A STUDY ON PRESERVICE TEACHERS' PERCEIVED PREPAREDNESS LEVELS REGARDING INSTRUCTIONAL PLANNING AND CREATING LEARNING ENVIRONMENTS

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

BY

NURDAN KARACA

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF EDUCATIONAL SCIENCES

SEPTEMBER 2019

Approval of the Graduate School of Social Sciences

_____

Prof. Dr. Yaşar KONDAKÇI
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

_____

Prof. Dr. Cennet ENGİN DEMİR
Head of Department

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

_____

Assoc. Prof. Dr. Hanife AKAR
Supervisor

Examining Committee Members

Prof. Dr. Fatma HAZIR BIKMAZ	(Ankara Uni., EPG)	_____
Assoc. Prof. Dr. Hanife AKAR	(METU, EDS)	_____
Assist. Prof. Dr. Nur AKKUŞ ÇAKIR	(METU, EDS)	_____

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

Name, Last name: Nurdan Karaca

Signature:

ABSTRACT

A STUDY ON PRESERVICE TEACHERS' PERCEIVED PREPAREDNESS LEVELS REGARDING INSTRUCTIONAL PLANNING AND CREATING LEARNING ENVIRONMENTS

Karaca, Nurdan
M.S., Department of Educational Sciences
Supervisor : Assoc. Prof. Dr. Hanife Akar

September 2019, 150 pages

The purpose of the study was to investigate perceived preparedness levels of senior preservice teachers regarding instructional planning and creating learning environments at a state university in Northwest Turkey. Variables of gender, high school type, department, GPA, desire to become a teacher and desire to continue graduate education in educational sciences field were examined to see if there were significant differences in preparedness levels of preservice teachers in terms of these variables. By examining preparedness levels, it was ultimately aimed to see whether the previous teacher education programs could help preservice teachers acquire the currently mandated General Teacher Competencies (GTC) as they continued their education with those programs.

To this end, the survey instrument, Preparedness to Teach Questionnaire (PTQ) was developed by the researcher in line with MoNE's GTC 2017 version and the related

literature. A cross-sectional survey was conducted and 232 senior preservice teachers constituted the participants of the study.

The findings showed that senior preservice teachers perceived themselves 'completely prepared' to teach in instructional planning and creating learning environments. When the differences regarding variables were investigated; significant differences were found in variables of gender, high school type and GPA. On the other hand, perceived preparedness levels did not differ significantly regarding the variables of department, desire to become teachers and desire to continue graduate education.

The study findings may make contributions to teacher education programs in question. Additionally, searching preservice teachers' preparedness levels in the other main competencies of GTC 2017 version is suggested for further study.

Keywords: Teacher education, teacher education programs, teacher competency, preparedness to teach, preservice teachers.

ÖZ

ÖĞRETMEN ADAYLARININ ÖĞRETİMİ PLANLAMA VE ÖĞRENME ORTAMLARI OLUŞTURMAYA YÖNELİK HAZIRBULUNUŞLUK ALGI DÜZEYLERİ ÜZERİNE BİR ÇALIŞMA

Karaca, Nurdan
Yüksek Lisans, Eğitim Bilimleri Bölümü
Tez Yöneticisi : Doç. Dr. Hanife Akar

Eylül 2019, 150 sayfa

Bu çalışmanın amacı, Türkiye'nin kuzeybatısında bulunan bir devlet üniversitesindeki son sınıf öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik öğretmenlik mesleğine hazırbulunuşluk düzey algılarını araştırmaktır. Algılanan hazırbulunuşluk düzeylerinin çeşitli değişkenlere göre anlamlı farklılıklar gösterip göstermediğini anlamak amacıyla cinsiyet, mezun olunan lise türü, bölüm, genel not ortalaması, öğretmen olma isteği ve lisansüstü eğitime eğitim bilimleri alanında devam etme isteği değişkenleri incelenmiştir. Algılanan hazırbulunuşluk seviyelerini incelemedeki amaç, önceki öğretmen eğitimi programlarının, eğitimlerine bu programlarla devam eden öğretmen adaylarına MEB'in 2017'de güncellediği Genel Öğretmen Yeterliklerini ne derecede kazandırdığını araştırmaktır.

Bu amaçla araştırmacı tarafından Millî Eğitim Bakanlığı'nın 2017'de yayımlanan Genel Öğretmen Yeterlikleri ve ilgili alanyazından yararlanılarak Öğretime Hazırbulunuşluk Anketi geliştirilmiş ve Türkiye'nin kuzeybatısında bulunan bir

devlet üniversitesindeki 232 son sınıf öğretmen adayının katılımıyla, kesitsel araştırma gerçekleştirilmiştir.

Bulgular, öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmada kendilerini öğretmenlik mesleğine 'tamamen hazır' olarak algıladıklarını göstermiştir. Bulgular değişkenlere göre analiz edildiğinde ise, hazırbulunuşluk seviye algılarının cinsiyet, mezun olunan lise türü ve genel not ortalamaları değişkenlerinde anlamlı farklılıklar gösterdiği görülmüştür. Buna karşılık; bölüm, öğretmen olma isteği ve lisansüstü eğitime eğitim bilimleri alanında devam etme isteği hazırbulunuşluk seviye algıları değişkenlerinde herhangi bir fark yaratmamıştır.

Bu çalışmanın bulguları bahsi geçen öğretmen eğitimi programlarına katkıda bulunabilir. Ayrıca, çalışma sonunda, gelecek çalışmalar için öğretmen adaylarının öğretmenlik mesleğine diğer yeterlik alanlarındaki hazırbulunuşluk seviye algılarının araştırılması önerilmektedir.

Anahtar Kelimeler: Öğretmen eğitimi, öğretmen eğitimi programları, öğretmen yeterlikleri, öğretime hazırbulunuşluk, öğretmen adayları.

To my parents Ali and Şükran Karaca,
for their unconditional love and support.

ACKNOWLEDGMENTS

Firstly, I would like to express my many thanks to my supervisor, Assoc. Prof. Dr. Hanife Akar, for her never ending positiveness and support in the whole process of this thesis. Although we could not meet frequently due to the circumstances, she has always given her support via many ways and enlightened me whenever I needed. Additionally, as my advisor, she has always shown her understanding and behaved kind-heartedly from the very beginning of my graduate education until the end, and I am very grateful to have that.

I also would like to share my appreciation to the examining committee members, Prof. Dr. Fatma Hazır-Bıkmaz and Assist. Prof. Dr. Nur Akkuş-Çakır for their contribution and valuable comments that helped me look from a different angle to some parts of my research.

Moreover, I must also thank my dearest friend and colleague Abdullah Atmacasoy for many reasons. He helped me in the process of choosing my research topic; he has shared his experience with me whenever I needed; and sometimes even when I did not ask for it. He is such a successful and passionate person in his field that he acted like he was my unofficial supervisor. He has encouraged me when I had difficult times in furthering my research.

Last but not least, I want to share my greatest thanks to my dearest friend Azer Güzeldereli, who is more than a sister to me. We started this graduate education journey together. It was a real journey, by the way, as we travelled to Ankara every week for two years. As much as it was a very challenging period, it was a fantastic adventure and I am really happy as I shared such an experience with her.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

GTC	General Teacher Competencies
HEC	Higher Education Council
MoNE	Ministry of National Education
PTQ	Preparedness to Teach Questionnaire

CHAPTER 1

INTRODUCTION

This chapter presents the introduction of the study with its background, purpose and significance. Firstly, background information about preservice teachers' competency and preparedness levels is provided; then what is aimed in this study is explained in the purpose of study. Afterwards, significance of the study clarifies what contributions the current study can provide to the literature. The chapter closes with the definitions of the study where the important terms are described in detail.

1.1 Background of the Study

As the most valuable assets of education system, teachers are given great importance all over the world; this also necessitates attaching importance to teacher education as a consequence of their irreplaceable contributions to education (MEB, 2017b). Their job is not as easy as many people think; they must concurrently deal with many complicated situations, decide on many distinctive points (Darling-Hammond, 2006). It is their job to simultaneously consider students' individual differences, previous knowledge, their cognitive structures, different learning styles, interests and motivations as well as the context, outcomes to be achieved, evaluating learning experiences, and giving reaction to students' immediate needs. Thus, teaching is not a knowledge transferring process anymore (OECD, 2019), unlike the traditional approaches in which students were considered as passive listeners and learners. With the constructivist approach, a new understanding has been brought to education and learning process (TED, 2009). Students are to learn how to get, interpret, analyse, assess and transform knowledge. This comprises of learning what, how and why *something* occurs rather than only considering what it is. The changes do not happen only in the field of education. As well as changed learning approaches, technological

developments and sociological changes according to these developments unavoidably require revising or updating education system. Therefore, schools must furnish students with the necessities that will bring them to the future; instead of providing them with the information that already exists (Caillier & Riordan; 2009). Another changing trend with the developments is internationalization of many areas such as economy, culture and, naturally, education. As the world gets more and more correlative and interconnected every day; changes and developments are seen and felt all over the world. So as to keep up with innovations and necessities of the time, education in the country must be revised in line with the world but without losing inner features of our culture (MEB, 2006). Changes in education mean that there must be changes in teacher education at first, since teachers are the actors who can provide students with the new knowledge and skills that are required in this era.

All the aforementioned topics make teacher education and especially initial teacher education very crucial and influential. Initial teacher education is the introductory stage which preservice teachers have to finish before beginning their career in the teaching profession (Yeigh & Lynch; 2017). Yet, teachers who have graduated from initial teacher education programs cannot be considered as 'fully prepared' for the profession; nor must they stop developing themselves in teaching. However, as the starting point of the teaching profession, initial teacher education must be planned adequately and appropriately (European Commission, 2010) in order to graduate preservice teachers as prepared as they can be after their teacher training period. Likewise, initial teacher education is not an end for preservice teachers; instead, it is the beginning of an ever-lasting process of personal and professional development that continues until retirement (MEB, 2017b). On the other hand, all this improvement process does not mean anything if preservice teachers cannot get a proper training at education faculties (Doğutaş, 2016) as initial teacher education forms the groundwork of this profession.

So as to provide preservice teachers a good training that can prepare them wholly for the profession, initial teacher education programs must achieve to give them

comprehension of various learnings in social and cultural settings and, more importantly, usage of this in the classroom with distinctive students or different learning environments. The programs must also ensure preservice teachers to have clinical experiences where they can learn how to teach effectively (Darling-Hammond, 2006). Another important aspect is that there must be a comprehensive cooperation between universities and schools where preservice teachers have their field experiences; and these two institutions must work interdependently with each other (Yeigh & Lynch; 2017) in order to enhance preservice teachers' learning experiences and their understanding of their future profession. In an attempt to improve initial teacher education in Europe, some precautions were decided to be generated in order to ensure some of these topics and accordingly to keep up with the time (TNTEE, 2000). These were development of teacher education policies, cooperation and reflective practices in teacher education, creating efficient learning environments for preservice teachers; teaching as a science, teaching within multiculturalism. Research in educational sciences was also emphasized to improve the field. Other than that, many initiatives have been seen for improving teacher education worldwide with the technological developments, sociological changes and the concept of internationalization (European Commission, 2010; Eurydice, 2002; OECD, 2005).

The issue of teacher quality and competency is critical in initial teacher education. Teacher competency is about having the expected behaviours for teaching profession in order to use in the learning environment (Şişman, 2009). Although teacher competencies change according to the needs of the period, teachers of the time must have these competencies in order to offer effective learning environments. It is obvious that the most important factor in student achievement is teacher qualification (OECD, 2005). This means that if education quality and student success are wanted to be improved, the way to do this depends heavily on improving teacher quality. After the introduction of teacher competencies in the world, studies have emerged to integrate initial teacher education programs and teacher competencies. New programs have been designed in line with them. As having these competencies is a

prerequisite for teachers, programs must accommodate themselves to these competencies (Chung & Kim; 2010). Teacher competencies also change according to the developments and needs of the time; requiring a change in teacher education programs, accordingly.

There are many studies in the world to generate and update general teacher competencies in the world. Turkey has also conducted some studies to form and update competencies for the teaching profession. As a matter of fact, the concern of this study is the latest version of General Teacher Competencies (GTC) which was published by MoNE in December 2017. In this version of GTC, three main competency areas were introduced, and these are (1) *professional knowledge* which is related to background theoretical information, content knowledge and subject specific knowledge, (2) the competency of *professional skills* which is related to the skills of teaching such as planning, creating learning environments or organizing the teaching and learning process, and (3) the competency of *attitudes and values* which are related to personal and professional behaviours of teachers (MEB, 2017a). Teacher competencies emphasize the measurement of teachers' individual performance; thus, performance criteria are also determined together with competencies (Şişman, 2009). GTC includes 3 main competencies, 11 sub-competencies and 65 performance criteria that show which standards teachers must have in order to have an efficient teaching process.

Teacher competencies are first introduced to preservice teachers in the initial teacher education programs by means of the outcomes and objectives of the pedagogical courses. Nevertheless, novice teachers have difficulties in the teaching profession especially in the first year as they do not know how to transform this theoretical knowledge of competencies into behaviours and attitudes in their teaching practice. In addition, in field experience, they have their supervisors or teacher educators whenever they need help; whereas, in their profession, they are alone in every step they take about particular situations, and in every decision that they make in the instructional period (Mehmetlioğlu & Haser; 2013). This can make them feel not

prepared enough for the profession. Preparedness to teach is related to how well initial teacher education programs prepare preservice teachers to cope with the difficulties of the profession (Black, 2003). It is a very important topic as it affects many aspects of education. It has an impact on student achievement and their motivation; as well as the desire to continue teaching profession (Darling-Hammond, Chung & Frelow; 2002). This makes investigating preparedness levels of preservice teacher very crucial. Although teachers' preparedness levels are affected by many factors (Gülbahar, 2017), preparedness levels of novice teachers are related to their initial teacher education as they have not had enough field experience and the only theoretical formal information that they could get is from their education. Thus, in order to increase preservice teachers' preparedness levels, initial teacher education programs must be improved. It can be concluded from the literature that all these concepts -teacher education, teacher qualification, teacher competency and preparedness to teach- are interrelated to each other; they affect the other terms as well as being affected by them.

1.2 Purpose of the Study

Education cannot be separated from real life as it tries to make students manage and survive in real life (Caillier & Riordan; 2009). Teacher competencies and initial teacher education programs have to be updated according to the changes in real life since education is affected by technological, sociological and environmental changes. After teacher competencies were introduced and accepted as a necessary framework for teacher education in some countries such as England, America and Germany, Higher Education Council (HEC) in Turkey also started studies for generating teacher competencies as a consequence of globalization in education as in many other areas. Following an intensive preparation period, the framework for general teacher competencies was published by Ministry of National Education (MoNE) (MEB, 2006). Within a decade, developments in technology, communication and changes in society that are caused by the developments made it necessary to update teacher competencies. MoNE published the updated version of General Teacher

Competencies (MEB, 2017). As an integration is required between initial teacher education and teacher competencies; in 2018, HEC introduced new teacher education programs that had been prepared based on the updated GTC. It was decided that the new programs would be used starting from the 2018-2019 academic year with the upcoming preservice teachers who would start the first grade in the mentioned year. The existing preservice teachers, on the other hand, would continue with the previous teacher education programs with which they had begun their education. This may create a problem for sophomore, junior and senior preservice teachers as they may not have the necessary competencies that are required at this time for the teaching profession. When all existing preservice teachers in Turkey are considered, the number is not a small amount. For this reason, with this study, it is ultimately aimed to investigate whether the previous teacher education programs can succeed in furnishing existing sophomore, junior and senior preservice teachers with the required competencies. This question has been tried to be answered in the study by determining perceived preparedness levels of preservice teachers who have continued their education with the previous version. Determining their preparedness levels also gives information about the effectiveness of the previous programs in achieving to give updated teacher competencies as the purpose of education programs is to provide preservice teachers the necessary competencies (MEB, 2017b). In this way, the main purpose can be achieved in the study. The other purpose is to investigate whether there are differences in preparedness levels according to gender, high school type, departments, desire to become a teacher and desire to continue graduate education in educational sciences.

The study includes two sub-competencies under professional skills in MoNE's GTC; these are *instructional planning* and *creating learning environments* which constitute two main topics of this study. The reason for choosing these two particular dimensions is that they are related to the field of curriculum and instruction which makes them very essential to search. They are also very significant parts in the teaching process which starts with them and continues with managing learning environments and ends with evaluating learning experiences. As being the initial

parts of teaching, examining these dimensions becomes important. Efficient learning environments cannot be provided without a proper and appropriate instructional plan (Zahorik, 1970). Moreover, managing learning environment and evaluation of student outcomes cannot be achieved as desired without creating productive learning environments. As these dimensions of professional skills are demonstrated in practice in preservice teachers' field experience courses in their last year of teacher education, the study includes senior preservice teachers.

With all the information explained above; the aim of the study can be summarized as in the following: To investigate senior preservice teachers' perceived preparedness to teach regarding instructional planning and creating learning environments based on MoNE's GTC; and to determine ultimately whether the previous teacher education programs can achieve to gain updated competencies in instructional planning and creating learning environments to senior preservice teachers; to examine whether there are differences in preparedness levels of preservice teachers regarding gender, department, high school type, GPA, desire to become a teacher and desire to continue graduate education variables. For this aim, the following research questions were determined:

1) What are preservice teachers' perceived preparedness levels in instructional planning and creating learning environments at a state university in Northwest Turkey?

2) Do preservice teachers' perceived preparedness levels to teach in instructional planning and creating learning environments at a state university in Northwest Turkey differ in terms of:

a) their gender?

b) the high school type they have graduated from?

c) preservice teachers' departments?

d) preservice teachers' GPA?

e) their desire to teach?

f) their desire to continue graduate education in educational sciences?

1.3 Significance of the Study

Having teacher competencies is essential as they are considered, in a way, as tools for the validation of activities in practising the curriculum and assessment processes and for checking the quality (Taylor, 1997). Preservice teachers are trained to acquire these competencies through objectives in teacher education programs. Therefore, this study may have significant implications to assess the competence of preservice teachers on the updated GTC and reveal any potential gaps in the objectives of teacher education programs to equip students with appropriate competencies. Examining the topic has become very intriguing for the researcher as it must be known if a gap exists between programs and the updated GTC. The subject is worth investigating because it is essential to know competency levels of preservice teachers who will graduate with the previous teacher education programs but must have the updated version of GTC. This may create a conflict as they may not have the training that is required for this period with all technological and sociological changes. Education must be in line with the era as it is considered a part of everyday life. If education cannot meet the necessary knowledge and skills that students need, meaningful learning experiences cannot be seen (Tyler, 2014). With the comprehension of this, Higher Education Council (HEC) prepared new teacher education programs that can keep up with the developments and changes in the society benefiting from the updated version of GTC. However, there is a problem for existing preservice teachers who are at the 2nd, 3rd and 4th grade. Although there is a small group who face this problem, the number cannot be underestimated when all existing preservice teachers in Turkey are considered. This makes the subject of high interest to examine; thus, it becomes very significant to be investigated. Additionally, it can make contributions for educational field by providing a perspective to policy makers and teacher educators. Necessary precautions can be taken according to the results if preservice teachers are found incompetent in some areas of teaching.

Another aspect of the study is related to preparedness levels of preservice teachers; competency levels show if they are prepared or not prepared enough for the

profession. Being prepared is very important for novice teachers as it affects the teaching process and students' achievement (Darling-Hammond, Chung & Frelow; 2002). Starting the profession with low preparedness levels not only affects teachers' effectiveness but also makes teachers change their profession (Darling-Hammond, Chung & Frelow; 2002). The study presents preparedness levels of preservice teachers providing valuable information in this respect. If low preparedness levels are found, necessary actions can be employed to increase preservice teachers' preparedness levels.

The current study is also significant in other aspects: Firstly, it includes preservice teachers of all departments at a faculty of education; instead of studying only one group. The earlier studies generally included only one or two departments of education faculties; whereas, this study does not make such a differentiation and involves all departments at the faculty. Thus, this study presents a wider aspect of the situation. Secondly, although there were a significant number of studies with 2006 version, only a few studies have been conducted with the latest version for the time being as it has recently been published. The current study is based on the updated GTC; making it the centre of interest to search. Third, the study examines competency levels regarding specific variables. Some of the studies with both versions of GTC examined this. The results of this study can contribute to their findings; or, it can have opposite results, providing some contrary ideas.

1.4 Definitions of Important Terms

Competency: Individuals' ability to act proficiently in circumstances depending on their own knowledge and skills (Eurydice, 2002).

Teacher Competency: The combination of features and capabilities that teachers must have for their profession in terms of knowledge, skills, merits and behaviours (Sisman, 2009). Also, the continuation of these features and qualities during the teaching profession (Tanrıverdi & Apak; 2013).

General Teacher Competencies (GTC): The generic competencies for the teaching profession which were introduced by Ministry of National Education in Turkey in 2006 and updated in 2017. GTC in the study represents these two frameworks of teacher competencies. In the study, there are mentioned as '2006 version of GTC' or the old version and '2017 version of GTC' or the updated version.

Preservice Teachers: University students who are being trained to be teachers; prospective teachers who are studying at various fields of the faculties of education.

Preparedness: The state of being prepared after some working or studying. A concept that is related to previous learnings, motivation levels, beliefs, skills and general health condition (Senemoğlu, 2018).

Preparedness to Teach: The level of initial teacher education's preparation to make teachers cope with the challenges of teaching profession (Black, 2003). The condition of how prepared teachers are after their initial teacher education for the requirements of their future profession (Mehmetlioğlu & Haser, 2013). In this study, preparedness to teach is used only in the context of preservice teachers' preparedness levels to start the teaching profession.

Initial Teacher Education: The four-year education period at the faculties of education at higher education institutions although the period can vary in some countries. The training period when preservice teachers start getting their first formal education regarding teaching. Graduation from these faculties does not mean the end of teacher education; but it gives the initial required training for the profession.

Initial Teacher Education Program: Programs that are designed to be used in the faculties of education in order to provide preservice teachers necessary knowledge and skills at higher education programs. In Turkey, these programs are designed centrally by Higher Education Council (HEC) and every faculty of education follows the same teacher education programs.

CHAPTER 2

LITERATURE REVIEW

This chapter examines the related literature about the current study. It starts with teacher education, continues with the concepts of 'competency' and 'teacher competency'. Then it gives information about General Teacher Competencies (GTC) which were introduced in 2006 and updated in 2017 by Ministry of National Education in Turkey. Subsequently, the basis of this study -two dimensions under GTC- are explained in detail. This is followed by preparedness to teach as the research question is concerned with preservice teachers' preparedness levels for teaching profession. After theoretical framework is presented, research on the mentioned topics is provided. The chapter finishes with a brief summary of literature review.

2.1 Teacher Education

Teacher education is seen as an accessible and progressive system by the European countries. It is also considered an on-going process; thus, it is required to promote professional improvement of teachers in all stages of their careers. European Union makes a categorization of teacher education having four stages: (1) initial teacher education which is given to preservice teachers at the very beginning, (2) initiation to the profession; in other words, starting to work as a teacher, (3) in-service training which is given during the time teachers work in the profession, and (4) advanced education which is not compulsory for all teachers (TNTEE, 2000).

As the starting point of teacher education, initial teacher education is an undergraduate program that prepares preservice teachers for maintaining national education's basic objectives in classes by ensuring the required competence,

knowledge, principles and attitudes for the profession (MEB, 2017b). Teacher education programs aim to provide such an effective training that preservice teachers could become qualified teachers who are also motivated, passionate and pleased in their jobs in addition to the desire to sustain these features through the phases of their profession (Mansfield et al, 2016). Another purpose is to form efficient teachers who can ensure students' transforming conceptual information into factual knowledge and merging new information with the previous ones. The way to assure this is related to teacher education programs and policies (Bangır-Alpan & Koç-Erdamar; 2019). The importance of teacher education becomes evident at this point as these aims are tried to be achieved to preservice teachers through teacher education.

2.1.1 Brief History of Teacher Education in Turkey

When the Republic of Turkey was founded in 1923, reforms were employed in many areas including teacher education in order to upgrade in economic, social, and academic levels. In 1924, the act of 'Law of Unification of Education' was legislated and it combined all institutions of education under the Ministry of National Education (MoNE). All paramount regulatory and policy resolutions are still taken by the same ministry (Çakıroğlu & Çakıroğlu; 2003). Teacher education for primary schools for cities and village teacher schools for villages were opened afterwards. They were separated as the needs of urban and rural areas were different. Village teacher schools raised teachers who would work in villages. Village Institutions, which were started in 1940s, were among this kind of schools. As a successful and original teacher education model, village institutions contributed to education of students at rural places, increased consciousness of Republic in society and provided the adaptation of reforms and revolutions (YÖK, 2007). Village Institutions had an important part in raising teachers until their closure in 1954 (MEB, 2017a).

With the enactment of 'Basic Law for National Education' in 1973, teacher education was decided to be given only within higher education institutions. This merged different practices of teacher education under one institution. Higher teacher

schools and education institutes with a 2-year education period were formed in the place of their previous versions (Çakıroğlu & Çakıroğlu; 2003). In 1982, the responsibility of teacher education was passed on to Higher Education Council (HEC). In 1989, all teacher education programs were transferred to faculties of education and made to give four-year trainings; there had been differences in the periods of study in teacher education programs previously (Çakıroğlu, Çakıroğlu; 2003). Following this, in 1992, 4-year Higher Teacher Schools were transformed into classroom teaching departments under education faculties (YÖK, 2007).

Major changes were employed in teacher education in 1997 within 'National Education Development Project'. One aspect of this project was about teacher education under the name of 'Improvement of Initial Teacher Education'. With this regulation, innovations and changes were made in the areas of curriculum development, training of teacher educators, providing equipment and materials to education faculties, cooperation between education faculties and practice schools, and foundation of the National Committee of Teacher Training (YÖK, 2007).

After a decade, 2006-2007 regulation was employed to revise problematic parts of 1997 innovations and to update teacher education programs. It was more of a re-arrangement of the previous regulation rather than changing all structure. There were innovations in the following areas: (1) Teacher education programs were updated. Among the changes, there were decreases in the course hours of field experience, changes in the credits of some courses, new courses such as *introduction to educational sciences, educational psychology, teaching principles and methods, measurement and evaluation, Turkish Education System and School Administration*. Additionally, some courses such as *introduction to teaching profession, development and learning, instructional planning and evaluation* were removed. (2) The department of Religious Culture and Ethics Teaching was taken from Faculties of Theology and added to faculties of education. (3) New arrangements were conducted for secondary school education teaching. (4) New departments were opened in Ankara University Educational Sciences Faculty (YÖK, 2007). The percentage of

courses was formed as 50-60 percent of content knowledge, 25-30 percent of professional knowledge and 15-20 percent of general culture courses (YÖK, n.d.). The following updating study of teacher education programs was in 2009.

Teacher education programs were lastly updated in 2017-2018 in line with the changes, developments, the updated version of General Teacher Competencies and Teacher Strategy Paper which was published by MoNE in 2017. According to this updating, some changes were as follows: Some course names and contents were changed, some course names remained the same but their contents were updated, school experience course was removed and field experience course was increased to two terms as *Field Experience-I* and *Field Experience-II*. Teaching Technologies and Material Development course was transformed into *Teaching Technologies*. Courses related to content knowledge were re-arranged for all departments. Except for field experience courses, professional knowledge courses would be the same in all departments and there would be no prerequisite courses for any other courses but for field experience I and II. 25 percent of the courses would be elective in line with the Bologna Process (YÖK, n.d.).

2.2 Teacher Competency

Before examining national and international studies on teacher competency, the definitions of *competency* and *teacher competency* are given in this part in order to reflect the concept better. At first, the concept of competency in general is defined through the descriptions in the literature. Then the concept is narrowed down to teacher competency which is related to teaching profession.

2.2.1 The Concept of 'Competency'

'Competency' as a concept is defined as individuals' ability to act efficiently in circumstances depending on knowledge and skills (Eurydice, 2002). That is; not only does it require attainable knowledge and skills, but also the efficient application of

them in a situation (Westera, 2001). Having only high levels of knowledge and skills in a subject matter is not equal to owning high levels of competency. It is necessary to have the ability to choose from reachable knowledge and skills in order to use them in complicated circumstances (Westera, 2001), only then competency can be achieved. Likewise, for Barnett (1994), competency is related to dealing with unanticipated events; thus, he defines it as the skills for transferring existing knowledge in order to make adequate decisions in certain contexts. It can be inferred from all the definitions that competency comprises behaviours and cognitive skills to use substantial knowledge in precise situations.

There has been a change in the understanding of the concept 'competency' over the years. Previously, it was described as the knowledge about a job; namely, it was based on knowledge. In today's world, on the other hand, it is considered as the knowledge of the way to do a task; thus, competency-based approach seems to be accepted. According to this approach, as much as knowledge is required to do a task, it is not enough to perform a task competently (TRACE Project, 2005). It is seen that 'competence' and 'competency' are used interchangeably in most situations but as stated in Trace Project (2005), there is a slight difference between them. 'Competence' supports 'competency' in such a way that competency cannot be observed without competence. Competence is more general, but competency refers to one's ability to do a task. Another issue about competency is that it cannot be observed as a whole; it is more than that observation. Furthermore, it can be different in various circumstances; thus, different levels of competency can occur in spectacular situations (TRACE Project, 2005).

Additionally, two types of competency definitions are given as for educational context: (1) Theoretical perspective of competency is identified with cognitive skills that promotes action in specific situations. (2) Operational perspective sees competency as skills that are used to cope with unexpected circumstances (Gokce, 2015). Therefore, like the previous definitions, it is a combination of both cognitive skills and behavioural components.

2.2.2 The Concept of 'Teacher Competency'

Like the concept of 'competency', teacher competency is associated with the combination of features and capabilities teachers must have for their profession regarding knowledge, skills, merits and behaviours (Sisman, 2009); it is also defined as the continuation of these features and qualities (Tanrıverdi & Apak; 2013). Likewise, teachers' attainment of required skills and knowledge in their field of teaching has a lot to do with teacher competency (Gökçe, 2015). Another definition made for teacher competency is teachers' carrying out the expected behaviour and attitudes in the classroom (Şişman, 2009).

Petalla and Madrigal (2017) state that teacher quality has a huge effect on education quality. In this respect, whenever education standards are upgraded, the new teacher competencies are also required for teachers to be efficient in their accomplishing these upgraded standards midst the teaching process. According to Taylor (1997), teacher competencies can be considered as tools for the confirmation of activities in practising the curriculum and assessment processes and for checking the quality.

Generating peculiar professional knowledge baselines for teachers has many difficulties. It is also challenging to make those worldwide and significant in distinctive contexts. At this point, creating a definition for teacher competency is of high importance. Dealing with those difficulties is aimed in forming teacher competency frameworks (Caena, 2014). The frameworks include both accomplished knowledge and necessary skills which are combined and interdependent on each other. Despite all efforts to determine teacher competencies, it is almost impossible to make one and only framework for teacher competencies throughout the world since teacher education and teacher competencies, accordingly, are affected by their place of practise (Caena, 2014), and this makes them specific for a nation. Likewise, as stated by MoNE (2017a), a common and universal competencies framework is not achievable. Although some similarities can be seen among frameworks of different countries, teacher competencies change according to the needs of the era and

education philosophy of the country in question. This necessitates determining and updating teacher competencies in line with the conditions of that country and their educational philosophy (MEB, 2017a). Therefore, it can be wise to create an international framework for teacher competencies and adapt it in different nations along with their cultures and social contexts. Such a study came by World Bank (2005) that divides teacher competencies (qualifications) into three dimensions. These are competencies about (1) professional skills training, (2) skills in the teaching environment, and (3) skills in the school context. They also see teacher competencies as having different stages which start in initial teacher education and continues with internship and *post-internship.* In all these stages, teachers must improve their skills in the teaching profession.

2.2.3 Changes in Terminology and Understanding of Teacher Competency

When the research on education is examined, it is seen that there was a different understanding of teacher competencies before 1990s. Behavioural approach in the 1960s affected most educational areas; thus, teacher competencies were described in behavioural terms when competencies were started to be investigated (TED, 2009). In the studies of determining teacher competencies, subject-specific and pedagogical knowledge were considered separated. This caused competencies to be defined in detail as behaviours that teachers had to have. Instead of providing preservice teachers to do so; combining subject-specific and pedagogical knowledge in practice was the responsibility of preservice teachers. This understanding changed in the 1990s when pedagogical content knowledge was adopted. In this sense, teacher competencies were regarded as *standards* rather than *behaviours*. As stated by Turkish Education Association (TED, 2009), the change can be seen in research and documents of America, Australia, England and Ireland that prefer *teaching standards* unlike the term *teacher competencies* they used to choose. This change is not only about the difference of terms but also about the shift of understanding that prefers *teaching standards* with general concepts; rather than *behaviours* with technical details.

Although they are referred as ‘teacher competencies’ in the Turkish context; there have been different terms used for competencies around the world. Accordingly, Gökçe (2015) states that foreign literature refers them as pedagogical standards. When documents of England are examined, it is seen that they use ‘professional standards’ instead of teacher competencies. As a matter of fact, the term ‘competency’ was used in England until 1997 when the term ‘standard’ was replaced with it and ‘standard’ has been used ever since (Köksal & Convery; 2013). The term ‘standard’ is also used in Germany (Tsujino, 2015); in Australia (Adonioua & Gallagher; 2017); and in America (Chung & Kim; 2010). European Union uses both terms in different concepts; ‘competency’ as a general concept, and ‘standard’ as a more specific and detailed concept (European Council, 2010; Caena, 2014); Eurydice, 2002; TRACE Project, 2005). Another term that is used instead of ‘competency’ is ‘qualification’ (Moosa & Shareefa; 2019); Manning, Wong, Fleming, & Garvis, 2019). When all these definitions are investigated; except for European Union’s *competence* definition, it is understood that they all meet the topic of this research. Yet, the terms ‘qualifications’ or ‘standards’ are not be used in order to prevent any confusion. Instead of them, the researcher uses only one term that is ‘competency’ except for citations in which ‘standard’ is used in the original document. The reason for choosing this term is that MoNE and Turkish contexts prefer it when they mention teacher standards or qualifications (MEB, 2017a).

2.2.4 Inquiries to Generate or Update Teacher Competencies in the World

In the case of Europe, the European Network on Teacher Education Policies (ENTEP) was founded in 1999 for the purpose of discussing transnational policy issues of teacher education. By generating a network of member countries, ENTEP encouraged members to share their teacher education practices, policies and problems with other members along with examining and analogising differences among them (Schratz, 2014). Although ENTEP gathers to discuss those issues, it is claimed that it is more of an advisory group rather than decision-making (Iucu & Schratz; 2013). Having not only European, but also nationwide dimension among

member countries, it has a large scale of experts with experience (Iucu & Schratz; 2013). Moreover, European Union started an *Expert Group of Teacher Education* in 2003 to investigate and describe necessary changes for teacher competencies for future teachers of the new era. A list was created as generic competencies for each teacher in the future.

Another study done within European Union was that common European principles were formed in order to improve the quality of teacher education in member countries: (1) *Well-qualified profession*, that is, all teachers must have required pedagogical knowledge, comprehensive subject knowledge and the skills to teach this knowledge. (2) *Supporting lifelong learning*, that is, teachers must be given the chance to advance their studies in educational field. They must be willing to learn new efficient ways to perform their jobs, as well. (3) *A mobile profession* is about visiting other European countries for the purpose of joining some professional development projects. (4) *Supporting partnership* refers to benefiting from other institutions in the place of work, local businesses, and stakeholders (European Council, 2010).

In America, teaching standards were created as a result of concentrating on teacher effectiveness in the educational reform. Due to the lack of desired student achievement in the 1990s, student standards were founded, and standards-based movement started accordingly in the USA. Following this, it became necessary to revise teacher education programs and determine teacher standards in order to increase student achievement as these were seen to influence education directly (Chung & Kim; 2010). With standards-based movement, teachers' competency became very essential and preservice teachers were made to show their effectiveness rather than their scores or degrees unlike before to become teachers. Then 'what effective teachers have to know and can do' became an important issue to solve. As a result of research, a framework for teaching standards was decided to be generated. Consequently, three organisations were formed for this aim: (1) *The National Council for Accreditation of Teacher Education (NCATE)* was responsible for

accreditation and preparation of standards for teachers. Subsequently, they check initial and graduate teacher programs to see whether the programs can meet NCATE standards. Universities try to meet the standards in order to get accredited. (2) *The Interstate New Teachers Assessment and Support Consortium (INTASC)* accounted for certifying beginning teachers. They determined basic features that every beginning teacher must have in order to be efficient in their teaching. The common idea was that a teacher must combine content knowledge with pedagogical knowledge to provide students learning. *(3) The National Board for Professional Teaching Standards (NBPTS)* oversaw advanced education of teachers. After three years in teaching profession, teachers can apply for this certificate with a portfolio and they must succeed in content knowledge tests (Chung & Kim; 2010). The common aim of these three organisations is to ensure development in the teaching profession both at the beginning and in the following years of teachers' careers. Many states have adopted these standards and revised their teacher education programs in line with these three organisations.

As for England, the Department for Education (DfE) introduced Teacher Competencies for the first time in 1992. Teacher Training Agency (TTA) which later became 'the Training and Development Agency (TDA) was founded in 1994. In 1997, the term 'competencies' was replaced with 'standards' and TTA proposed Core Teacher standards. The standards were updated in 2002 and then in 2007. There were three main dimensions in the 2007 version of England's teacher standards: *Professional Attributes, Professional Knowledge and Understanding, and Professional Skills* (Köksal & Convery; 2013). Later, in 2011, Department for Education (DfE) presented 'The Teachers' Standards' which had some important changes (DfE, 2011). It covered all three previous frameworks which were (1) the 2007 version of core teacher standards updated by TDA, (2) the standards for qualified teacher status (QTS), and (3) the General Teaching Council for England's Code of Conduct and Practice for Registered Teachers (DfE, 2011). Therefore, it was binding for all teachers from different career levels starting with the first level which is initial teacher training. All preservice teachers must meet the standards before

graduating from higher education in order to have Qualified Teacher Status which is a necessity for all teacher candidates and qualified teachers (Goepel, 2013). Newly Qualified Teacher (NQT) is the status when teachers start their profession, it lasts for one year, and they are to be assessed with these standards at the end of NQT period. There is also an advanced status for teachers which is Qualified Teacher Learning and Skills (QTLS), teachers with this status are accepted as 'fully qualified teachers. Only this status is exceptional in assessing; headteachers are given the opportunity to choose assessment instrument from any standards framework for teachers with QTLS. They can use the Teachers' Standards, but they are not obliged to do so for QTLS (DfE, 2011). 'The Teachers' Standards' show the minimal expectation of being QTS. Those working in initial teacher training are supposed to assess preservice teachers appropriately in line with these standards in order to accept them as QTS. Furthermore, headteachers are to use these standards for all career levels of teachers. There are three parts in the Teachers' Standards: *Preamble* gives values and behaviour which teachers must display in their profession. *Part I* refers to teaching standards and *Part II* is about personal, professional conduct (DfE, 2011).

In the case of Germany, a conference in which all states' ministers of education participated was held and some resolutions were enacted for teacher education standards in 2004 and 2008, and some of them were updated in 2014. These standards and competencies were created for all states since students were found under the expected level in PISA, 2001 resulting in dissatisfaction about schools and teachers. (Tsujino, 2015). Although input and process were accepted as self-determining for the states, general standards were the same for all states. In the first resolution in 2004, four divisions were decided for competencies; these were teaching, education, assessment and innovation. Subject-based standards were determined in 2008 resolution. There were three parts which were mission, professional competency regarding subject and subject profile. As stated by Tsujino (2015), these competencies were restricted to peculiar practice levels. Yet, expected teacher competencies were important to be ensured regardless of school types that teachers worked at. The competencies of the resolutions 2004 and 2008 were decided

by teacher unions and educational academicians. It was assured that teachers could reach the expected competency levels by means of their actions. Consequently, education policy of Germany can be considered as the product of an agreement of the stakeholders (Tsujino, 2015).

As for Australia, a universal trend can be seen in teacher standards; they have been used for over twenty years in order to define teachers' works via some standards and competencies in Australia (Adonioua, Gallagher, 2017). The Australian Professional Standards for Teachers (APST) was introduced in 2011 and it has been integrated to teacher education programs and teaching profession by the state and jurisdictions since then. As Australia has a jurisdictional education, each jurisdiction used APST in distinctive styles. One of the eight jurisdictions is mentioned in the following part: Before APST, there were no accreditation systems for teacher education nor were there any territorial teacher standards in the mentioned jurisdiction. After the introduction of APST, they constituted a teacher accreditation agency in line with APST by the help of teacher unions, lecturers, and educational scientists. APST was aimed to be benefited in graduate assessments and in career stages which were graduate, proficient, highly accomplished, and the lead. The first stages are to be achieved by all teachers; whereas, the latter two stages are voluntary based. Additionally, when teacher standards were seen for the first time in 2002 in Australia, they were voluntary based and subject-related; and they were considered as a tool for professional improvement (Adonioua & Gallagher; 2017). Today, on the other hand, there are general teacher standards (APST) which are compulsory as well as these voluntary and subject-related standards. The reason for generating APST was to have the same nation-wide standards for the teaching profession. There are three dimensions under APST; namely; professional knowledge, professional practice, and professional engagement (Adonioua & Gallagher; 2017).

In Austria, a research project which is called as 'EPIK' in short was started in order to generate a teacher competencies framework in line with international context in 2005. They found *five domains of teacher professionalism* which can be considered

as competency categorizations (Schratz, 2014). The determined domains were as follows: (1) *Reflection and discourse* is the capability of engaging with the circumstances in a distinctive viewpoint, evaluating the circumstances and expressing them correctly. (2) *Professional awareness* is the recognition of one's own skills and proficiency in the teaching profession and knowing what requires to be a teacher. (3) The domain of *Collaboration and collegiality* is about cooperating with other teachers, joining teacher communities, professional associations and forming cultures. (4) *Ability to differentiate* is the capability of coping with divergent learning characteristics, students with communication obstacles and knowing what to do in those situations. (5) *Personal mastery* means ongoing observation and consideration about one's own expertise in teaching (Schratz, 2014). These domains are not related to subject matter or types of schools theoretically; whereas, they are useful and effective for subject matter and types of schools in practice. There is a sixth domain and it combines five domains in a unified discipline; it also establishes the contexts for the five domains (Schratz, 2014).

2.2.5 General Teacher Competencies (GTC) in Turkey

GTC are 'the general knowledge, skills and attitudes that must be acquired by teachers in order to fulfil their profession effectively and efficiently' (MEB, 2006). They are also defined as 'lists that include details of what teachers are able to do at the behaviour level' (TED, 2009). The efforts to determine GTC and actualising preservice and in-service teacher training improvement studies in line with these competencies can be considered as opportunities to make Turkish Education System move to the international education quality (TED, 2009).

2.2.5.1 Initial Studies on General Teacher Competencies in Turkey

Before reviewing initial studies on GTC, the conditions in which teacher education was in are summarised in this paragraph in order to reflect the situation in all aspects. Teacher education was under the responsibility of Ministry of National Education

(MoNE) until 1982 when it was transferred to Higher Education Council (HEC). After 15 years of this change, in 1997, a new and comprehensive regulation was started for teacher education by HEC. The regulation included innovations in the areas of teacher training model, periods of study for initial teacher education, departments, program names, cooperation with MoNE and Faculty of Science and Letters, and education and employment harmony, (YÖK, 2007). Meanwhile, preservice teacher education was reorganized as a part of the National Education Development Project, which was conducted via the World Bank's loan. The study was in between the years 1994 and 1999 and directed by HEC and MoNE. The aim of this part of the project was to improve the quality of education for preservice teachers who would be employed in the primary and secondary schools (YÖK, 2007).

Within the same project, there was also another teacher education study which was related to accreditation system and teacher competencies. This first formal study was started in 1998 with the cooperation of HEC and MoNE in Turkey. The aims were to develop accreditation system in teacher education and to determine teacher competencies. Four dimensions were generated at the end of this study: (1) *Competencies on subject area and field education*, (2) *competencies on teaching and learning process*, (3) *monitoring, evaluating and recording students' learning*, and (4) *complementary professional competencies*. There were 50 performance criteria under these dimensions (YÖK, 1999). However, these competencies were never put into practice (Atik Kara & Sağlam; 2014).

Another attempt to generate teacher competencies was started by MoNE in 1999 and completed in 2002. The *Teacher Competencies Commission* was formed with deputies of MoNE and members of numerous universities. They generated GTC by examining documents of other countries and benefiting from the previous study which had been prepared by HEC and MoNE within the National Education Development Project (MEB, 2017a). Three competency dimensions were determined: (1) Competencies of education and training, (2) general knowledge and

skills, and (3) special field knowledge and skills (Atik-Kara & Sağlam; 2014). There were over 200 performance criteria under the dimensions. It was decided that these competencies would be sent to education faculties to put into practice in 2002. As the previous teacher competencies study, these GTC were not put into effect because another study to determine teacher competencies was started by the support of the World Bank (Şişman, 2009).

2.2.5.2 General Teacher Competencies of 2006

The Basic Education Support Project was signed between European Union Committee and Turkish Government in 2000 and the project studies started in September 2002. The main aim was to improve education quality and attainment by increasing the education level. One of the components of this project was teacher education and the Directorate General for Teacher Training and Education was responsible for this component. Within this, general and special field competencies for teaching profession were to be determined and professional development guidance for the aim of improving GTC was to be prepared (MEB, 2006).

Intensive studies for generating GTC included examining competency frameworks of England, America, Australia, The Seychelles and Ireland, the previous GTC studies in Turkey, together with all related studies of the Department of Research and Development of Education and the Directorate General for Teacher Training and Education. They used a holistic and systematic approach and worked on finding a common understanding of terms and concepts. A seminar was held with the participation of 120 teachers, 25 lecturers from education faculties, 18 primary school supervisors, 6 measurement and evaluation specialists, representatives of MoNE, and members of various unions. At the end of the study, 6 main competencies, 39 sub-competencies and 244 performance criteria were generated as the first draft (MEB, 2006).

Subsequently, a comprehensive pilot study was conducted to see stakeholder opinions. GTC were transferred into questionnaire items. 167 primary school managers, 1913 teachers, 63 lecturers from education faculties, 394 senior preservice teachers, 433 primary school supervisors and 227 members of unions participated in the study. The results showed that most of the participants agreed on all main competencies and sub-competencies and 225 out of 244 performance criteria. Additionally, some repetitions were found between different items by the participants. According to the feedbacks, the final version of GTC was formatted with 6 main competencies, 31 sub-competencies and 221 performance criteria (MEB, 2006). The final version was published in the Journal of Communiques and was put into practice in April 2006 (MEB, 2017a). Main and sub-competencies of 2006 version of GTC are given in Table 2.1.

Table 2.1

GTC Version 2006 (MEB, 2006)

A. Personal and Professional Values – Professional Development
A1. Valuing, understanding and respecting students
A2. Believing that students can learn and succeed
A3. Respecting national and international values
A4. Self-evaluation
A5. Ensuring personal development
A6. Following and contributing to professional developments
A7. Contributing to enhancing and improving the school
A8. Following professional acts and fulfilling responsibilities
B. Knowing Students
B1. Knowing development features
B2. Considering interests and needs
B3. Valuing Students
B4. Guidance to students
C. Teaching and Learning Process
C1. Planning of lesson
C2. Preparing materials
C3. Arranging learning environments
C4. Arranging extracurricular activities
C5. Enhancing teaching by considering individual differences
C6. Time management
C7. Behaviour management
D. Monitoring and Evaluating Learning and Development

Table 2.1 *(continued)*

D1. Determining measurement and evaluation methods and techniques
D2. Measuring students' learning by using different measurement techniques
D3. Interpreting data by analysing, and giving feedback to students
D4. Reviewing teaching and learning process according to the results
E. Communication with School, Parents and Community
E1. Knowing the environment
E2. Benefiting from environmental facilities
E3. Making school a cultural centre
E4. Knowing parents and providing objectivity in family relations
E5. Ensuring family contribution and cooperation
F. Knowledge of Curriculum and Content
F1. Aims and principles of Turkish Education System
F2. Pedagogical content knowledge and skills to practice
F3. Following, evaluating and improving special field curriculum

2.2.5.3 General Teacher Competencies of 2017

Technological and sociological developments in both national and international levels required updating GTC in Turkey. Thus, 10th Development Plan asked for a 'reconstruction of teacher education system' in line with competencies (MEB, 2017a). Additionally, Teacher Strategy Paper that was prepared by the Directorate General for Teacher Training and Development in 2017 requested an updating for GTC based on the needs and 'taking GTC as a reference in the teacher training and development processes' (MEB, 2017b). Another updating necessity was expressed in the 19th National Education Council. Lastly, in the 2015-2019 The Ministry of National Education Strategic Plan, updating competencies was one of the topics. Some related topics to competencies were updating initial teacher training, developing in-service training and creating a 'performance evaluation system' in line with GTC (MEB, 2017a).

In order to update GTC, investigation of teacher education competency frameworks of some countries and policy texts of some organizations was held at the beginning. The process of updating GTC was carried out with the participation of HEC, some

units of MoNE, Assessment, Selection and Placement Centre (ÖSYM), the Board of Education and Training, the Vocational Qualifications Authority, lecturers from education faculties, and teachers (MEB, 2017a). The main difference between 2006 and 2017 versions of GTC was that one framework for all teaching fields was prepared in 2017; instead of preparing one for general competencies and one for each subject area, as in 2006. Three main competencies, 11 sub-competencies and 65 performance criteria were introduced in the updated version of GTC and it was published in December 2017 (MEB, 2017a).

The usage areas of GTC were suggested in the competency framework document in the following subjects: (1) forming initial teacher education, (2) the process of teachers' employment, candidacy and development, (3) teachers' self-evaluation, (4) performance evaluation and development of teacher career, and (5) in-service teacher training programme planning and constant development of teachers (MEB, 2017a).

Table 2.2

GTC Version 2017 (MEB, 2017a)

A. Professional Knowledge
A1. Content knowledge
A2. Pedagogical content knowledge
A3. Knowledge on legislation
B. Professional Skills
B1. Instructional Planning
B2. Creating learning environments
B3. Managing the teaching and learning process
B4. Assessment and evaluation
C. Attitudes and Values
C1. National, moral and universal values
C2. Personal and professional development
C3. Communication and cooperation
C4. Personal and professional development

2.3 Professional Skills in General Teacher Competencies

In the updated version of GTC (2017) *professional skills* competency is one of the main competencies. Under this, there are four sub-competencies which are (1) instructional planning, (2) creating learning environments, (3) managing the teaching and learning process, and (4) assessment and evaluation (MEB, 2017a). This study includes only the first two sub-competencies of professional skills. Thus, the following part gives information about only the sub-competencies in question in the study.

2.3.1 Instructional Planning

Planning is the determination process of which teaching activities will be employed, how and why those activities will be done, which complementary sources will be used and how the desired behaviours will be evaluated, in order to reach peculiar outcomes and objectives (Demirel, 2015; MEB, 2003). Teaching activities without any planning unavoidably move away from the aim as the desired behaviour must be determined beforehand aiming to reach the outcomes. A planned teaching process provides an effective learning experience for students (Zahorik, 1970). Planning is also defined as preparing accessible materials in a pleasing and appealing environment so that initially settled, desired outcomes could be acquired by students (Douse & Uys; 2018). Additionally, it is a process of visualizing and experiencing teaching process in mind beforehand in order to create an efficient learning environment. Students' learning levels are predictors that planning has achieved its aim since planning is done to ensure students high levels of learning (Gülbahar, 2016). The success of a teaching and learning process can be seen in planning of teaching effectively beforehand; thus, teachers must have proficiency in preparing and implementing instructional plans for students to achieve the desired outcomes (Karaca, 2006).

For an instructional plan to be successful, it must be outcomes oriented, adjustable, coherent, and learner-centered. A successful plan also creates connections between different disciplines depending on continuity, involves applicable activities, considers individual differences and environmental conditions (Tanrıseven, 2016). Furthermore, there are some benefits of preparing plans for the teaching process. Firstly, it gives teachers self-confidence. Secondly, it provides teachers monitoring, evaluating and revising their own teaching process; namely, it promotes reflective thinking to teachers (Senemoğlu, 2018); thus, it increases efficiency. Thirdly, teachers can manage time efficiently as they will know what and how to do in the classroom (Demirel, 2015). Forth, it furnishes teachers with time and classroom management, and professional development (Gürkan, 2019). Fifth, planning provides the organization of activity processes and when and within which periods they are to be done via considering levels of students' knowledge and skills (MEB, 2003). Lastly, instructional plans and lesson preparation help teachers deal with the profession's new and various challenges and requirements in an efficient way (OECD, 2019).

Instructional planning is one of the essential parts of the teaching process which starts with planning, continues with in-class activities and ends with after teaching activities such as measurement and evaluation (Tanrıseven, 2016). Additionally, Senemoğlu (2018) explains the following stages for the planning process: Deciding objectives and desired outcomes, determining prerequisite learning, determining the features of students, revising objectives and desired outcomes, organizing the content, choosing teaching strategies and materials, planning teaching activities and, planning measurement and evaluation process.

Tyler (2014) suggests five general principals to consider for determining learning experiences in the planning process: Firstly, students must be given the chance to practice learning experience themselves, instead of just learning theoretical knowledge about it. Secondly, learning experience must be in such a way that students will be satisfied with or interested in the process. Thirdly, students must be

capable of doing the desired behaviour; thus, in planning, teachers must know students' capacities, levels or previous knowledge in order to pay attention to this principal. Fourth, there can be more than one experience to acquire one single desired behaviour. Lastly, one learning experience can generally result in many different behaviours.

Like Tyler, MoNE also introduced some principals of instructional planning in *the Regulation on Conducting Teaching and Learning Studies in a Planned Framework* (MEB, 2003). These principals are as follows: (1) Plans must depend on interdisciplinary studies which include student-centered, individualized teaching, active learning process for students and applicable activities in accordance with the requirements of the era. (2) An active teaching and learning process must be prepared and new developments in education field, environmental features, individual development characteristics of students and school-environment relations must be considered in the planning studies. (3) Plans must be flexible enough to make changes such as adjustments of time, subject or activities when it is necessary. (4) Plans must be in accordance with the aims of the curriculum and explicit objectives of the educational institutions. (5) Content must be determined based on the curriculum. In planning, the topics of teaching and learning approaches, materials and sources, student activities and observation must be taken into consideration. (6) Every planning must encompass a peculiar amount of time. (7) Plans must be suitable for education quality, level, subject specific-field, and its aim.

2.3.2 Creating Learning Environments

In the recent TALIS report, teaching is mentioned as not only transferring knowledge to students anymore as it was in the past. With technological and sociological developments, it is broader than this. Thus, today's teachers are required to have a comprehension of *what*, *whom* and *how* to teach; as well as professional skills, curriculum knowledge and knowledge about learning theories. Teachers must also be good at multitasking because in the teaching and learning process, they must react to

many distinct needs of learners concurrently (OECD, 2019). These necessitate creating such learning environments that can meet all learners needs. Furthermore, teachers constitute essential parts in the teaching process which is planned, practiced and managed by them. For a teaching and learning process to be efficient and productive, teachers must plan the period adequately, prepare appropriate materials, arrange learning environment suitably, diversify the teaching according to individual differences of students, manage time and behaviours well. Only then meaningful and permanent learning can occur (Kubat, 2015). It is teachers' responsibility to determine materials and equipment in line with the content, to provide healthy communication in the class and to choose appropriate method and technique for the content. Thus, students' acquiring a good learning experience depends on teachers.

According to Tyler (2014), learning occurs with the help of experiences that learners face with and their reactions to the environment; in other words, learning happens through an interaction between the learner and external circumstances that the learner reacts. Moreover, students can learn only if they participate in the learning process; thus, teachers must know students' interests in order to create an environment which will stimulate them. In this way, teachers can control and provide a good learning experience by forming an environment that will promote the desired behaviour. Likewise, Venugopal-Wairagade (2016) claims that there are three kinds of learning: *Involuntary* in which students do activities for only completing the task, *voluntary* in which they desire to learn, and again *voluntary* in which they want to receive good scores. Therefore, the purpose of in-class activities should promote students' curiosity and eagerness to provide students to learn voluntarily. Student participation to the activities should be promoted, as well.

With constructivism, the concepts of learning and teaching are perceived differently from traditional approaches. Instruction programs and teacher competencies have been prepared based on constructivism. Instead of being knowledge providers, teachers are helpers of students in structuring their knowledge, realising their mistakes in the learning process, organising their knowledge, and communicating

with other knowledge sources in constructivist approach. Therefore, teachers have responsibilities to provide students these in the teaching and learning process. Their task is to organise which learning will be promoted, and to determine problems that will be studied together with the students (Şimşek, 2004). Accordingly, while creating learning environments, this must be kept in mind.

Acquiring effective learning experiences to students is not an easy task with the changes in educational field; teachers must be aware of distinct learning methods. They must also provide students a pleasant learning environment as an effective learning experience includes these two criteria. When students are provided with effective learning, desired outcomes can be achieved appropriately. Teachers must contribute students' creativity in the teaching process (Prameswari & Budiyanto; 2017). Additionally, as stated by Kubat (2015), creating democratic learning environments is another dimension of this competency as it provides students to share their opinions comfortably and increases their creativity in the teaching and learning process. Thus, it is essential to promote a democratic learning environment where communication between teacher and students; and among students is carried effectively. Activities such as determining class rules with students and asking students to choose activities from some options can be examples of creating democratic learning environments.

2.4 Preparedness to Teach

Operational definition of 'preparedness' is expressed as 'the state of being prepared for a particular situation' in Cambridge Dictionary. Preparedness is the individuals' circumstance of reaching a level where they can do a developmental task through learning and progression, acquiring necessary prerequisite behaviours to perform a learning activity, being ready cognitively, affectively, socially and psychologically to do an activity (Başaran, 1998). According to another definition that was made by Senemoğlu (2018), preparedness is a concept that is related to previous learnings, motivation levels, beliefs, skills and general health condition. Factors that affect

preparedness levels are one's attitudes towards learning, language development, habits, values, interests, needs and methods for studying (Başaran, 1998). While doing any task, it is essential to perceive oneself prepared (Housego, 1990).

When the concept 'preparedness' is examined regarding teacher education, it is related to the level of initial teacher education's preparation in order to make teachers deal with the challenges of teaching profession (Black, 2003). Preparedness for preservice teachers, then, has to do with their training, as well. It could be considered as a concept related to preservice teachers' perceptions about how prepared they are after their initial teacher education for the requirements of their future profession (Mehmetlioğlu & Haser, 2013). The perception of 'preparedness to teach' can be described as preservice teachers' views about the presentation of required tasks that are related to instruction and subject-specific knowledge (Housego, 1990). Being prepared for teaching is considered as an essential part for self-development of teachers. Teachers must modify their generic knowledge and skills for the peculiar circumstances in their teaching period. To do this, teachers must be prepared in the areas of planning and instruction, classroom management, strategy, method and techniques, measurement and evaluation (Göçer, 2008).

Teachers not only raise students academically but also, they affect social, individual and cognitive developments of students. Therefore, it is necessary for teachers to feel prepared for teaching profession (Karakaya et al, 2019). Moreover, unless teachers are qualified, education quality cannot be mentioned in even effective, technologically enriched learning environments or even when curriculum is perfectly designed. Thus, raising teachers who are well-prepared in all aspects of necessary qualifications for teaching profession gets more and more important every day (Ataş-Akdemir, 2019). Literature provided the information that student success is related to a great amount teacher quality; if students are wanted to be given the best learning experiences possible, preservice teachers must graduate as well-prepared teachers (Al-Bataineh, 2009). On the other hand, preparedness levels increase as teachers spend more time in the classroom and as long as they have necessary learning

opportunities such as in-service training (Black, 2003). Likewise, as stated by Housego (1992), preparedness levels of preservice teachers increase through their initial teacher education. It can be inferred that whether novice teachers have high or low preparedness levels at the beginning of their career, the levels will increase through their teaching period. A similar view was expressed by Darling-Hammond and Baratz-Snowden (2007). According to them, qualifications that can be seen in a prepared teacher are coping with various facets of learning environment, evaluating complicated situations and choosing the most appropriate reaction towards them, understanding cognitive structures of students and acting according to them. Yet, these are signs of changing from a beginning teacher to an 'expert' in teaching since this is a progress while teachers continue teaching in the classes and preparedness level increases through this progress.

After initial teacher education, many novice teachers feel unprepared for the profession if they have not had enough field experience. Teacher education programs fall behind in acquiring the required qualifications to preservice teachers in peculiar areas (Yıldırım & Kalman; 2017). However, it is known that when teachers have enough preparation for the profession, they feel more self-confident and prospering in the teaching process than the ones who have not been prepared enough (Darling-Hammond, 2000). Being unprepared to teach causes teachers to have difficulties in instructional planning, creating learning environments, managing teaching process and acknowledging individual differences. Those with less preparation also struggle with modifying their instruction, encouraging students' learning, nor do they think it is their responsibility to promote students. Thus, they accuse students of not learning when teaching is not effective (Darling-Hammond, 2000). Preparedness level also affects the love of profession. A study which investigated the perceptions of teachers about their preparedness and self-efficacy levels showed that preparedness level at the beginning of teaching profession has a huge effect on teachers' perceptions about the profession. A majority of teachers who felt 'not completely prepared' to teach expressed they would not select the same profession if they had the chance, some of them even thought of changing their profession (Darling-Hammond, Chung &

Frelow; 2002). According to the same study, preparedness is connected to teachers' views about how confident they feel on their capabilities to provide students with the desired outcomes.

Darling-Hammond and Baratz-Snowden (2007) suggest correcting three common issues about preservice teachers in order to prepare them for the profession appropriately: (1) Preservice teachers generally have incorrect conceptions about teaching and learning process. They wrongly begin their profession by concentrating on their teaching qualifications; while they must consider subject-specific and pedagogical knowledge. Also, they falsely think their job is to transfer their knowledge to students; as such, they must lead students to consciously designed learning experiences. This can be solved by providing preservice teachers with the opportunities to investigate, interpret and improve their teaching perceptions in guided field experiences. (2) Preservice teachers have problems with putting their knowledge into action. They cannot decide what to do with their theoretical knowledge in their teaching process. The solution here supports the idea in the previous paragraphs, which is, preparedness to teach increases during teaching via preservice and in-service training. The authors explain that when preservice teachers are guided in the beginning of their practices, they do not form false understandings about teaching. (3) The last issue is that preservice teachers must be prepared for all the complicatedness of the teaching and learning process. Explaining them only teaching strategies or pedagogical skills is not enough if the aim is to make preservice teachers learn what to do with this knowledge. Providing them example situations and the ways to cope with some problematic circumstances can be solutions.

The OECD Report (2005) points out changing roles of teachers with all the developments of the time and gives four aspects for teachers to be well-prepared before starting the profession. The aspects are as follows: *Student aspect:* A prepared teacher launches and leads learning experiences, reacts to individual differences of students, combines developmental and cumulative assessments. *Classroom aspect:*

They can teach multinational classes, conduct cross-curricular teaching and learning processes, and include students with diverse needs in the learning process. *School aspect:* They can work as a member of a team with the colleagues, plan working activities with teams, plan assessments and organize development programs at school, benefit from information and computer technology both in teaching and administration, and help directorate. *Aspect of parents and community*: They can communicate with parents effectively about students' improvement and initiate cooperation with other stakeholders.

2.5 Related Research in Literature

This part covers the related international and national studies on the topics of the current study. It starts with research on teacher competency. Secondly, studies on instructional planning which is a dimension in professional skills of GTC are provided. Thirdly, studies on creating learning environments, another dimension in professional skills are given. Lastly, research on preparedness to teach is provided.

2.5.1 Research on Teacher Competency

This part includes research on teacher competency which is examined through survey method which is one of the quantitative methods (Köksal, 2013; Numanoğlu & Bayır, 2009; Özer & Acar, 2011; Panev & Barakoska, 2015; Pantić & Wubbels, 2010; TED, 2009; Yenen & Kılınç, 2018), qualitative method (Chung & Kim, 2010; Tanrıverdi & Apak, 2013), and mixed method which combines both methods in a study (Alpaydın et al, 2018; Ayan & Budak, 2012; Hudson et al, 2016; Kunter et al, 2013). These studies are explained in the following part in detail.

At first, studies that used quantitative means are presented. Yenen and Kılınç (2018) investigated primary and secondary school teachers' competency levels according to 2017 version of GTC. They also searched whether competency levels changed according to variables of gender, department, faculty of graduation, and year of

professional experience. The study was conducted in the 2017-2018 academic year in Nevşehir. 271 primary and secondary school teachers were included in the study by convenience sampling. The researchers composed a questionnaire using all performance criteria in MoNE's GTC. Items were generated by transforming performance criteria into questions and 5-point Likert scale from *1-totally disagree* to *5-totally agree* was used. The results indicated that teachers considered themselves as 'highly competent' in professional knowledge, 'competent' in professional skills, and attitudes and values. When examined according to gender, male teachers were found more competent than females in the areas of professional knowledge, instructional planning and creating learning environments, also in sub-competencies of national and international values. Female teachers were more competent in the area of personal and professional development. Based on faculties from which teachers had graduated, teachers from education faculty were found more competent in the areas of legislation knowledge and creating learning environments; and teachers from other faculties were found more competent in content knowledge. According to department they completed at university; there were significant differences in pairwise comparisons between: (1) science and social sciences teaching, (2) mathematics and classroom teaching, (3) social sciences and classroom teaching, and (4) English language and social sciences teaching. Additionally, classroom teaching was found less competent than other departments in professional knowledge and professional skills.

Panev and Barakoska (2015) investigated how efficient initial English language teacher training was in acquiring teacher competencies to preservice teachers in Macedonia; they also searched whether there was a necessity to revise and strengthen teacher training programs for preservice teacher to comprehend teacher competencies. There were 60 English language teachers from 20 primary schools. It was a quantitative research; participants were given close questions and they were asked to choose from 'strongly disagree' to 'strongly agree'. There were also a few open-ended questions to see participants' opinions about the efficiency of teacher training programs. With the questionnaire the researchers searched whether initial

English language teacher training programs could promote the required general and subject-specific competencies, along with pedagogical competencies. The results showed that pedagogical competencies could not be acquired to preservice teachers in an expected level. Within pedagogical competencies; the areas that participants felt less competent were assessment and evaluation, monitoring, instructional planning, preparing pedagogical records, and using new methods in the educational process. Additionally, they felt incompetent in general and subject-specific competencies as well. Yet, the part that needed more support was understood as pedagogical competencies.

Köksal (2013) studied GTC and professional attitudes and searched if there was a relationship between them. She also investigated gender, high school and GPA variables. The participants were 379 senior preservice teachers from Pamukkale University in the 2008-2009 academic year. There were two instruments one of which was prepared based on GTC. Results showed that senior preservice teachers had high levels of GTC and positive professional attitudes towards competencies. Competency levels of female preservice teachers were significantly higher than males; they also had more positive professional attitudes. High school and GPA variables did not show any significant differences. Additionally, a moderate, positive relationship was found between GTC and competency perceptions.

Özer and Acar (2011) investigated which dimensions of GTC preservice teachers considered more important than others. The participants were 169 senior preservice teachers from Kilis 7 Aralık University and Trakya University. The instrument was 'Teacher Competencies Evaluation Form' which was prepared by benefiting from MoNE's GTC of 2006. The form included dual comparisons of dimensions and preservice teachers were asked to rank these dimensions as 1- more important, or 2- less important. Results showed that preservice teachers found the dimension *knowing students* as the most essential competency. The second essential was *monitoring and evaluating learning and development*. *Personal and professional values – professional development* was the third; *teaching and learning process* was the

fourth; *communication with school, parents and community* was the fifth. The dimension that preservice teachers considered as the least important was *knowledge of curriculum and content*.

Pantić and Wubbels (2010) conducted a survey with Serbian teachers and teacher educators to determine teacher competencies. The instrument was a questionnaire with four-point scale in which respondents could choose from 'not important' to 'very important'. There were 51 performance criteria for a standards-framework in the questionnaire and respondents gave their opinions about the standards. In this way, it was aimed to generate teacher standards together with people who were in the education field. 370 participants expressed their opinions along with choosing from a four-point scale. They could also add other competencies which they thought necessary or vice versa. The feedbacks of participants were positive about taking part in such an important task of preparing teacher competencies. The results showed that most of the participants supported competency-based teacher education. Additionally, they wanted teacher education to include competencies which would be required during teaching and learning process. Some respondents claimed that answering the questionnaire itself was a practice of thinking about and analysing teacher competencies. When all results were examined, four dimensions were formed according to the answers of respondents: (1) values and child-raising, (2) realization of education system and helping its improvement, (3) content knowledge, pedagogical content knowledge and curriculum, and (4) self-assessment and professional improvement.

Turkish Education Association (TED) conducted a comprehensive study about GTC throughout Turkey in the academic year of 2008-2009. The aim was to determine the current situations of teachers in Turkey about GTC by means of examining the evaluations of primary school principals, teachers, students and parents. The universe of the study consisted of all primary school students, teachers, principals and parents in that year in Turkey; the sample consisted of 2007 primary school teachers, 272 principals, 4450 students and 2112 parents. Four distinctive questionnaires were

prepared based on MoNE's GTC to these four groups. All performance criteria in GTC were separated thoroughly to four groups of participants. As an example, students were given a questionnaire with only performance criteria that students could have an opinion such as communication with students, interaction, in-class practices and feedbacks to students. Parents, on the other hand, were given a questionnaire with performance criteria that included teachers' attitudes and behaviours to students, relationship with parents, communication and so on. Questionnaires of teachers and principals were mostly alike. All performance criteria were used in at least one of four questionnaires. The results were given in each main competency under 2006 version of GTC: (1) *Personal and professional values – professional development:* Activities that were organized for professional development and teachers' own development efforts were not enough. Teacher participation to works of school management on development was insufficient, as well. (2) *Knowing students:* Teachers' activities for determining students' development levels and individual differences were not in the expected level. Additionally, most of the teachers did not use any materials instead of coursebooks for homework, neither did they pay attention to individual differences in giving assignments. (3) *Teaching and learning process:* Half of the teachers did not benefit from instructional technologies in the classroom. More than half did not believe in the efficiency of lesson plans. (4) *Monitoring and evaluating learning and development*: Teachers were incompetent in using alternating measurement and evaluation methods that were necessary in the updated curriculum. (5) *Relationships with school and community:* Most of the teachers were incompetent in knowing and informing parents; and in relationships with school environment. (6) *Knowledge of curriculum and content:* Teachers did not have much knowledge about legislation and curriculum changes (TED, 2009).

Numanoğlu and Bayır (2009) investigated GTC levels of senior preservice teachers in the computer education and instructional technologies together with the variables of gender and desire to become a teacher. There were 39 participants from the mentioned department, Ankara University. MoNE's GTC was used as an instrument

with a scale which consisted of ‘yes’, ‘partially’, and ‘no’ options. Participants answered the items about whether they had that competency. The results showed that the highest competency level was seen in the competency of *knowing students* and the least competency level was in *relationships with school, parents and community*. According to gender, both male and female preservice teachers had the highest levels in *knowing students*, similarly. As for desire to become a teacher variable, preservice teachers who desired to become a teacher had the highest levels in *monitoring and evaluating learning and development*; whereas, the ones who did not want to become teachers were the highest in *knowing students*.

After examining research with quantitative means, studies with qualitative methods are given here. Tanrıverdi and Apak (2013) investigated opinions of senior preservice teachers and teacher educators about whether teacher education curriculum could succeed in making preservice teachers acquire GTC. In the phenomenology study, there were 59 senior preservice teachers and 35 teacher educators. Data were collected in the 2011-2012 academic year through focus group and face-to face interviews from preservice teachers; and face-to-face interviews and questionnaires from teacher educators. According to the results, three most mentioned competencies as very important by preservice teachers were (1) flexibility, toleration and objectivity, (2) content knowledge, and (3) communication skills. Two of these competencies were also considered as ‘very important’ by teacher educators, but in a different order: (1) communication skills, (2) flexibility, toleration and objectivity, and (3) planning the teaching and learning process and choosing appropriate methods and techniques. The least mentioned competency as ‘important’ by preservice teachers was competency of creativity and critical thinking. Whereas, teacher educators thought it was a very essential competency. Teacher educators considered the competencies of professional ethics and cooperation with co-workers important; yet, it was not important for preservice teachers. As stated by the researchers, the competency of contributing the curriculum was not mentioned in the study. However, it was one of the common competencies that appeared in the teacher competencies of Turkey, Australia, England and Finland.

Another study that investigated teacher standards was done by Chung and Kim (2010). They searched the standards-based curriculum and its effectiveness of a teacher education program in the USA. It was a qualitative study and focus group interviews were done with 10 participants who were at the fourth semester of their initial teacher education. At the university in question, preservice teachers were required to complete five semesters in pedagogical courses together with subject matter courses. They were also obliged to attend field experience. By means of semi-structured interviews, participants were asked to reflect on teacher standards they had learnt in their teacher training. According to the findings, four main topics emerged: (1) Although at the beginning of their education, preservice teachers had considered teacher standards as items to be checked after every teaching period; they, at the time of the study, were aware of the real function of the standards and they knew what to do with them theoretically. (2) They thought they knew how to teach in order to meet the standards. However, they did not comprehend the rationale behind the standards. They just learnt how to meet the standards and their learning could not pass the surface of the standards. (3) The language of the standards was above the level of preservice teachers; thus, they could not realize the meaning of the performance criteria in the standards. Rather, they learnt from their teachers' comments on the standards. This caused them not to examine and interpret the standards. (4) Preservice teachers felt uncomfortable about performing in their future profession based on the standards since they had a new system with an old practice at school; this was considered as an obstacle by the participants.

Lastly, mixed method research is given in the following part. Alpaydın et al. (2018) examined the level of consistency between GTC that were achieved at education faculties and real practice of teaching profession. To what extent teachers gave importance to dimensions of teacher competencies was also studied. 836 teachers were chosen for the quantitative part and 20 teachers for the qualitative part. The instruments were two questionnaires for the quantitative part and a semi-structured interview form for the qualitative part. The instruments were 'Education Faculties' Levels of Acquiring Teacher Competencies Scale', and 'Importance Attached to

Teacher Competencies in the Teaching Process Scale' which were prepared by the researchers. Four factors were determined in the questionnaires and these were teaching orientation, professional skills, school development and content knowledge. In addition to this, the second questionnaire had a fifth factor which was *focusing on students*. The results of the quantitative part showed that education faculties' levels of acquiring teacher competencies were found *satisfactory* in all sub-competencies. Importance attached to teacher competencies in the teaching process was found as *very important*. The findings of qualitative part indicated that teachers generally shared positive feedbacks related to faculties they graduated from. Competencies which they mentioned as the most important were communication skills, content knowledge, professional skills, constant development and classroom management.

Hudson et al. (2016) conducted a study to investigate senior preservice teachers' confidence towards the Australian Professional Standards for Teachers (APST). A mixed-method research design was used. In the quantitative part of the study, 312 senior preservice teachers from three universities were given a Likert scale which included items about feelings and beliefs about APST. Participants were asked to think about the time after graduation and reflect on how confident they felt about using those standards in their teaching. Participants' answers were benefited in generating questions in the qualitative part of the study. In that part, 10 participants were interviewed and the causes of the answers in the first part were aimed to be answered. The findings of the quantitative part indicated that 95% of the participants felt confident in the areas of realizing the way students learn, designing lessons in line with the curriculum, using a wide variety of communication skills in the teaching and learning process, using feedbacks from headteachers for their own development process. However, 30% of participants felt less confident in the areas of using the necessary strategies to teach disabled students, showing understanding towards disadvantaged students in the teaching process, communicating with parents and other stakeholders and informing them about student learning. The qualitative part provided the reasons behind these results. According to the interviews, the causes of feeling less confident in those areas were preservice teachers' not having

much field experience on the mentioned standards and schools not providing such experience to preservice teachers during initial teacher training.

Kunter et al. (2013) studied whether instruction and student outcomes were affected by teachers' professional competency and some parts of it. The parts were pedagogical content knowledge, beliefs about the job, motivation for it, and self-supervision of teachers. Out of 194 mathematics classes at 10^{th} grade in German schools, 10 classes and their teachers were chosen as a representative sample. Multiple measurement was applied to determine teacher competency, quality of instruction, achievement of students and motivation with a quasi-experimental design. The dependent variables were student achievement and motivation, independent variables were teachers' knowledge, self-supervision, their beliefs and motivation, and mediator variable was quality of instruction which was about pedagogical content knowledge. A recently prepared test, students' opinions and presentations were the instruments to measure teacher variables. For student variables, there were a test to assess students' achievement in accordance with standards of the state, and two questionnaires that measured students' motivation. Lastly, to measure instructional variables; student ratings, self-report of teachers and examinations of tasks which were done in the classroom were used. The results showed that teacher variables affected student achievement and motivation. Namely, teachers with high levels of knowledge, constructivist beliefs, and self-supervision and motivation affected students positively; thus, student achievement and motivation increased with those variables. Furthermore, instructional quality was affected by those variables, as well.

Ayan and Budak (2012) searched to what extent education faculties could acquire GTC to senior preservice teachers. In the quantitative part of the study, a questionnaire was conducted to 278 senior preservice teachers from classroom education departments of five universities; and in the qualitative part, there were semi-structured interviews with 30 senior preservice teachers and observation of 20 senior preservice teachers in the 2009-2010 academic year. The participants who

were included in the qualitative part were chosen from the participants in the quantitative part by random sampling. The quantitative results indicated that senior preservice teachers considered the level of teacher education as 'high' and 'very high' in acquiring GTC to preservice teachers. Observation results were mostly in line with questionnaire results; however, in some parts of the observation, it was seen that competencies were not acquired in a high level. In interviews, preservice teachers expressed that education faculties could not achieve GTC in an expected level, which differed from the questionnaire results. Participants also declared that practice period at schools was not enough, and theoretical knowledge had to be supported by more practicum.

2.5.2 Research on Instructional Planning

This part covers the research on instructional planning which is examined by means of quantitate method (Gülbahar, 2017; Gürkan, 2019; OECD, 2019; Süral, 2019) and mixed method (Aşiroğlu & Koç-Akran, 2018).

The OECD Teaching and Learning International Survey (TALIS), which is conducted every five years, made a comprehensive research among OECD countries about teaching profession (OECD, 2019). Among the results, there was the theme of time that is spent by teachers for their profession in and outside the classroom. The results showed that teachers spend 38.8 hours for their profession in a week, and 20.6 hours of this period is spent as in-class teaching; indicating that teachers spend nearly half of their work (46.91%) outside the class. The countries with the lowest time that is spent totally for teaching are Eastern countries such as Kazakhstan, Singapore, Japan and Viet Nam; the countries with the highest time average that is spent for teaching are Brazil, Chile, Georgia, Saudi Arabia, South Africa and Turkey. The activities related to the profession outside the classroom are *planning*, *lesson preparation*, and *evaluating students' assignments*. Out of 18.2 hours that are spent outside the classroom in a week, 6.5 hours on average are spent for planning and lesson preparation. When the previous TALIS report (2013) is compared to the latest

report, there is a decline in the time spent for planning and lesson preparation; in contrast, there is an increase in the teaching time among OECD countries (OECD, 2019).

Gürkan (2019) aimed to reveal classroom preservice teachers' cognitive structures about curriculum, instruction, instructional planning, and evaluation of instruction. The participants were 109 classroom preservice teachers from a private university in Gaziantep in the 2017-2018 academic year. Within this sample, there were 26 preservice teachers who attended 2nd grade, 60 from 3rd grade and 23 from 4th grade. The instrument was 'the Word Association Test' which included the concepts *curriculum, instruction, instructional planning, evaluation of instruction* and participants were asked to write 10 words that came into their mind related to these concepts and to create one sentence for researchers to understand participants' cognitive structures. The results indicated that preservice teachers had so many different words in their minds related to the concepts. However, they could not express the connection between concepts with the exception of using *outcomes-objectives, teacher-student, period-time;* indicating that preservice teachers did not have cognitive connections related to the concepts. The words that were generated in line with the concepts were found insufficient in determining how participants' cognitive levels were structured and how the connection between the concepts was mapped; thus, relationships between these concepts could not be comprehended due to lack of word variety that participants used. 19 connections were found between *curriculum* and other concepts, 14 between *instructional planning* and others, 10 between *instruction* and others, and 7 between *evaluation of instruction* and others. It was understood that the concept of *evaluation of instruction* was encoded in participants' minds independently from other concepts while the concept of *curriculum* was seen to be perceived as a central term. The sentences that participants wrote showed that there were some misunderstood concepts as participants used them in scientifically wrong ways.

Süral (2019) studied competency levels of preservice teachers in lesson planning. Firstly, in order to develop the instrument, an open-ended questionnaire was given to teachers who had professional experience of 3 to 17 years. Then 'The Competency Scale for Lesson Planning' was developed by the researcher according to questionnaire results. At the end of factor analysis, two factors emerged: *theoretical competency* which was related to preservice teachers' theoretical knowledge on lesson planning, and *practical competency* which was related to preparing an actual lesson plan. The data were collected from 620 participants from junior and senior preservice teachers at Pamukkale University in the 2018-2019 academic year. The findings revealed that preservice teachers perceived themselves as *strongly competent* in theoretical competency, and *competent* in practical competency. As for gender variable, competency levels of female preservice teachers were significantly higher than males in theoretical competency; whereas, male preservice teachers had higher competency levels in practical competency in lesson planning. In department variable, classroom teaching had significantly higher competency levels in theoretical competency than all other departments. Lastly, senior preservice teachers were more competent than juniors.

Gülbahar (2017) conducted a study to investigate classroom teachers' competency levels in instructional planning, also some variables that could affect competency perceptions of teachers. The participants were 294 primary school teachers who worked in different counties of Kırşehir in the 2014-2015 academic year, and they were selected by random sampling. A researcher-developed scale, name of which was 'Scale for Perception of Competency in Instructional Planning' was benefited in the study. There were 24 items in the questionnaire, and it used a 5-point Likert scale ranging from *1- not competent at all* to *5- highly competent*. According to the findings, primary school teachers' competency levels were found very high. As for gender variable, there were no significant differences between female and male teachers. Perceptions of female teachers were a little higher than males, but it did not result in any statistically significant differences. As for marital status variable, married teachers were found to have higher levels of competency than single

teachers. According to age, the age groups of ‘35-39’ and ’45 and more’ had higher competency levels in instructional planning than the group of ’34 and less’; also there was a significant difference between the groups of ’45 and more’ and ’40-44’; former having higher levels. As for education degree, it did not affect competency levels of teachers; thus, there were not any significant differences between teachers with undergraduate and graduate levels. The last variable was whether teachers had in-service training on instructional planning. The result showed that in-service training influenced competency levels positively.

Aşiroğlu and Koç-Akran (2018) investigated preservice teachers’ competency levels in preparing instructional plans. They used a mixed method design where they collected both quantitative and qualitative data in the 2016-2017 academic year. In the quantitative part, there were 224 preservice teachers from a private university. The participants were at the second grade and were having Teaching Principles and Methods course which is related to planning. The instrument for this part of the study was a performance test about preparing an instructional plan with a subject and a learning approach that participants could choose from a list at the end of aforementioned course. In the qualitative part, there were 12 voluntary participants that consisted of 4 low level, 4 average level and 4 high level preservice teachers that had been determined by the scores of their performance test results. The instruments for this part were participants’ lesson plans, observations of participants’ teaching practices and an open-ended questionnaire. The findings showed that preservice teachers were in the *average level* in preparing instructional plans. When the dimensions of plans were examined, participants were found to have *average level* in writing objectives and in organizing content; *low level* in organizing measurement and evaluation activities; and *high level* in organizing learning situations. According to qualitative results, participants that have *low* and *average level* in performance test preferred teaching by using projector only, and the ones with *high level* preferred teaching by using different methods. Participants with *high level* also managed to write objectives for different cognitive levels and develop evaluation activities.

2.5.3 Research on Creating Learning Environments

This part presents research on creating learning environments. The topic is investigated through quantitative means (Yavuz-Konokman & Yanpar-Yelken, 2013), and qualitative means (Atik-Kara & Sağlam, 2014; Kubat, 2015)

Yavuz-Konokman and Yanpar-Yelken (2013) investigated preservice teachers' competency levels related to teaching and learning process and the reasons behind the levels. The study was conducted at Mersin University with the participation of 382 senior preservice teachers in the 2010-2011 academic year. It used a mixed method. In the quantitative part, a questionnaire was prepared based on MoNE's GTC; in qualitative part, an open-ended questionnaire was used. According to the results, preservice teachers saw themselves 'highly competent' in the teaching and learning process as a whole and in dimensions. As for gender, there was not a significant difference between female and male preservice teachers. Qualitative part also produced reasons for competency levels. For high competency levels, 'education quality, effective time management and good communication skills' were told. For low competency skills, 'insufficient education quality, not having more practice at school and not having required knowledge and skills' were mentioned.

Kubat (2015) examined science preservice teachers' competencies related to teaching and learning process. The qualitative study included 16 senior preservice teachers at Muğla Sıtkı Koçman University in the 2014-2015 academic year. The instrument was a semi-structured interview. The findings indicated that preservice teachers did not have much knowledge about teaching methods that could be chosen according to some factors as none of the participants mentioned them, so they were thought to prefer teacher-centered activities rather than student-centered ones. Participants claimed that they would consider individual differences in arranging learning environment; yet, they did not express they would provide a varied learning experience for students, which is related to minding differences. About promoting activities outside the class, preservice teachers declared that they would enrich

learning experiences with such activities. As for starting lesson with a warm-up, participants claimed they would begin with an interesting activity that would take students' attention. However, they did not talk about considering students' readiness levels to start the teaching process.

Atik-Kara and Sağlam (2014) conducted a study to evaluate professional knowledge courses regarding acquiring competencies for learning environment. It was a case study that was based on competencies of teaching and learning process in MoNE's GTC. The participants were 14 senior preservice teachers from seven departments of Anadolu University and 8 lecturers who were teaching professional knowledge courses at the same faculty. The instruments were interview, observation, documents, preservice teachers' dairies and products. Semi-structured and unstructured interviews were done with lecturers about aims and content of professional knowledge courses and teaching and learning process. As for preservice teachers, semi-structured interviews were conducted about whether they had competencies of teaching and learning process; afterwards, they were observed in teaching period in their field experience. This was done to compare their perceptions about their own competencies and their observed competencies and to see how they used these competencies in learning environment. Document analysis was done with dairies and products of preservice teachers. The results showed that professional knowledge course and competencies of teaching and learning process in GTC are compatible. When preservice teachers' competencies were examined, in dimensions, they had 19 performance criteria out of 49 in instructional planning; 57 out of 81 in implementing this plan; 5 out of 15 in evaluating the learning process. In total, it was seen that they had nearly half of the performance criteria about teaching and learning process. The competencies that they did not have were about considering students' features, social and cultural backgrounds in the learning process, planning the process and implementing it, organizing activities outside the class.

2.5.4 Research on Preparedness to Teach

This part provides the related studies on preparedness to teach. It is investigated by means of survey method which is one of the quantitative methods (Ataş-Akdemir, 2019; Güven-Yıldırım & Köklükaya, 2017; Karakaya et al, 2019; Mehmetlioğlu & Haser, 2013) and qualitative method (Göçer, 2008).

Karakaya et al (2019) investigated preservice teachers' preparedness levels for teaching regarding some variables which were gender, department, GPA, grade levels, and whether they had chosen this field willingly. The participants were 192 science and biology preservice teachers from all grade levels at a state university in the 2017-2018 academic year. 'Preparedness to Teach Scale' which had been adapted to Turkish by Yıldırım and Kalman (2017) was used. It had four sub-scales which were effective learning, organizing learning process, techno-pedagogic competency and understanding students. The findings indicated that there were no significant differences in terms of gender in the whole scale or in any of the dimensions. According to department variable, there were significant differences in favour of science teaching department in the whole scale and all sub-scales except for techno-pedagogic competency. As for willingness to choose the field, there was a significant difference in the dimension of organising learning process; other than that, there were no differences. As for grade levels, there were significant differences in favour of senior preservice teachers. Additionally, according to GPA, no significant differences were found in the whole scale and in the dimensions of effective learning, organising learning process and techno-pedagogic competency; yet, 'understanding students' dimension had differences in favour of participants with high GPAs.

A similar study which used the same instrument; namely, 'Preparedness to Teach Scale', was conducted by Ataş-Akdemir (2019) in another context. In this respect, there are four dimensions here as in the previous research. The aim was to investigate preparedness levels of preservice teachers in terms of gender, grade level and

department. In the descriptive study, there were 211 preservice teachers from all grades at a state university in Turkey, and their departments were Computer Teaching and Instructional Technology, Elementary Mathematics Education, Classroom Teaching, and Psychological Counselling. The results showed that preservice teachers' preparedness levels were sufficient in the whole scale. Among the dimensions, the dimension with the highest preparedness level was techno-pedagogical competency and the lowest was understanding students. No significant differences were found according to gender in the whole scale or in the dimensions. Significant differences were found among departments. Preservice teachers at Elementary Mathematics Education and Computer Teaching and Instructional Technology had higher preparedness levels than other two departments. Regarding grade level variable, there were no statistically significant differences in the whole scale, effective learning and techno-pedagogical competency. However, significant differences were found in the dimensions of organising learning process and understanding students.

Güven-Yıldırım and Köklükaya (2017) conducted a study to develop a survey about preparedness for teaching profession and then determine science preservice teachers' preparedness levels to teach. After collecting data for the necessary steps to run factor analysis and to check reliability, validity issues, they collected data for the second time for the purpose of investigating preparedness levels. 'Preparedness to Teach' questionnaire was conducted to 35 junior preservice teachers at a state university in the 2016-2017 academic year. According to the results, science preservice teachers were found to have low preparedness levels although the responses to the items on the scale varied according to the items. When the items were examined, the items with low preparedness levels were found as follows: using various methods and techniques in the course, healthy communication with students, cooperating with parents about students' development, designing activities that could improve students' skills, selecting appropriate activities for individual differences, acquiring students' skills to search and interrogate, and establishing positive relations with school management and other teachers.

Mehmetlioğlu and Haser (2013) aimed to determine mathematics preservice teachers' preparedness levels to teaching. 'Preparedness to Teach Scale' which was developed by the researchers was conducted to 420 junior and senior mathematics preservice teachers at ten universities in Turkey. The findings showed that preservice teachers did not feel themselves 'completely prepared; nonetheless, they did not have low levels of preparedness. There were no significant differences in the variables of gender, high school and teacher in the family. However, significant differences were found between junior and senior preservice teachers in favour of senior preservice teachers.

Göçer (2008) conducted a qualitative study to determine preparedness levels of preservice teachers regarding Turkish language teaching in the areas of content knowledge, communication skills, classroom management, their love of the profession and humanity, instructional planning and evaluation. The participants were 153 junior and senior preservice teachers from classroom teaching and social sciences teaching. All participants were having Turkish Teaching course at the time of the study. According to document analysis, preservice teachers were found 'prepared' in the afore mentioned areas in Turkish language teaching. Participants also thought that theoretical knowledge and practices that they had during the courses were useful for them considering the importance of professional knowledge and experience. As for observations, participants benefited from teaching techniques in their teaching practice. They also used instructional technologies to enhance teaching process. However, they did not use the evaluation materials that they had mentioned in documents.

2.6 Summary of Literature Review

When the related literature was reviewed about the present study, it was seen that preservice teachers' competency and preparedness levels were examined in a particular aspect or in a specific topic. There have been also some studies related to

novice teachers' competency in national and international literature. The summary of mentioned studies is given in the following part.

Firstly, teacher competency was investigated and different terms such as 'standards and qualifications' were found instead of the term 'competency' in the foreign literature. The studies comprised of examining effectiveness of initial teacher education programs in acquiring teacher competencies, preservice teachers' competency levels regarding standards-framework for teachers, the efficiency of teacher competency in student achievement, motivation and instructional quality. Another result showed that preservice teachers were competent about content knowledge, designing lessons; however, they were not competent enough in practice since they did not have the necessary amount of field experience in their initial teacher education. Another result indicated that preservice teachers had competencies superficially, but they did not interiorise them. Secondly, literature about General Teacher Competencies (GTC) in Turkey was examined. As the updated version has recently been published, there were a few studies related to 2017 version; thus, studies with 2006 version were investigated together with 2017 version. As in the foreign literature, the studies in Turkey were generally conducted with preservice or novice teachers, as well. The studies with 2017 version indicated that novice teachers felt themselves as 'highly competent' in the teaching profession. Both updated and former version were studied with regard to success of teacher education programs in acquiring GTC as well as teachers' competency levels. The most comprehensive study was done by TED (2009) that included all stakeholders to the study and tried to determine the current situation of teachers. The study was distinctive as a sample that represented all cities from Turkey was selected. The participants were also selected from all stakeholders; there were 2007 teachers, 272 principals, 4450 students and 2112 parents in the study. The results showed that teachers were not competent in an expected level in many sub-dimensions of GTC.

Thirdly, studies with two sub-competencies of professional skills that were included in the present study were investigated. For *instructional planning*, different results

were found. At first TALIS Report (2019) which was conducted among OECD countries was examined. The results showed that teachers spent nearly half of their time in their profession outside the classroom. Interestingly, Turkey was among the countries that spent the highest time for teaching in a week; that is teachers in Turkey worked longer than many OECD countries. Other studies revealed that preservice teachers felt 'highly competent' in theoretical knowledge and 'competent' in practical skills. Mixed method studies showed differences for the same participants. While they were found 'competent on average' in the quantitative part, observations in the qualitative part showed that they had low competency levels. The second sub-competency was *creating learning environments*. Studies were done with preservice teachers. They were found competent on average when competencies related to learning environment were investigated. There were also studies that examined the consistence between teacher education programs and GTC; and they were found compatible.

Lastly, studies about preparedness to teach were reviewed. The studies were conducted with preservice or novice teachers and how prepared they were for the profession as a whole or in one aspect of the area was searched. A qualitative study was conducted to determine preparedness levels of senior preservice teachers and they were found prepared to teach. In 2013, Mehmetlioğlu and Haser generated 'Preparedness to Teach' Scale for preservice teachers in order to see how prepared preservice teachers were. They were found prepared on average, not having high or low levels of preparedness. They also checked if preparedness levels differed in terms of some variables. There were also studies that used a previously prepared scale. The 'Preparedness to Teach' scale was adapted to Turkish in 2017 by Yıldırım and Kalman; the results showed that preservice teachers had low preparedness levels for the profession. Subsequently two studies were done using the same scale. Firstly, a study investigated whether there were differences in preservice teachers' preparedness levels for the profession according to some variables. When examined as a whole scale, no significant differences were found; yet, there were some

differences in the dimensions of the scale. The other study with the same scale examined preparedness levels as a whole and for some variables. The findings indicated that preservice teachers had sufficient levels of preparedness. Studies were generally done with junior and senior preservice teachers to see whether initial teacher education programs affected preparedness levels and if so, to what extent they affected. The results showed that senior preservice teachers had significantly higher levels of preparedness indicating that initial teacher education programs had an effect on preparedness levels. In Table 2.3, summary of the literature that is covered in the study is given as a list.

Table 2.3
Review on Teacher Competencies and Preparedness to Teach

Author(s)	Subject	Method	Data Collection Tool(s)	Participants
Ataş-Akdemir (2019)	Preparedness to Teach	Survey	Questionnaire	211 preservice teachers
Gürkan (2019)	Instructional Planning	Survey	Test	109 classroom preservice teachers
Karakaya et al (2019)	Preparedness to Teach	Survey	Questionnaire	192science and biology preservice teachers
Süral (2019)	Instructional Planning	Survey	Questionnaire	620 preservice teachers
OECD (2019)	Teacher Education	Survey	Questionnaire	Teachers from OECD countries
Alpaydın et al (2018)	Teacher Competency	Mixed method	Questionnaire Semi-structured interview	836 teachers (quan.) 20 teachers (qual.)
Aşiroğlu and Koç-Akran (2018)	Instructional Planning	Mixed method	Performance test observations, open-ended questionnaire, Lesson plans	224 preservice teachers (quan.) 12 preservice teachers (qual.)
Yenen and Kılınç (2018)	Teacher Competency	Survey	Questionnaire	271 primary and secondary school teachers

Table 2.3 *(continued)*

Author(s)	Subject	Method	Data Collection Tool(s)	Participants
Gülbahar (2017)	Instructional Planning	Survey	Questionnaire	294 primary school teachers
Güven-Yıldırım, Köklükaya (2017)	Preparedness to Teach	Survey	Questionnaire	35 junior preservice teachers
Hudson et al (2016)	Teacher Competency	Mixed method	Questionnaire (quan.) Interview (qual)	312 senior preservice teachers (quan.) 10 preservice teachers (qual.)
Kubat (2015)	Creating Learning Environments	Qualitative	Semi-structured interview	16 senior science preservice teachers
Panev and Barakoska (2015)	Teacher Competency	Survey	Questionnaire	60 English language teachers
Atik-Kara and Sağlam (2014)	Creating Learning Environments	Case study	Interview, observation, documents, student dairies and products	14 senior preservice teachers, 8 teacher educators
Kunter et al (2013)	Teacher Competency	Mixed method	students' opinions, test, preserntations, 2 questionnaires	10 10th grade Maths classes and their teachers
Mehmetlioğlu & Haser (2013)	Preparedness to Teach	Survey	Questionnaire	420 junior and senior maths preservice teachers
Köksal (2013)	Teacher Competency	Survey	Questionnaire	379 senior preservice teachers
Tanrıverdi and Apak (2013)	Teacher Competency	Pheno-menology	Focus group interview Face-to-face interview	94 preservice teachers and teacher educators
Yavuz-Konokman and Yanpar-Yelken (2013)	Creating Learning Environments	Survey	Questionnaire	382 senior preservice teachers

Table 2.3 *(continued)*

Author(s)	Subject	Method	Data Collection Tool(s)	Participants
Ayan and Budak (2012)	Teacher Competency	Mixed method	Questionnaire (quan.) Semi-structured interview, observation (qual.)	278 preservice classroom teachers (quan.) 50 preservice teachers (qual.)
Özer and Acar (2011)	Teacher Competency	Survey	Questionnaire	169 senior preservice teachers
Chung and Kim (2010)	Teacher Competency	Qualitative	Focus group interviews	10 2nd grade preservice teachers
Pantić and Wubbels (2010)	Teacher Competency	Survey	Questionnaire	370 teachers and teacher educators
TED (2009)	Teacher Competency	Survey	Questionnaire	2007 teachers, 272 principals, 4450 students, 2112 parents
Numanoğlu and Bayır (2009)	Teacher Competency	Survey	Questionnaire	39 senior preservice teachers
Göçer (2008)	Preparedness to Teach	Qualitative	Document analysis	153 junior and senior preservice teachers

CHAPTER 3

METHOD

This chapter introduces the method of the study. It begins with the overall design. Then the research questions are provided, the variables and their required features are clarified subsequently. Following this, Preparedness to Teach questionnaire, which was developed by the researcher, is described with the process of its development. Then the participants of the pilot study are explained with their demographic information. As the scale has newly been developed, the pilot study is explained step by step giving the information about the necessary analyses after collecting the data for piloting. Later, the participants of the main study are introduced, and main data collection procedure is mentioned. This is followed by the information about data analysis and the chapter closes with the limitations and assumptions of the study.

3.1 Research Design

The purpose of the study was to investigate perceived preparedness levels of preservice teachers who have been studying with the previous teacher education programs. Technological and sociological changes made it necessary for Ministry of National Education (MoNE) to revise General Teacher Competencies (MoNE, 2017), former version of which had been published in 2006. Correspondingly, the Higher Education Council revised teacher education programs and sent these programs to the universities in the early 2018 and it was decided that these programs would be started at teacher education programs in the 2018-2019 academic year with the incoming students. Preservice teachers that had started their education with the previous programs would continue with those programs. This situation brings a question; whether these preservice teachers studying through the previous programs could be competent enough according to the outcomes of new competencies?

To this end, a descriptive survey research was chosen for the study. Descriptive research is associated with existing conditions and relations, in addition to the events which have already occurred (Best & Kahn; 2006). Descriptive survey design collects data from many participants, but it is not interested in the features of one individual; instead, it uses the results of all the data collected from the individuals (Best & Kahn; 2006). The main aim of survey design is to illuminate certain features of a population (Fraenkel, Wallen, & Hyun; 2015) which is suitable for the current study as the aim was to see preservice teachers' perceived preparedness levels, and it requires understanding the characteristics of the population about their preparedness levels to teach. In the study, there were no treatments to the participants since survey design only tries to learn about the population and 'to identify standards against which existing conditions can be compared' (Creswell, 2012) unlike experimental research in which participants are given some treatments and the results of them are examined subsequently.

Among survey designs, cross-sectional survey was conducted in this study. As stated by Creswell (2012), 'cross-sectional survey examines current attitudes, beliefs, opinions, or practices of a population at one point in time'; similarly, in the study, data were gathered at a time. Cohen, Manion and Morrison (2007) liken cross-sectional design to a 'snapshot' that can present factual situation which has been affected from the past, or possible future situation which can be seen from the current conditions. Likewise, the present study collected data to see how prepared preservice teachers are for their future profession, aiming to answer prospective exploration.

A researcher-developed questionnaire with a six-point scale was administered in the study. The questionnaire was called 'Preparedness to Teach Questionnaire (PTQ)'. Through it, it was aimed to see preservice teachers' perceived preparedness levels to competencies of instructional planning and creating learning environments based on MoNE's updated General Teacher Competencies. The questionnaire was administered to 232 senior preservice teachers from six departments at a state university in Northwest Turkey.

In Figure 3.1, overall research design is given.

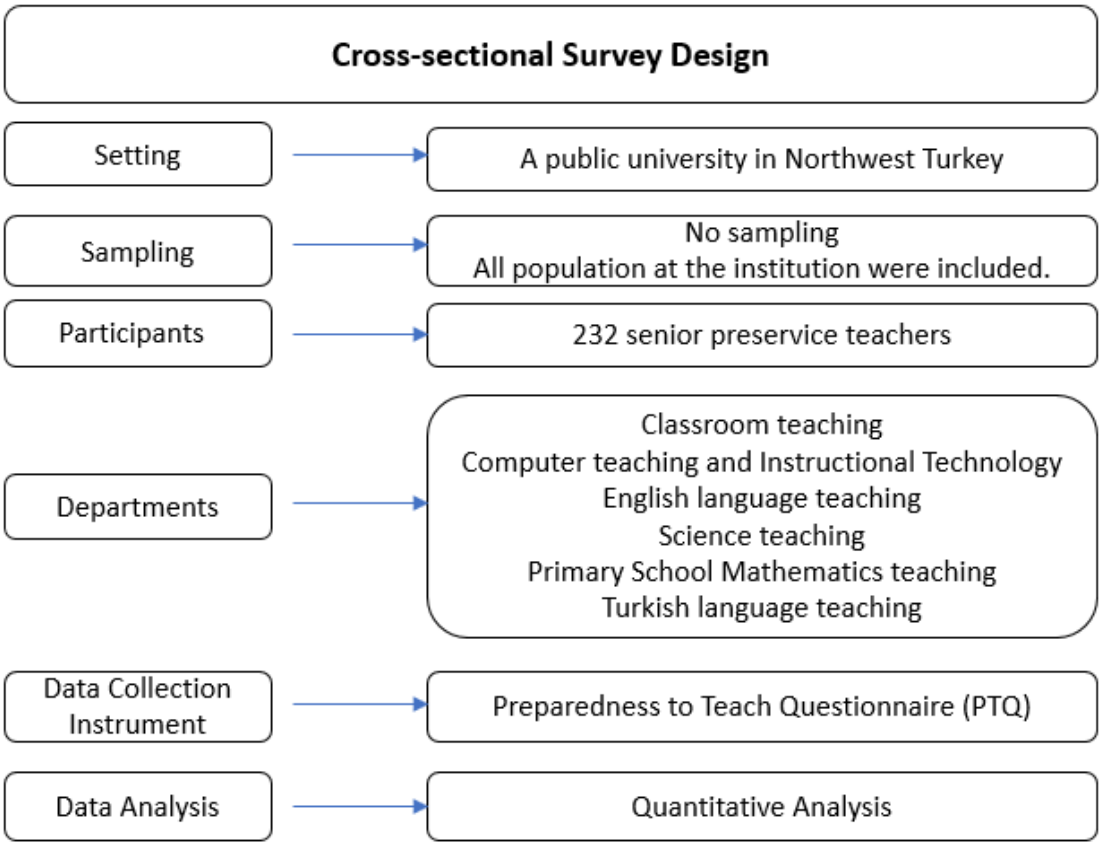

Figure 3.1. Overall Research Design

3.2 Research Questions

The study includes the following research questions;

1) What are preservice teachers' perceived preparedness levels in instructional planning and creating learning environments at a state university in Northwest Turkey?

2) Do preservice teachers' perceived preparedness levels to teach in instructional planning and creating learning environments at a state university in Northwest Turkey differ in terms of:

a) their gender?

b) the high school type they have graduated from?

c) preservice teachers' departments?

d) preservice teachers' GPA?

e) their desire to teach?

f) their desire to continue graduate education in educational sciences?

3.3 Research Variables

Gender: This independent variable has two levels as female and male. It divides individuals into two categories and its scale of measurement is nominal. It is also a discrete variable.

Department: This variable refers to the departments in which preservice teachers are currently studying. It is a discrete and independent variable with six levels: (1) Computer Teaching and Instructional Technology, (2) Classroom Teaching, (3) English Language Teaching, (4) Science Teaching, (5) Primary School Mathematics Teaching, and (6) Turkish Language Teaching. The scale of measurement is nominal.

High School: It refers to the high schools in which preservice teachers graduated from before starting their university education. This discrete variable contains seven levels as (1) Anatolian High School, (2) İmam Hatip High School, (3) Anatolian Teacher High School, (4) Science High School, (5) Vocational and Technical Anatolian High School, (6) Basic High School and (7) other types of high schools. This is an independent variable whose scale is nominal.

Grade Point Average (GPA): It refers to preservice teachers' cumulative grade points average in the time of study. It is a continuous variable including levels such as under 2.00, 2.01-2.50, 2.51-3.00, 3.01-3.50, and 3.51-4.00. The grades under 2.00 were not separated into four different categories; instead, they were put into one level as preservice teachers cannot reach the fourth grade unless they have at least 2.00 in their GPAs. It is an independent variable that uses ratio scale.

Desire to Become a Teacher: This discrete variable refers to preservice teachers' eagerness whether to be a teacher in the future. It is a nominal scale having three levels as (1) yes, (2) undecided and (3) no. This is also an independent variable.

Desire to Continue Graduate Education in Educational Sciences: This independent variable is a discrete variable referring to preservice teachers' eagerness whether to continue their graduate education in the educational sciences field. There are three levels as (1) yes, (2) undecided and (3) no, and it is a nominal scale.

Preparedness to Teach: It refers to preservice teachers' level of being prepared to be a teacher in the areas of instructional planning and creating learning environments. The variable was measured by Preparedness to Teach Questionnaire (PTQ) which was developed by the researcher based on the revised General Teacher Competencies by MoNE (2017). The scale includes eight dimensions, which are (1) acting on curriculum and learning outcomes, (2) considering national and moral values, (3) being aware of physical conditions in planning, (4) considering physical conditions in organizing learning, (5) improving students' high-level cognitive skills, (6) awareness of students' individual differences in planning, (7) creating democratic learning environments, and (8) consciousness of students' different interests and needs. These dimensions were decided according to the results of pilot study whose results were explored with Exploratory Factor Analysis (EFA). This is a continuous variable and it is the dependent variable of the current study. The scale of measurement is interval. The questionnaire includes 45 items on a 6-point scale. The

mean scores were both computed totally and separately since there are more than one dimension. Higher scores indicate higher preparedness levels to teaching.

3.4 Data Collection Instrument

The data collection instrument in this study was a questionnaire that included two sections. The former section was prepared to collect the participants' demographic information and the latter section included 45 items to investigate preservice teachers' perceived preparedness levels to teach. The instrument was developed by the researcher. The development process of the questionnaire is presented in 3.4.2.

3.4.1 Demographic Information

This section was prepared in order to collect background information about the participants. The variables were gender, high school types they graduated from, department, GPA, desire to continue graduate education in the educational sciences, and desire to become a teacher. All variables have nominal scale expect for GPA which has ratio scale.

3.4.2 Preparedness to Teach Questionnaire (PTQ)

A researcher-developed questionnaire with 6-point scale ranging from 'Strongly Disagree' to 'Strongly Agree' was used in the study. When literature was reviewed on how to develop a questionnaire, a pre-pilot study was seen necessary. The pre-pilot which can consist of open-ended questions is used to form categories with the aim of generating closed questions for the questionnaire (Cohen, Manion & Morrison; 2007). In this study, on the other hand, such a pre-pilot was not required since categories were already available from MoNE's updated General Teacher Competencies (GTC). MoNE's GTC was used in order to form a ground for generating the questionnaire. Before explaining the development process, it is

necessary to mention MoNE's GTC at this point. Competencies and sub-competencies which were introduced by MoNE in 2017 can be seen in Table 3.1.

Table 3.1

General Competencies for Teaching Profession (MoNE, 2017a)

Professional Knowledge	Professional Skills	Attitudes and Values
Content Knowledge	Instructional Planning	National, Moral & Universal Values
Pedagogical Content Knowledge	Creating Learning Environments	Personal and Professional Development
Knowledge on Legislation	Managing the Teaching and Learning Process	Communication and Cooperation
	Assessment and Evaluation	Approach to Students

MoNE's GTC, has 11 sub-competencies and 65 performance criteria under three main competencies which are professional knowledge, professional skills and, attitudes and values. In this study, two sub-competencies under professional skills were used. These sub-competencies are instructional planning and creating learning environments which have four and seven performance criteria respectively in MoNE's GTC. As the name suggests, MoNE's performance criteria present competencies in general terms. To investigate preservice teachers' perceived preparedness levels according to GTC, more specific items were needed in our research. As the first step, each item in MoNE's mentioned sub-competencies was investigated in depth. Following this, the related literature was reviewed to express the item in detail and every concept in the criterion was searched in its own perspective resulting in generating more than one item for each performance criterion. As an example, MoNE's criterion "*The teacher prepares his/her plans in accordance with the curriculum of his/her subject area*" (B1.1) was turned into four items which give the different aspects of this performance criterion. The items that were generated from this criterion with the help of literature are as follows:

- I can prepare lesson plans to reach the goals that have set in the curriculum.
- I can determine which methods and techniques I can use to reach the instructional objectives determined in my course plans.
- I can determine how the learning outcomes will be evaluated in accordance with the curriculum in my course plan.
- I can determine the assignments and projects required to achieve the goals when preparing my course plan.

At the end of this study, 53 items were formulated out of MoNE's 11 performance criteria. After developing the questionnaire, content validity check was required. Content validity, which is about the content and format of the instrument, requires the instrument to have a similar content with the domain it claims to reproduce. It also desires an appropriate format with a suitable language and clarified explanations (Fraenkel, Wallen, & Hyun, 2015). A good approach to check content validity is to consult expert opinion as stated by Fraenkel, Wallen, and Hyun (2015). In this respect, three experts in the educational sciences field were asked to give their feedback about the content and format of the questionnaire to check content and face validity. An associate professor, an assistant professor, and a doctorate candidate from the same field examined the questionnaire in depth and reported that there had been a few unnecessary items, or some items had measured the same aspects with others. Additionally, some items had unclear statements. According to the expert opinion, five items were excluded from the questionnaire, some items were revised and checked by the experts again. Thus, the last version of the questionnaire which was conducted in the pilot study was generated with 48 items.

3.5 Pilot Study

A pilot study was required after the procedures above were considered to see whether items are clarified enough and to conduct validity and reliability checks. By means of pilot study, the researcher can determine and make the necessary changes in the

instrument (Creswell, 2012) and can see the parts that can be misunderstood by the participants or the items that can have different meanings to different participants (Cohen, Manion & Morrison; 2007). It also gives feedback about the format of the questionnaire, the approximate time needed to complete it, and unnecessarily easy or difficult items to answer (Cohen, Manion & Morrison; 2007).

3.5.1 Participants of the Pilot Study

In order to conduct a pilot study, a specific number of participants is needed according to the literature. As stated by Gorsuch (1983), participant number should at least be five times higher than item number in order to run EFA. In our case, there were 48 items in the questionnaire which require at least 240 participants. For this reason, the data were collected from 250 participants for the pilot study in line with Gorsuch (1983). The participants were the junior preservice teachers from six departments at the Faculty of Education of the same university. The departments were computer education and instructional technology, science teaching, English language teaching, mathematics teaching, classroom teaching, and Turkish language teaching. The reason for choosing this group was that they were the most representative group that shared similar characteristics to the actual participants (the senior preservice teachers) as they had completed most of their educational science courses. Furthermore, Psychological Counselling and Guidance Education and Early Childhood Education departments were excluded from the pilot study as in the main study because the research questions seek to answer preparedness levels in the areas of instructional planning and creating learning environments; which makes these two departments unrelated to the study. See demographic information about the participants of the pilot study in Table 3.2.

Table 3.2

Participant Preservice Teachers' Profile of the Pilot Study

Variable	*f*	*%*
Gender		
Female	180	72
Male	70	28
Age		
20	74	29.6
21	99	39.6
22	42	16.8
23	15	6.0
24 and over	20	8.0
High Schools		
Anatolian H.S.	108	43.2
Anatolian Teacher H.S.	35	14.0
Vocational and Technical H.S.	30	12.0
Basic High School	30	12.0
İmam Hatip H.S.	19	7.6
Science H.S.	7	2.8
Other types	21	8.4
Departments		
Computer Teaching and Instructional Tech.	30	12.0
Classroom Teaching	48	19.2
English Language Teaching	40	16.0
Science Teaching	44	17.6
Primary School Mathematics Teaching	49	19.6
Turkish Language Teaching	39	15.6
GPA		
2.00 and below	4	1.6
2.01 – 2.50	57	22.8
2.51 – 3.00	103	41.2
3.01 – 3.50	82	32.8
3.51 - 4.00	4	1.6
Desire to be a Teacher		
Yes	202	80.2
Undecided	37	14.8
No	11	4.4
Desire to continue Graduate Edu.		
Yes	75	30.0
Undecided	98	39.2
No	77	30.8

3.5.2 Data Collection Procedures of the Pilot Study

The data collection process of the pilot study was in March 2019 in the second term of the 2018-2019 academic year. Firstly, the permission was taken from Middle East Technical University Human Subjects Ethics Committee. Secondly, the approval of the university where the data collection would be done was taken. After both permissions were granted, a pilot study was conducted to check the construct validity as the researcher developed the questionnaire. The participants of pilot study were all junior preservice teachers (N = 250) in departments at the Faculty of Education. Junior preservice teachers were chosen since they had very similar characteristics to the target population. The researcher collected the data in participants' educational science courses. The instructors were informed, and the available courses were selected for data collection. The preservice teachers who were present in the course were informed about the purpose of the study and Preparedness to Teach Questionnaire. Pilot study took place in between 6th March and 13th March 2019.

3.5.3 Data Analyses for the Pilot Study

The pilot study was done to check the construct validity for the scale as it was newly developed by the researcher. Prior to Exploratory Factor Analysis (EFA), necessary assumptions were checked through Statistical Package for Social Sciences (SPSS) 23 Metu Version. The assumptions were metric variables, no univariate outliers, univariate normality, multivariate normality, correlation matrix inspection, sampling adequacy, and sphericity. Only Metrix variable did not necessitate using SPSS as the scale used a 6-point scale assuring this assumption. To find whether there were any univariate outliers, z-scores, 5% trimmed mean values, histograms and box plots were examined via SPSS 23 Metu Version. For univariate normality; skewness-kurtosis, Kolmogorov-Smirnov and Shapiro-Wilks values were checked, also histograms and Q-Q plots were controlled. For multivariate normality, Mardia's test was conducted. Additionally, correlation matrix was inspected, KMO value was checked for sampling adequacy, Barlett's test of sphericity was conducted for

sphericity. EFA was conducted through SPSS 23 Metu Version after assumptions were checked. Consequently, Cronbach's alpha was checked to see internal consistency reliability.

3.5.4 Assumptions of EFA in the Pilot Study

Before conducting EFA to assess the construct validity of the instrument, the necessary assumptions were checked. These assumptions involve metric variables, no univariate outliers, univariate normality, correlation matrix inspection, sampling adequacy, sphericity, and multivariate normality (Hair et al, 2010).

The first assumption was the existence of metric variables. As a 6-point scale which had a continuous variable was used in the questionnaire, this assumption was assured. Moreover, when the level of measurement is interval, this shows metric variable as stated by Cohen, Manion, and Morrison (2007). Similarly, in the current study, interval variable was used as the level of measurement, ranging from 1-strongly disagree to 6-strongly agree.

The absence of univariate outliers, as another assumption, was checked by examining z-scores which are the standardized values. For this aim, each item was standardized to a z-score to see whether there were any items which exceeded 3.29 and could be considered as an outlier (Tabachnick & Fidell; 2012). There were four cases that exceeded 3.29 in almost half of the items out of 250 cases. As Stevens (2009) stated, when there are outliers in the data, some further examination should be done to see the reason of the outliers. The reasons could be some errors in entering data, or differences in the data collection process of these subjects (outliers). If this is the case, it is wise to eliminate the cases from the study. When four cases were examined in the current study, there were no errors in data entering and the data collection process was very similar for all the participants. When outliers do not stem from reasons, Stevens (2009) suggests not dropping these outliers, but doing two analyses, one with the outliers and one without them to check whether there are any

differences between two analyses. Therefore, four outliers were not deleted from the data; instead, two analyses were run, and no differences were revealed between them.

As for univariate normality; Kolmogorov-Smirnov, Shapiro-Wilk tests, skewness and kurtosis values, histograms and Q-Q plots were examined. Kolmogorov-Smirnov and Shapiro-Wilk results were significant that meant non-normality; however, these tests are considered very insensitive to sample size and, even if the data are normally distributed, they may show non-normality in large samples (Field, 2009). For this reason, Q-Q plots and histograms should also be checked in large samples. Thereby, the other ways of testing univariate normality were conducted. Skewness and kurtosis values must be between -3.00 and +3.00 according to Tabachnick and Fidell (2012) and, should be close to zero according to Field (2009). Being close to zero means normal distribution and, when the distance gets further from zero, it means it is not normally distributed (Field, 2009). Skewness and kurtosis values were examined and kurtosis values in 9 items out of total 48 items were found larger than the boundaries. However, as mentioned by Kline (2015), kurtosis values between 8.0 and 20.0 reveal 'severe' kurtosis. In this sense, he states that kurtosis values over 10.0 show non-normality. In the study, none of these 9 cases exceeded 10.0 which assures normal distribution. Histograms and Q-Q plots were also examined, and they did not indicate any non-normality that would violate this assumption.

According to Tabachnick and Fidell (2012), each item should correlate at least one of the other items with a coefficient of .30 or higher. To check this assumption, correlation matrix was inspected, and items were found to correlate at least one of the other items with .30 or higher coefficient. Furthermore, Barlett's test shows whether correlation matrix is significantly different from identity matrix. If they are not different, it means that there are no clusters and factor analysis cannot be run (Field, 2009). Barlett's Test of Sphericity result was significant (x^2 (990) = 7635.47, p<.05), showing that the correlation matrix was different from the identity matrix as desired. Additionally, Kaiser-Meyer-Olkin (KMO) ranges from 0 to 1; 0 means running factor analysis is not suitable and, a value close to 1 means factor analysis will give

reliable results. In this respect, KMO value must be at least .50 (Field, 2009). KMO value was .94 for the scale; namely, Preparedness to Teach Questionnaire (PTQ). Hutcheson and Sofroniou (1999) state that the boundaries were mediocre (.50-.70), good (.70-.80.), great (.80-.90), and superb aspect (.90 and above) of the sample size adequacy, indicating that the sample size was adequate (.94) to run EFA with a superb sample adequacy.

Finally, multivariate normality was checked via Mardia's test. The Mardia's test result showed violation of normality (*b2p* = 2778,30, *p*<.001) inconsistent with the desired assumption (*p*> .05). This necessitated using Principal Axis Factoring in order to extract factors. Moreover, in factor extraction, orthogonal rotation is used when there is no correlation among factors; whereas, oblique rotation is used when the factors are correlated (Tabachnick & Fidell; 2012). In this sense, Costello and Osborne (2005) state that in case of violation of normality, a relationship among expected factors is assumed. Thereby, rotating the factors was done by using oblique rotation in the study as the result of multivariate normality check presented non-normality. In Figure 3.2, the process of instrumentation is summarized with its all steps.

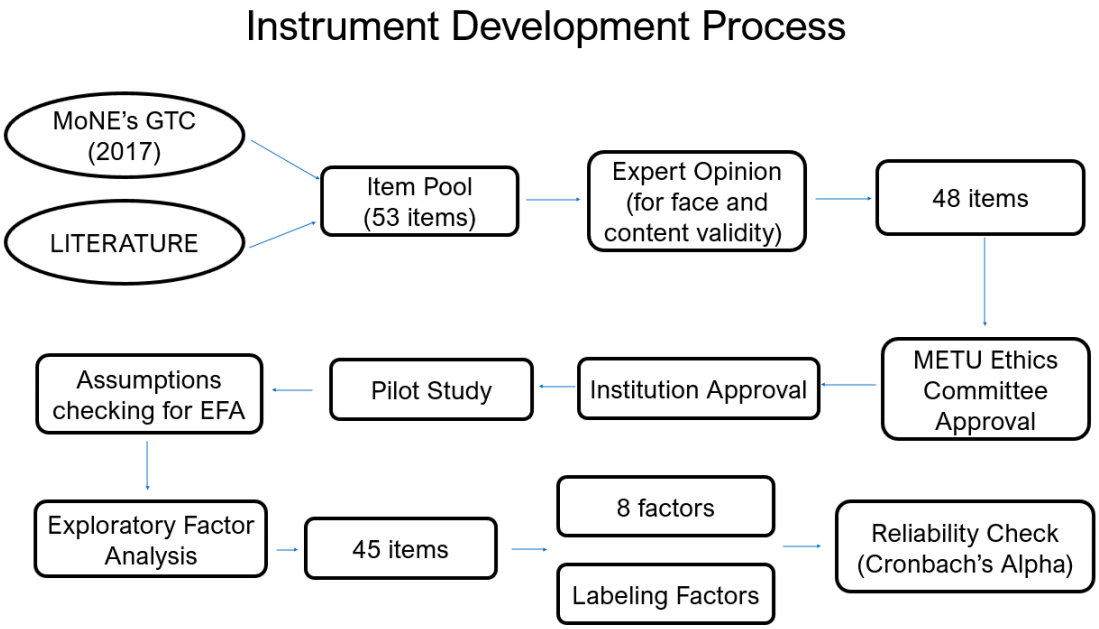

Figure 3.2. Instrument Development Process

3.5.5 Results of the Pilot Study

After checking the necessary assumptions, EFA was done using Principal Axis Factoring and direct oblimin. The number of factors was decided through the inspection of Eigenvalues which were higher than 1.0 and Catell's scree plot. According to Stevens (2009), benefiting scree plot when there are more than 200 participants does not mislead the researcher to see how many factors there are since the communalities are large with the participant number. Thereby, when the scree plot was examined, the scale seemed to have eight factors. The inflexion point starts in between the numbers seven and nine in the plot; additionally, the first two factors seem to make the most contributions to the variance. (See Figure 3.3)

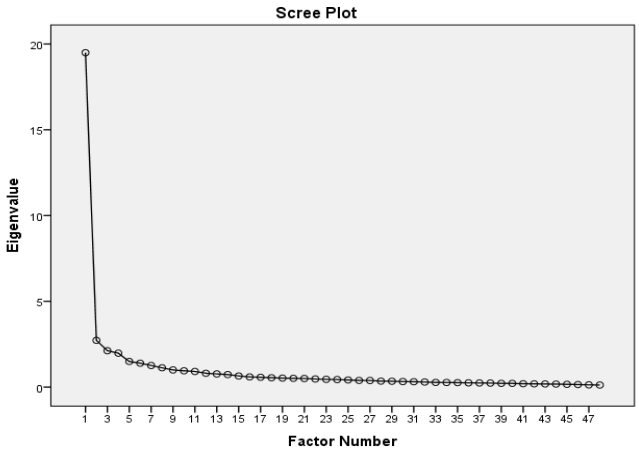

Figure 3.3. Scree plot for the scale

Like the findings of scree plot, eigenvalues provided eight factors that are higher than 1.0., and these factors explained 66.90% of the total variance which is greater than 40% as a rule of thumb as Blunch (2008) suggested. After determining factor numbers, pattern matrix was examined to see if there were any items that were cross loading or freestanding. Then communalities were checked from pattern matrix table. Communities are the variables that are explained by a group of factors (Stevens, 2009). The communalities can be seen in factor loadings and the lowest accepted

value changes according to sample size; as sample size increases, the lower factor loadings can be accepted according to Stevens (2009). As for Barnes et al (2001), values less than .30 should not be included. In this respect, the factor loadings with .30 or above were considered significant.

The result of the analysis showed five problematic items (item 7, item 22, item 32, item 38, and item 39). Item 7 was eliminated from the scale since it was cross loading, the loading of factor one was .42 and factor five was .32, showing very close loadings. Item 39 was also eliminated for the same reason. It was cross loading with .42 (factor two) and .35 (factor four). The last eliminated item was 22 because it was freestanding and did not load to any factors. Since there may have been a mismatch among factors because of these three items, the analysis was repeated after discarding them from the scale. In this way, item 32 that had been under the wrong factor, cleared up in the right factor in the second analysis. Item 38 was loaded to factor five which was about considering physical conditions in organizing learning; whereas, it was in factor 2 which was about considering national and moral values. For this reason, this item was revised, and it was made more clarified. Thus, at the end of EFA, the new version of the scale had 45 items with eight factors after eliminating three items and revising one item. Factor loadings ranged from .79 to .32. Factor correlation matrix can be seen in Appendix E. Factor loadings of the items can be seen in Table 3.3.

Table 3.3

Factor Loadings of the Items in Preparedness to Teach Questionnaire

	Factor Loadings							
Items	F1	F2	F3	F4	F5	F6	F7	F8
Item 3	.78							
Item 2	.77							
Item 1	.75							
Item 4	.73							
Item 5	.50							
Item 8	.38							
Item 6	.38							

Table 3.3 *(continued)*

	Factor Loadings							
Items	F1	F2	F3	F4	F5	F6	F7	F8
Item 9	.37							
Item 34		.74						
Item 33		.74						
Item 35		.73						
Item 36		.70						
Item 31		.47						
Item 37		.32						
Item 32		.32						
Item 21			.76					
Item 19			.65					
Item 18			.63					
Item 20			.47					
Item 43				.67				
Item 40				.66				
Item 41				.58				
Item 42				.51				
Item 45				.51				
Item 44				.49				
Item 46					.76			
Item 48					.66			
Item 47					.59			
Item 38					.35			
Item 15						.61		
Item 16						.54		
Item 14						.54		
Item 17						.50		
Item 13						.38		
Item 24							.79	
Item 12							.74	
Item 11							.67	
Item 10							.61	
Item 23							.53	
Item 29								.75
Item 28								.61
Item 30								.54
Item 26								.48
Item 27								.46
Item 25								.42

Note. Extraction Method: Principal Axis Factoring. Rotation Method: Direct Oblimin

When percentages were examined, the first factor seemed to explain 40.88% of the total variance which meant that it had the largest portion of all the factors. Factor 2

contributed with 5.75%, factor 3 with 4.63%, factor 4 with 4.33%, factor 5 with 3.13%, factor 6 with 3.02, factor 7 with 2.79%, and factor 8 with 2.38% to the total variance. All factors explained 66.90% of the total variance. Eigenvalues, percentages of variance, and cumulative percentages for factors of Preparedness to Teach Questionnaire can be seen in Table 3.4.

Table 3.4

Eigenvalues, Percentages of Variance, and Cumulative Percentages for Factors of Preparedness to Teach Questionnaire

Factor	Eigenvalue	% of Variance	Cumulative %
1	18.40	40.88	40.88
2	2.59	5.75	46.63
3	2.08	4.63	51.26
4	1.95	4.33	55.58
5	1.41	3.13	58.72
6	1.36	3.02	61.73
7	1.25	2.79	64.52
8	1.07	2.38	66.90

After running exploratory factor analysis, reliability checking was done. Reliability means consistency for an individual between two applications of one instrument, or between two sets of items in the same instrument (Fraenkel, Wallen, & Hyun; 2015). One of the ways is to check internal consistency through Cronbach's alpha which has a value ranging from 0 to 1. As the value increases, internal consistency increases. Cronbach's alpha was calculated for the scale and the overall reliability coefficient was found to be .96 which indicated a high consistency level according to Cortina (1993) who stated that coefficients .70 and over show high and acceptable reliability. When Cronbach's alpha was calculated for each factor, their reliability coefficients ranged from .80 to .92; showing high levels of consistency. Each factor was named in line with MoNE's GTC and the related literature. Reliability statistics of factors, number of loaded items and factor labels can be seen in Table 3.5.

Table 3.5

Reliability Statistics of Factors, Number of Loaded Items, Factor Labels

Factors	Cronbach's Alpha	N of Items
Acting on curriculum and learning outcomes	.92	8
Considering national and moral values	.89	7
Consciousness of students' differences of interests and needs	.80	4
Being aware of physical conditions in planning	.84	6
Considering physical conditions in organizing learning	.85	4
Awareness of students' individual differences in planning	.84	5
Improving students' high-level cognitive skills	.90	5
Creating democratic learning environments	.87	6

3.6 The Study

In this part, the procedures for the main part of the study are explained in detail.

3.6.1 Participants of the Study

The target population of the current study was the senior preservice teachers at a state university in Northwest Turkey. Out of eight departments in the Faculty of Education; six of them were included in the study. As the aim of the study was to find preservice teachers' perceived preparedness levels in instructional planning, and creating learning environments; two departments, namely Psychological Counselling and Guidance Education and Early Childhood Education were not included in the study because they are different in teaching profession from the other departments, and they would not work in the traditional classes, unlike others. The reason for selecting only senior preservice teachers is that they had completed most of their educational science courses at the time of data collection which makes them the perfect participants of the current study. Additionally, the junior preservice teachers were benefited in the pilot study as they are considered to be the most similar group to the actual participants and a suitable group to the purpose of the study. The

included departments were as follows: Computer Education and Instructional Technology, Classroom Teaching, English Language Teaching, Science Teaching, Primary School Mathematics Education, and Turkish Language Teaching.

The accessible population were all senior preservice teachers in the departments. There was not a sampling process; instead, all population was provided with the questionnaire and the volunteer preservice teachers participated in the study.

According to statistics of the Higher Education Council, the total number of senior preservice teachers in these departments was 327 at the university in question. Out of all these preservice teachers, 298 (91%) were reached and 232 of them (70.9%) accepted to participate in the study. There were 149 females (64.2%) and 83 males (35.8 %). Participants' ages mainly varied from 20 to 25 (97.4%) and the others' ages were over 25 (2.6%). As for the high school types preservice teachers graduated from, 87 of them (37.5%) finished Anatolian high schools, 52 (22.4%) completed their education at Anatolian Teacher high schools, 38 (16.4%) went to Vocational and Technical high schools, 15 of them (6.5%) were from Basic high schools, 14 of them (6.0%) went to Imam Hatip high school. 11 of them (4.7) were form Science high school and 15 of them (6.5%) were from other types of high schools. When the participants were examined according to their departments; the number of participants was as follows: Computer Teaching and Instructional Technology was 42 (18.1%), Classroom Teaching was 29 (12.5%), English Language Teaching was 52 (22.4%), Science Teaching was 48 (20.6%), Primary School Mathematics Teaching was 35 (15.1%), and Turkish Language Teaching was 26 (11.2%). As for participants' desire to continue graduate education in educational sciences; 65 participants (28.0%) responded 'yes', 94 (40.5%) were uncertain, and 73 (31.5%) claimed they did not want to continue. The number of participants who desired to become teachers was 187 (80.6%), 33 of them (14.2%) were unsure, and 12 of them (5.2%) did not want to become teachers. Table 3.6 includes demographic information about the participants.

Table 3.6

Participant Preservice Teachers' Profile of the Study

Variable	*f*	%
Gender		
Female	149	64.2
Male	83	35.8
High Schools		
Anatolian H.S.	87	37.5
Anatolian Teacher H.S.	52	22.4
Vocational and Technical H.S.	38	16.4
Basic High School	15	6.5
İmam Hatip H.S.	14	6.0
Science H.S.	11	4.7
Other types	15	6.5
Departments		
Computer Teaching and Instructional Tech.	42	18.1
Classroom Teaching	29	12.5
English Language Teaching	52	22.4
Science Teaching	48	20.6
Primary School Mathematics Teaching	35	15.1
Turkish Language Teaching	26	11.2
GPA		
2.00 and below	5	2.2
2.01-2.50	43	18.5
2.51-3.00	95	40.9
3.01-3.50	75	32.3
3.51-4.00	14	6.0
Desire to continue Graduate Edu.		
Yes	65	28.0
Undecided	94	40.5
No	73	31.5
Desire to be a Teacher		
Yes	187	80.6
Undecided	33	14.2
No	12	5.2

3.6.2 Data Collection Procedures of the Study

Following the pilot study and the necessary analyses, the main data were collected in between 25th March and 05th April 2019 in the second term of the 2018-2019 academic year. Data collection process was administered in the same way as it had been done in the pilot data collection process. With Ethics Committee Approval from

METU Applied Ethics Research Centre, the required permissions were taken from the Dean of Faculty of Education at the university in question. With the consent of the instructors, the researcher collected the data in the educational sciences courses of the participants. Prior to giving consent forms, the researcher also informed the participants about the purpose of the study and the content of the scale. The ones that signed the consent forms were provided with the Preparedness to Teach Questionnaire (PTQ). It took almost 15 minutes for the participants to complete the scale. The researcher was there in the whole process in case participants needed any help or wanted to ask questions about the items.

232 preservice teachers accepted to participate in the study (See the participant numbers in detail in table 3.6). The participants were asked to answer the questionnaire honestly and accurately. The participants were also informed that the questionnaire would be answered voluntarily, and they could quit answering the questionnaire any time they wanted. Additionally, they were assured that their answers were confidential and only the researcher could get access to the answers for the purpose of the study.

Table 3.7

Timeline of the Study

Time	Study
July-August 2018	Competency and preparedness research
September-November 2018	Item generation for the questionnaire
December 2018	Expert check of PTQ
	Changes according to feedbacks
18th -22nd February 2019	Metu Ethics Committee Approval
05th -06th March 2019	Institution Approval
06th -13th March 2019	Data collection for pilot study
13th -24th March 2019	Data transfer to SPSS file
	Exploratory Factor Analysis
25th March-05th April 2019	Main data collection
06th -14th April 2019	Data transfer to SPSS file
15th –30th April 2019	Necessary analyses via SPSS 23 METU Version
May 2019	Reporting the results

3.6.3 Data Analyses for the Study

Prior to running analyses, participants' demographic information and their answers to each item were transferred into an SPSS file. The first research question was "What are the preservice teachers' perceived preparedness levels in instructional planning and creating learning environments at a state university in Northwest Turkey?" In order to answer this question, descriptive statistical analyses were conducted to see perceived preparedness levels of preservice teachers to teaching. Additionally, mean and standard deviations, percentages and frequencies were examined to see certain characteristics of the participants.

The questionnaire had a 6-point scale. A criterion needed to be chosen in order to decide how prepared the senior preservice teachers perceived themselves to teach. Büyüköztürk, Çokluk and Köklü (2011) cited from Arıcı (1993) that there are two types of criteria in grouping the data one of which is to divide the scores in a range equally through their factual boundaries. This study used this type to decide the level of preservice teachers' perceived preparedness levels. In order to find the score interval, the difference between the highest score and the smallest score in the scale is found. Then the levels of scale evaluation are decided. The difference is divided to the number of levels and the equal score interval is found in this way. Lastly, this number is added to the numbers to find the levels starting with the smallest score in the scale (Büyüköztürk, Çokluk and Köklü, 2018). Likewise, the calculation in this study was as follows: In a 6-point scale, the highest score is 6 and the smallest score is 1. 6-1=5. The levels of measurement criterion were decided as four by the researcher. 5:4=1.25. The scale interval was found as 1.25. The criterion levels occurred as seen in table 3.8 and their labels are shown in the same table.

Table 3.8

The Criterion Levels of PTQ

Score Interval	Scale Evaluation
1.00 – 2.25	Totally Unprepared
2.26 – 3.50	Unprepared
3.51 – 4.75	Prepared
4.76 – 6.00	Completely Prepared

For the second research question which investigated whether there were significant differences in preparedness levels in terms of some variables, descriptive and inferential statistics were benefited to make some conclusions. For gender variable, independent measures t-test was used. Independent measures t-test measures mean differences between two distinct groups of participants and tells whether there is a statistically significant difference between these two groups (Gravetter & Wallnau; 2016). Gender variable has two levels and they present two separate groups of participants as being suitable for using an independent measures t-test.

For GPA, high school, department, willingness to continue graduate education, and willingness to teach variables, one-way ANOVA was used to analyse data. Analysis of Variance (ANOVA) is used to examine mean differences of at least two different populations or treatments (Gravetter & Wallnau; 2016). It helps the researcher to generalize about the population as one of the tests in inferential statistics. There were six sub-questions in the second research question. The independent variables were gender, high school type, department, GPA, willingness to continue graduate education, and willingness to teach. The dependent variable was preparedness to teach for all sub-questions.

3.7 Limitations of the Study

There are some limitations in this study. First, the results are limited to the university in question and others with similar characteristics and settings. Nevertheless, the study does not aim at generalizability as it is seen in the research questions which

investigated perceived preparedness levels of preservice teachers at a state university in Northwest Turkey.

Secondly, the current study involves only two sub-competencies under professional skills. Thereby, the results are limited to these two sub-competencies which are instructional planning and creating learning environments. In this sense, it does not cover all dimensions in the competency of professional skills which has four dimensions. As the other two sub-dimensions are less related to curriculum and instruction, they have not been included. For this reason, it does not aim to show competency levels in professional skills; instead, the purpose is to show competency levels in the dimensions of instructional planning and creating learning environments. Thus, they cannot be generalized to all sub-competencies under professional skills. Furthermore, MoNE's General Teacher Competencies (GTC) paper includes three main competencies which are professional knowledge, professional skills, and attitudes and values. However, this study is restricted to professional skills only. Competencies of professional knowledge and attitudes and values must also be investigated.

3.8 Assumptions of the Study

Assumptions of the study are as follows: Firstly, since the data were based on self-report questionnaires, it was considered that all participants in the study answered the questionnaire honestly and accurately. Secondly, participants were not affected by one another while they were answering the questionnaire. Lastly, all participants completed the questionnaire under the same conditions.

CHAPTER 4

RESULTS

This chapter includes information about the results of the current study. In the first part in which the first research question is aimed to be answered, descriptive statistics related to both the whole scale and its dimensions are given. Subsequently, the second research question is answered together with its sub-questions. In this sense, inferential statistics that try to answer whether there are statistically significant differences among certain variables are provided. The variables are gender, high school, department, GPA, desire to become a teacher, and desire to continue graduate education in educational sciences field. Consequently, the summary of the results is provided.

4.1 Descriptive Statistics for the Whole Scale

The first research question aims to see preservice teachers' perceived preparedness levels to teach in terms of instructional planning and creating learning environments. In order to answer this question, descriptive statistics were conducted. Then the criterion levels were decided with reference to Büyüköztürk, Çokluk and Köklü (2018): In the scale, the smallest score was subtracted from the highest score. (6-1=5). As the levels of measurement criterion were decided as 4 by the researcher, this number was divided into 4 (5:4=1.25). Thus, the scale interval was found as 1.25 and, criterion levels and their labels emerged as follows: 'Totally unprepared' between 1.00 and 2.25, 'unprepared' between 2.26 and 3.50, 'prepared' between 3.51 and 4.75 and, 'completely prepared' between 4.76 and 6.00.

To answer the first research question, firstly, the results of descriptive statistics are given. The overall mean value for Preparedness to Teach Questionnaire (PTQ) was

5.03 (*SD* = .52). The mean scores were between 2.16 and 5.98. High mean values show high preparedness levels to teach as mentioned in the data analysis part. According to this criterion, the overall mean score shows that preservice teachers are 'completely prepared' to teach (*M* = 5.03, *SD* = .52) in the areas of instructional planning and creating learning environments.

Examining the overall mean value was followed by investigating mean, standard deviation, minimum and maximum scores for each item in the questionnaire. Table 4.1 presents descriptive statistics for the items in Preparedness to Teach Questionnaire (PTQ) together with the overall mean score.

As can be seen in Table 4.1, the smallest minimum score was 1.00. Additionally, maximum score was 6.00 for each item. Mean values ranged from 4.39 to 5.38. This means that preservice teachers are either 'prepared' or 'completely prepared' in each item. No items had mean values below the score 4.39; thus, preservice teachers did not perceive themselves 'unprepared' or 'totally unprepared' in any items. There were 35 items in which preservice teachers were found 'completely prepared' and 10 items in which they were found 'prepared'. The items with the lowest mean values were as follows: 'I can prepare my lesson plans considering the different socio-cultural backgrounds of the students' (*M* = 4.39, *SD* = .95) and 'I can prepare my lesson plans so that students can perform individual learning' (*M* = 4.39, *SD* = .82). These two items were under the same dimension which is 'awareness of students' individual differences in planning'. The items with the highest mean values were as follows: 'I can tell the students when I see their positive behaviour' (*M* = 5.38, *SD* = .72), and 'When any problem occurs, I can listen to the student at first' (*M* = 5.32, *SD* = .70). These items were under 'creating democratic learning environments' dimension.

Table 4.1

Descriptive Statistics for Overall Mean Score and Items in PTQ (N = 232)

	Min.	*Max.*	*M*	*SD*
Overall Score	**2.16**	**5.98**	**5.03**	**.52**
Item 1 / F1.1	2.00	6.00	4.96	.88
Item 2 / F1.2	2.00	6.00	4.89	.88
Item 3 / F1.3	2.00	6.00	4.84	.91
Item 4 / F1.4	2.00	6.00	5.02	.79
Item 5 / F1.5	3.00	6.00	5.07	.78
Item 6 / F1.6	1.00	6.00	4.95	.85
Item 7 / F1.7	2.00	6.00	4.91	.84
Item 8 / F1.8	2.00	6.00	4.91	.81
Item 9 / F7.1	2.00	6.00	5.03	.79
Item 10 / F7.2	2.00	6.00	4.93	.82
Item 11 / F7.3	2.00	6.00	5.09	.80
Item 12 / F6.1	2.00	6.00	4.90	.89
Item 13 / F6.2	1.00	6.00	4.73	.91
Item 14 / F6.3	1.00	6.00	4.39	.95
Item 15 / F6.4	2.00	6.00	4.71	.86
Item 16 / F6.5	1.00	6.00	4.39	.82
Item 17 / F3.1	1.00	6.00	4.41	1.02
Item 18 / F3.2	2.00	6.00	4.62	.98
Item 19 / F3.3	2.00	6.00	4.68	.93
Item 20 / F3.4	2.00	6.00	5.07	.85
Item 21 / F7.4	2.00	6.00	5.28	.74
Item 22 / F7.5	2.00	6.00	5.04	.71
Item 23 / F8.1	3.00	6.00	5.38	.72
Item 24 / F8.2	2.00	6.00	5.32	.70
Item 25 / F8.3	2.00	6.00	5.24	.76
Item 26 / F8.4	1.00	6.00	5.19	.87
Item 27 / F8.5	1.00	6.00	4.98	.91
Item 28 / F8.6	1.00	6.00	5.15	.86
Item 29 / F2.1	1.00	6.00	4.64	.87
Item 30 / F2.2	2.00	6.00	4.63	.80
Item 31 / F2.3	2.00	6.00	4.61	.85
Item 32 / F2.4	2.00	6.00	5.20	.80
Item 33 / F2.5	2.00	6.00	5.20	.84
Item 34 / F2.6	2.00	6.00	5.16	.80
Item 35 / F2.7	1.00	6.00	5.19	.88
Item 36 / F5.1	1.00	6.00	5.24	.84
Item 37 / F4.1	2.00	6.00	4.96	.84
Item 38 / F4.2	1.00	6.00	5.02	.99
Item 39 / F4.3	2.00	6.00	4.93	.92
Item 40 / F4.4	1.00	6.00	4.95	.91
Item 41 / F4.5	3.00	6.00	5.01	.84

Table 4.1 *(continued)*

	Min.	*Max.*	*M*	*SD*
Item 42 / F4.6	2.00	6.00	5.04	.88
Item 43 / F5.2	1.00	6.00	5.05	.81
Item 44 / F5.3	1.00	6.00	5.12	.84
Item 45 / F5.4	1.00	6.00	5.09	.81

4.2 Descriptive Statistics for Dimensions of the Scale

After investigating mean value for each item in the questionnaire, mean values and standard deviations for each dimension were calculated along with the minimum and maximum scores for each dimension. As seen in Table 4.2, the dimension with the highest mean score was 'creating learning environments' (M = 5.21, SD = .61), and the dimension with the lowest mean score was 'awareness of students' individual differences in planning' (M = 4.44, SD = .62). 'Considering physical conditions in organizing learning' dimension had the second highest mean value (M = 5.06, SD = .66) and 'being aware of physical conditions in planning' dimension came after the dimension with the second highest mean value (M = 5.01, SD = .69). When the dimensions with the lowest mean scores were checked, the dimensions 'considering national and moral values' (M = 4.63, SD = .81) and 'consciousness of students' differences in interests and needs' (M = 4.70, SD = .75) followed the dimension with the lowest mean score. Moreover, the dimensions 'acting on curriculum and learning outcomes' (M = 4.95, SD = .64) and 'improving students' high-level cognitive skills' (M = 4.99, SD = .57) had very close mean scores to each other.

Furthermore, each dimension's minimum and maximum mean scores were calculated. For each dimension, maximum score was 6.00 which was the highest score that could be chosen in the scale. The dimension with the lowest minimum score was 'considering physical conditions in organizing learning' with a minimum mean score of 1.00. The dimension 'awareness of students' individual differences in planning' had the second lowest minimum score which was 1.60. It was followed by 'consciousness of students' differences in interests and needs' dimension with a

minimum score of 2.00. When the dimensions with the highest minimum scores were checked, the dimension ‘creating democratic learning environments’ was seen to have the highest minimum score which was 2.67. It was followed by ‘acting on curriculum and learning outcomes’ dimension with 2.38, ‘considering national and moral values’ dimension with 2.29, and ‘being aware of physical conditions in planning’ dimension with 2.17. Lastly, ‘improving students’ high-level cognitive skills’ dimension had a minimum score of 2.20 which was very close to the mean value of the former dimension. (Table 4.2)

Table 4.2

Descriptive Statistics for Dimensions of PTQ (*N* = 232)

Dimensions	*Min.*	*Max.*	*M*	*SD*
Acting on curriculum and learning outcomes	2.38	6.00	4.95	.64
Considering national and moral values	2.29	6.00	4.63	.81
Consciousness of students’ differences in interests & needs	2.00	6.00	4.70	.75
Being aware of physical conditions in planning	2.17	6.00	5.01	.69
Considering physical conditions in organizing learning	1.00	6.00	5.06	.66
Awareness of students’ individual differences in planning	1.60	6.00	4.44	.62
Improving students’ high-level cognitive skills	2.20	6.00	4.99	.57
Creating democratic learning environments	2.67	6.00	5.21	.61

Note: Dimensions were named regarding the items that clustered together in EFA.

Table 4.3 presents scale evaluations of the questionnaire according to the dimensions. According to the criterion levels which had been explained in the beginning of this chapter, preservice teachers were found ‘completely prepared’ in five dimensions, and ‘prepared’ in three dimensions for their future profession. Nonetheless, they were not found ‘unprepared’ or ‘totally unprepared’ in any dimensions. This shows that preservice teachers who studied with the previous teacher education programs perceived themselves prepared to teach according to MoNE’s updated General Teacher Competencies in the areas of instructional planning and creating learning environments.

Table 4.3

Scale Evaluations of PTQ According to Dimensions

Dimensions	Scale Evaluation
Acting on curriculum and learning outcomes	Completely Prepared
Considering national and moral values	Prepared
Consciousness of students' differences in interests and needs	Prepared
Being aware of physical conditions in planning	Completely Prepared
Considering physical conditions in organizing learning	Completely Prepared
Awareness of students' individual differences in planning	Prepared
Improving students' high-level cognitive skills	Completely Prepared
Creating democratic learning environments	Completely Prepared

4.3 Descriptive and Inferential Statistics Regarding Variables

The second research question was as follows: 'Do preservice teachers' preparedness levels in instructional planning and creating learning environments at a state university in Northwest Turkey differ in terms of gender, high school type, departments, GPA, willingness to teach, and desire to continue graduate education?' In order to answer this question, inferential statistics were used. For gender variable, independent samples t-test was used and for the other variables, One Way ANOVA was conducted.

4.3.1 Independent Samples T-Test for Gender Variable

In order to examine perceived preparedness level for gender variable, independent samples t-test was conducted. Before running the analysis, the assumptions for independent samples t-test were needed to be checked. The assumptions were independent observation, normality and homogeneity of variance (Field, 2009).

4.3.1.1 Checking Assumptions for Independent Samples T-Test

Independent observation means that two groups of samples are not affected by one another during data collection procedure. Likewise, the measurement or observation must have no relationship with the other measurement or observation (Gravetter, Wallnau, 2016). In this study, two groups of participants answered the questionnaire independently so independent observation was provided.

Regarding normality assumption, skewness and kurtosis values, Kolmogorov - Smirnov values and histograms were examined. Kolmogorov - Smirnov values, which must be nonsignificant, with a value of > .05 in order to assume normality (Field, 2009), were checked; and, they were found significantly non-normal, D (232) = 0.00, $p < .05$. Nonetheless, Kolmogorov - Smirnov test can be affected by large sample size and can show non-normality even when the differences from a normal distribution are hardly noticeable; thus, they should be checked together with skewness and kurtosis values, histograms, and Q-Q plots (Field, 2009). In this sense, the other tests of normality were conducted. Skewness and kurtosis values must be between the boundaries of -3 and +3 to assume that normality is provided according to Tabachnick and Fidell (2012). When skewness and kurtosis values were checked, they were found between the boundaries, meaning that the scores are normally distributed. Histograms and Q-Q plots did not show any non-normality, either. In this respect, normality assumption was not violated.

Lastly, homogeneity of variance was checked through Levene's test. In homogeneity of variance, the spread of scores is assumed to be nearly equal in separate groups of participants (Field, 2009). The result of Levene's test was non-significant as desired, F (1, 230) = 3.62, $p = .058$, it means that homogeneity of variance was not violated.

4.3.1.2 Perceived Preparedness Level Regarding Gender

Before running independent samples t-test for gender, descriptive statistics were reported. Findings show that, female preservice teachers had a higher mean value (*M* = 5.09, *SD* = .45) than male preservice teachers (*M* = 4.92, *SD* = .60).

Table 4.4

Descriptive Statistics for Gender Variable (N = 232)

	gender	*N*	*M*	*SD*
mean	female	149	5.09	.45
	male	83	4.92	.60

One of the sub-questions in the second research question investigated whether female and male preservice teachers differ significantly in their preparedness levels to teach. For this reason, independent samples t-test was conducted to compare mean differences between female and male preservice teachers after checking the necessary assumptions. The results indicated that there was a statistically significant mean difference between female and male preservice teachers in their preparedness levels to teach on instructional planning and creating learning environments. Therefore, gender had effect on preparedness levels of preservice teachers. As there was significant mean difference between female and male preservice teachers, effect size was also calculated. Eta squared was .02 which was a small effect, t (230) = 2.33, $p < .05$, $r^2 = .02$. Table 4.5 gives independent samples t-test results according to gender.

Table 4.5

Independent Samples T-Test Results for PTQ Regarding Gender

	Levene's Test for Equality of Variance		T-test for Equality of Means		
	f	*Sig.*	*t*	*df*	*Sig. (2-tailed)*
Equality variances assumed	3.62	.058	2.33	230	.021
Equality variances not assumed			2.15	133.889	.033

4.3.2 One-Way ANOVA Test Results

In order to answer the second research question, which investigated the differences in preparedness levels regarding the variables of high school, department, GPA, desire to become a teacher and desire to continue graduate education, One-Way ANOVA test was required. Running the test necessitated checking assumptions for ANOVA.

4.3.2.1 Checking Assumptions for One Way-ANOVA Test

Apart from gender variable; the second research question had other independent variables which require conducting One-Way ANOVA. These variables were (1) high school type, (2) departments, (3) GPA, (4) willingness to teach, and (5) desire to continue graduate education in educational sciences field. In this part, One-Way ANOVA was run to answer these sub-questions. The reason for choosing One-Way ANOVA over a series of independent samples t-tests is that running multiple tests can increase Type 1 error which is about rejecting the null hypothesis and deciding there is a significant difference while, in fact, there is not any significant difference (Gravetter, Wallnau, 2016). Additionally, ANOVA enables the researcher to run multiple analyses within a single analysis.

Assumptions of ANOVA, as in independent samples t-test, are independent observation, normality and homogeneity of variance (Field, 2009). As for independent observation assumption, all groups of participants answered the questionnaire independent from each other. Normality check was done for all independent variables separately. Kolmogorov - Smirnov values showed normality except for some levels of independent variables in which the values were under .05. As mentioned earlier, Kolmogorov - Smirnov tests are sensitive to large sample sizes; thus, other normality checks were also conducted as suggested by Field (2009). Skewness and kurtosis values were within the boundaries which were -3.00 and +3.00 (Tabachnick & Fidell; 2012) except for four groups whose kurtosis values were over the limit. The groups were ‘basic high school’ under high school type

(8.58), ‘2.01-2.50’ under GPA (9.77), ‘undecided’ under desire to continue graduate education (8.94), and ‘yes’ under desire to become a teacher (6.37). However, Kline states (2015) that kurtosis values up to 10.0 can be accepted as normal. For this reason, these four groups were considered normal. Skewness and kurtosis values of other groups had already been within the boundaries for normal distribution. Additionally, histograms and Q-Q plots showed normal distribution.

As for homogeneity of variance, Levene’s test was conducted for each independent variable. Levene’s test was nonsignificant for all independent variables; the result for high school was F (6, 225) = 1.88, p > .05, for department it was F (5, 226) =.68, p >.05, for Grade Point Average (GPA) it was F (4, 227) = 1.49, p > .05, for desire to become a teacher it was F (2, 229) = .43, p > .05, and for desire to continue graduate education it was F (2, 229) = 2.51, p > .05. These values showed that the variances were nearly equal, and homogeneity of variance was not violated. Table 4.6 presents Levene’s test of equality of error variances for independent variables.

Table 4.6

Levene’s Test Results for Overall Scale Regarding Independent Variables

	F	*df1*	*df2*	*Sig.*
High school type	1.88	6	225	.08
Department	.68	5	226	.63
GPA	1.49	4	227	.20
Desire to become teachers	.43	2	229	.65
Desire to continue gr. edu.	2.51	2	229	.08

After necessary assumptions were checked, a series of One-Way ANOVA tests were run in order to answer sub-questions of the second research question which were related to high school type, department, GPA, desire to become a teacher and desire to continue graduate education in educational sciences trying to examine differences in terms of these variables. Results of these analyses are given in the following part.

4.3.2.2 Perceived Preparedness Level Regarding High School Type

One-Way analysis of variance (ANOVA) was conducted to investigate the differences in perceived preparedness levels to teach on instructional planning and creating learning environments with respect to high school types. The independent variable, high school type, had seven levels: Anatolian high school (*M* = 4.96, *SD* = .49), Imam Hatip high school (*M* =5.13, *SD* = .28), Anatolian Teacher high school (*M* = 5.01, *SD* = .58), Science high school (*M* = 5.18, *SD* = .33), Vocational and Technical high school (*M* = 5.26, *SD* = .35), Basic high school (*M* = 4.81, *SD* = .82), and other types of high schools (*M* = 4.91, *SD* = .54). The dependent variable was preparedness to teach. When the means were examined, vocational and technical high schools were found to have the highest mean value among high schools and basic high schools were found to have the lowest mean value. Mean values ranged from 2.16 to 5.98 among high schools. Descriptive statistics are shown in Table 4.7.

Table 4.7

Descriptive Statistics for High School Variable (*N* = 232)

	N	*M*	*SD*	*Min.*	*Max.*
Anatolian HS	87	4.96	.49	3.45	5.86
Imam hatip HS	14	5.13	.28	4.61	5.66
Anatolian teacher HS	52	5.01	.58	2.91	5.98
basic HS	15	4.81	.82	2.16	5.64
science HS	11	5.18	.33	4.61	5.73
Vocational & tech. HS	38	5.26	.35	4.36	5.89
Other high schools	15	4.91	.54	3.48	5.52

According to table 4.8, the mean square between groups was .63 and within groups it was .26. The result of One-Way ANOVA was significant, F (6, 225) = 2.44, $p < .05$. In other words, preparedness levels of preservice teachers differed significantly according to high school types that they have graduated from. Since the result was significant, the effect size was also measured. Eta squared was found to have a moderate value (η^2 = .061), that is 6% of the variance can be explained by high

school types. Table 4.8 presents the results of One-Way ANOVA for high school variable.

Table 4.8

One Way ANOVA Results for High School Variable (*N* = 232)

Source	*SS*	*df*	*MS*	*F*	*p*	η^2
Between Groups	3.823	6	.63	2.44	.026	.061
Within Groups	58.699	225	.26			
Total	62.522	231				

Since there was a significant difference among high school types, post hoc tests were run to see which high schools had significant mean differences from each other. When the null hypothesis is rejected, ANOVA shows that there is at least one difference among groups; yet, it cannot present which specific groups differ significantly (Field, 2009). In this case, post hoc tests can make pairwise comparisons to show which pair/s of the independent variable have significant mean differences precisely. Post hoc comparisons using Tukey's Honestly Significant Difference (HSD) indicated that Anatolian high school (*M* = 4.96, *SD* = .49) and Vocational and Technical high school (*M* = 5.26, *SD* = .35) differed significantly in perceived preparedness levels of preservice teachers, *MD* = -.30, *SE* = .09, *p* = .042. There were no other significant differences in pairwise comparisons of high schools, at .05 alpha level.

4.3.2.3 Perceived Preparedness Level Regarding Department

One-Way ANOVA was conducted to investigate whether preparedness levels of preservice teachers differ according to departments. The independent variable, departments, had six levels: Computer Teaching and Instructional Technology (*M* = 4.98, *SD* = .59), Science Teaching (*M* = 5.03, *SD* = .62), English Language Teaching (*M* = 4.93, *SD* = .50), Primary School Mathematics Teaching (*M* = 5.07, *SD* = .42), Classroom Teaching (*M* = 4.99, *SD* = .45), and Turkish Language Teaching (*M* =

5.22, *SD* = .38). Dependent variable was preparedness to teach. Mean values showed that English language teaching had the lowest mean value and Turkish language teaching had the highest mean value. Mean scores ranged from 2.13 to 5.98. Table 4.9 presents descriptive statistics for department variable.

Table 4.9

Descriptive Statistics for Department Variable (*N* = 232)

	N	*M*	*SD*	*Min.*	*Max.*
Computer edu. & inst. Tech.	42	4.98	.59	2.89	5.89
Science teaching	48	5.03	.62	2.13	5.82
English language teaching	52	4.93	.50	3.69	5.87
Mathematics teaching	35	5.07	.42	4.22	5.87
Classroom teaching	29	4.99	.45	4.07	5.78
Turkish language teaching	26	5.22	.38	4.13	5.98

According to Table 4.10, mean square between groups was .32 and within groups it was .27. Results of One-Way ANOVA indicated that department did not have effect on preservice teachers' perceived preparedness levels to teach; thus, preparedness levels did not differ according to departments. As the result was not significant, effect size was not measured, F (5, 226) = 1.21, $p > .05$.

Table 4.10

One-Way ANOVA Results for Department Variable (*N* = 232)

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	1.638	5	.32	1.21	.30
Within Groups	61.134	226	.27		
Total	62.772	231			

4.3.2.4 Perceived Preparedness Level Regarding GPA

For the sub-question which examined the difference in preparedness levels according to GPA levels, independent variable, GPA, had five levels: GPA of 2.00 and below (*M* = 5.24, *SD* = .29), GPA between '2.01 and 2.50' (*M* = 4.90, *SD* = .57), GPA

between ‘2.51 and 3.00’ (*M* = 4.93, *SD* = .55), GPA between ‘3.01 and 3.50’ (*M* = 5.17, *SD* = .40), and GPA between ‘3.01 and 4.00’ (*M* = 5.25, *SD* = .44). Dependent variable was preparedness to teach. According to the results of descriptive statistics, minimum mean values ranged from 2.16 to 4.77, and maximum mean values were between 5.50 and 5.98 (Table 4.11).

Table 4.11

Descriptive Statistics for GPA Variable (N = 232)

	N	*M*	*SD*	*Min.*	*Max.*
2.00 and below	5	5.24	.29	4.77	5.50
2.01-2.50	43	4.90	.57	2.16	5.75
2.51-3.00	95	4.93	.55	2.91	5.98
3.01-3.50	75	5.17	.40	4.00	5.86
3.51-4.00	14	5.25	.44	4.36	5.86

One-Way ANOVA was conducted to investigate whether GPA of preservice teachers had an impact on preparedness levels of preservice teachers. Mean square between groups was .99, and within groups it was .25. The results showed that there was a significant difference among GPA levels; thus, GPA had effect on preparedness levels to teach, F (4, 227) = 3.83, $p < .05$. As One-Way ANOVA was significant, effect size was also measured. Eta squared value showed that there was a moderate effect with .06; thus, 6% of variance can be explained by GPA (Table 4.12)

Table 4.12

One-Way ANOVA results According to GPA Variable (N = 232)

Source	*SS*	*df*	*MS*	*F*	*p*	η^2
Between Groups	3.961	4	.99	3.83	.005	.063
Within Groups	58.561	227	.25			
Total	62.522	231				

Since the result was significant, post hoc test was run. Post hoc test with Tukey’s HSD showed that GPA between 2.51 and 3.00 (*M* = 4.93, *SD* = .55) and GPA

between 3.01 and 3.50 (*M* = 5.17, *SD* = .40) were significantly different from each other in preparedness levels, *MD* = -.23, *SE* =.07, *p* = .022. Pairwise comparisons between GPA groups did not show any other statistically significant differences at .05 alpha level.

4.3.2.5 Perceived Preparedness Level Regarding Desire to Become a Teacher

This independent variable had three levels: Preservice teachers who wanted to become teachers (*M* = 5.06, *SD* = .51), preservice teachers who were undecided about becoming a teacher (*M* = 4.90, *SD* = .50), and the ones who did not want to become teachers (*M* = 4.86, *SD* = .58). Results of descriptive statistics are given in Table 4.13 below.

Table 4.13

Descriptive Statistics for Desire to Become a Teacher Variable (N = 232)

	N	*M*	*SD*	*Min.*	*Max.*
Yes	187	5.06	.51	2.16	5.98
Undecided	33	4.90	.50	3.73	5.70
No	12	4.86	.58	4.00	5.75

One-Way ANOVA was run to see whether preservice teachers' willingness to become a teacher had an impact on their perceived preparedness levels to teach. Mean square between groups was .56, and within groups it was .26. The results did not show any significant difference among three groups; therefore, preservice teachers' desire to become a teacher did not change their preparedness levels, *F* (2, 229) = 2.10, *p* > .05. Effect size was not calculated since the result was not significant (Table 4.14).

Table 4.14

One-Way ANOVA Results for Desire to Become a Teacher Variable

Source	*SS*	*df*	*MS*	*F*	*Sig.*
Between Groups	1.128	2	.56	2.10	.12
Within Groups	61.394	229	.26		
Total	62.522	231			

4.3.2.6 Perceived Preparedness Level Regarding Desire to Continue Graduate Education

This variable is about preservice teachers' preferences on continuing graduate education in educational sciences field. Independent variable had three levels: Preservice teachers who wanted to continue graduate education (M = 5.12, SD =.43), preservice teachers that were undecided about graduate education (M = 4.99 SD = .51), and the ones that did not want to continue graduate education in educational sciences field (M = 4.99, SD = .58). Minimum mean values were from 2.16 to 3.48, and maximum mean values ranged from 5.86 to 5.98. Results of descriptive statistics are given below in Table 4.15.

Table 4.15

Descriptive Statistics for Desire to Continue Graduate Education (N = 232)

	N	*M*	*SD*	*Min.*	*Max.*
Yes	65	5.12	.43	3.48	5.86
Undecided	94	4.99	.51	2.16	5.89
No	73	4.99	.58	2.91	5.98

One-Way ANOVA was run to examine the effect of willingness to continue graduate education in educational sciences field. Mean square between groups was .36 and it was .27 within groups. The result did not show significant differences among groups. Therefore, willingness to continue graduate education did not have effect on preservice teachers' preparedness levels to teach, F (2, 229) = 1.36, p > .05. Eta squared was not calculated since the result was not significant (Table 4.16).

Table 4.16

One-Way ANOVA Results for Desire to Continue Graduate Education

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	.737	2	.36	1.36	.25
Within Groups	61.785	229	.27		
Total	62.522	231			

4.4 Summary of the Results

This study aimed to investigate senior preservice teachers' perceived preparedness levels to teach on instructional planning and creating learning environments. Preparedness level was tried to see by means of a researcher-developed questionnaire (Preparedness to Teach Questionnaire) which was based on MoNE's updated General Teacher Competencies.

There were two main focuses in the study. The first research question searched perceived preparedness levels of preservice teachers on two sub-competencies of professional skills of teaching. Descriptive statistics in SPSS 23 Metu Version were used to investigate preparedness levels of preservice teachers. The results indicated that senior preservice teachers perceived themselves 'completely prepared' (M = 5.03, SD = .52) for the teaching profession based on the competencies of instructional planning and creating learning environments. Preparedness levels were also examined in terms of dimensions of the questionnaire. According to the results, preservice teachers perceived themselves 'completely prepared' in five dimensions, and 'prepared' in three dimensions of the questionnaire.

The second research question investigated whether preservice teachers' preparedness levels differ according to some variables such as gender, high school type, department, GPA, desire to become a teacher, and desire to continue graduate education. To search gender variable, independent samples t-test was conducted, and significant differences were found between female and male preservice teachers.

Effect size was calculated to see how much of the variation was caused by gender. Eta squared was .02 which was a small effect.

As regard to other variables, One-Way ANOVA was conducted. The result for high school variable showed significant difference among high school types. Eta squared was found .06, which was a moderate effect size. Post hoc tests were run to see which high school types had significant differences from each other. Pairwise comparisons showed that Anatolian high school and vocational and technical high school differed in preservice teachers' preparedness levels to teach. Other pairs of high schools did not have any significant differences between one another.

For department variable, preservice teachers' departments were not found to have effect on their preparedness levels. As there was no significant effect, effect size was not calculated. Another independent variable was GPA, and it was found significant; thus, it had effect on perceived preparedness levels of preservice teachers. A moderate effect size was found with .06 value, that is, 6% of variance can be explained by GPA. Post hoc test results presented that there were significant mean differences between GPA level of '2.51 – 3.00' and level of '3.01-3.50' at the .05 alpha level. Other pairwise comparisons did not show any significant differences. Desire to become a teacher was the other sub-question. It was found nonsignificant. The last sub-question was related to the variable of willingness to continue graduate education in educational sciences field. One-Way ANOVA results showed that there were not significant differences in perceived preparedness levels according to their preferences on continuing graduate education, either.

To conclude, senior preservice teachers perceived themselves 'completely prepared' to teaching profession, as an answer to the first research question. For the second research question, the independent variables that were found significant were gender, high school type and GPA. However, department, desire to become a teacher and desire to continue graduate education in educational sciences field were found nonsignificant in preservice teachers' preparedness levels to teach.

CHAPTER 5

DISCUSSION

This chapter aims to present a critical examination of the findings in the study together with the previous research on the same topic. Firstly, the results of the study are provided through the similarities and differences with former research in literature. After that, implications for practice in teacher education are given according to the results. The chapter closes with suggestions for further research in perceived preparedness levels of preservice teachers.

5.1 Summary of the Study

The focus of the study was perceived preparedness levels of senior preservice teachers in instructional planning and creating learning environments. However, this was not the ultimate purpose of the study. With determining perceived preparedness levels of preservice teachers who continue studying with the previous teacher education programs, it was ultimately aimed to investigate whether the previous teacher education programs could succeed in acquiring the updated version of General Teacher Competencies (GTC) which were published by MoNE in 2017 to preservice teachers. In line with the updated GTC, new teacher education programs were also introduced to be implemented starting with upcoming preservice teachers in the 2018-2019 academic year. The existing students continued their education with the previous teacher education programs with which they had begun their initial teacher training.

To this end, the following steps were taken: The starting point was the competency of professional skills in 2017 version GTC. Two sub-competencies which were

instructional planning and creating learning environments were taken as the basis and 11 performance criteria under these sub-competencies were examined in detail.

These two sub-dimensions were chosen since they are related to the field of curriculum and instruction which makes them crucial to investigate. As they are expressed in general terms, they were split into more specific statements by means of benefiting from the related literature, so every original criterion was turned into more than one item through which only one special point is measured. After the necessary analyses were done, a researcher-developed instrument emerged which was named 'Preparedness to Teach Questionnaire (PTQ). All senior preservice teachers at a state university in Northwest Turkey were included and perceived preparedness levels to instructional planning and creating learning environments were found. There were also other dimensions of the study which were to investigate whether there were differences in preparedness levels regarding variables of gender, department, high school, GPA, desire to be a teacher and desire to continue graduate education in educational sciences. These were investigated to provide necessary recommendations if there were any differences in terms of these variables. The results may enlighten teacher education about preparedness levels of preservice teachers.

5.2 Conclusion of the Results

Conclusions of the study are presented below along with similar and different findings of related research from literature which can provide a better understanding and a wider perspective to the topic.

5.2.1 Perceived Preparedness Level of Preservice Teachers

The first research question was as follows: 'What are preservice teachers' perceived preparedness levels in instructional planning and creating learning environments at a state university in Northwest Turkey?' Descriptive statistics showed that preservice teachers perceived themselves 'completely prepared' to teach in instructional

planning and creating learning environments. In this sense, it can be said that senior preservice teachers who studied with the former teacher education programs perceived themselves prepared enough for the teaching profession; thus, former programs were adequate in acquiring General Teacher Competencies (GTC) to preservice teachers in the mentioned areas. Based on these findings, it can be concluded that preservice teachers can cope with the changes and challenges of the period with the former programs in terms of these areas. This result is important in another aspect, as well. As stated by Kunter et al (2013), high competency or preparedness levels of teachers have a positive effect on student achievement, motivation, and instructional quality.

When the literature is examined, similar findings can be seen which makes the current study compatible with the related literature (Alpaydın et al., 2018; Ataş-Akdemir, 2019; Ayan & Budak, 2012; Göçer, 2008; Hudson et al., 2016; Köksal, 2013; Yenen & Kılınç, 2018).

Similar to this study, a study investigated preservice teachers' competency levels based on 2017 version of GTC (Yenen & Kılınç; 2018). The results indicated that preservice teachers perceived themselves as 'highly competent' in professional knowledge, 'competent' in professional skills, attitudes and values. Since the bases of this study were instructional planning and creating learning environments, the findings of professional skills can be compared to this study. Their finding which was 'competent' can be assumed as similar to the result of the current study with 'highly prepared' preservice teachers on the abovementioned areas. That study (Yenen & Kılınç; 2018) was also important for this research as they studied the updated version of GTC which makes two studies very alike to each other. There was one more study that benefited from the 2017 version of GTC. Likewise, Alpaydın et al. (2018) examined to what extent teacher education programs could give GTC that can be reflected in the actual teaching practice. The findings indicated that the level of programs' success in this respect was 'satisfactory' showing the results are consistent to one another. In other words, the studies in this paragraph can be

assumed as parallel to the current study in applying the updated version of GTC in their research.

As being a crucial topic that effects not only teachers, but also their students and all educational process; teacher competency is a 'must' that should be assured by initial teacher education programs at first, then by in-service training. Therefore, seeing that preservice teachers were 'highly prepared' in instructional planning and creating learning environments gives positive implications. Accordingly, in a study which examined future teachers' GTC levels based on 2006 version GTC and their professional attitudes, Köksal (2013) found that senior preservice teachers had high levels of GTC which supports the current study. Additionally, Göçer (2008) studied preparedness levels of senior preservice teachers in terms of content knowledge, communication skills, classroom management, instructional planning and evaluation together with their love of profession and humanity in Turkish language teaching. He found that preservice teachers perceived themselves 'prepared' in these areas. Ayan and Budak (2012) examined the consistency between teacher education programs and GTC by using a mixed method. The findings were compatible with this study; senior classroom preservice teachers thought that the levels of teacher education programs were 'high' and 'very high' in acquiring GTC to preservice teachers. Furthermore, Ataş-Akdemir (2019) investigated preservice teachers' preparedness to teach and found that their levels of preparedness were 'sufficient' in the whole scale. Accordingly, this study found similar findings showing that preservice teachers see themselves prepared enough for the profession. It can be inferred, then, that preservice teachers can acquire the updated version of GTC as there are other studies that investigated the new version and found compatible results with this study.

The findings of the current study show that teacher education programs could achieve the updated GTC, and the abovementioned studies reveal that they were also efficient in giving old version of GTC. Another study that is consistent with this research inspected competency levels according to a nation-wide criterion like Turkey's GTC. Hudson et al (2016) based their research on the Australian

Professional Standards for Teachers (APST) and asked senior preservice teachers to think the period after their graduation and answer how confident they felt themselves about the performance criteria in APST in their teaching process as a teacher. Almost all participants (95%) felt confident in the areas of knowledge on student learning, instructional planning based on the curriculum, using effective communication skills in teaching, and benefiting from headteacher's feedbacks for their own professional development. One fourth of participants, on the other hand, felt less confident in using the required skills to teach disabled students and knowing how to approach disadvantaged students. Among the dimensions of the current study, consciousness of students' differences in interests and needs and awareness of students' individual differences in planning can be considered similar topics with less confidence. However, preservice teachers were found 'prepared' in these dimensions in our research which is inconsistent to their findings. Nonetheless, the researchers explained that preservice teachers had not had enough field experience and this could be the reason of their less confidence.

The Preparedness to Teach Questionnaire (PTQ) which was prepared by the researcher for this study has eight dimensions. When preparedness levels were checked according to the dimensions, senior preservice teachers were found 'completely prepared' in five dimensions which were (1) acting on curriculum and learning outcomes, (2) being aware of physical conditions in planning, (3) considering physical conditions in organizing learning, (4) improving students' high-level cognitive skills, and (5) creating democratic learning environments. They were 'prepared' in three dimensions, and these were (1) considering national and moral values, (2) consciousness of students' differences in interests and needs, and (3) awareness of students' individual differences in planning. The fact that preservice teachers felt themselves 'prepared' or 'completely prepared' can be seen in Özer and Gelen's study (2008) in which preservice and in-service teachers were examined in terms of their GTC levels and preservice teachers were found to have higher levels of competency than in-service teachers. The reason was explained by the authors as being the actual experience of in-service teachers. As they had been teaching for a

while in classrooms, they could see the challenges and difficulties of the profession and could analyse these competencies in a wider perspective than preservice teachers with only limited field experience (Özer & Gelen, 2008). Therefore, the reason of their feeling 'prepared' or 'completely prepared' can lie in their not having enough experience in real teaching settings. Thus, preservice teachers seem to overvalue their preparedness levels; in this respect, suggestions are given to increase their level of preparedness in this chapter even though the results show high preparedness level. In other words, as it has been seen in literature that preservice teachers may overestimate their preparedness, suggestions are provided in the following parts.

After checking the results of the scale dimensions, it is wise to examine the related research which investigated preservice teachers' preparedness levels in instructional planning as it is one of the bases of the current study. Studies with both preservice and in-service teachers had consistent results with this study (Gülbahar, 2017; Süral, 2019). Gülbahar (2017) studied GTC levels of primary school teachers and the result was that teachers were found 'highly competent' in instructional planning. Süral (2019) investigated preservice teachers' competency levels in lesson planning. Two dimensions of the scale were theoretical competency and practical competency. Preservice teachers perceived themselves 'strongly competent' in theoretical competency and 'competent' in practical competency. Nevertheless, there are also inconsistent results to this study in instructional planning: Aşiroğlu and Koç-Akran (2018) searched competency levels of preservice teachers in preparing lesson plans. They found that preservice teachers had average competency levels in preparing instructional plans. They also examined the dimensions of the scale; competency level of preservice teachers was *high* in the organization of learning environments, *average* in writing objectives and organizing content, and *low* in organizing measurement and evaluation activities. In another study that examined the other basis of the current research, which is creating learning environments, competency levels of preservice teachers on teaching and learning process were investigated (Yavuz-Konokman and Yanpar-Yelken; 2013). The results showed that preservice teachers perceived themselves 'highly competent' as a whole and in all dimensions.

To this point, the results of the first research question and the related research with which the current study is compatible have been given mostly. If a study had both consistent and inconsistent results, they were also shared in the previous paragraphs. Yet, there are also studies in the literature that had opposite results. They are shared in the following paragraphs.

As teacher competency and preparedness to teach are very essential topics, they are searched a lot in both national and international literature. The literature that are discussed in this paper show that preservice teachers were generally found 'competent', or 'prepared'; however, some studies showed conflicting results (Atik-Kara & Sağlam, 2014; Gürkan, 2019; Güven-Yıldırım & Köklükaya, 2017; Kubat, 2015; Mehmetlioğlu & Haser, 2013; Panev & Barakoska, 2015; TED, 2009).

The research of Panev and Barakoska (2015) which examined the effectiveness of initial teacher education programs in achieving competencies has inconsistent results with this study. They studied with primary school English teachers in Macedonia. The results showed the inadequacy of initial teacher education in achieving teacher competencies to preservice teachers. Teachers were less prepared in the competencies about assessment and evaluation, monitoring students, instructional planning and using new methods (Panev & Barakoska, 2015). Mehmetlioğlu and Haser (2013) investigated preparedness levels of preservice mathematics teachers. According to the findings, preservice teachers had average levels of preparedness; having neither high nor low levels whereas the current study found high levels of preparedness. Moreover, Atik-Kara and Sağlam (2014) conducted a case study with preservice teachers and lecturers. Preservice teachers were found to have nearly half of the performance criteria about teaching and learning process in 2006 version GTC. Additionally, preservice teachers had low competency levels in considering students' features, their social and cultural backgrounds in planning, organizing and implementing the teaching process. The result of another study (Kubat, 2015) showed that preservice teachers had low levels of competency in choosing appropriate learning experiences for particular situations, nor did they have much

knowledge on teaching methods. Accordingly, Gürkan (2019) studied cognitive structures of classroom teachers about curriculum, instruction, instructional planning, and evaluation. Preservice teachers were found not to have enough cognitive connections about the concepts. In a study in which preparedness levels of science preservice teachers were investigated, Güven-Yıldırım and Köklükaya (2017) found that preservice teachers had low levels of competency. The last study that is not compatible with the current research is a comprehensive study that was conducted with a sample from all over the country (TED, 2009). The study was based on the former version of GTC and all stakeholders were included. The results showed that primary school teachers did not have competencies in an expected level.

5.2.2 Perceived Preparedness Level of Preservice Teachers Regarding Variables

The second research question investigated whether there were significant differences in perceived competency levels of preservice teachers in instructional planning and creating learning environments regarding the variables of gender, high school type, department, GPA, desire to become a teacher and desire to continue graduate education in educational sciences. The results are given in the following part together with the related studies.

As for gender variable, the issue of whether there are significant differences between male and female preservice teachers were checked and a statistically significant result was found in favour of females. It can be concluded that gender had an effect on competency and preparedness levels of preservice teachers. In a study which showed that females had higher competency and efficacy levels than males, Bandura (2002) explains the reason of this result as cultural differences. Moreover, for Köksal (2013), it may be the conclusion of Turkish culture that sees teaching as a profession for women. The reason of significant differences in favour of females in this study, then, can be their predisposition to teaching profession. However, the effect size was found to be small. Therefore, it can also be concluded that perceived preparedness levels are nearly similar in both groups as female preservice teachers have slightly

higher preparedness levels than males. In this case, the reason may still remain as female preservice teachers' aptness to the profession.

When the literature is examined, there are studies which have consistent results about gender (Köksal, 2013; Özdemir, 2008; Yeşilyurt, 2011). Yeşilyurt (2011) investigated competency levels of preservice teachers in terms of three dimensions of GTC and found that female preservice teachers had significantly higher competency levels. In the study, the reason was suggested by the author as sensuality of female preservice teachers. Similarly, in the study where competency levels of classroom preservice teachers in teaching and learning process were examined (Özdemir, 2008), female preservice teachers were found to have significantly higher competency levels. Lastly, Köksal (2013) found the same result as for gender in the study where she investigated GTC of prospective teachers. As a conclusion of all these studies together with the current study, it can be considered that gender has an effect on competency and preparedness levels in favour of females.

Despite all the aforementioned findings; there are studies that found no significant differences between male and female preservice teachers which must also be kept in mind. According to the studies in question, there are not any statistically significant differences in competency or preparedness levels regarding gender (Ataş-Akdemir, 2019; Eyüp, 2012; Gülbahar, 2017; Karakaya et al, 2019; Mehmetlioğlu & Haser; 2013; Yavuz-Konokman & Yanpar-Yelken, 2013). As there are remarkable number of studies in both parts that show gender variable is significant and not significant, this issue needs to be further examined in order to reach a better understanding.

When it comes to the variable of high school type, one-way ANOVA test result showed that there were significant differences among high school types where preservice teachers had graduated. However, post hoc comparisons indicated only one difference that was between Anatolian High School and Vocational and Technical High School. The fact that there is only one difference among seven types of high schools which were compared must be taken into account. Thus, it can be

considered that there were no significant differences if this one difference was ignored as it only covers one comparison out of 20 pairwise comparisons. Previous studies did not find statistically significant differences among high school types, either. In the studies where preparedness or competency levels of preservice teachers were investigated, it was found that high school did not have an effect on competency or preparedness levels of preservice teachers (Köksal, 2013; Mehmetlioğlu & Haser, 2013; Özdemir, 2008). In one of these studies, the author explained the reason of this as follows: Preservice teachers have similar expectations about their field of education and they study the same teacher education programs throughout their initial teacher education; thus, high school type does not have an effect on them (Özdemir, 2008).

In terms of department variable, the results showed that preparedness levels do not differ regarding department; thus, there were no significant differences among departments. This result may conclude from the bases of the current study which depend on professional skills and those skills do not differ regarding departments. That is to say, all departments at the faculty of education study the same professional skill courses which makes these findings very natural. Thus, indication of no differences among six departments in the study is not a surprising result. Although literature shows significant differences among departments in preparedness levels (Ataş-Akdemir, 2019; Karakaya et al, 2019), the inconsistency between the current study and those studies may result from searching different dimensions of teacher competencies. They investigated preparedness levels of preservice teachers as a whole in all areas; whereas, this study examines preparedness in only instructional planning and creating learning environments. Preparedness can change regarding departments when professional knowledge, professional skills and attitudes and values are considered. Yet, when examining only professional skills may not create such a difference among departments.

As for GPA variable, preparedness levels of preservice teachers differ significantly in terms of GPA. When post hoc test was examined, preparedness levels of

preservice teachers with GPA level of 2.51 - 3.00 and level of 3.01 – 3.50 were significantly different from each other. There were five GPA groups in this variable and no differences were found in pairwise comparisons other than that. If other pairwise comparisons -except for that particular one- are used as a base, similar research results can be shown in this respect. Karakaya et al. (2019) studied preparedness levels and Köksal (2013) studied competency levels of preservice teachers. In both studies, no significant differences were found in terms of GPA variable in competency or preparedness levels.

Regarding the variable of desire to become a teacher, there were no statistically significant differences in preparedness levels. The last variable which was 'desire to continue graduate education in educational sciences' also had the same result, showing no difference. In literature, no other research which investigated these variables was found; thus, there are no results that can be compared to the findings of the current study. The reason for the involvement of these variables in this study was to find out if the interest in teaching profession had an impact on the preparedness levels of preservice teachers. Moreover, as stated by Özdemir (2008), when people work in their job willingly and they have a love for their profession, their success and performance are affected positively. However, the current study did not show such a result. Therefore, it can be concluded that preparedness levels of preservice teachers in instructional planning and creating learning environments are not affected by their desire to become teachers or to continue graduate education in educational sciences.

5.3 Implications for Practice

In this part, suggestions for initial teacher education are given according to the results of the study. However, it should not be forgotten that this study was conducted with preservice teachers who still studied with the previous teacher education programs; by examining the consistency between those programs and the updated General Teacher Competencies (GTC). Therefore, these suggestions are

given to the previous teacher education programs which will be used for two more years until the graduation of preservice teachers who started with those programs, yet must have the updated GTC in their profession. Although preservice teachers' perceptions were found to be 'completely prepared' in the study, they may overvalue their preparedness levels in teaching profession since they have not had enough field experience in real education settings. Thus, suggestions are provided in this part to increase their preparedness levels. Accordingly, the implications can be used to improve their initial teacher education programs.

Results show that senior preservice teachers perceived themselves as 'highly prepared' in the whole scale. Nevertheless, the scale was about two dimensions of professional skills which can better be understood by practicing. In the former programs, preservice teachers had one field experience course in the last semester; whereas, in the updated programs, there are two field experience courses one of which starts in the 7th semester and the other is in the last semester (YÖK, n.d.). At the time of data collection process, participants were still having their field experience course but when it is thought that hours of field experience course are not enough in the previous teacher education programs, it can be considered that preservice teachers had not had enough teaching practice, so they may not have had the correct perceptions about their professional skills as they did not face the real teaching period in a required level. As stated by Özer and Gelen (2008), perceived competency levels of in-service teachers can be lower than preservice teachers as in-service teachers see the challenges of the profession and can have a broader perspective about what they can do in the classroom and they work in the actual classroom settings full time. In this respect, it can be practical for those preservice teachers to be offered more field experience courses. In the updated programs, school experience course which was given one semester before field experience course has been discarded and the course 'Field Experience I' has been added instead of it (YÖK, n.d.). For the upcoming two years, it is recommended that there should be the same practice for senior preservice teachers who will continue with the former programs. This means that they can have *Field Experience I* in the 7th semester and

Field Experience II in the 8th semester. In this way, they can have more opportunity to comprehend and practice teaching in real classroom settings.

Moreover, as it is teacher education programs' responsibility to acquire teacher competencies to preservice teachers, courses related to professional skills should be designed according to GTC. Yet, they already have a program, for this reason, it is suggested that the objectives of the previous program should be checked in terms of the updated GTC and, extra instructional plans should be added for the competencies which cannot be gained to preservice teachers through those programs.

Furthermore, preservice teachers were found 'highly prepared' in five dimensions of the scale but they were found 'prepared' in three dimensions which were (1) considering national and moral values, (2) consciousness of students' differences in interests and needs, and (3) awareness of students' individual differences in planning. Although they were not 'unprepared', some precautions can be taken to increase preservice teachers' preparedness levels in these areas. For 'considering national and moral values' dimension, workshops can be arranged. The other two dimensions are related to comprehension of students' individual differences which is very essential for constructivism. As stated by Kubat (2015), it is better to choose methods and strategies in which students can learn in their own speed rather than providing them a massive teaching process. Thus, it is necessary for preservice teachers to comprehend this well. In this sense, extra instructional plans should be designed for preservice teachers to make them better understand student differences.

5.4 Implications for Further Research

The current study searched preparedness levels of preservice teachers at a state university in Northwest Turkey, ultimately aiming to check the consistency between the former teacher education programs and the updated GTC. The purpose was to suggest solutions if there was inconsistency. Research findings provide implications for the institution studied. Preservice teachers were found 'highly prepared' to teach,

yet, there are still topics to further examine in preparedness to teach, teacher competencies and teacher education. This part provides suggestions for further study.

As previous teacher education programs will continue for two more years, the Preparedness to Teach Questionnaire (PTQ) which has been validated in this study can be conducted to preservice teachers who will continue with those programs at different universities in order to see if the results are consistent. It would be interesting to learn how effective other state and private universities with teacher education programs prepare their students for teaching profession. It will also be good to determine perceived preparedness levels in different educational settings with different participants and to have a more comprehensive picture about the consistency between former programs and GTC. It can be beneficial to see their levels and offer solutions if any inconsistency is found.

Moreover, PTQ can be applied to similar groups of preservice teachers after their graduation when they become novice teachers. Their perceptions about preparedness levels to teach can change when they encounter their own students in real classroom settings. It can be important to see if they perceive that they have low or average competency levels as necessary cautions can be taken and the shortcomings of novice teachers can be decreased in this way.

Furthermore, the new teacher education programs which were started to be used with the upcoming students in the 2018-2019 academic year can be investigated when the first preservice teachers graduate with these programs to see its effectiveness in gaining GTC to preservice teachers. To this end, it is suggested that future studies highlight the effectiveness of new teacher education programs by benefiting from 2017 version of GTC, or, any main competency can be used as the basis of the study. Similarly, PTQ can be used to see their preparedness levels in the areas of instructional planning and creating learning environments.

Another point to state is that 2017 version of GTC has three main competencies (professional knowledge, professional skills, attitudes and values) and 11 sub-dimensions, yet, this study only covers 2 sub-dimensions under professional skills which are instructional planning and creating learning environments as they were investigated in detail by generating a researcher-developed questionnaire based on GTC. Therefore, further research can be conducted in the other main competencies, in order to see competency levels of preservice teachers in those areas, as well. Additionally, research can examine all three main competencies in one study by using the original performance criteria in MoNE's GTC. This can give a general understanding of teacher competencies.

In this respect, another study can be conducted to in-service teachers who are already in the teaching profession for more than ten years to see whether an in-service training is necessary for them. As teacher competencies are updated according to the social changes, technological developments and needs of the society, it is possible that in-service teachers may not have some of the updated GTC. Research can be a good way to understand this.

Review of the literature showed that preservice teachers can be found to have different competency or preparedness levels when they are examined through quantitative and qualitative means (Ayan & Budak; 2012). Preservice teachers may consider their own competency levels differently as they have not had teaching practice in an expected level. For this reason, a comprehensive mixed method study can be conducted to determine preservice teachers' preparedness levels more accurately. In the quantitative part, survey method can be applied, and preservice teachers can reflect their perceptions about their competencies. In the qualitative part, observations can be done during their field experience; their assignments regarding instructional planning and creating learning environments can be investigated; or opinions of teacher educators can be asked about preservice teachers; semi-structured interviews can be conducted, as well. Subsequently, the findings of both parts can be compared, and competency levels can be determined.

REFERENCES

Adoniou, M., & Gallagher, M. (2017). Professional standards for teachers—What are they good for? *Oxford Review of Education, 43*(1), 109-126.

Al-Bataineh, A. (2009). An examination of pre-service teacher preparedness: A cooperation teacher perspective. *The International Journal of Learning, 16*(5), 231-250.

Alpaydın, Y., Kocabaş, C., Dervişoğulları, M., & Çakır, S. (2019). Öğretmenlik eğitiminde kazandırılan yeterliklerin öğretmenlik mesleği ile uyumu: Öğretmen görüşlerine dayalı bir karma araştırma. *Eğitim Bilimleri Dergisi, 49*, 17–49.

Ataş-Akdemir, Ö. (2019). Student teachers' preparedness to teach: The case of Turkey. *International Education Studies, 12*(3), 90-96.

Aşiroğlu, S., & Koç Akran, S. (2018). Öğretmen adaylarının ders planlarının ve öğretim uygulamalarının incelenmesi. *E-Kafkas Eğitim Araştırmaları Dergisi, 5*(3), 1-13.

Atik Kara, D., & Sağlam, M. (2014). Öğretmenlik meslek bilgisi derslerinin öğrenme-öğretme sürecine yönelik yeterliklerinin kazandırılması yönünden değerlendirilmesi. *Eğitimde Nitel Araştırmalar Dergisi – Journal of Qualitative Research in Education, 2*(3), 28-86.

Ayan, M., & Budak, Y. (2012). Eğitim fakültelerinin sınıf öğretmenliği programlarının öğretmenlik mesleği genel yeterliklerini kazandırma düzeyi. *Akdeniz Eğitim Araştırmaları Dergisi, 12,* 1-16.

Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology: An International Review, 51*(2), 269–290.

Bangır-Alpan, G., & Koç-Erdamar, G. (2019). Professional knowledge courses in teacher education: Lecturer and student views (The case of Gazi Education Faculty). *International Journal of Progressive Education, 15*(2), 140-157.

Barnes, J., Cote, J., Cudeck, R., & Malthouse, E. (2001). Factor analysis—checking assumptions of normality before conducting factor analysis. *Journal of Consumer Psychology, 10*(1,2), 79–81.

Barnett, R. (1994). *The limits of competence: Knowledge, higher education and society.* Buckingham, UK: Open University Press.

Başaran, İ. E. (1998). *Eğitim psikolojisi*. Ankara: Aydan Web Tesisleri.

Best, J. W., & Kahn, J. V. (2006). *Research in education.* (10th ed.) Pearson / Allyn and Bacon.

Black, M. W. (2003). *A study of first-year teachers and their principals: Perceptions of readiness among participants from traditional and non-traditional teacher preparation programs*. (Unpublished doctoral dissertation). Fayetteville State University, Fayetteville.

Blunch, N. J. (2008). *Introduction to structural equation modelling using SPSS and AMOS*. London: Sage.

Büyüköztürk, Ş. Çokluk, Ö., & Köklü, N. (2018). *Sosyal bilimler için istatistik*. (20th ed.) Ankara: Pegem Akademi.

Caena, F. (2014). Teacher competence frameworks in Europe: Policy-as-discourse and policy-as-practice. *European Journal of Education, 49*(3), 311-332.

Caillier, S. L. & Riordan, R. C. (2009). Teacher education for the schools we need. *Journal of Teacher Education, 60*(5), 489-496.

Çakıroğlu, E., & Çakıroğlu, J. (2003). Reflections on teacher education in Turkey. *European Journal of Teacher Education, 26*(2), 253-264.

Chung, H., & Kim, H (2010). Implementing professional standards in teacher preparation programs in the United States: Preservice teachers' understanding of teaching standards. *KEDI Journal of Educational Policy, 7*(2), 355-377.

Cohen, L., Manion, L. & Morrison, K. (2007). *Research Methods in Education*. (6th edition). Routledge, London.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology, 78*(1), 98-104.

Costello, Anna B., & Jason Osborne (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, *10*(7), 1-9.

Creswell, W. J. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research.* (4th edition). Pearson.

Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education, 51*(93), 166-173.

Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher education: How well do different pathways prepare teachers to teach? *Journal of Teacher Education, 53*(4), 286-302.

Darling-Hammond, L. (2006). Constructing 21st century teacher education. *Journal of Teacher Education, 57*(3), 300-314.

Darling-Hammond, L., & Bartz-Snowden, J. (2007). A good teacher in every classroom: Preparing the highly qualified teachers our children deserve. *Educational Horizons, 85*(2), 111-132.

Demirel, Ö. (2015). *Öğretim ilke ve yöntemleri, öğretme sanatı.* Ankara, Pegem Yayınevi.

DfE (Department for Education). (2011). Teacher' standards: Guidance for school leaders, school staff and governing bodies. *Department of Education and Skills*, 1-15.

Doğutaş, A. (2016). Teacher candidates' perceptions of standards in an education program at a university in Turkey. *Eurasian Journal of Educational Research, 63*, 1-20.

Douse, M., & Uys P. (2018). Educational planning in the age of digitization. *Educational Planning, 25*(2), 7-23.

Eyüp, B. (2012). Türkçe öğretmen adaylarının öğretmenlik mesleğinin genel yeterliklerine sahip olma durumları üzerine bir inceleme. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi, 25*(1), 233-247.

European Commission (2010). Education and culture lifelong learning: Education and training policies school education and higher education.

Eurydice (2002). *Key competencies: A developing concept in general compulsory education.* Brussels: Eurydice/European Commission.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage.

Fraenkel, R. J., Wallen, E. N., & Hyun, H. H. (2015). *How to design and evaluate research in education.* (9th ed.). McGraw Hill Education.

Göçer, A. (2008). Eğitim fakültesi öğrencilerinin Türkçe öğretimi bakımından öğretmenlik mesleğine hazır bulunuşluk düzeyleri (Niğde Üniversitesi örneği). *Çağdaş Eğitim Dergisi, 33*(358), 5-13.

Goepel, J. (2012). Upholding public trust: An examination of teacher professionalism and the use of teachers' standards in England. *Teacher Development*, *16*(4), 489-505.

Gökçe, E (2015). The development of a scale to determine general competency for primary school teachers in Turkey: A validity and reliability study. *Anthropologist*, *20*(1,2), 360-368.

Gorsuch, R. L. (1983). *Factor Analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.

Gravetter, F., & Wallnau, L. (2016). *Statistics for the behavioral sciences.* (10th ed). Wadsworth: Cengage Learning.

Gülbahar, B. (2017). Investigation into Turkish primary school teachers' perception of proficiency towards instruction planning in relation to various variables. *The Journal of Academic Social Sciences*, *43*, 315–328.

Gürkan, B. (2019). Sınıf öğretmeni adaylarının "eğitim programı, öğretim, öğretimi planlama ve öğretimi değerlendirme" kavramlarına ilişkin bilişsel yapıları. *Kastamonu Eğitim Dergisi, 27*(2), 633-645.

Güven-Yıldırım, E., & Köklükaya, A. N. (2017). Öğretmenlik mesleğine yönelik hazırbulunuşluk ölçeğinin geliştirilmesi ve fen bilgisi öğretmen adaylarının hazırbulunuşluk düzeylerinin belirlenmesi. *The Journal of Academic Social Science Studies, 56,* 67-82.

Iucu, R., & Schratz, M. (2013). European doctorate in teacher education. *E-Learning & Software for Education, 1*, 15-22.

Hair, J. F., & Anderson, R. E., Tatham, R. L. & Black, W. C. (2010). *Multivariate data analysis* (7th ed.). Prentice Hall, Inc.

Housego, B. E. J. (1990). Student teachers' feelings of preparedness to teach. *Canadian Journal of Education, 15*(1), 37-56.

Housego (1992). Monitoring student teachers' feelings of preparedness to teach and teacher efficacy in a new elementary teacher education program. *Journal of Education for Teaching, 18*(3), 259-272.

Hudson, S. M., Hudson, P., Weatherby-Fell, N. L., & Shipway, B. (2016). Graduate standards for teachers: Final-year preservice teachers potentially identify the gaps. *Australian Journal of Teacher Education, 41*(9), 134-151.

Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. London: Sage.

Karaca, E. (2006). Öğretimde planlama uygulama ve değerlendirme yeterliklerine yönelik bir algı ölçeği. *Eğitim Araştırmaları, 6*(25), 119-128.

Karakaya, F., Uzel, F., Gül, A., & Yılmaz, M. (2019). Öğretmen adaylarının öğretmenliğe hazır olma düzeyleri. *Gazi Üniversitesi Eğitim Fakültesi Dergisi, 39*(1), 373-396.

Kline, R. B. (2015). *Principles and practice of structural equation modelling* (4th ed.). The Guilford Press.

Köksal, N. (2013). Competencies in teacher education: Preservice teachers' perceptions about competencies and their attitudes. *Educational Research and Reviews, 8*(6), 270–276.

Köksal, N., & Convery, A. (2013). Initial teacher education in Turkey and England: Comparing competencies and standards. *Journal of Education and Future, 3*, 1–20.

Kubat, U. (2015). Fen bilgisi öğretmen adaylarının öğretme ve öğrenme sürecine yönelik yeterlikleri. *Turkish Studies-International Periodical for the Languages, Literature and History of Turkish or Turkic, 10*(15), 601-614.

Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology, 105*(3), 805–820.

Manning, M., Wong, G. T. W., Fleming, C. M., & Garvis, S. (2019). Is teacher qualification associated with the quality of the early childhood education and care environment? A meta-analytic review. *Review of Educational Research, 89*(3), 370–415.

Mansfield, C. F., Beltman, S., Broadley, T., & Weatherby-Fell, N. (2016). Building resilience in teacher education: An evidenced framework. *Teaching and Teacher Education, 54*, 77-87.

MEB. (2003). Eğitim ve öğretim çalışmalarının planlı olarak yürütülmesine ilişkin yönerge. *Tebliğler dergisi, 66(2551).* Ankara: MEB Yayımlar Dairesi Başkanlığı. Retrieved from http://mevzuat.meb.gov.tr/dosyalar/284.pdf.

MEB. (2006). *TEDP Öğretmenlik Mesleği Genel Yeterlikleri.* Ankara: Milli Eğitim Bakanlığı Öğretmen Yetiştirme ve Eğitimi Genel Müdürlüğü.

MEB. (2017a). *Öğretmenlik Mesleği Genel Yeterlikleri*. Ankara: Milli Eğitim Bakanlığı Öğretmen Yetiştirme ve Geliştirme Genel Müdürlüğü.

MEB. (2017b). *Öğretmen Strateji Belgesi 2017-2023.* Ankara: Öğretmen Yetiştirme ve Geliştirme Genel Müdürlüğü.

Mehmetlioğlu, D. & Haser, Ç. (2013). İlköğretim matematik öğretmen adaylarının mesleğe hazır bulunuşlukları. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 34,* 91-102.

Moosa, V., & Shareefa, M. (2019). The impact of teachers' experience and qualification on efficacy, knowledge and implementation of differentiated instruction. *International Journal of Instruction, 12*(2), 587–604.

Numanoğlu, G., & Bayır, Ş. (2009). Bilgisayar öğretmen adaylarının öğretmenlik mesleği genel yeterliklerine ilişkin görüşleri, *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD), 10*(1),197–212.

OECD. (2005). *Teachers Matter: Attracting, Developing and Retaining Effective Teacher*. OECD Publishing, Paris. Retrieved from https://www.oecd.org/education/school/34990905.pdf.

OECD. (2019). *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris. Retrieved from https://doi.org/10.1787/1d0bc92a-en.

Özdemir, S. M. (2008). Sınıf öğretmenleri adaylarının öğretim sürecine ilişkin öz-yeterlik inançlarının çeşitli etkenler açısından incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi, 54*, 277-307.

Özer, B., & Gelen, İ. (2008). Öğretmenlik mesleği genel yeterliklerine sahip olma düzeyleri hakkında öğretmen adaylari ve öğretmenlerin görüşlerinin değerlendirilmesi. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *5*(9), 40–55.

Özer, Y., & Acar, M. (2011). Öğretmenlik mesleği genel yeterlikleri üzerine ikili karşılaştırma yöntemiyle bir ölçekleme çalışması, *40*, 89–101.

Panev, V., & Barakoska, A. (2015). The need of strengthening the pedagogical competences in teaching from the english teachers' perspective. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), 3*(1), 43–50.

Pantić, N., & Wubbels, T. (2010). Teacher competencies as a basis for teacher education - Views of Serbian teachers and teacher educators. *Teaching and Teacher Education, 26*(3), 694–703.

Petalla, M. B. & Madrigal, D. V. (2017). Teaching standards competence and efficiency performance of basic education teachers. *Journal of Institutional Research in South East Asia, 15*(3), 60-72.

Prameswari, S.J. & Budiyanto, C. (2017). The development of the effective learning environment by creating an effective teaching in the classroom. *Indonesian Journal of Informatics Education, 1*(1), 79-86.

Schratz, M. (2014). The European teacher: Transnational perspectives in teacher education policy and practice. *Center for Educational Policy Studies Journal, 4*(4), 11-27.

Senemoğlu, N. (2018). *Gelişim öğrenme ve öğretim, kuramdan uygulamaya*. (25.basım). Ankara, Anı Yayıncılık.

Senn, G.; McMurtrie, D., & Coleman, B. (2019). Collaboration in the middle: Teachers in interdisciplinary planning, *Current Issues in Middle Level Education, 24*(1), 23-26.

Şimşek, N. (2004), Yapılandırmacı öğrenme ve öğretime eleştirel bir yaklaşım. *Eğitim Bilimleri ve Uygulama, 3*(5), 115-139.

Şişman, M. (2009). Öğretmen yeterlilikleri: Modern bir söylem ve retorik. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, Özel Sayı. *10*(3), 63–82.

Stevens, J. P. (2009). *Applied multivariate statistics for the social sciences*. (5th ed.) Taylor & Francis Group, Routledge.

Süral, S. (2019). An examination of pre-service teachers' competencies in lesson planning. *Journal of Education and Training Studies, 7*(3), 1-13.

Tabachnick, B. G. & Fidell, L. S. (2012). *Using multivariate statistics*. (6th edition) Pearson.

Tanrıseven, I. (2016). Öğretimde planlama. *Öğretim İlke ve Yöntemleri*. (4. Baskı). Anı Yayıncılık, Ankara, 43-76.

Tanrıverdi, B., & Apak, Ö. (2013). Evaluating teacher education curricula in terms of facilitating teacher competencies. *Ankara University, Journal of Faculty of Educational Sciences, 46*(2), 297-318.

Taylor, I. (1997). *Developing learning in professional education.* Buckingham: Open University Press / Society for Research into Higher Education.

TNTEE (Thematic Network on Teacher Education in Europe). (2000). Green paper on teacher education in Europe, Sweden, Umea Universitet.

Tyler, R. W. (2014). *Eğitim programlarının ve öğretimin temel ilkeleri.* (Translated by Rüzgar, M. E. and Aslan, B.) Ankara: Pegem Akademi.

TRACE Project. (2005). Transparent Competences in Europe-Overview of European Competency Frameworks, 1–12.

Tsujino, K. (2015*).* An outsider's viewpoint of Germany's teacher education reform: What kind of influence was brought by teacher education standards? *Journal of the International Society for Teacher Education, 19*(1), 85-96.

Türk Eğitim Derneği (TED). (2009). *Öğretmen Yeterlikleri.* Ankara. Retrieved from http://portal.ted.org.tr/yayinlar/Ogretmen_Yeterlik_Kitap.pdf.

Venugopal-Wairagade, G. (2016). Creating a supportive learning environment for better student engagement. *Proceedings- 2016 International Conference on Learning and Teaching in Computing and Engineering, LaTiCE 2016*, 71–75. Retrieved from https://doi.org/10.1109/LaTiCE.2016.26.

Villanueva, J. E. (2018). Competencies of technical vocational teachers of the College of Education: Bases for comprehensive training program. *African Educational Research Journal, 6*(3), 203-212.

Yavuz-Konokman, G. & Yanpar-Yelken (2013). Öğretmen adaylarının öğrenme öğretme süreci alanındaki yeterliklerine ilişkin görüşleri. *Mersin Üniversitesi, Eğitim Fakültesi Dergisi, 9*(1), 175-188.

Yeigh, T., & Lynch, D. (2017). Reforming initial teacher education: A call for innovation. *Australian Journal of Teacher Education, 42*(12), 111-127.

Yenen, E. T., & Kılınç H. H. (2018). Öğretmenlerin öğretmenlik mesleği genel yeterliklerine sahip olma düzeylerinin incelenmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi, 7*(4), 2767-2787.

Westera, W. (2001). Competences in education: A confusion of tongues. *Journal of Curriculum studies*. *33*(1), 75-88.

World Bank. (2005). Learning to teach in the knowledge society. Final report. By Task Manager Juan Manuel, World Bank.

Yeşilyurt, E. (2011). Öğretmen adaylarının öğretmenlik mesleğinin genel yeterliklerine yönelik yeterlik algıları. *Türk Eğitim Bilimleri Dergisi, 9*(1), 71-100.

Yıldırım, İ., & Kalman, M. (2017). Öğretmenliğe hazır olma ölçeği'nin Türkçe formunun geçerlik ve güvenirlik çalışması. *Kastamonu Üniversitesi Kastamonu Eğitim Dergisi, 25*(6), 2311-2326.

YÖK. (1999). *Türkiye'de öğretmen eğitiminde standartlar ve akreditasyon*. Öğretmen Eğitimi Dizisi. Ankara: Yükseköğretim kurulu yayını.

YÖK. (2007). *Öğretmen yetiştirme ve eğitim fakülteleri –öğretmenin üniversitede yetiştirilmesinin değerlendirilmesi (1982-2007).* Ankara: Yükseköğretim kurulu yayını.

YÖK (n.d.). Öğretmen yetiştime lisans programları. Retrieved from https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Yeni-Ogretmen-Yetistirme-Lisans-Programlari/AA_Sunus_%20Onsoz_Uygulama_Yonergesi.pdf.

Zahorik, J. A. (1970). The effect of planning on teaching. *The Elementary School Journal*, *71*(3), 143–151.

APPENDICES

A. RANDOMLY SELECTED ITEMS BY DIMENSION

ÖĞRETMEN ADAYLARI İÇİN MESLEĞE HAZIRBULUNUŞLUK ANKETİ

Değerli öğretmen adayları,

Öğretmenlik mesleği hizmet öncesi eğitiminin, güncellenen öğretmenlik yeterliklerini ne derece karşıladığıyla ilgili bir çalışma yürütmekteyim. Bu anket eğitim öğretimi planlama ve öğrenme ortamları oluşturma bakımından öğretmenliğe ne derece hazır olduğunuzu ölçmek için hazırlanmıştır.

Elde edilen sonuçlar bilimsel bir araştırma kapsamında kullanılacaktır ve öğretmenlik mesleği derslerinin geliştirilmesine katkı sağlayacaktır. Bu nedenle, anketteki tüm sorulara içtenlikle cevap vermeniz doğru sonuçların alınması için büyük önem taşımaktadır. Verdiğiniz cevaplarda tüm kişisel bilgiler gizli tutulacak ve sadece araştırmacı tarafından değerlendirilecektir. Ankete katılımınız gönüllülük esasına dayanmaktadır ve istediğiniz anda cevaplamayı bırakabilirsiniz.

Anket yaklaşık 15 dakika sürmektedir ve toplamda iki bölümden oluşmaktadır: 1) demografik bilgiler; 2) eğitim öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik yeterlikler. Katkınız için teşekkür ederim.

Öğr. Gör. Nurdan Karaca
nurdan.karaca@metu.edu.tr
nurdan.karaca@kocaeli.edu.tr

BÖLÜM 1. DEMOGRAFİK BİLGİLER

1. Cinsiyetiniz: ( ) Kadın ( ) Erkek

4. Bölümünüz:

( ) Bilgisayar ve Öğretim Tekn. Öğr. ( ) Fen Bilgisi Öğretmenliği

( ) İngilizce Öğretmenliği ( ) Matematik Öğretmenliği

( ) Sınıf Öğretmenliği ( ) Türkçe Öğretmenliği

7. Eğitimle ilgili bir alanda yüksek lisans / doktora yapmak istiyor musunuz?

( ) Evet ( ) Kararsızım ( ) Hayır

BÖLÜM 2- EĞiTiM ÖĞRETiMi PLANLAMA VE ÖĞRENME ORTAMLARI OLUŞTURMAYA YÖNELiK YETERLiKLER

Öğretmen eğitimi programınız doğrultusunda aşağıdaki yeterliklere ne derece hazır olduğunuzu düşünüyorsunuz? Verilen ifade görüşünüzü tamamen yansıtıyorsa "Tamamen katılıyorum (6)", hiçbir şekilde hemfikir değilseniz "Kesinlikle katılmıyorum (1)" seçeneğini işaretleyiniz. Bu iki durum dışında düşüncenizi en iyi yansıtan seçeneğe X işareti koyunuz.

F1 **Madde 5.** Öğrencilerin hedef davranışları kazanabilecekleri öğretim materyallerini seçebilirim.
Madde 9. Öğrencilerime karşılaştırma, sınıflandırma, tahmin etme gibi görevlere yönlendirici öğrenme ortamları sağlayabilirim.

F2 **Madde 32.** Öğrenme sürecini planlarken tarih ve dil gibi milli değerleri dikkate alabilirim.
Madde 36. Öğrencilerin sevgi ve saygı gibi evrensel değerlere dayalı ilişkiler geliştirmelerine olanak sağlayacak öğrenme ortamı oluşturabilirim.

F3 **Madde 18.** Her bir öğrencinin öğrenmesini ayrı ayrı gözlemleyebilirim.
Madde 20. Öğrenme ortamını düzenlerken öğrencilerin farklı ön yaşantılarını dikkate alabilirim.

F4 **Madde 40.** Öğrenme sürecini okulumdaki şartları dikkate alarak planlayabilirim.
Madde 43. Planlama sürecinde çevrenin gereksinimlerini dikkate alabilirim.

F5 **Madde 46.** Öğrenme ortamının fiziksel koşullarını öğrenmeyi destekleyecek şekilde düzenleyebilirim.
Madde 47. Öğrenme ortamını oluştururken araç ve gereçlerin güvenli biçimde kullanımı için önlemler alabilirim.

F6 **Madde 15.** Öğrencilerin farklı sosyokültürel altyapılarını dikkate alarak ders planı hazırlayabilirim.
Madde 17. Ders planlarımı öğrencilerin bireysel öğrenmeyi gerçekleştirebilecekleri şekilde hazırlayabilirim.

F7 **Madde 10.** Öğrencilerin soru sormalarını destekleyici öğrenme ortamları oluşturabilirim.
Madde 12. Öğrencilerin merak ve ilgisini artırıcı sorular sorabilirim.

F8 **Madde 28.** Sınıf içi kurallarını öğrencilerle birlikte oluşturabilirim.
Madde 29. Öğrencileri derslerle ilgili konularda kara verme sürecine dahil edebilirim.

B. METU ETHICS COMMITTEE APPROVAL

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

DUMLUPINAR BULVARI 06800
ÇANKAYA ANKARA/TURKEY
T: +90 312 210 22 91
F: +90 312 210 79 59
ueam@metu.edu.tr
www.ueam.metu.edu.tr

Sayı: 28620816 / 87

20 Şubat 2019

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Doç.Dr. Hanife AKAR

Danışmanlığını yaptığınız ***Nurdan KARACA'nın*** **"Türkiye'de bir Devlet Üniversitesindeki Öğretmen Adaylarının MEB Tarafından 2017'de Yayımlanan Öğretmenlik Mesleği Genel Yeterliliklerine Dayalı Eğitim Öğretimi Planlama ve Öğrenme Ortamları Oluşturmaya İlişkin Hazırlık bulunuşluk Düzeyleri Üzerine Bir Çalışma"** başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve **064-ODTÜ-2019** protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Prof. Dr. Tülin GENÇÖZ
Başkan

Prof. Dr. Ayhan SOL
Üye

Prof. Dr. Ayhan Gürbüz DEMİR
Üye

Prof. Dr. Yaşar KONDAKÇI (4.)
Üye

Doç. Dr. Emre SELÇUK
Üye

Doç. Dr. Pınar KAYGAN
Üye

Dr. Öğr. Üyesi Ali Emre TURGUT
Üye

C. INSTITUTION APPROVAL

Evrak Tarih ve Sayısı: 06/03/2019-E.19814

T.C.
KOCAELİ ÜNİVERSİTESİ
Eğitim Fakültesi Dekanlığı

Sayı : 45323396-903.99/
Konu : Öğr. Gör. Nurdan KARACA'nın
Anket İzin Talebi

YABANCI DİLLER YÜKSEKOKULU MÜDÜRLÜĞÜNE

İlgi : 05/03/2019 tarihli, 19112 sayılı ve "Öğr. Gör. Nurdan KARACA'nın Anket İzin Talebi" konulu yazı

Yüksekokulunuz Öğretim Elemanlarından Öğr. Gör. Nurdan KARACA'nın, Fakültemiz öğrencilerine anket uygulama isteği Dekanlığımız tarafından uygun bulunmuştur.
Bilgilerinizi rica ederim.

Prof.Dr. Ahmet KÜÇÜK
Dekan Vekili

Mevcut Elektronik İmzalar

AHMET KÜÇÜK (Eğitim Fakültesi Dekanlığı - Dekan Vekili) 06/03/2019 17:08

Fakülte Sekreterliği Kocaeli Üniversitesi Eğitim Fakültesi
Umuttepe Yerleşkesi
41380 KOCAELİ
Tel:+90 (262) 303 2402 Faks:+90 (262) 303 2403
E-Posta :egitim@kocaeli.edu.tr Elektronik Ağ :http://egt.kocaeli.edu.tr/

Bu belge 5070 sayılı Elektronik İmza Kanununun 5. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır.

D. CORRELATION MATRIX TABLE

	i1	i2	i3	i4	i5	i6	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i23	i24	i25	i26	i27	i28	i29
i1	1.0																										
i2	.74	1.0																									
i3	.66	.66	1.0																								
i4	.71	.67	.71	1.0																							
i5	.57	.60	.56	.67	1.0																						
i6	.52	.55	.47	.58	.64	1.0																					
i8	.55	.53	.53	.62	.62	.58	1.0																				
i9	.51	.53	.49	.57	.55	.51	.65	1.0																			
i10	.49	.55	.52	.56	.60	.53	.59	.57	1.0																		
i11	.46	.50	.46	.52	.47	.48	.58	.56	.70	1.0																	
i12	.40	.39	.35	.45	.45	.46	.52	.42	.59	.63	1.0																
i13	.43	.42	.36	.47	.45	.55	.48	.49	.45	.51	.57	1.0															
i14	.54	.48	.38	.48	.43	.47	.44	.46	.40	.48	.40	.60	1.0														
i15	.34	.37	.25	.37	.33	.35	.32	.31	.30	.36	.41	.47	.55	1.0													
i16	.39	.36	.34	.40	.37	.36	.39	.28	.31	.42	.41	.41	.46	.56	1.0												
i17	.42	.40	.27	.42	.37	.41	.43	.39	.34	.42	.41	.49	.50	.52	.55	1.0											
i18	.28	.28	.23	.29	.35	.32	.32	.33	.24	.29	.27	.35	.36	.33	.33	.44	1.0										
i19	.26	.27	.32	.33	.41	.30	.30	.28	.33	.34	.34	.34	.25	.24	.36	.37	.52	1.0									
i20	.22	.23	.26	.30	.34	.21	.29	.23	.30	.24	.30	.29	.31	.38	.35	.40	.41	.45	1.0								
i21	.25	.24	.29	.29	.39	.25	.33	.24	.28	.27	.25	.28	.25	.26	.31	.39	.56	.53	.48	1.0							
i23	.47	.45	.43	.48	.50	.46	.48	.45	.60	.60	.59	.44	.41	.36	.34	.33	.32	.37	.30	.33	1.0						
i24	.45	.44	.47	.52	.50	.51	.56	.47	.69	.69	.66	.50	.38	.33	.34	.31	.24	.36	.28	.27	.70	1.0					
i25	.43	.38	.37	.44	.48	.44	.55	.49	.52	.44	.42	.37	.40	.25	.23	.32	.31	.31	.30	.34	.55	.49	1.0				
i26	.29	.28	.28	.31	.40	.32	.39	.35	.41	.32	.35	.30	.31	.18	.12	.18	.23	.21	.28	.31	.47	.39	.63	1.0			
i27	.43	.40	.35	.42	.43	.39	.50	.50	.45	.47	.39	.47	.48	.35	.37	.35	.34	.29	.34	.31	.56	.49	.59	.60	1.0		
i28	.23	.29	.17	.32	.30	.25	.32	.29	.33	.26	.29	.24	.21	.31	.22	.18	.18	.24	.33	.23	.41	.33	.45	.49	.49	1.0	
i29	.30	.31	.25	.33	.36	.31	.42	.32	.33	.37	.32	.34	.39	.31	.29	.26	.28	.31	.31	.27	.45	.39	.49	.47	.57	.53	1.0

	i1	i2	i3	i4	i5	i6	i8	i9	i10	i11	i12	i13	i14	i15	i16	i17	i18	i19	i20	i21	i23	i24	i25	i26	i27	i28	i29	i30	i31	i32	i33	i34	i35	i36	i37	i38	i40	i41	i142	i43	i44	i45	i46	i47	i48
i30	.39	.38	.36	.43	.52	.43	.55	.55	.50	.47	.42	.38	.42	.32	.33	.33	.26	.28	.39	.27	.52	.48	.59	.51	.56	.49	.61	1.0																	
i31	.29	.23	.23	.29	.35	.32	.42	.31	.33	.35	.40	.37	.35	.26	.23	.27	.27	.29	.34	.25	.48	.40	.53	.55	.54	.38	.45	.57	1.0																
i32	.41	.38	.39	.43	.39	.37	.41	.42	.39	.39	.35	.39	.50	.44	.39	.39	.32	.35	.32	.28	.45	.40	.49	.46	.53	.37	.47	.55	.57	1.0															
i33	.32	.30	.29	.35	.35	.35	.32	.36	.38	.39	.34	.39	.37	.36	.32	.29	.27	.33	.37	.31	.41	.36	.43	.46	.48	.31	.38	.49	.59	.61	1.0														
i34	.32	.36	.31	.36	.40	.39	.41	.42	.45	.44	.37	.43	.35	.27	.18	.25	.22	.24	.28	.30	.51	.46	.50	.54	.58	.42	.44	.53	.55	.50	.68	1.0													
i35	.42	.44	.39	.47	.51	.44	.48	.43	.51	.47	.45	.44	.37	.29	.23	.27	.25	.26	.34	.29	.57	.54	.56	.51	.57	.35	.39	.52	.55	.45	.59	.67	1.0												
i36	.38	.40	.34	.44	.46	.42	.50	.50	.46	.43	.43	.44	.35	.33	.28	.35	.25	.29	.37	.32	.54	.49	.53	.53	.59	.44	.41	.57	.54	.46	.59	.73	.79	1.0											
i37	.38	.39	.30	.37	.35	.34	.42	.38	.34	.39	.29	.38	.39	.26	.23	.34	.29	.19	.23	.18	.38	.34	.45	.37	.49	.34	.39	.50	.46	.37	.40	.44	.51	.56	1.0										
i38	.40	.39	.33	.40	.43	.39	.47	.42	.42	.45	.40	.37	.44	.26	.26	.31	.22	.19	.21	.14	.44	.43	.48	.37	.48	.25	.36	.47	.39	.33	.31	.33	.42	.42	.61	1.0									
i40	.40	.30	.34	.38	.40	.30	.36	.37	.41	.36	.31	.23	.28	.35	.40	.21	.15	.26	.22	.12	.33	.33	.37	.27	.29	.27	.20	.38	.29	.39	.33	.25	.31	.34	.26	.42	1.0								
i41	.21	.16	.22	.23	.24	.26	.27	.27	.28	.24	.20	.16	.12	.18	.21	.20	.11	.21	.17	.13	.19	.24	.38	.28	.30	.18	.19	.27	.30	.27	.24	.23	.24	.25	.20	.27	.55	1.0							
i42	.44	.39	.38	.44	.48	.40	.43	.40	.35	.39	.37	.43	.33	.30	.43	.33	.20	.35	.28	.29	.40	.44	.39	.33	.51	.34	.43	.46	.34	.43	.38	.32	.33	.39	.35	.37	.46	.39	1.0						
i43	.42	.31	.38	.40	.43	.39	.41	.38	.38	.33	.28	.37	.27	.27	.35	.33	.27	.31	.36	.27	.35	.30	.36	.30	.41	.29	.32	.42	.29	.38	.35	.33	.30	.41	.34	.35	.50	.45	.65	1.0					
i44	.38	.30	.26	.31	.38	.32	.39	.36	.32	.31	.32	.36	.31	.27	.33	.33	.20	.27	.31	.24	.27	.29	.37	.27	.35	.26	.32	.40	.26	.35	.34	.28	.24	.33	.26	.41	.38	.29	.44	.51	1.0				
i45	.45	.33	.36	.39	.52	.41	.45	.41	.42	.38	.29	.35	.36	.25	.29	.30	.14	.23	.24	.21	.35	.39	.37	.31	.41	.31	.31	.44	.28	.38	.33	.34	.31	.37	.31	.42	.44	.29	.49	.55	.63	1.0			
i46	.42	.40	.32	.43	.51	.49	.52	.49	.44	.42	.36	.44	.41	.36	.25	.32	.34	.29	.25	.27	.46	.42	.48	.40	.51	.30	.41	.45	.44	.44	.37	.40	.40	.48	.40	.51	.39	.30	.45	.44	.42	.54	1.0		
i47	.36	.37	.30	.39	.46	.42	.43	.42	.46	.38	.41	.37	.35	.30	.24	.28	.33	.35	.23	.29	.50	.42	.43	.41	.49	.37	.37	.36	.42	.37	.43	.40	.38	.46	.36	.49	.34	.24	.41	.41	.30	.43	.72	1.0	
i48	.41	.44	.30	.45	.49	.49	.49	.48	.38	.38	.36	.45	.39	.34	.29	.36	.28	.24	.17	.30	.44	.34	.44	.36	.50	.33	.42	.44	.37	.40	.29	.33	.37	.44	.38	.49	.33	.27	.41	.36	.39	.45	.73	.60	1.0

E. CONSENT FORM FOR PARTICIPANTS

GÖNÜLLÜ KATILIM FORMU

Bu araştırma, ODTÜ Eğitim Programları ve Öğretim Bölümü Yüksek Lisans öğrencisi Nurdan Karaca tarafından Doç. Dr. Hanife Akar danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek amacıyla hazırlanmıştır.

Çalışmanın amacı nedir?

Çalışmanın amacı, bir devlet üniversitesinde öğrenim gören öğretmen adaylarının MEB tarafından 2017 yılında yayımlanan öğretmenlik mesleği genel yeterliklerine ne derece hazır bulunduklarını araştırmaktır.

Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?

Araştırmaya katılmayı kabul ederseniz, sizden beklenen, ankette yer alan bir dizi soruyu derecelendirme ölçeği üzerinde yanıtlamanız ve üç açık uçlu soruyu kısaca cevaplandırmanızdır. Bu çalışmaya katılım ortalama olarak 15 dakika sürmektedir.

Sizden Topladığımız Bilgileri Nasıl Kullanacağız?

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Anketi doldururken sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak, sadece araştırmacı tarafından değerlendirilecektir. Katılımcılardan elde edilecek bilgiler toplu halde değerlendirilecek ve bilimsel yayımlarda kullanılacaktır. Sağladığınız veriler gönüllü katılım formlarında toplanan kimlik bilgileri ile eşleştirilmeyecektir.

Katılımınızla ilgili bilmeniz gerekenler:

Anket, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır.

Araştırmayla ilgili daha fazla bilgi almak isterseniz:

Anket sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için ODTÜ Eğitim Programları ve Öğretim Bölümü öğretim üyelerinden Doç. Dr. Hanife Akar (E-posta: hanif@metu.edu.tr) ya da yüksek lisans öğrencisi Nurdan Karaca (E-posta: nurdan.karaca@metu.edu.tr) ile iletişim kurabilirsiniz.

Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

Ad Soyad	Tarih	İmza
		---/----/-----

F. TURKISH SUMMARY / TÜRKÇE ÖZET

ÖĞRETMEN ADAYLARININ ÖĞRETİMİ PLANLAMA VE ÖĞRENME ORTAMLARI OLUŞTURMAYA YÖNELİK HAZIRBULUNUŞLUK ALGI DÜZEYLERİ ÜZERİNE BİR ÇALIŞMA

Giriş

Araştırmanın Amacı ve Önemi

Eğitim sisteminin en önemli değerleri olarak kabul edilen öğretmenlerin eğitime yeri doldurulamaz katkılarının bir sonucu olarak tüm dünyada öğretmen eğitimine büyük önem verilmektedir (MEB, 2017b). Gelişen teknoloji ve değişen sosyokültürel yapı, her alanı olduğu gibi eğitim alanını da etkilemekte ve bu durum eğitim dolayısıyla öğretmen eğitimi alanlarında birtakım güncelleme ve değişiklikler yapılmasını gerekli kılmakta ve tüm bunlar öğretmen eğitiminin ilk adımı olan ilk öğretmen eğitiminin (initial teacher education) önemini vurgulamaktadır. İlk öğretmen eğitimi, öğretmen adaylarının farklı sosyokültürel ortamlardaki çeşitli öğrenme tarzlarını kavramalarını; daha da önemlisi, bu öğrendiklerini farklı öğrenci gruplarıyla ve değişik öğrenme ortamlarında kullanabilmelerini sağlamalıdır. Bu durum, öğretmen yeterlikleriyle ilgilidir. Öğretmen yeterliği, öğrenme ortamlarında öğretmenlerin kullanmaları gereken ve onlardan beklenen davranışlardır (Şişman, 2009). Öğretmen yeterlikleri çağın gereklerine göre değişse de öğretmenlerin etkin ve etkili bir öğrenme ortamı sunabilmeleri için bu yeterliklere sahip olmaları gerekmektedir.

Eğitim teknolojik, sosyolojik ve çevresel değişimlerden etkilendiği için öğretmen yeterlikleri ve ilk öğretmen eğitimi, bu değişikliklere göre şekillenmeli ve güncellenmelidir. Tüm dünyada öğretmen yeterlikleriyle ilgili yoğun çalışmalar yapılmış ve İngiltere, Amerika ve Almanya gibi ülkelerde öğretmen yeterlikleri

öğretmen eğitimi için gerekli bir çerçeve olarak kabul edildikten sonra Türkiye'de de bu konuda çalışmalar başlatılmıştır. İlk olarak 2006 yılında Millî Eğitim Bakanlığı ve Yüksek Öğretim Kurumu iş birliğiyle *Öğretmenlik Mesleği Genel Yeterlikleri* yayımlanmıştır. Aradan geçen on yılı aşkın sürede teknolojideki gelişmeler ve toplumdaki değişimler öğretmen yeterliklerinin güncellenmesini gerekli kılmış ve Millî Eğitim Bakanlığı 2017 yılında *Öğretmenlik Mesleği Genel Yeterlikleri* belgesinin güncellenmiş versiyonunu yayımlamıştır. Buna bağlı olarak 2018-2019 eğitim öğretim yılında yeni başlayacak öğretmen adaylarıyla birlikte uygulanmak üzere yeni öğretmen eğitimi programları tanıtılmıştır. Ancak, eğitimine eski öğretmen eğitimi programlarıyla başlayan ikinci, üçüncü ve dördüncü sınıf öğrencilerinin eğitime eski programla devam etmesi kararlaştırılmıştır.

Güncellenen yeterlikler ve eski programlarla ilgili bu durum, eski programların öğrencilere yeni yeterlikleri ne derece kazandırabileceği sorusunu akla getirmektedir. Bu sorudan yola çıkan çalışmanın amacı, mevcut öğretmen adayları mezun olana kadar devam edecek olan eski programların öğretmen adaylarına güncellenen yeterlikleri ne ölçüde kazandırabildiğini belirlemeye çalışmaktır. Bu doğrultuda, öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik mesleğe hazırbulunuşluk seviye algıları araştırılmıştır. Ayrıca mesleğe hazırbulunuşluk düzeylerinin çeşitli değişkenlere göre farklılık gösterip göstermediği incelenmiştir.

Öğretmen yeterlikleri, müfredatı uygulama ve ölçme değerlendirme süreçlerindeki faaliyetlerin verimliliğini artırmak için araç olarak kabul edilirler (Taylor, 1997). Öğretmen adaylarına bu yeterliklerin kazandırılabilmesi amacıyla öğretmen eğitimi programlarının hedefleri belirlenirken öğretmen yeterlikleri dikkate alınır. Bu çalışmanın, öğretmen adaylarının güncellenmiş öğretmen yeterlikleri (GTC) üzerindeki yetkinliklerini değerlendirmede önemli etkileri olabilir ve öğrencilere uygun yetkinlikleri kazandırmak açısından öğretmen eğitimi programlarının hedeflerinde var olan eksiklikleri ortaya çıkarabilir. Ayrıca önceki öğretmen eğitimi programlarından mezun olacak ancak güncellenmiş öğretmen yeterliklerine sahip

olması gereken öğretmen adaylarının yeterlik seviyelerini bilmek önemli ve gereklidir. Çalışma ile bu sorular cevaplanmıştır:

Araştırma Soruları

1. Türkiye'nin kuzeybatısında bulunan bir devlet üniversitesindeki öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik öğretmenliğe hazırbulunuşluk seviye algıları nedir?
2. Türkiye'nin kuzeybatısında bulunan bir devlet üniversitesindeki öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik öğretmenliğe hazırbulunuşluk seviye algıları;
    a. cinsiyet
    b. mezun olunan lise türü
    c. bölüm
    d. genel not ortalaması
    e. öğretmen olma isteği
    f. eğitim bilimleri alanında lisansüstü eğitime devam etme isteği

    değişkenlerine göre anlamlı farklılıklar gösterir mi?

Literatür Taraması

Öğretmen eğitiminin başlangıcı olan ilk öğretmen eğitimi, öğretmen adaylarını milli eğitimin temel hedefleri doğrultusunda öğretmenliğe hazırlayan ve onları mesleğin gerektirdiği bilgi, beceri, tutum ve davranışlarla donatan lisans programıdır (MEB, 2017b). Öğretmen eğitimi programları; motivasyonu yüksek, istekli ve mesleklerinden memnun, nitelikli öğretmenler yetiştirmek için gerekli olan etkili eğitimi öğretmen adaylarına sunmayı amaçlar (Mansfield ve diğerleri, 2016). İlk öğretmen eğitiminin diğer bir amacı da öğretmen adaylarının teorik ve kavramsal bilgiyi uygulamaya aktarabilmesini ve yeni bilgiyi eski bilgilerle ilişkilendirmesini sağlamaktır (Bangır-Alpan & Koç-Erdamar; 2019).

Öğretmen yeterlikleri, öğretmenlik mesleği için gerekli olan bilgi, beceri ve davranışların toplamıdır (Şişman, 2009), aynı zamanda bu özellik ve niteliklerin devamlılığıdır (Tanrıverdi ve Apak, 2013). Öğretime hazırbulunuşluk ise ilk öğretmen eğitiminin öğretmen adaylarını mesleğin zorluklarına karşı ne derece hazırladığıyla ilgilidir (Black, 2003). İlk öğretmen eğitimini tamamladıktan sonra öğretmen adaylarının kendilerini gelecekteki mesleklerine ne kadar hazır algıladıkları olarak da düşünülebilir (Mehmetlioğlu & Haser, 2013). Öğretime hazırbulunuşluk için öğretmen adaylarının öğretimi planlama, sınıf yönetimi, strateji, yöntem, teknik, ölçme ve değerlendirme alanlarında hazır olmaları gereklidir (Göçer, 2008). Öğretmenler öğrencileri akademik olarak eğitmekle kalmaz, aynı zamanda onların sosyal, bireysel ve bilişsel gelişimlerine de katkıda bulunur. Bu yüzden öğretmenlerin kendilerini meslekleri için hazır hissetmeleri önemli ve gereklidir (Karakaya ve diğerleri, 2019). Öğretime yüksek hazırbulunuşluğu olan bir öğretmen öğrenme ortamı ve çevresinin çeşitli zorluklarıyla başa çıkabilir, karmaşık durumları değerlendirip bunlara en uygun tepkiyi seçebilir ve öğrencilerin farklı bilişsel özelliklerini anlayıp öğretimini bunlara bağlı olarak çeşitlendirebilir (Darling-Hammond & Baratz-Snowden, 2007).

Öğretmen yeterlikleriyle ilgili literatür incelendiğinde nicel yöntemlerden biri olan araştırma desenini kullanan birçok çalışma vardır (Köksal, 2013; Numanoğlu & Bayır, 2009; Özer & Acar, 2011; Panev & Barakoska, 2015; Pantić & Wubbels, 2010; TED, 2009; Yenen & Kılınç, 2018). Yenen ve Kılınç'ın (2018) ilk ve orta okul öğretmenleriyle yaptığı çalışmada öğretmenlerin mesleki bilgi alanında kendilerini 'tamamen yeterli', ve mesleki beceri ve tutum ve davranışlar alanlarında 'yeterli' buldukları ortaya çıkmıştır. Panev ve Barakoska'nın (2015) İngilizce ilk öğretmen eğitimini incelediği çalışmada pedagojik yeterliklerin öğretmen adaylarına yeterince kazandırılamadığı anlaşılmıştır. Köksal'ın (2013) çalışması öğretmen adaylarının öğretmen yeterliklerine yüksek düzeyde sahip olduklarını ve yeterliklere karşı olumlu profesyonel tavır içinde olduklarını göstermiştir. Özer ve Acar (2011) öğretmen adaylarının genel öğretmen yeterliklerinden hangilerini daha önemli gördükleriyle ilgili bir çalışma yapmışlardır. Pantic ve Wubbels (2010) ise

çalışmalarında öğretmen yeterliklerini belirlemek için öğretmen ve öğretmen eğitimcilerinin görüşlerine başvurmuştur. Türk Eğitim Derneği, öğretmenlerin 2006'da yayımlanan yeterliklere ne derece sahip olduklarını incelemiş (TED, 2009); Numanoğlu ve Bayır (2009) ise bilgisayar öğretmenliği bölümü öğretmen adaylarının yeterliklerini araştırmışlardır.

Bu konuda ayrıca nitel çalışmalara da yer verilmiştir (Chung & Kim, 2010; Tanrıverdi & Apak, 2013). Son olarak nicel ve nitel yöntemi birleştiren karma yöntemli çalışmalar da mevcuttur (Alpaydın ve diğerleri, 2018; Ayan & Budak, 2012; Hudson ve diğerleri, 2016; Kunter ve diğerleri, 2013). Tanrıverdi ve Apak (2013) öğretmen eğitimi programlarının genel öğretmen yeterliklerini kazandırıp kazandıramadığı konusuyla ilgili öğretmen adayları ve öğretmen eğitimcilerinin görüşlerine başvurmuştur. Chung ve Kim (2010) standartlara dayalı öğretmen eğitimi programlarının etkililiğini incelemiş; Alpaydın ve diğerleri (2018) genel öğretmen yeterlikleriyle öğretmenlik mesleği uygulamalarının tutarlılığını araştırmıştır. Hudson ve diğerleri (2016) son sınıf öğretmenlik öğrencilerinin Avustralya Öğretmenlik Mesleği Standartları (APST) konusunda kendilerini ne kadar yeterli hissettikleri üzerine çalışmıştır. Kunter ve diğerleri (2013) öğretmen yeterliklerinin öğretimi ve öğrenim çıktılarını etkileyip etkilemediğini araştırmış ve son değinilen çalışmada ise eğitim fakültelerinin genel öğretmen yeterliklerini öğretmen adaylarına ne derece kazandırdığı incelenmiştir (Ayan ve Budak, 2012).

Çalışmanın diğer bir odak noktası olan öğretimi planlama konusunda son yıllarda yapılan çalışmalara yer verilmiştir (Aşiroğlu & Koç-Akran, 2018, Gülbahar, 2017; Gürkan, 2019; OECD, 2019; Süral, 2019). Güral (2019) sınıf öğretmenliği bölümü öğretmen adaylarının öğretim programı, öğretimi planlama ve öğretimi değerlendirmeyle ilgili bilişsel yapılarını; Süral (2019) ise öğretmen adaylarının dersi planlama ile ilgili yeterliklerini incelemiştir. Bu doğrultuda araştırmacı ölçek geliştirmiş ve bir üniversitenin üçüncü ve dördüncü sınıf öğretmen adaylarına uygulamıştır. Araştırma sonunda, öğretmen adayları teorik yeterliklerde 'oldukça yeterli' ve uygulama yeterliklerinde 'yeterli' bulunmuştur. Gülbahar (2017) sınıf

öğretmenliği bölümü öğretmen adaylarının öğretimi planlama konusundaki yeterliklerini ve çeşitli etkenlerin bu yeterlik düzeylerini etkileyip etkilemediğini araştırmış ve bulgular öğretmen adaylarının öğretimi planlama açısından oldukça yeterli olduğunu göstermiştir. Aşiroğlu ve Koç-Akran (2018) da aynı konuyu araştırmış fakat karma yöntem kullanmıştır. Araştırmanın nicel bölümünde ölçme aracı olarak performans testi kullanılmış; nitel bölümde ise katılımcıların hazırladığı ders planlarından, açık uçlu anketlerden ve gözlemlerden yararlanılmıştır.

Öğrenme ortamları oluşturma konusunda da nicel ve nitel çalışmalar yapılmıştır (Atik-Kara & Sağlam, 2014; Kubat, 2015; Yavuz-Konokman & Yanpar-Yelken, 2013). Yavuz-Konokman ve Yanpar-Yelken (2013) yaptıkları karma yöntemli çalışmada öğretmen adaylarının öğretme ve öğrenme süreciyle ilgili yeterlik seviyelerini ve bu seviyelerin nedenlerini araştırmışlardır. Ölçek olarak, nicel bölümde bir anket ve nitel bölümde açık uçlu bir anket kullanılmıştır. Bulgular, öğretmen adaylarının öğretme ve öğrenme süreciyle ilgili kendilerini 'oldukça yeterli' olarak algıladıklarını göstermiştir. Kubat (2015) aynı konuyu fen bilgisi öğretmen adaylarıyla çalışmıştır. Nitel çalışmada ölçek olarak yarı-yapılandırılmış görüşme kullanılmıştır. Atik-Kara ve Sağlam (2014) ise mesleki bilgi derslerinin öğrenme ortamıyla ilgili yeterlikleri ne derece kazandırdığını incelemiş ve bulgular, mesleki bilgi dersleriyle öğretme ve öğrenme süreci yeterliklerinin tutarlı olduğunu göstermiştir.

Çalışmanın odak noktalarından sonuncusu olan öğretime hazırbulunuşluk ile ilgili literatür taramasında son yıllarda yapılan nicel ve nitel çalışmalara yer verilmiştir (Ataş-Akdemir, 2019; Göçer, 2008; Karakaya et al, 2019). Karakaya ve diğerleri (2019) fen bilgisi ve biyoloji öğretmen adaylarıyla çalışmış ve öğretmen adaylarının hazırbulunuşluk seviyelerini cinsiyet, bölüm, sınıf, genel not ortalaması ve bölümü gönüllü seçme değişkenlerine göre incelemiştir. Benzer bir çalışma Ataş-Akdemir (2019) tarafından aynı ölçme aracı kullanılarak dört farklı bölümden öğretmen adaylarının katılımıyla yapılmıştır. Bu çalışma bir önceki çalışma gibi değişkenlere göre farklılıkları araştırmak yerine öğretmen adaylarının mesleğe hazırbulunuşluk

seviyelerini belirlemeye çalışmıştır. Göçer (2008) ise yaptığı nitel çalışmada sınıf öğretmenliği ve sosyal bilgiler öğretmenliği öğretmen adaylarının içerik bilgisi, iletişim becerisi, sınıf yönetimi, meslek sevgisi ve öğretimi planlama açısından Türk dilini öğretmeye ne derece hazır olduklarını incelemiştir.

Öğretmenlik mesleğine hazırbulunuşluk ile ilgili ölçek geliştirme çalışmaları da vardır (Güven-Yıldırım & Köklükaya, 2017; Mehmetlioğlu & Haser, 2013). Güven-Yıldırım & Köklükaya (2017) yaptıkları ölçek geliştirme çalışması sonunda geliştirdikleri ölçeği fen bilgisi öğretmen adaylarına uygulamışlar ve çalışma sonunda adayların düşük hazırbulunuşluk seviyelerine sahip olduklarını tespit etmiştir. Bir diğer ölçek geliştirme çalışmasında (Mehmetlioğlu & Haser, 2013) ise ölçek matematik öğretmen adaylarına uygulanmış ve adayların mesleğe orta düzeyde hazır oldukları görülmüş; çalışmada çeşitli değişkenlerin de hazırbulunuşluk seviyelerini etkileyip etkilemediği incelenmiştir.

Yöntem

Desen

Son sınıf öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturma açısından öğretime hazırbulunuşluk algılarını belirlemeyi amaçlayan bu çalışmada kesitsel tarama araştırma deseni kullanılmıştır. Veriler, Türkiye'nin kuzeybatısında bulunan bir devlet üniversitesindeki Bilgisayar ve öğretim teknolojileri öğretmenliği, Fen bilgisi öğretmenliği, İngilizce öğretmenliği, Matematik öğretmenliği, Sınıf öğretmenliği ve Türkçe öğretmenliği bölümlerinde öğrenim gören son sınıf öğretmen adaylarından toplanmıştır.

Örneklem

Bu araştırmanın hedef evreni, sözü geçen üniversitede öğrenim gören tüm son sınıf öğretmen adaylarıdır. Üniversitedeki okul öncesi öğretmenliği ve psikolojik

danışmanlık ve rehberlik bölümleri araştırma dışı tutulmuştur. Bunun sebebi, bu bölümlerde diğer bölümlerden farklı olarak araştırma sorusunun merkezini oluşturan öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik dersler olmamasıdır. Her ne kadar okul öncesi öğretmenliğinde benzer isimli dersler olsa da o dersler çalışmaya dahil edilen diğer bölümlerden farklıdır. Sadece son sınıfın dahil edilme nedeni ise öğretmen adaylarının programda ne kadar fazla süre geçirmiş ve ne kadar fazla ders almışsa mesleğe o kadar hazır hissedecek olmalarıdır.

Araştırmada herhangi bir örnekleme yöntemi kullanılmamış; aksine tüm evren çalışmaya dahil edilmiştir. Bahsi geçen altı bölümdeki toplam öğretmen adayı sayısı 327'dir. Bu sayıdan 298'ine (%91) ulaşılmış ve 232 öğretmen adayı (%70,9) araştırmaya katılmayı gönüllü olarak kabul etmiştir. Katılımcılar, 149 kadın (%64,2) ve 83 erkek (%35,8) öğretmen adayından oluşmaktadır. Ayrıca katılımcılar bölümlere göre incelendiğinde; bilgisayar ve öğretim teknolojileri öğretmenliğinden 42 öğretmen adayı (18,1%), fen bilgisi öğretmenliğinden 48 aday (%20,6), İngilizce öğretmenliğinden 52 aday (%22,4), matematik öğretmenliğinden 35 aday (%15,1), sınıf öğretmenliğinden 29 aday (%12,5) ve Türkçe öğretmenliğinden 26 öğretmen adayı (%11,2) katılmıştır.

Veri Toplama Aracı

Çalışmada veri toplamak amacıyla araştırmacı tarafından Öğretmenlik Mesleğine Hazırbulunuşluk Anketi (PTQ) geliştirilmiştir. Anket iki bölümden oluşmaktadır. İlk bölümde katılımcılarla ilgili demografik bilgiler kısmı yer almakta, ikinci bölüm ise yeterliklerle ilgili 45 performans kriterinden oluşmakta ve katılımcılardan '1-hiç katılmıyorum' ile '6-tamamen katılıyorum' arasında cevap vermeleri beklenmektedir. Anket geliştirildikten sonra kapsam ve görünüş geçerliliğini kontrol etmek için üç farklı uzmandan görüş alınmış ve onların geri bildirimlerine göre gerekli düzeltme ve düzenlemeler yapılmıştır. Anket geliştirildikten ve uzman görüşü alındıktan sonra anketin yapı geçerliliğini ölçmek için bahsi geçen üniversitenin üçüncü sınıf öğretmen adaylarının katılımıyla pilot çalışma yapılmış ve toplanan

verilerle açımlayıcı faktör analizi yapılarak sonuçlar çalışmada aktarılmıştır. Ayrıca, iç tutarlılık güvenirliliği için Cronbach Alpha değerine bakılmış ve bu değer tüm anket için .96 olarak bulunmuştur; tüm faktörlerin Cronbach Alpha değerlerine bakıldığında ise değerler .80 ve .92 arasında değişiklik göstermiştir.

Veri Toplama Süreci

Çalışmayı yürütebilmek için öncelikle Orta Doğu Teknik Üniversitesi İnsan Araştırmaları Etik Kurulu'ndan, sonrasında da verinin toplanacağı üniversitenin eğitim fakültesi dekanlığından gerekli izinler alınmış ve veriyi toplamak için öğretmen adaylarının mesleki beceriyle ilgili dersleri, onlar uygun olmadığında ise diğer derslerinin öğretim elemanlarıyla iletişime geçilmiş; ve dersinde uygulama yapılmasına izin veren öğretim elemanlarının sınıfları araştırmacı tarafından ziyaret edilip öğretmen adaylarına anketin amacıyla ilgili bilgi verilmiştir. 2018-2019 eğitim öğretim yılı bahar dönemi mart ayında pilot çalışma verileri toplanmıştır. Öğretmen adaylarına çalışmanın amacıyla ilgili bilgi verildikten sonra Gönüllü Katılım Formları dağıtılmış ve toplam 250 üçüncü sınıf öğrencisi çalışmaya gönüllü olarak katılmak istediklerini belirtmişlerdir. Bu öğrencilere Öğretmenlik Mesleğine Hazırbulunuşluk Anketi (PTQ) verilmiştir. Anket cevaplama süresi yaklaşık 15 dakika sürmüştür.

Pilot çalışma sonrasında gerekli analizler yapıldıktan sonra çalışmanın ana bölümü için 2018-2019 eğitim öğretim yılı nisan ayında aynı fakültenin son sınıf öğretmen adaylarından veri toplanmıştır. Veri toplama sürecinde pilot ve ana çalışmada aynı prosedürler izlenmiş olup ana çalışmanın veri toplama sürecinde de araştırmacı anketlerin amacı ve içeriğiyle ilgili katılımcılara bilgi verdikten sonra Gönüllü Katılım Formunu vermiş, 232 gönüllü katılımcı anketi cevaplamış ve anketler doldurulana kadar araştırmacı, katılımcıların sorularını cevaplayabilmek amacıyla sınıflarda hazır bulunmuştur. Ana çalışmanın anket doldurma süreci de pilot çalışmadaki gibi yaklaşık 15 dakikadır.

Veri Analizi

Çalışmanın veri analizi IBM SPSS 23 ODTÜ versiyonu yazılım programı kullanılarak yapılmış olup betimsel ve çıkarımsal analiz yönteminden yararlanılmıştır. Açımlayıcı faktör analizi için veriler SPSS dosyasına aktarıldıktan sonra SPSS aracılığıyla önce varsayımlar kontrol edilmiş, sonrasında da analiz yine SPSS ile yapılmıştır. Ana çalışmada ise öğretmen adaylarının mesleğe hazırbulunuşluk düzeylerini inceleyen birinci araştırma sorusunu cevaplamak için betimsel analiz kullanılarak hem tüm anketin hem de her bir faktörün ortalama ve standart sapmalarına bakılmıştır. Hazırbulunuşluk seviyelerinin değişkenlere göre farklarını inceleyen ikinci araştırma sorusu için ise cinsiyet değişkeni için IBM SPSS 23 ODTÜ versiyonu programında Bağımsız Örnekler t-testi yapılmış ve lise türü, bölüm, genel not ortalaması, öğretmen olma isteği ve eğitim bilimleri alanında lisansüstü eğitime devam etme isteği değişkenleri için yine aynı program aracılığıyla Tek Yönlü Varyans Analizi yapılmıştır.

Araştırmanın Sınırlılıkları

Bu çalışmanın dikkate alınması gereken birkaç sınırlılığı şöyledir: Araştırma sorusu kuzeybatı Türkiye'deki bir devlet üniversitesiyle ilgili olduğundan veriler sadece bu üniversiteden toplanmış; herhangi bir genelleme amacı güdülmemiştir. Bu yüzden araştırma sonuçları sadece söz konusu üniversite ve benzer karakteristikteki diğer üniversiteler ile sınırlıdır.

Araştırmanın diğer bir sınırlılığı ise yeterliklerle ilgilidir. MEB'in 2017'de yayımladığı Genel Öğretmen Yeterlikleri mesleki bilgi, mesleki beceri ve tutum ve değerlerden oluşan üç ana yeterlik ve bunların 11 alt yeterliğinden oluşmaktadır. Ancak bu çalışmada mesleki beceri ana yeterliği altında yer alan öğretimi planlama ve öğrenme ortamları oluşturma alt yeterlilikleri esas alınmıştır. Sonuçlar, bu alt yeterliliklerle sınırlıdır. Sadece bu alt yeterliklerin seçilme nedeni ise eğitim programları ve öğretim bölümüyle doğrudan ilişkili olmalarıdır. Çalışma, tüm

yeterliklerle ilgili hazırbulunuşluk düzey algılarını belirlemeyi amaçlamamaktadır. Bu yüzden öğretmen adaylarının hazırbulunuşluk düzeyleri ile ilgili bulgular öğretimi planlama ve öğrenme ortamları oluşturma yeterlikleriyle sınırlıdır.

Bulgular

Çalışmanın iki araştırma sorusunu cevaplamaya yönelik yapılan analizlerden elde edilen bulgular sonucunda öğretmen adaylarının öğretmenlik mesleğine ne derece hazır bulundukları belirlenmiştir. İlk olarak, öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik hazırbulunuşluk düzey algılarını inceleyen birinci araştırma sorusunun sonuçları şöyledir: Öğretmenlik Mesleğine Hazırbulunuşluk Anketine verilen cevaplar doğrultusunda öğretmen adayları öğretimi planlama ve öğrenme ortamları oluşturma yeterliklerine ilişkin kendilerini 'tamamen hazır' olarak algılamaktadırlar. Tüm ankete bakıldıktan sonra anketin sekiz boyutu da ayrı ayrı incelenmiş ve öğretmen adaylarının beş boyutta kendilerini 'tamamen hazır' ve üç boyutta 'hazır' olarak algıladıkları görülmüştür.

Cinsiyet, mezun olunan lise türü, bölüm, genel not ortalaması, öğretmen olma isteği ve lisansüstü eğitime devam etme isteği değişkenlerine göre hazırbulunuşluk seviye algılarını inceleyen ikinci araştırma sorusunun sonuçları ise şöyledir: Cinsiyet değişkenine göre bakıldığında, hazırbulunuşluk seviye algılarında kadın öğretmen adaylarının lehine anlamlı fark bulunmuştur. Bu doğrultuda, cinsiyetin hazırbulunuşluk seviye algılarında bir etkisi olduğu söylenebilir. Öğretmen adaylarının hazırbulunuşluk seviye algılarında mezun olunan lise türü değişkenine göre de anlamlı farklılıklar bulunmuştur. Yapılan devam analizlerinde Anadolu Lisesi mezunu ve Mesleki ve Teknik Lise mezunu öğretmen adaylarının hazırbulunuşluk seviyeleri arasında anlamlı farklılıklar olduğu görülmüştür. Anlamlı fark bulunan son değişken ise genel not ortalaması değişkenidir. Bu değişkende not ortalaması 2,51 ve 3,00 arasında olan öğretmen adaylarıyla ortalaması 3,01 ve 3,50 arasında olan adayların hazırbulunuşluk seviye algılarında anlamlı farklılıklar bulunmuştur.

Hazırbulunuşluk seviyeleri diğer değişkenlere göre incelendiğinde ise öğretmen adaylarının öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik hazırbulunuşluk seviye algılarında anlamlı farklılık bulunmamıştır. Hazırbulunuşluk seviyelerinde herhangi bir fark yaratmayan bu değişkenler öğretmen adaylarının bölümü, öğretmen olma isteği ve eğitim bilimleri alanında lisansüstü eğitime devam etme isteği değişkenleridir.

Sonuç ve Öneriler

Sonuç

Bu çalışma, mevcut öğretmen adayları öğrenimlerini tamamlayana kadar devam edecek olan bir önceki öğretmen eğitimi programlarına ve bu programlarla öğrenim görüp, güncellenen genel öğretmen yeterliklerine sahip olması gereken öğretmen adaylarının öğretimi planlama ve öğrenme ortamı oluşturmaya yönelik hazırbulunuşluk algılarına ilişkin literatüre katkı sağlamaktadır.

Çalışma sonucunda öğretmen adaylarının kendilerini öğretimi planlama ve öğrenme ortamları oluşturmaya yönelik 'tamamen hazır' algıladıkları ortaya çıkmıştır. İlgili alanyazın incelendiğinde bu doğrultuda birçok çalışma göze çarpmaktadır (Alpaydın ve diğerleri, 2018; Ataş-Akdemir, 2019; Ayan & Budak, 2012; Göçer, 2008; Hudson ve diğerleri, 2016; Köksal, 2013; Yenen & Kılınç, 2018). Bu çalışmalarda öğretmen adaylarının veya öğretmenlerin çeşitli alanlardaki yeterlikleri ya da öğretime hazırbulunuşlukları araştırılmış ve genelde 'yeterli', 'oldukça yeterli', 'hazır' ve 'tamamen hazır' sonuçlarına ulaşılmıştır. Bu bulguların aksine, düşük ve orta seviye yeterlik ya da hazırbulunuşluk düzeyleri görülen çalışmalar da mevcuttur (Atik-Kara & Sağlam, 2014; Gürkan, 2019; Güven-Yıldırım & Köklükaya, 2017; Kubat, 2015; Mehmetlioğlu & Haser, 2013; Panev & Barakoska, 2015; TED, 2009).

Hazırbulunuşluk seviyeleri değişkenlere göre incelendiğinde cinsiyet değişkeninde kadın öğretmen adaylarının lehine anlamlı fark bulunmuştur. Fark bulunmuş

olmasına karşın etki boyutunun küçük olması, cinsiyetin öğretmenliğe hazırbulunuşluk seviyeleri üzerinde çok fazla etkiye sahip olmadığını da düşündürebilir. Anlamlı fark bulma durumu önceki bazı çalışmaların bulgularıyla desteklenmekte (Köksal, 2013; Özdemir, 2008; Yeşilyurt, 2011); ancak bazı çalışmalar da aksi bulgular içermektedir (Ataş-Akdemir, 2019; Eyüp, 2012; Gülbahar, 2017; Karakaya ve diğerleri, 2019; Mehmetlioğlu & Haser; 2013; Yavuz-Konokman & Yanpar-Yelken, 2013).

Mezun olunan lise türüne gelince, sadece Anadolu Lisesi ve Mesleki ve Teknik Lise mezunu öğretmen adaylarının hazırbulunuşluklarında anlamlı fark bulunmuştur. Lise hayatı boyunca pedagojik alan dersleri alan Anadolu Öğretmen Lisesi mezunu öğretmen adaylarının diğer adaylara göre daha yüksek hazırbulunuşluk seviye algılarında sahip olmaması ayrıca düşündürücüdür. Yedi lise türü arasında yapılan ikili karşılaştırmalarda sadece iki lise türü arasında anlamlı fark olması ve diğer lise türlerinde herhangi bir fark görülmemesi, Özdemir (2008) tarafından öğretmen adaylarının aynı eğitimi görüp aynı beklentilere sahip olması olarak açıklanmaktadır.

Sonuçlar bölüm değişkenine göre değerlendirildiğinde, öğretmenlik mesleğine hazırbulunuşluk seviyelerinde anlamlı bir farklılık bulunmamıştır. Bunun nedeni araştırılan yeterliklerin mesleki beceri içerisindeki alt yeterlikler olması ve öğretmen adaylarının hangi bölümde olursa olsun aynı mesleki beceri derslerini almasıdır. Alanyazında anlamlı fark bulan çalışmalar olsa da (Ataş-Akdemir, 2019; Karakaya ve diğerleri, 2019), bu durum söz konusu çalışmaların farklı alanlardaki yeterlikleri ölçmesinden kaynaklanıyor olabilir. Genel not ortalaması değişkeninde de sadece iki not ortalaması arasında anlamlı fark bulunmuş; diğer not ortalamalarında böyle bir farklılık görülmemiştir. Literatüre bakıldığında benzer çalışmalarda da anlamlı farklılıklar bulunmamıştır (Karakaya ve diğerleri, 2019; Köksal, 2013).

Son olarak öğretmen olma isteği ve eğitim bilimleri alanında lisansüstü eğitime devam etme isteği değişkenlerine bakılmış ve bu değişkenlerin öğretmen adaylarının hazırbulunuşluk düzeylerinde herhangi bir anlamlı fark yaratmadığı sonucuna

varılmıştır. Bu değişkenlerin çalışmaya eklenme sebebi, öğretmenlik mesleğine duyulan sempati ve ilginin hazırbulunuşluğa etkisini araştırmaktır. Özdemir (2008) insanların mesleğini severek yaptıklarında işteki başarı ve performanslarının olumlu şekilde etkileneceğini belirtmiştir. Ancak bu çalışmanın sonuçlarından yola çıkarak bu durumun hazırbulunuşluk algılarına herhangi bir etkisinin olmadığı söylenebilir.

Öneriler

Çalışmanın sonuçlarından hareketle aşağıdaki öneriler yapılabilir:

- Uygulamaya yönelik verilen bu önerinin sadece mevcut öğretmen adayları mezun olana kadar uygulanacak olan eski programlarla ilgili olduğu unutulmamalıdır. Öğretmen adayları kendilerini her ne kadar 'tamamen hazır' algıladıklarını belirtmişseler de anketin üç boyutunda kendilerini 'hazır' olarak algıladıkları anlaşılmıştır. Bu boyutlarla ilgili derslere ek ders planları ve konuyla ilgili materyaller eklenebilir.

- Bu çalışma Türkiye'nin kuzeybatısındaki bir devlet üniversitesinde öğrenim gören öğretmen adaylarını kapsamaktadır. Diğer devlet okullarında ve özel üniversitelerdeki öğretmen adaylarının hazırbulunuşluklarını görmek bilgilendirici olabilir.

- Aynı çalışma söz konusu öğretmen adayları ve aynı özelliklere sahip diğerleri mezun olduktan sonra tekrar yapılıp sonuçlar karşılaştırılabilir.

- Öğretmenlik Mesleğine Hazırbulunuşluk Anketi (PTQ), 2018-2019 eğitim öğretim yılında öğrenime yeni başlayan öğretmen adaylarıyla uygulamaya konan yeni programdan mezun olacak öğrencilere uygulanıp programla yeterliklerin uyumuna bakılabilir.

- Bu çalışma, MEB'in yayımladığı üç ana yeterlikten sadece mesleki beceri ana yeterliğini içermektedir. Diğer ana yeterlikler de araştırılabilir. Yeterliklere genel olarak bakılmak istenirse de bu konu MEB'in yayımladığı performans kriterleri kullanılarak araştırılabilir.

- Çalışma, öğretmen adayları yerine meslekte çalışan öğretmenlere uygulanabilir. Böylece öğretmenlerin yeni yeterliklere ne derece sahip olduğu görülüp çalışma sonunda gerekirse hizmet içi eğitim önerilebilir.

- Bu çalışma öğretmen adaylarının doldurduğu anketler esas alınarak yapılmıştır. Ancak bazen öğretmen adaylarının düşündükleri hazırbulunuşluk seviyeleriyle uygulamadaki hazırbulunuşlukları farklı olabilir. Bu yüzden, benzer bir çalışma karma desen olarak çalışılabilir. Öğretmen adaylarının gerçek hazırbulunuşluk seviyeleri çeşitli kriterlere göre nitel yöntemle belirlenip, nicel bölümde belirlenen kendi algıladıkları hazırbulunuşluk düzeyleriyle karşılaştırılabilir.

G. TEZ İZİN FORMU /THESIS PERMISSION FORM

ENSTİTÜ / INSTITUTE

Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences ☐

Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences ■

Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics ☐

Enformatik Enstitüsü / Graduate School of Informatics ☐

Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences ☐

YAZARIN / AUTHOR

Soyadı / Surname : **KARACA**

Adı / Name : **NURDAN**

Bölümü / Department : **EĞİTİM PROGRAMLARI VE ÖĞRETİM**

TEZİN ADI / TITLE OF THE THESIS (**İngilizce** / English) : **A STUDY ON PRESERVICE TEACHERS' PERCEIVED PREPAREDNESS LEVELS REGARDING INSTRUCTIONAL PLANNING AND CREATING LEARNING ENVIRONMENTS**

TEZİN TÜRÜ / DEGREE: **Yüksek Lisans** / Master ■ **Doktora** / PhD ☐

1. **Tezin tamamı dünya çapında erişime açılacaktır. /** Release the entire work immediately for access worldwide. ■
2. **Tez iki yıl süreyle erişime kapalı olacaktır.** / Secure the entire work for patent and/or proprietary purposes for a period of **two years. *** ☐
3. **Tez altı ay süreyle erişime kapalı olacaktır.** / Secure the entire work for period of **six months**. ***** ☐

***** *Enstitü Yönetim Kurulu kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir.*

A copy of the decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

Yazarın imzası / Signature ..... **Tarih** / Date ……