** Include families as participants in school decisions, governance, and advocacy through PTA/PTO, school councils, committees, and other parent organizations.

**TYPE 6--COLLABORATING WITH THE COMMUNITY:** Coordinate resources and services for families, students, and the school with businesses, agencies, and other groups, and provide services to the community.

### **Daily Educational Schedule (11);**

From the 2<sup>nd</sup> week a daily educational schedule should be added to daily plans. This daily schedule will be related to previous week. You should include each part of the day such as the time to begin, play time, daily routines and the names of your activities (*Apx. 9 of 2013 National Early Childhood Education Curriculum Book*). The most important part of this Schedule is the *Daily Assessment Part*. It should be written in detail.

### **Child Observation Form;**

This form is given in the *Apx. 1 of 2013 National ECE Curriculum Book*. One child from the class will be chosen and s/he will be observed during the semester. This

form should include critical indicators of child’s development. At the end of each month *Development Observation Form* will be filled and submitted to related assistants. Totally, *3 Development Observation Form* will be submitted for October, November and December.

**Child Development Report;**

This form is given in the *Apx. 2 of 2013 National ECE Curriculum Book*. At the end of the semester, by using your Child Observation Forms you will write an overall report about the child. This Report will be submitted with portfolio. There will be only **one Child Development Report**.

**Portfolio will include:**

- ✓ Information about the institution (Brief explanations regarding the physical properties of the school, history of the school, staff characteristics, educational policy, curriculum approach, Teacher Observation Checklist and etc.)
- ✓ All documents you have prepared during the course (Appendices 1,2,3,4,5,6, and 9 from New Curriculum Book)
- ✓ An overall reflection paper about the seminar course (min.3 pages-max.5 pages).
- ✓ Performance assessment forms filled by the classroom teacher.
- ✓ Attendance forms signed by the institution (administrator or teacher).

**Schedule of Practicum Reports**

Week	Date	Assignment
1	15 October	<b>OBSERVATION</b>
2	22 October	<b>Activity Plans</b>
3	29 October	<b>Holiday</b>
4	05 November	<b>Activity Plans</b>
5	12 November	<b>Activity Plans</b>
6	19 November	<b>Activity Plans</b>
7	26 November	<b>Activity Plans</b>
8	03 December	<b>Activity Plans</b>
9	10 December	<b>Activity Plans</b>
10	17 December	<b>Activity Plans</b>
11	24 December	<b>Activity Plans</b>
12	31 December	<b>Activity Plans</b>
13	07 January	<b>Activity Plans</b>

### Schedule of Seminar Course

Week	Assignment
16 October	Preschool Curriculum Discussion
23 October	Preschool Curriculum Discussion
30 October	Preschool Curriculum Discussion
06 November	Preschool Curriculum Discussion
13 November	Group Discussion
20 November	Group Discussion
27 November	Group Discussion
04 December	Group Discussion
11 December	Group Discussion
18 December	Group Discussion
25 December	Group Discussion
01 January	Holiday
08 January	Group Discussion

### Evaluation Criteria for the Course

Course requirements	% of final grade
<b>22 Activity Plans + 11 Daily Schedules</b> (3 points each activity plan)	66
<b>Portfolio</b> 22 Activity Plan Revisions + 11 Daily Schedules School Observation 3 Monthly Plans 3 Child Observation Form 1 Child Development Report 3 Monthly Objectives-Indicators Chart 3 Monthly Concept Chart 1 General Discussion for Seminar Course	34

## APPENDIX K

### TURKISH SUMMARY

#### Giriş ve Alanyazını

Okul öncesi eğitim çocukların birbirleri, aileleri, sosyal ve global çevreleriyle uyum içinde yaşayabilmeleri için bilgi, beceri ve okul değerlerinin güçlendirilmesini ele almaktadır. Bu değerleri en üst seviyede tutabilmeyi isteyen ülkeler erken çocukluk eğitiminin kalitesini arttırmak için daha özenli planlamalar yapmaktadırlar (Elliot, 2002). Eski bir Çin atasözü olan “iyi öğretmenler güçlü uluslar yaratır” sözü öğretmenlerin çocukların hayatındaki etkisinin önemine vurgu yapmaktadır.

Erken çocukluk dönemindeki öğrenmenin önemi Türkiye’de de kabul görmeye başladıktan sonra, devlet tarafından okulöncesi eğitime verilen önem artmıştır ve üniversiteler bünyesinde okulöncesi eğitim programları arttırılmıştır ve daha nitelikli öğretmenler yetiştirmeye öncelik vermeye başlanmıştır.

Bu konuda yapılan araştırmalar öğretmen ve öğrenciler arasındaki etkileşimin öğrencilerin motivasyon ve başarıları üzerindeki etkisinin göstergesi niteliğindedir (Midgley & Urdan, 2001; Pianta, 1999; Roeser, Eccles & Sameroff., 2000; Raider-Roth, Rodgers & Carol, 2006). Bu etkileşimin kalitesini arttırmak öğretmenin bilgi ve becerilerine değil, öğrencilerle nasıl iletişim kurduğuna bağlıdır. Öğretmenin karakter özellikleri, öğrencilerle kurduğu etkileşim, tutumu, değer yargıları ve felsefesi mesleki yatkınlığının bileşenlerini oluşturmaktadır ve bu bileşenler kaliteli ve etkili bir öğretmen olmanın temelini oluşturmaktadır (Harper & Morris, 2008).

Arkadaşlarınız tarafından size iki soru sorulduğunu düşünün; “Keman çalabiliyor musun?” ve “Keman çalar mısınız?”. Birinci soruya “evet” cevabı verebilir, ikinci soruya “hayır” cevabı verebilirsiniz. Belirli bilgi ve beceriye sahip olmak onları etkili

kullanabilmeyi garanti etmediği gibi, keman çalma yeteneğinizin olması, keman çalmaya olan yatkınlığınızı garanti etmez, yani bir insanın bilgi ve becerilerini etkili kullanabilmesi için belirli yatkınlık düzeyine sahip olması gereklidir. Harper and Morris (2008) yatkınlık terimini bir bireyin günlük olaylar hakkında hissettikleri ve verdiği tepkilerle tanımlamış ve okulöncesi öğretmenlerinin etkililiği üzerinde güçlü bir etkisi olduğunu belirtmiştir. Yatkınlık terimi için çok çeşitli tanımlamalar vardır. Örneğin Katz (1993) yatkınlığı bilinçli ve gönüllü kontrol edilebilen ve sıklıkla ve zorlama olmadan belirli hedeflere yönelik gerçekleştirilen kasıtlı davranış biçimleri olarak tanımlamaktadır.

Wasicko (2002) öğretmenlerin kalitesinde ve etkililiğinde pedagojik ve içerik bilgileri kadar mesleki yatkınlığın da önemli bir rol oynamakta olduğunu vurgulamıştır. Wasicko'ya göre yatkınlık, davranışın temelini oluşturan tutum, algı ve inançlardan oluşmaktadır ve bu tutumlar içten gelen tasarruflar olduğu için doğrudan ölçümü mümkün değildir. Amerika'da kurulan Eyaletler Arası Yeni Öğretmen Değerlendirme ve Destek Konsorsiyumu göreve yeni başlayacak olan öğretmenlerin hazırlanmasına ve mesleki gelişimlerine rehberlik etmek için standartlar geliştirmiştir. Geliştirilen bu standartlar göreve yeni başlayacak olan öğretmen adaylarından beklenen bilgi, beceri ve yatkınlıklarını 10 ilke altında belirlemiştir.

Eyaletler Arası Yeni Öğretmen Değerlendirme ve Destek Konsorsiyumu'nun Öğretmen Yeterlilikleri Modeli (CCSSO, 2011)

### *Öğrenen ve Öğrenme*

1. Öğrenenin Gelişimi: Öğretmen, öğrencilerin nasıl öğrendiğinin ve geliştiğinin farkına varır ve öğrencilerin gelişimini destekleyecek öğrenme fırsatları sağlar.
2. Öğrenme Farklılıkları: Öğretmen, öğrencilerin öğrenme farklılıklarını bilir ve bu farklılıkları göz önünde bulundurarak farklı öğrenme fırsatları sunar.

3. Öğrenme Ortamları : Öğretmen, öğrenciler arası etkileşimi, öğrencilerin öğrenmeye aktif katılımını ve öğrencilerin bireysel motivasyonlarını arttıracak öğrenme ortamları oluşturmayı bilir.

#### *İçerik Bilgisi*

4. İçerik Bilgisi: Öğretmen, öğrencilere öğrenme deneyimini anlamlı kılacak şekilde alanın temel kavram, araç ve yapılarını bilerek hareket eder.
5. İçeriğin Uygulanması: Öğretmen alan bilgisini kullanarak öğrenmenin gerçekleşebilmesi için alan bilgisini sınıf içi uygulamalarla ilişkilendirebilir.

#### *Öğretim Uygulaması*

6. Değerlendirme: Öğretmen, öğrencilerin sosyal ve fiziksel gelişimlerinin sürekliliğini sağlamak için değerlendirme stratejilerini bilir ve uygular.
7. Öğretimi Planlama: Öğretmen, öğrencilerin öğreniminin gerçekleşebilmesi için alan bilgisi, öğrenciler, toplum ve müfredat içeriklerini göz önünde bulundurarak planlamalar yapar.
8. Öğretim Yöntemleri: Öğretmen, sınıf içerisinde eleştirel düşünme, problem çözme ve öğrencilerin performans becerilerini desteklemek için çeşitli öğretim stratejilerini bilir ve kullanır.

## *Mesleki Sorumluluk*

9. Mesleki Öğrenme ve Etik: Öğretmen, kendi mesleki gelişiminin devamlılığı için öğretmenlik uygulamalarının öğrenciler üzerindeki etkilerini değerlendirebilmek adına kendi öz değerlendirmesini yapmayı bilir.
10. Liderlik ve İşbirliği: Öğretmen, öğrencilerinin gelişim ve öğrenmelerini desteklemek adına meslektaşları, veliler ve diğer kuruluşlarla işbirliği içinde çalışmayı bilir.

Kaynak: Interstate Teacher Assessment and Support Consortium. (2011). *Model core teaching standards: A resource for state dialogue.*

Bu konsorsiyum mesleki yatkınlığı öğretmenin sınıf içerisindeki performansının altında yatan mesleki uygulama alışkanlıkları ve ahlaki tutumlarıyla tanımlamaktadır. Mesleki yatkınlık konusunda yapılan bir çok araştırma (Schulte et al., 2004; Keiser, 2005; Frederiksen, 2010; Taylor, 2010) bu konsorsiyumun belirlemiş olduğu ilkeleri temel alarak gerçekleştirilmiştir.

Amerika’da kurulan bir diğer kuruluş, Öğretmen Eğitimi Ulusal Akreditasyon Konseyi, mesleki yatkınlığı, öğretmenin öğrencilere, velilere, meslektaşlarına ve topluma karşı davranışlarını etkileyen değerler, taahhütler ve mesleki etikler olarak tanımlamıştır (NCATE, 2006). Amerika’da kurulan bir diğer kuruluş, Öğretmen Eğitimi Ulusal Akreditasyon Konseyi, mesleki yatkınlığı, öğretmenin öğrencilere, velilere, meslektaşlarına ve topluma karşı davranışlarını etkileyen değerler, taahhütler ve mesleki etikler olarak tanımlamıştır (NCATE, 2006). Bu konseye göre mesleki yatkınlık kişinin korumacı, adaletli olma, dürüstlük, sorumluluk sahibi olma gibi inanç ve tutumlarıyla ele alınmasıdır ve bu yatkınlık öğretmenin kendi mesleki gelişimini etkilediği gibi öğrencilerinin motivasyon ve gelişimini de etkilemektedir.

Kaliteli öğretmen yetiştirmede mesleki yetkinlik önemli bir rol oynadığı için (Taylor & Wasicko, 2000), öğretmen yetiştirme programlarının kendi yetiştirecekleri öğretmen adayları için yetkinlik kriterlerini belirlemeleri önemlidir. Bu süreçte öğretmen adaylarına danışmanlık yapan üniversite hocalarının ve öğretmenlik uygulamaları için gittikleri okullardaki mentor öğretmenlerinin rolü büyüktür. Uygulama öncesi üniversite danışmaları teorik olarak öğretmen adaylarını desteklerken, uygulama sınıflarındaki mentor öğretmenler, öğretmen adaylarına sınıf içerisinde geri bildirimler vererek ve rol model olarak, onların daha etkili öğretmen olabilmeleri ve ülke düzeyinde verilen eğitim kalitesini arttırabilecek öğretmenler olarak yetiştirilmesinde önemli rollere sahiptirler.

Türkiye'de son yıllarda okul öncesi eğitime verilen önemin artmasıyla birlikte, bu alanda çalışacak öğretmen adaylarının yetiştirilmesine daha çok önem verilmeye başlanmıştır ve yetiştirilen öğretmenin kalitesi dikkate alınmaya başlanmıştır. Daha önce belirtildiği gibi öğretmen kalitesini ve etkililiğini etkileyen en önemli faktörlerden birisi mesleki yetkinliktir. Bu çalışmada okul öncesi öğretmenliğinde eğitimine devam eden öğretmen adaylarının anlamlı bilgi ve becerilerini geliştirmek adına mesleki yetkinliklerinin incelenmesinin önemli olduğu düşünülerek öğretmen adaylarının öğretmenlik uygulamalarında kazandıkları öğretmenlik uygulama tecrübelerinin onların mesleki yetkinliklerine olan etkisi araştırılmıştır. Bu amaç doğrultusunda aşağıdaki araştırma sorularına cevaplar aranmıştır.

1. Okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde öğretmenlik uygulamaları dersi öncesi ve sonrasında bir değişiklik var mı?

1a. Okul öncesi öğretmen adaylarının öğretmenlik uygulamaları dersinden sonra mesleki yetkinlik algıları öğretmen adaylarının yaş gruplarına göre farklılık gösteriyor mu?

1b. Okul öncesi öğretmen adaylarının öğretmenlik uygulamaları dersinden sonra mesleki yetkinlik algıları uygulama yaptıkları okulun özel veya devlet okulu olmasına göre farklılık gösteriyor mu?

1c. Üçüncü sınıf ve dördüncü sınıf okul öncesi öğretmen adayları öğretmenlik uygulamaları sonrasında mesleki yetkinlikleri bakımından farklılık gösteriyor mu?

1d. Okul öncesi öğretmen adaylarının mesleki yetkinlikleri daha önce yapmış oldukları öğretmenlik uygulamalarının sayısına göre farklılık gösteriyor mu?

2. Mentor öğretmenlerin okul öncesi öğretmen adayları tarafından ortaya konulan mesleki yetkinlik algılarında öğretmenlik uygulamaları dersi sonrasında bir değişiklik var mı?
3. Üniversite danışmanlarının okul öncesi öğretmen adayları tarafından ortaya konulan mesleki yetkinlik algılarında öğretmenlik uygulamaları dersi sonrasında bir değişiklik var mı?
4. Okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde öğretmenlik uygulamaları dersi sonrasında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında bir değişiklik var mı?
5. Mentor öğretmenlerin okul öncesi öğretmen adayları tarafından ortaya konulan mesleki yetkinlik algılarında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında bir değişiklik var mı?
6. Üniversite danışmanlarının okul öncesi öğretmen adayları tarafından ortaya konulan mesleki yetkinlik algılarında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında bir değişiklik var mı?

7. Okul öncesi öğretmen adaylarına göre öğretmenliğe yatkınlık nedir?
8. Okul öncesi öğretmen adaylarının öğretmenlik uygulamaları dersi sonunda mesleki yatkınlıklarının arttığını kanıtlayan örnekler nelerdir?

Almerico, Johnston, Henriott ve Shapiro (2011) öğretmenin belirli bir konuyu öğretmek için bilgi ve becerinin gerekliliğini vurgulamışlar, fakat tutku ve yatkınlık olmadan bilgi ve becerinin etkili bir uygulamayı mümkün kılmadığını belirtmişlerdir. Öğretmenlerin bilgiyi öğrencilerle paylaşma yolları ve öğrencilere nasıl bir öğrenme ortamı sunabildikleri, onların mesleki yatkınlıklarının göstergesidir. Öğretmen adaylarının etkili birer öğretmen olarak yetiştirilebilmeleri için öğretmen yetiştirme programlarına dahil olan kişi ve kurumların öğretmen adaylarının tüm süreçlerini dikkate almaları gerektiği ve en önemlisi öğretmen adaylarının mesleki gelişimlerinde mesleki yatkınlıklarının ele alınması önemli bir husustur (Almerico, Johnston, Henriott & Shapiro, 2011).

Öğretmen yetiştirme programlarının temel amacı öğretmen adaylarını bilgi ve becerilerle donatarak nasıl öğretim yapmalarını öğretmek olmasıdır. Ancak bu programlar öğretmen adaylarının mesleki yatkınlıklarını arttırmayı da temel amaç olarak ele almalıdırlar (Renzaglia, Hutchins, & Lee, 1997). Öğretmen adaylarının mesleki yatkınlıklarının düzenli olarak ele alınıp değerlendirilmesi, öğretmen yetiştirme programlarına olası eksik ve olumsuz yatkınlıkları belirleme ve önlem alma avantajı sağlamaktadır (Dee & Henkin, 2002).

İlgili alanyazını ışığında, mesleki yatkınlık bir çok araştırmacı tarafından öğretmen yetiştirme programlarının önemli bir parçası olarak ele alınmaktadır. Wasicko (2007) okul öncesi öğretmen adaylarının öğretmenlik programına girerken geçmiş ilköğretim ve lisedeki eğitim deneyimlerinin olduğunu ve o dönemde öğretmen adaylarının

belirli inanç, tutum ve değerleri geliştirmiş odluklarını belirtmiştir. Ancak bu gelişimlere rağmen öğretmenlik eğitimleri sırasında bu deneyimlerinin üzerine yeni gelişimler ekleyerek gelecekte daha etkili öğretmen olabilmeleri için mesleki yatkınlıklarının geliştirildiğini belirtmiştir.

## **Yöntem**

Bu çalışmada öğretmen adaylarının öğretmenlik uygulamalarında kazandıkları öğretmenlik uygulama tecrübelerinin onların mesleki yatkınlıklarına olan etkisini detaylı olarak anlayabilmek için yakınsayan paralel karma yöntem kullanılmıştır. Bu yöntemde araştırmacı, nitel ve nicel verileri beraber toplar fakat verileri ayrı ayrı analiz ederek bulguların birbirlerini doğrulayıp doğrulamadığına bakar (Cresswell, 2011). Çalışma verileri ölçek ve açık uçlu sorulara verilen cevaplarla toplanmıştır.

Nicel veriler Schulte, Edick, Edwards ve Mackiel (2004) tarafından geliştirilmiş olan Mesleki Yatkınlık Ölçeği (Teacher Disposition Index) aracılığı ile, nitel veriler ise açık uçlu sorular ile toplanmıştır. Nicel verileri toplamadan önce ölçek sahiplerinden gerekli izinler alınmış ve ölçek Okul Öncesi Öğretmenliği alanında uzman üç kişi tarafından Türkçe'ye çevrilerek ve gerekli adaptasyon işlemleri tamamlanmıştır. Ölçek Türkçe'ye çevrildikten sonra, ölçeğin geçerlik ve güvenilirliğini test etmek amacıyla Ankara'daki üç farklı üniversitede eğitimini sürdüren 436 okul öncesi öğretmen adayına pilot uygulama yapılmıştır. Pilot verilere temel bileşenler analizi uygulanmış ve varimax yöntemiyle rotasyona tabi tutulan mesleki yatkınlık ölçeğini oluşturan 45 maddeye ilişkin yapılan faktör analizi sonucunda, birinci faktörün ölçeğin %70,8'ini, ikinci faktörün %70,7'sini açıkladığı görülmüştür. Ölçeğe ilişkin Cronbahs Alpha katsayısı 0,958 olarak hesaplanmıştır. Hesaplanan iç tutarlılık katsayısının çok iyi düzeyde güvenilir olduğunu görülmüştür. (1,00'e yaklaştıkça güvenilirlik düzeyi çok iyi olarak değerlendirilmektedir)

Geçerlik ve güvenilirlik testinden başarıyla geçen Mesleki Yetkinlik Ölçeği, okul öncesi öğretmenliğinde okuyan 86 öğretmen adayına öğretmenlik uygulama döneminin başında ve sonunda uygulanmıştır. Öğretmen adaylarından toplanan verinin geçerliğini doğrulamak adına ölçek aynı dönemde öğretmen adaylarının uygulama yaptıkları sınıftaki 86 mentor öğretmene ve onların öğretmenlik uygulamalarına rehberlik eden 14 üniversite danışmanına da uygulanmıştır.

### **Analiz ve Bulgular**

Toplanan veri setlerine normallik testi uygulanmış ve bazı verilerin normal dağılmadığı gözlenmiştir. Çalışmamızdaki veriler bir bütün olarak ele alındığı için analizler yapılırken parametrik olmayan testler uygulanmıştır. Bu amaçla üç veya daha fazla gruba sahip değişkenleri incelerken kullanılan ANOVA yönteminin parametrik olmayan istatistikî yöntemlerden alternatif bir yöntem olan Kruskal-Wallis Testi, ikili grup karşılaştırmalarında bağımsız t testinin parametrik olmayan istatistikî yöntemlerden alternatifi olan Mann-Whitney U testi ve bağımlı iki örneklemin öncesi ve sonrası karşılaştırılmasını incelerken kullanılan bağımlı iki örnekleme t testinin parametrik olmayan istatistikî yöntemlerden alternatifi olan Wilcoxon Signed Rank testi tercih edilmiştir.

### *Öğretmen Adaylarının Öğretmenlik Uygulamalarından Sonra Demografik Değişkenleri ile Mesleki Yetkinlik Arasındaki İlişkiler*

Yapılan analiz sonucunda okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde öğretmenlik uygulamaları deneyimleri sonrası yaş gruplarına göre aralarında bir farklılık olmadığı bulunmuştur. Öğretmen adaylarının öğretmenlik uygulamalarını yaptıkları okul türüne göre mesleki yetkinliklerinin farklılığına bakıldığında ise özel okul öncesi eğitim kurumlarında uygulama yapan öğretmen adaylarının, mesleki ve müfredat merkezli yetkinliklerinin devlet kurumlarında uygulama yapan öğretmenlere göre daha çok arttığı bulunmuştur.

İki bağımsız değişken olan 3. sınıf ve 4. sınıf okul öncesi öğretmen adaylarının öğretmenlik uygulamaları sonrasında mesleki yetkinliklerinin farklılığına bakmak için parametrik olmayan yöntemlerden Mann-Whitney U testi kullanılmıştır. Test sonucunda öğretmen adaylarının buldukları sınıf düzeylerine göre öğretmenlik uygulamasından sonra öğrenci merkezli mesleki yetkinlikleri ve mesleki, müfredat merkezli yetkinlikleri yönünden aralarında anlamlı bir farklılık olduğu gözlenmiştir.

Okul öncesi öğretmen adaylarının öğretmenlik uygulama deneyimlerinin sayısına göre mesleki yetkinlikleri ele alındığında, öğretmen adaylarının uygulama deneyimleri beş gruba ayrılmıştır. Gruplar normal dağılım göstermediği için Kruskal Wallis testi uygulanmış ve test sonucunda öğretmen adaylarının öğretmenlik uygulama deneyimlerine göre öğrenci merkezli yetkinlikleri yönünden aralarında anlamlı bir farklılık olduğu gözlenirken, mesleki, müfredat merkezli yetkinlikleri yönünden aralarında anlamlı bir farklılık olduğu gözlenmemiştir. Öğretmen adaylarının öğretmenlik uygulama tecrübelerine göre öğrenci merkezli mesleki yetkinlikleri bakımından farklılık yaratan grubu bulmak için öğrenci merkezli alt boyutta sırasıyla en büyük sıra ortalamasına sahip olan 4 dönem ve 3 dönem öğretmenlik uygulama tecrübesi bulunan öğretmen adayları çıkarıldıktan sonra geriye kalan grupların arasındaki ilişkiye Kruskal Wallis testi ile tekrarlanarak uygulanmıştır. 1, 2 ve 5 dönem tecrübesi olanlar arasında öğrenci merkezli mesleki yetkinlik bakımından istatistiki açıdan anlamlı bir farklılık gözükmezken, 3 ve 4 dönem öğretmenlik uygulama tecrübesine sahip olanların istatistiki açıdan ve öğrenci merkezli mesleki yetkinlik bakımından farklılık yarattıkları %95 güven düzeyi ile söylenebilir. Sonuç olarak, öğretmen adaylarının demografik bilgilerine göre yapılan analiz sonuçlarına dayanarak, öğretmenlik uygulamaları sonrası öğretmen adaylarının hem öğrenci merkezli hem de müfredat merkezli olarak mesleki yetkinliklerinin arttığı söylenebilir.

*Okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde öğretmenlik uygulamaları dersinin öncesi ve sonrasında bir değişiklik var mı?*

Öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki değerlendirmelerine ilişkin alt boyutların incelenmesi için bağımlı iki örneklem t testinin parametrik olmayan istatistiksel yöntemlerden alternatif olan Wilcoxon Signed Ranks testi uygulanmıştır. Bağımlı iki grup karşılaştırmalarında gruplar normal dağılım göstermiyorsa, bunların ortalamaları parametrik olmayan bir test olan Wilcoxon testi ile test edilir. Test sonucunda elde edilen Z değeri öğrenci merkezli altboyut için -7,570 ve müfredat merkezli altboyut için -6,592 olarak ve p değerleri 0,000 olarak elde edilmiştir. Bu sonuçlara bakarak '*Öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki öğrenci merkezli olarak mesleki yetkinlikleri arasında öğretmen adaylarının değerlendirmelerine göre fark yoktur*' iddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı %95 güven düzeyi ile reddedilir. Öğretmen adaylarının yaptıkları değerlendirmelere göre öğretmenlik uygulamalarından önce ve öğretmenlik uygulamalarından sonra, öğrenci merkezli olarak mesleki yetkinlikleri arasında istatistiksel olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin öğrenci merkezli mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin öğrenci merkezli mesleki yetkinlik bakımından faydalı olduğunu öğretmenler açısından ortaya koymaktadır. Aynı şekilde '*Öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki müfredat merkezli olarak mesleki yetkinlikleri arasında öğretmen adaylarının gözlemlerine göre fark yoktur*' iddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı %95 güven düzeyi ile reddedilir. Öğretmen adaylarına göre öğretmenlik uygulamalarından önce ve öğretmenlik uygulamalarından sonra, öğrenci müfredat merkezli olarak mesleki yetkinlikleri arasında istatistiksel olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamasının etkisinin müfredat merkezli mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamasının etkisinin müfredat

merkezli mesleki yatkınlık bakımından faydalı olduğunu öğretmenler açısından ortaya koymaktadır.

Sonuç olarak, öğretmen adaylarına göre yapılan analiz sonuçlarına dayanarak, öğretmenlik uygulamaları sonrası öğretmen adaylarının hem öğrenci merkezli hem de müfredat merkezli olarak mesleki yatkınlıklarının arttığı söylenebilir.

*Mentor öğretmenlerin okul öncesi öğretmen adayları tarafından ortaya konulan mesleki yatkınlık algılarında öğretmenlik uygulamaları dersi sonrasında bir değişiklik var mı?*

Mentor öğretmenlerin okul öncesi öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki gözlemlerine ilişkin alt boyutlarını incelemek için bağımlı iki örneklem t testinin parametrik olmayan istatistiki yöntemlerden alternatifi olan Wilcoxon Signed Ranks testi kullanılmıştır. Test sonucunda elde edilen Z değeri öğrenci merkezli mesleki yatkınlık için -4,592 ve müfredat merkezli mesleki yatkınlık için -3,989 olarak ve p değerleri 0,000 olarak elde edilmiştir. Bu sonuçlara bakarak '*Öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki öğrenci merkezli olarak mesleki yatkınlıkları arasında mentor öğretmenlerin gözlemlerine göre fark yoktur*' iddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı %95 güven düzeyi ile reddedilir. Mentor öğretmenlerin öğretmen adayları üzerinde yaptıkları gözlemlere göre öğretmenlik uygulamalarından önce ve sonra öğretmen adaylarının, öğrenci merkezli olarak mesleki yatkınlıkları arasında istatistiki olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin öğrenci merkezli mesleki yatkınlık bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin öğrenci merkezli mesleki yatkınlık bakımından faydalı olduğunu mentor öğretmenler açısından ortaya koymaktadır. Aynı şekilde '*Öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki müfredat merkezli olarak mesleki yatkınlıkları arasında mentor öğretmenlerin gözlemlerine göre fark yoktur*' iddiası

$p=0,000 < \alpha=0,05$  olduğundan dolayı %95 güven düzeyi ile reddedilir. Mentor öğretmenlerin öğretmen adayları üzerinde yaptıkları gözlemlere göre öğretmenlik uygulamalarından önce ve öğretmenlik uygulamalarından sonra öğretmen adaylarının, müfredat merkezli olarak mesleki yetkinlikleri arasında istatistiki olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin müfredat merkezli mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin müfredat merkezli mesleki yetkinlik bakımından faydalı olduğunu mentor öğretmenler açısından ortaya koymaktadır.

Sonuç olarak, mentor öğretmenlerin öğretmen adayları üzerinde gerçekleştirdikleri gözlemler sonucu yapılan analiz sonuçlarına dayanarak, öğretmenlik uygulamaları sonrası okul öncesi öğretmen adaylarının hem öğrenci merkezli hem de müfredat merkezli olarak mesleki yetkinliklerinin arttığı %95 güven düzeyi ile söylenebilir.

*Üniversite danışmanlarının okul öncesi öğretmen adayları tarafından ortaya konulan mesleki yetkinlik algılarında öğretmenlik uygulamaları dersi sonrasında bir değişiklik var mı?*

Üniversite danışmanlarının okul öncesi öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki gözlemlerine ilişkin alt boyutlarını incelemek için bağımlı iki örneklem t testinin parametrik olmayan istatistiki yöntemlerden alternatifi olan Wilcoxon Signed Ranks testi kullanılmıştır. Test sonucunda elde edilen Z değeri öğrenci merkezli altboyut için -6,718 ve müfredat merkezli altboyut için -7,107 olarak ve p değerleri 0,000 olarak elde edilmiştir. Bu sonuçlara bakarak '*Öğretmen adaylarının Öğretmenlik uygulamalarından önceki ve sonraki öğrenci merkezli olarak mesleki yetkinlikleri arasında üniversite danışmanlarının değerlendirmelerine göre fark yoktur*' iddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı %95 güven düzeyi ile reddedilir. Üniversite danışmanlarının yaptıkları gözlemlere göre öğretmenlik uygulamalarından önce ve sonra, öğrenci merkezli olarak mesleki yetkinlikleri arasında

istatistiki olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin öğrenci merkezli mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin öğrenci merkezli mesleki yetkinlik bakımından faydalı olduğunu öğretmenler açısından ortaya koymaktadır. Aynı şekilde *‘Öğretmen adaylarının öğretmenlik uygulamalarından önceki ve sonraki müfredat merkezli olarak mesleki yetkinlikleri arasında üniversite danışmanlarının gözlemlerine göre fark yoktur’* iddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı %95 güven düzeyi ile reddedilir. Üniversite danışmanlarına göre öğretmenlik uygulamalarından önce ve sonra, öğretmen adaylarının müfredat merkezli olarak mesleki yetkinlikleri arasında istatistiki olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin müfredat merkezli mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin müfredat merkezli mesleki yetkinlik bakımından faydalı olduğunu öğretmenler açısından ortaya koymaktadır.

Sonuç olarak, üniversite danışmanlarına göre yapılan analiz sonuçlarına dayanarak, öğretmenlik uygulamaları sonrası okul öncesi öğretmen adaylarının hem öğrenci merkezli hem de müfredat merkezli olarak mesleki yetkinliklerinin arttığı söylenebilir.

*Okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde öğretmenlik uygulamaları dersi sonrasında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında bir değişiklik var mı?*

Öğretmen adaylarına göre öğretmenlik uygulamalarından önceki ve sonraki Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerinin değişimine ilişkin bağımlı iki örneklem t testinin parametrik olmayan istatistiki yöntemlerden alternatifi olan Wilcoxon Signed Rank testi ile incelenmiştir. Test sonuçlarına bakarak *‘öğretmen adaylarına göre öğretmenlik uygulamalarından önce ve sonra mesleki yetkinlik algılarıyla Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri arasında bir ilişki yoktur.’*

İddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı her bir ilke için %95 güven düzeyi ile reddedilir. Öğretmen adaylarına göre öğretmenlik uygulamalarından önce ve sonra, her bir ilkenin arasında istatistiki olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir. Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin her bir ilke için mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin her bir ilke için mesleki yetkinlik bakımından faydalı olduğunu öğretmen adayları açısından ortaya koymaktadır. Sonuç olarak, öğretmenlik uygulamalarından sonra öğretmen adaylarının Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerinden 1, 2, 3, 5, 6, 7 ve 9 bakımından mesleki yetkinliklerinin arttığı %95 güven düzeyi ile söylenebilir.

*Mentor öğretmenlerin okul öncesi öğretmen adayları tarafından ortaya konulan “mesleki yetkinlik” algılarında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında bir değişiklik var mı?*

Mentor öğretmenlere göre öğretmenlik uygulamalarından önceki ve sonraki Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerinin değişimine ilişkin bağımlı iki örneklem t testinin parametrik olmayan istatistiki yöntemlerden alternatifi olan Wilcoxon Signed Rank testi ile incelenmiştir. Test sonuçlarına bakarak ‘*Mentor öğretmenlerin algılarına göre öğretmenlik uygulamalarından önce ve sonra öğretmen adayları tarafından ortaya konulan mesleki yetkinlik örnekleri ile Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri arasında bir ilişki yoktur.*’ İddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı her bir ilke için %95 güven düzeyi ile reddedilir. Mentor öğretmenlere göre öğretmenlik uygulamalarından önce ve sonra, öğretmen adaylarının mesleki yetkinlikleri ve her bir Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkesinin arasında istatistiki olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir.

Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin her bir ilke için mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin her bir Öğretmen Eğitimi Ulusal

Akreditasyon Konseyi ilkesi için mesleki yetkinlik bakımından faydalı olduğunu mentor öğretmenler açısından ortaya koymaktadır. Her bir Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkesine göre okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde önemli bir artış olduğu gözlemlenmiştir.

Sonuç olarak, mentor öğretmenlerin değerlendirmelerine göre öğretmenlik uygulamalarından sonra öğretmen adaylarının Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerinden 1, 2, 3, 5, 6, 7 ve 9 bakımından mesleki yetkinliklerinin arttığı %95 güven düzeyi ile söylenebilir.

Üniversite danışmanlarının okul öncesi öğretmen adayları tarafından ortaya konulan “mesleki yetkinlik” algılarında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında bir değişiklik var mı?

Üniversite danışmanlarına göre öğretmenlik uygulamalarından önceki ve sonraki Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerinin değişimine ilişkin bağımlı iki örneklem t testinin parametrik olmayan istatistiksel yöntemlerden alternatif olan Wilcoxon Signed Rank testi ile incelenmiştir. Test sonuçlarına bakarak *‘Üniversite danışmanlarının algılarına göre öğretmenlik uygulamalarından önce ve sonra öğretmen adayları tarafından ortaya konulan mesleki yetkinlik örnekleri ile Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri arasında bir ilişki yoktur.’* İddiası  $p=0,000 < \alpha=0,05$  olduğundan dolayı her bir Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkesi için %95 güven düzeyi ile reddedilir. Üniversite danışmanlarına göre öğretmenlik uygulamalarından önce ve sonra, öğretmen adaylarının mesleki yetkinlikleri ve her bir Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkesinin arasında istatistiksel olarak %95 güven düzeyi ile anlamlı bir farklılık olduğu söylenebilir.

Negatif sıralar, öğretmen adaylarına öğretmenlik uygulamalarının etkisinin her bir Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkesi için mesleki yetkinlik bakımından faydalı olmadığını, pozitif sıralar ise, öğretmen adaylarına öğretmenlik

uygulamalarının etkisinin her bir ilke için mesleki yetkinlik bakımından faydalı olduğunu üniversite danışmanları açısından ortaya koymaktadır. Her bir Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkesine göre okul öncesi öğretmenliğinde okuyan öğretmen adaylarının mesleki yetkinliklerinde önemli bir artış olduğu gözlemlenmiştir.

Sonuç olarak, üniversite danışmanlarının değerlendirmelerine öğretmenlik uygulamalarından sonra öğretmen adaylarının Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerinden 1, 2, 3, 5, 6, 7 ve 9 bakımından mesleki yetkinliklerinin arttığı %95 güven düzeyi ile söylenebilir.

Genel olarak okul öncesi öğretmenliğinde okuyan öğretmen adaylarının öğretmenlik deneyimi öncesinde ve sonrasındaki mesleki yetkinliklerindeki değişim Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkelerine göre incelendiğinde öğretmen adayları, mentor öğretmenler ve üniversite danışmanlarının değerlendirmelerine göre öğretmen adaylarının mesleki yetkinliklerinde artış gösterdiği söylenebilir.

Nitel veriler iki aşamada toplanmış ve analiz edilmiştir. İlk aşamada öğretmenlik uygulamasının başında öğretmen adaylarına açık uçlu sorular verilerek kendilerine göre mesleki yetkinliğin ne olduğunu kendi cümleleriyle açıklamaları istenmiştir. İkinci aşamada ise öğretmenlik uygulamalarının sonunda öğretmen adaylarına verilen sınıf içi uygulamalarına yönelik açık uçlu sorularla mesleki yetkinliklerine dair kanıtlar elde edilmiştir. Toplanan nitel verilerin analizi için içerik analizi yöntemi kullanılmıştır. Her iki aşamada da öğretmen adaylarının verdiği cevapların kodlanmasında Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri birer kod olarak ele alınmıştır. Belirlenen kodlara göre anlamlı bilgi içeren her bir kelime, cümle ya da paragraf analiz birimi olarak ele alınıp sıklık sayımı yapılarak analiz edilmiştir.

*Okul öncesi öğretmen adaylarına göre mesleki yatkınlık nedir?*

Öğretmen adaylarına göre mesleki yatkınlık tanımlamalarına yönelik sorulan sorular:

1. “Öğretmenliğe yatkınlık” ifadesini açıklayınız?
2. Sizin için “Öğretmenliğe yatkınlık” ifadesi neleri içermektedir?
3. Öğretmenliğe yatkın olmak etkili bir öğretmen olmak için önemli midir?  
Neden?

Bu üç soruya verilen cevaplar neticesinde elde edilen nitel verilerin analizleri sonucunda; öğretmen adayları “mesleki yatkınlık” ifadesini bir öğretmenin; %22.81 oranla mesleki öğrenme ve etik olarak, %15.38 oranla öğretim yöntemlerini bilmesi olarak, % 13.12 oranla içeriğin uygulanmasını bilmesi olarak, %10.74 oranla liderlik ve işbirliği özelliklerine sahip olması olarak, %9.15 oranla öğrenme ortamları düzenlemeyi bilmesi olarak, %7.82 oranla öğrenenin gelişimi hakkında bilgi sahibi olması olarak, %7.69 oranla öğrenme farklılıklarını göz önünde bulundurması olarak, %5.17 oranla içerik bilgisine sahip olması olarak, %4.77 oranla değerlendirme yapmayı bilmesi olarak ve % 3.31 öğretimi planlama konusunda yeterliliğe sahip olması olarak tanımlamıştır.

*Okul öncesi öğretmen adaylarının öğretmenlik uygulamaları dersi sonunda mesleki yatkınlıklarının arttığını kanıtlayan örnekler nelerdir?*

Öğretmen adaylarından sınıf içi uygulamalarına yönelik cevaplamaları istenilen sorular:

1. Çocuklara öğrettiğiniz, çocukların doğrudan kendi yaşantılarıyla ilişkili olan bir konuyu açıkla mısınız? Onların öğrenmelerini pekiştirmek için nasıl bir etkinlik uyguladınız? Çocukların bu konuyu öğrenebildiklerini nasıl anlarsınız?
2. Öğretmenlik uygulamaları yaptığınız sınıfta diğer tüm çocuklardan farklı bir öğrenci olduğunu düşünün. Nasıl bir öğrenci olduğunu açıklayın. Bu çocuğun sınıfınızdaki günlük rutinelere katılımından emin olabilmek için neler yapardınız? Bu çocuğun en iyi nasıl öğrendiğini nasıl belirlersiniz?
3. Öğretmenlik uygulamaları yaptığınız sınıftaki çocukları eleştirel düşünmeye teşvik eden bir strateji söyleyebilir misiniz? Bu öğretme stratejisini uyguladığınız aktiviteye örnek verir misiniz? Uyguladığınız bu aktivitede öğrencilerin tepkileri nasıldı?
4. Öğretmenlik uygulamaları yaptığınız sınıfta etkinliklere ilgisiz bir öğrenci olduğunda onun motivasyonunu arttırmak için neler yaptınız? Motivasyonunu arttırmak için uyguladığınız yöntem işe yaradı mı? Bundan sonraki süreçte bu çocukla ilgili tutumunuz nasıl olacak?
5. Sınıfta uyguladığınız, çocukların birlikte çalıştığı bir aktiviteyi açıkla mısınız? Size göre bu çalışmanın iyi yönleri nelerdi? Bir sonraki uygulamada bu çalışmayla ilgili neleri değiştireceksiniz?
6. Öğretme yöntemiyle ilgili en son öğrendiğiniz şey nedir? Bu yöntemi öğretmenlik uygulamaları yaptığınız sınıfta uyguladınız mı? Neden uyguladınız ya da uygulamadınız?
7. Öğretmenlik uygulamaları yaptığınız okulda, bir meslektaşınızla en son yaptığınız işbirliğini açıkla mısınız? Nasıl bir işbirliği yaptınız? Nasıl bir tavsiye

veya yardım aldınız? Bu kişiyle bundan sonraki süreçte tekrar bir işbirliği yapar mısınız?

Okul öncesi öğretmenliğinde okuyan öğretmen adaylarının bu yedi soruya verilen cevaplar sonucunda elde edilen nitel verilerin analizleri; öğretmen adaylarının sınıf içi uygulamalarından elde edilen mesleki yatkınlık oranlarını şu şekilde göstermektedir; %17.39 oranla öğretim yöntemlerini kullanmaya, % 14.58 oranla değerlendirme yapmayı bilmeye, %11.84 oranla içerik bilgisine sahip olmaya, %10.13 oranla içeriğin uygulanmasını bilmeye, %9.93 ile öğrenenin gelişimi hakkında bilgi sahibi olmaya, %9.58 oranla öğretimi planlayabilmeye, %7.32 oranla öğrenme farklılıklarını göz önünde bulundurmaya, %6.98 oranla liderlik ve işbirliği özelliklerine sahip olmaya, % 6.36 oranla mesleki öğrenme ve etik önceliklerine sahip olmaya ve %5.82 oranla öğrenme ortamlarını düzenleyebilmeye yatkın oldukları belirlenmiştir.

### **Tartışma ve Öneriler**

Öğretmen adaylarının kendilerini değerlendirme verilerine göre yapılan analiz sonucuna göre öğretmenlik uygulamaları sonrası öğretmen adaylarının, hem öğrenci merkezli hem de müfredat merkezli olarak mesleki yatkınlıklarının arttığı söylenebilir. Deneyim kazanılarak yapılan işler bireylerin kişisel gelişimlerine katkı sağlamaktadır. Bu bağlamda okul öncesi öğretmen adaylarının uygulama yaparak kazanmış oldukları deneyimlerin onların mesleki yatkınlıklarını arttırması sürpriz bir sonuç değildir. Öğretmen adayları için sınıf içerisinde kazanılan uygulama deneyimleri geleceğin öğretmenlerinin yetiştirilmesinde önemli bir unsurdur (Doppen, 2007 & Singh, 2006). Wilson (1996) yapmış olduğu çalışma ile bu sonucu desteklemektedir. Öğretmen adaylarıyla yapmış olduğu çalışma sonucunda öğretmen adaylarının kazanmış olduğu uygulama deneyimlerinin onların öz yeterliliklerini arttırdığını bulmuştur. Bullough, ve diğerleri (2002) öğretmen adaylarının sınıf içerisindeki uygulama deneyimleri sonucunda öğrettikleri konulara daha hakim olduklarını belirtmiş, bu deneyimlerin öğretmen adaylarının öğretim planlamalarını geliştirdiklerini vurgulamışlardır.

Öğretmenlik uygulamaları tecrübeleri öğretmen adaylarının daha anlayışlı ve dışa dönük olmalarını sağladığı ve bu sayede öğretim ve öğrenim kuramlarını daha iyi kavramalarını sağlamaktadır (Rock & Levin, 2002). Ayrıca Malone, Jones ve Stalling (2002) öğretmenlik uygulama deneyimlerinin öğretmen adaylarını öğretmeye çalıştıkları konuyu daha kolay öğrenebilmesini sağladığını ve öğretmen adaylarının empati kurma, toleranslı olma ve sabırlı olma yetilerini geliştirdiğini belirtmişlerdir. Singh ve Stoloff (2006) öğretmenlik uygulama tecrübelerinin öğretmen adaylarının öğretim ve öğrenim inançları üzerine önemli bir etkisinin olduğunu vurgulamışlardır. Ayrıca öğretmenlik uygulama deneyiminin öğretmen yetiştirme sürecinin olmazsa olmaz bir parçası olduğuna değinmişlerdir.

İlgili alanyazını incelendiğinde, öğretmenlik uygulamalarında kazanılan tecrübeler öğretmen adaylarının mesleki yetkinliklerinin geliştirilmesinde önemli bir role sahiptir. Alanyazınından edilen bu bilgiler bu çalışmanın sonuçlarını destekler niteliktedir. Ayrıca bu çalışmanın sonucu, Prosak ve Donald (2014) ve Masunga ve Lewis (2011) gibi araştırmacıların öğretmen adaylarının mesleki yetkinlik düzeylerinin öğretmenlik uygulamaları sonrası arttığı sonucuna varmalarıyla benzerlik göstermektedir.

Okul öncesi öğretmen adaylarının kendi özdeğerlendirmelerinin analizi sonucunda elde edilen mesleki yetkinliklerinin arttığı sonucu, mentor öğretmenlerin ve üniversite danışmanlarının değerlendirmelerinin sonuçları ile doğrulanmıştır, hem mentor öğretmenler hem de üniversite danışmanları, öğretmen adaylarının mesleki yetkinliklerinin uygulama deneyimleri sonunda arttığını belirtmişlerdir. Bu sonucu destekler nitelikteki çalışmalar daha önce Pauli (2006) ve Keiser (2005) tarafından gerçekleştirilmiştir ve her iki çalışmada da mentor öğretmenlerin ve üniversite danışmanlarının yapmış olduğu değerlendirmeler, öğretmen adaylarının kendi özdeğerlendirmeleriyle paralel sonuçlar vermiştir.

Öğretmen adaylarının, öğretmenlik uygulamaları deneyimlerini öncesi ve sonrası olarak Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri bazında mesleki yetkinlik değişimlerine bakıldığında, öğretmen adaylarının en çok artan mesleki yetkinlik alanı "öğretimi planlama" ilkesinde olmuştur. Bu ilkeye göre öğretmen, öğrencilerin öğreniminin gerçekleşebilmesi için alan bilgisi, öğrenciler, toplum ve müfredat içeriklerini göz önünde bulundurarak planlamalar yapabilmelidir (InTASC, 2011). Bu değişimin sebebi, öğretmen adaylarının üniversite ortamında aldıkları okul deneyimi dersinin teorik kısmında ders planlarının nasıl hazırlandığını öğrenmeleri olabilir, çünkü öğretmen adayları öğretmenlik uygulamaları öncesinde uygulama için gittiklerinde yapacakları tüm etkinlikleri, amaç ve kazanımları dikkate alarak hazırlayarak, geri bildirim almak üzere üniversite danışmanlarına teslim etmektedirler. Hazırladıkları günlük planları okul ortamında uyguladıklarında uygulayacakları öğretim uygulamalarının kendilerine ne derece faydalı olduğunu deneyimlemiş olabilirler. Ball, Knobloch ve Hoop tarafından 2007 yılında yapılan çalışma öğretmen adaylarının geçmiş deneyimleri, bilgi birikimlerinin ve ilgi alanlarının öğretmen adaylarının öğretimi planlama yetkinliklerini etkilediği sonucuna ulaşmıştır ve bu çalışmanın sonuçlarını desteklemektedir. Öğretmen Eğitimi Ulusal Akreditasyon Konseyi ilkeleri doğrultusunda öğretmenlik uygulaması sonrası en fazla ikinci artışı gösteren "öğrenenin gelişimi" ilkesidir. Bu ilkeye göre öğretmen, öğrencilerinin nasıl öğrendiğini ve geliştiğinin bilincindedir ve öğrencilere onların gelişimini destekleyecek öğrenme ortamları ve fırsatları sağlar (InTASC, 2011). Bu artışın sebebi olarak okul öncesi öğretmen adaylarının öğretmenlik uygulamaları için gittikleri sınıflarda farklı yaş grubunda öğrencileri görmeleri ve her yaş grubunun bilişsel, sosyal, duygusal ve fiziksel olarak farklılıklara sahip olduklarını gözlemlemeleri sayesinde farklı tecrübeler edinmesi gösterilebilir. Yine bu ilkeler doğrultusunda, öğretmenlik uygulamaları deneyimleri sonrası öğretmen adaylarının mesleki yetkinliklerinin en fazla artış gösterdiği üçüncü ilke "İçerik Bilgisi" dir. Bu ilkeye göre öğretmen, sınıf içerisinde öğrenmenin gerçekleşebilmesi için gerekli olan alan bilgisini sınıf içi etkinlikler ile ilişkilendirerek kullanabilmelidir. Okul öncesi öğretmen adaylarının içerik bilgilerindeki artışın sebebi öğretmen adaylarının öğrencilerin

yaratıcılığını, problem çözüme ve eleştirel düşünme becerilerini destekleyerek onlar için içerik bilgisini daha erişilebilir hale getirebilmek için daha çok çaba sarfetmesi olabilir. Öğretmen adaylarının özdeğerlendirmelerinin yanı sıra, mentor öğretmenlerin ve üniversite danışmanlarının yapmış oldukları değerlendirmelerin INTASC ilkeleri bazında inceleme sonuçları da öğretmen adaylarının uygulama deneyimleri sonrasında mesleki yetkinliklerinde artış olduğunu göstermektedir.

Öğretmen adaylarının kişisel bilgileri ve öğretmenlik uygulamaları sonrası mesleki yetkinliklerindeki değişime bakıldığında, öğretmen adaylarının yaş gruplarının mesleki yetkinliklerinde herhangi bir fark yaratmadığı bulunmuştur, buna sebep olarak araştırmaya katılan 86 öğretmen adayının aynı yaş grubu (18-24) içerisinde olması gösterilebilir. Öğretmen adaylarının uygulama yaptıkları okul türüne göre mesleki yetkinliklerindeki değişime bakıldığında; özel ve devlete bağlı okul öncesi eğitim kurumlarında öğretmenlik uygulamasına giden öğretmen adaylarının öğrenci merkezli mesleki yetkinlikleri bakımından herhangi bir değişiklik gözlenmezken, özel okul öncesi eğitim kurumlarında öğretmenlik uygulama tecrübesi edinen okul öncesi öğretmen adaylarının devlete bağlı okul öncesi eğitim kurumlarında uygulama tecrübesi edinen öğretmen adaylarına göre müfredat merkezli mesleki yetkinliklerinin daha çok arttığı bulunmuştur. Bu farklılığın sebebi, özel ve devlete bağlı okul öncesi eğitim kurumlarının her ikisinde öğrenci merkezli bir eğitim felsefesine sahipken, uygulanan müfredat açısından, özel okul öncesi eğitim kurumlarının her birinin kendine ait farklı müfredatları kullanmaları gösterilebilir. Bunlara ek olarak okul öncesi öğretmen adaylarının sınıf düzeylerine (3.sınıf ve 4.sınıf) göre öğretmenlik uygulamaları sonrası mesleki yetkinliklerindeki değişime bakıldığında, üçüncü sınıfa devam eden öğretmen adaylarının mesleki yetkinliklerindeki değişim oranı dördüncü sınıfta olan öğretmen adaylarına göre daha yüksek çıkmıştır. Bu değişim oranındaki farklılığa sebep olarak üçüncü sınıfa devam eden çoğu öğretmen adayının ilk defa öğretmenlik uygulama deneyimine sahip olması gösterilebilir, çünkü dördüncü sınıftaki öğretmen adaylarının üçüncü sınıfta öğrenimine devam ederken edinmiş oldukları öğretmenlik deneyimleri sayesinde

kazanmış oldukları mesleki yetkinlikleri mevcuttur ve var olan bu mesleki yetkinlikler ilk defa öğretmenlik uygulamaları deneyimi kazananlara göre değişim oranındaki düşüklüğün sebebi olarak açıklanabilir. Ayrıca okul öncesi öğretmen adaylarının daha önce edinmiş oldukları öğretmenlik uygulama tecrübelerinin sayısına göre uygulama sonrası mesleki yetkinliklerine bakıldığında, 3 ve 4 dönem öğretmenlik uygulaması deneyimine sahip olan öğretmen adaylarının mesleki yetkinlikleri bakımından 1, 2 ve 5 dönem tecrübesi olanlara göre farklılık yaratmıştır. Bu farklılığa sebep olarak öğretmen adaylarının mesleki yetkinliklerinin daha çok farkedilebilir olabilmesi için en az üç veya dört dönemlik öğretmenlik uygulamaları deneyimine sahip olması gösterilebilir çünkü öğretmen adayları ne kadar çok uygulama deneyimi kazanırlarsa planlamada, organizasyonda ve öğrencilerinin aktif katılımında o kadar çok mesleki yetkinliklerini geliştirmiş olurlar.

Okul öncesi öğretmen adaylarının “mesleki yetkinlik” tanımlamalarını içeren nitel verilerin incelenmesi sonucunda öğretmen adaylarının mesleki yetkinliği genel olarak mesleki öğrenme ve etik, öğretim yöntemleri ve içerik uygulamalarını bilme yetisine sahip olmak olarak tanımlamışlardır. Bunun yanında öğretmenlerin sınıf içi uygulamalarına yönelik sorulan açık uçlu sorularla toplanan nitel veriler incelendiğinde öğretmen adaylarının en çok öğretim yöntemleri, değerlendirme ve içerik bilgisini kullanabilme yetilerine sahip oldukları belirlenmiştir.

Karma yöntemin gereği olarak, nicel ve nitel veriler birlikte değerlendirildiğinde, öğretmen adaylarından elde edilen ve kendi öz değerlendirmelerine dayanan nicel veri ve öğretmenlik uygulamasının sonunda elde edilen nitel veriler birbirlerini doğrular niteliktedir. Sonuç olarak okul öncesi öğretmenliğinde eğitime devam eden öğretmen adaylarının öğretmenlik uygulamaları deneyimlerinin, onların mesleki yetkinliklerini arttırdığı nicel ve nitel verilerin incelenmesi sonucunda doğrulanmıştır.

Bu çalışmanın sonuçları göz önünde bulundurulduğunda, geleceğin öğretmenlerini daha donanımlı yetiştirebilmek adına öğretmen yetiştirme programlarının mesleki

yatkınlık konusunda daha özverili olmaları ve verilen derslerin içeriğine mesleki yatkınlığın nasıl daha üst seviyelere çıkarılabileceğini dikkate alarak yeniden düzenlemeleri gerekmektedir. Bu doğrultuda öğretmen yetiştirme programları ve bu programların bağlı olduğu kurum ve kuruluşlar “mesleki yatkınlık” ifadesinin ne olduğunu ve eğitim sistemimizin içerisindeki yerini daha açık ve anlaşılabilir hale getirebilir ve eğitim programlarıyla ilişkilendirilmesini sağlayabilir. Bu konu ile ilgili uzun süreli araştırmalar yapılabilir, öğretmen adaylarının var olan mesleki yatkınlıkları gözlem ve video kayıtlar yapılarak incelenebilir. Ayrıca bu çalışmaya katılan öğretmen adayları, öğretmen olarak çalışmaya başladıklarında belirli aralıklarla takip edilip, deneyimlerinin mesleki yatkınlıklarına ve gelişimlerine etkisi incelenebilir.

## APPENDIX L

### CURRICULUM VITAE

#### PERSONAL INFORMATION

Surname, Name: Buldu, Metehan  
Nationality: Turkish (TC)  
Date and Place of Birth: 10 January 1983, Andırın  
Marital Status: Married  
Phone: +90 312 210 7506  
email: mbuldu@metu.edu.tr

#### EDUCATION

Degree	Institution	Year of Graduation
MS	METU Early Childhood Education	2010
BS	METU Early Childhood Education	2007
High School	Ayşe Atıl Teacher Training High School, Adana	2001

#### WORK EXPERIENCE

Year	Place	Enrollment
2009- Present	METU-Elementary Education	Research Assistant

#### FOREIGN LANGUAGES

Advanced English

#### PUBLICATIONS

Buldu, N., Buldu, M. & Buldu, M. (2014). A quality snapshot of science teaching in Turkish K-3<sup>rd</sup> grade programs. *Education and Science*, 39, 214-232.

**APPENDIX M**

**TEZ FOTOKOPİSİ İZİN FORMU**

**ENSTİTÜ**

Fen Bilimleri Enstitüsü	<input type="checkbox"/>
Sosyal Bilimler Enstitüsü	<input checked="" type="checkbox"/>
Uygulamalı Matematik Enstitüsü	<input type="checkbox"/>
Enformatik Enstitüsü	<input type="checkbox"/>
Deniz Bilimleri Enstitüsü	<input type="checkbox"/>

**YAZARIN**

Soyadı : Buldu  
Adı : Metehan  
Bölümü : İlköğretim Bölümü

**TEZİN ADI** (İngilizce) : EARLY CHILDHOOD PRE-SERVICE TEACHERS'  
DEVELOPMENT OF TEACHING DISPOSITIONS AND PRACTICES

**TEZİN TÜRÜ** : Yüksek Lisans  Doktora

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz.

**TEZİN KÜTÜPHANEYE TESLİM TARİHİ:**