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The Role of Graduate Education in Professional Development of Teachers: Is Graduation Enough?

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Abstract

This research aims to determine the role of graduate education in supporting the professional development of teachers. The qualitative research method was employed, and the basic qualitative research design was utilized. The study group of the research consisted of 25 teachers who had graduate level and were working in a province center in the Central Black Sea Region of Turkey. In-depth interviews were held with teachers through a semi-structured interview form developed by the researchers. The data were analyzed with content analysis using the MaxQda software package. The results of the study revealed that the teachers pursued graduate education mostly to achieve personal and professional development and to build an academic career. They stated that graduate education provided them with the skills of scientific thinking and research, communication, teaching and evaluation, and establishing theory-practice relationships, as well as knowledge of the profession and the field. They also added that they gained positive attitudes towards their profession, students, education, and life in general. A considerable part of the teachers stated that with graduate education, they realized the importance of professional development, their approach to evaluating events changed, and that their self-confidence, satisfaction, and performance increased. Almost all of the teachers claimed that positive changes occurred in their approach to students after they had received graduate education. A significant portion of the teachers said that the graduate education they received contributed directly to learning and applying new methods and techniques and led to some tangible changes in their measurement and evaluation practices. On the other hand, teachers also touched on important problem areas, such as the lack of a career system that encouraged graduate education and failure to put what had already been learned into practice for various reasons. Findings showed that it was not enough to have graduate education alone and that some measures regarding both the structure of graduate education programs and the working environment of teachers needed to be taken. Based on the results of the research, we recommend that a

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career system that will increase the professional development motivation of teachers should be created and that the degrees to be obtained in the fields of education and educational sciences should be prioritized in this system.

Introduction

Almost all over the world, education is seen as the most effective means of improving people and society. Countries allocate a significant portion of their budgets for education systems and schools established for this purpose. Achieving the expected outcomes from education systems depends largely on the teachers working in the kitchen of this profession. According to the prominent historian and thinker Ortaylı (2019), teacher education is the most important issue in Turkey. According to him, "the life of future generations cannot be improved unless we improve our teachers, we lend a hand to them, we save at least their new generations, we promote their quality of life, we support their qualifications, and we bring them out of poverty. Otherwise, it is the frustration that awaits us" (p. 159). As Ortaylı emphasizes, teacher education is one of our most important issues, and supporting their quality is of critical importance.

The quality of education and student achievement are closely related to teacher qualifications. The argument that increased teacher qualifications will enhance student success is also supported by previous research (Goldhaber, 2016; Stronge, Ward, & Grant, 2011; Stronge, Ward, Tucker, & Hindman, 2007). Therefore, it is thought that one of the priority issues of policymakers in the field of education is to increase the quality of teachers in the system. Based on similar ideas, the Ministry of National Education in Turkey (MoNE, 2017a) has identified the achievement of teachers' continuous professional development as one of the priority objectives in the Teacher Strategy Document of 2017-2023. However, how this can be achieved is an important and challenging question.

In Turkey, teachers want a career system so that their efforts regarding graduate education and their professional development motivation could be supported (Can, 2019). According to the Vision 2023 Technology Foresight Project Education and Human Resources Final Report and Strategy Paper of the Scientific and Technological Research Council of Turkey (TUBITAK), one of the important problems of the education system is failure to turn teaching into a "career profession". It has also been mentioned in the document that the Teacher Career Steps application, which was put into effect at the time the report was published, have not yielded outcomes, yet (TUBITAK, 2005). Unfortunately, it can be said that despite the 15 years that have passed since the publication of the report, no significant progress has been made towards making teaching a career profession.

The Organization for Economic Co-operation and Development (OECD) (2016) published a report based on the 2013 Teaching and Learning International Survey (TALIS) data on how teachers' professionalization can be supported. In the report, it is emphasized that tangible support should be given to the professional development activities that teachers will participate in. Some of these include wage increases, financial support for professional development, and time allocated for professional development activities. According to the report in which TEDMEM (2019) examined the TALIS 2018 results, similar findings appeared in the survey five years later and similar suggestions were made. In other words, no significant progress had been made on the issues mentioned since then.

In Turkey, the MoNE organizes various in-service training activities through national education directorates in provinces and the school administrations in schools to support teachers' professional development. Another important source of professional development of teachers is the graduate education that teachers receive from universities with their own efforts (Can, 2019). Although the MoNE has not created a career system that will encourage the professional development of teachers, their interest in graduate programs at universities continues. According to the MoNE 2012 annual report, the number of teachers who did a masters' degree was 56,770 and the number of those with a Ph.D. was 898. In 2015, these numbers rose to 77,757 and 1052, and to 98,518 and 1743 in 2019, respectively (MoNE, 2013, 2016, 2020a).

"Teacher professional learning is of increasing interest as one way to support the increasingly complex skills students need to learn in preparation for further education and work in the 21st century" (Darling-Hammond, Hyler, & Gardner, 2017). One of the general competence areas regarding the teaching profession, which was created by the MoNE in 2006 and updated in 2017, is personal and professional development. Accordingly, teachers should be able to participate in appropriate personal and professional development activities by evaluating their professional status (MoNE, 2017b). However, about one-third of teachers in Turkey state that they allocate no time to attend professional development activities. Approximately 70% of the teachers spend less than one hour a week for professional development activities (Abazoğlu, Yıldırım, & Yıldızhan, 2014).

Professional development activities are defined as all activities that teachers are involved in throughout their professional life and that are designed to improve their knowledge, skills, and expertise (TEDMEM, 2019). Professional development is a learning process designed to enable teachers to fulfill their duties more effectively and thus help students to learn better. Although in-service training programs are seen as activities that contribute to professional development, they cannot meet the professional development of teachers alone in terms of both meaning and function (Daresh, 2001 Gültekin & Özenç İra, 2019; Sergiovanni & Starrat, 2007). OECD (2016) recommends that courses or programs spread over a period of time should be put into practice rather than one-time in-service training activities to support the professional development of teachers.

Teachers are among the most important human resources that countries rely on to carry out development reforms. The realization of development goals largely depends on the effective functioning of education systems and teachers. In this context, it is of great significance to support the professional development of teachers (Villegas-Reimers, 2003). One of the most important resources that can be utilized to achieve the professional development of teachers is formal programs opened at universities (Avalos, 2011). One of the most important indicators of the relationship of graduate education programs offered at universities with the professional development of teachers is accepted to be increased student achievement. Although some studies conducted in the USA (Harris & Sass, 2011; Jepsen, 2005; Ladd & Sorensen, 2015) report no significant relationship between teachers' advanced education and student achievement, studies that show students taught by teachers with graduate education have higher success are in majority (Badgett, Decman, & Carman, 2013; Betts, Zau, & Rice, 2003; Croninger, Rice, Rathbun, & Nishio, 2007; Dee, 2004; Darling-Hammond, 2000; Horn & Jang, 2017; Nye, Konstantopoulos, & Hedges, 2004). According to a study conducted in Sweden, the education level of teachers is effective on student success (Myrberg, Johansson, & Rosen, 2019). Despite the lack of empirical studies in Turkey addressing the direct impact of graduate education on student achievement, there are some studies showing teachers think that graduate education they received contributes to their field knowledge and professional development (Balıkçı, Cansoy, & Parlar, 2018; Çalışoğlu & Yalvaç, 2019; Nayır, 2011; Turhan & Yaraş, 2013). Research results show that graduate education received by teachers can be an important tool to support their professional development, and thereby increasing student achievement.

Authorities who have a say in the MoNE and education policies in Turkey have long noticed the importance of graduate education of teachers and made several decisions in this regard. For example, in the Vision 2023 Technology Foresight Project Education and Human Resources Final Report and Strategy Paper of TUBITAK, increasing the number of teachers with master's degree has been set as a goal (TUBITAK, 2005). In the Teacher Strategy Document, the MoNE (2017b) has suggested that the professional development of teachers should not be limited to in-service training programs organized by the MoNE and should be supported with graduate education, and developed strategies accordingly. Also, the 11th Development Plan of Turkey, which is one of the highest policy documents in effect, has aimed to create a professional development model for teachers based on graduate education and related to the career system (Presidency of Strategy and Budget [PSB], 2019). In the 2023 Education Vision Document of the MoNE, it has been stated with a similar approach that graduate education opportunities will be offered in cooperation with universities to support the professional development of teachers (MoNE, 2020b). As a tangible step, a cooperation protocol was signed between the MoNE and the Council of Higher Education (CoHE) on March 5, 2020 to open face-to-face and distance graduate education programs for teachers (MoNE, 2020c). In addition, with the Amendment of the MoNE Teacher Appointment and Relocation Regulation published on 19 June 2020, the MoNE announced that it would increase service ratings of teachers by 90 points for PhD, 50 for master's degree with thesis, and 30 for master's degree without thesis.

The MoNE itself states that the quality and efficacy of human resources in the education system in Turkey is not at the desired level. The MoNE is a very large organization with more than one million employees. It was announced that this human resource included 1.525 teachers with a PhD degree and 91.268 teachers with a master's degree as of the end of 2018. These figures show that less than 10% of the total human resource has completed graduate education. In the 2019-2023 Strategic Plan of the MoNE, it has been stated that the rate of teachers and managers who have received graduate education will be increased to 17% until 2023 (MoNE, 2019). According to the 2018 TALIS survey, the rate of teachers with graduate education in OECD countries is over 45% (master's degree = 44.2%; PhD = 1.3%) (TEDMEM, 2019). When the OECD average is taken into account, it can be said that although policy level decisions about guiding teachers to graduate education in Turkey have been made, there is still much to do in practice.

A more important issue than the number of teachers with graduate education is what expectations these teachers have from this education and what they have obtained from this education in terms of professional development. Accordingly, this study focuses on the role of graduate education in achieving the professional development of teachers. What do teachers expect from graduate education and what do they achieve in terms of professional development? How are the professional development of teachers with graduate education, their perspectives on teaching profession, approach to students, use and knowledge of teaching methods and techniques, and measurement and evaluation practices affected by the education they receive? This study aimed to answer all these questions based on teachers' opinions with a qualitative approach, thereby shedding light on the role of graduate education in teacher's professional development.

In Turkey, one of the most frequently discussed questions in research on this topic is what teachers expect from graduate education or why do teachers receive graduate education. The prominent reasons in these studies include developing professional skills and pursuing a career in the MoNE or universities (Alabaş, Kamer, & Polat, 2012; Balıkçı et al., 2018; Baş, 2013; Başer, Narlı, & Günhan, 2005; Berkant & Baysal, 2017; Kahraman & Tok, 2016; Kaya, 2014; Oluk & Çolak, 2005; Savaş & Topak, 2005; Turhan & Yaraş, 2013). In addition, some teachers have stated that they have turned to graduate education to improve their personal rights (Savaş & Topak, 2005; Turhan & Yaraş, 2013) and achieve spiritual satisfaction (Baş, 2013). The findings are similar in the international literature, too. Indeed, teachers receive graduate education in different countries to achieve personal development (Leonard, Becker, & Coate, 2005; Snoek & Volman, 2014), improve their instructional knowledge and skills (Kowalczuk-Walędziak, Lopes, Menezes, & Tormenta, 2017; Ligus, 2013; Snoek & Volman, 2014), benefit from different career opportunities (Blackwell & Diez, 1998; Jablonski, 2001) and utilize personal rights (Ladd & Sorensen, 2015; Loxley & Seery, 2012).

In addition to the expectations of teachers from graduate education, what they get from these education programs in terms of professional development is an important question, too. Research has partially answered this question. For example, Kahraman and Tok (2016) reported that the primary expectation of teachers was to increase their knowledge and skills about their profession and that this expectation was largely met. Kaya (2014) determined that teachers with graduate education found the education they received functional in applying different teaching methods and techniques, recognizing/understanding students, and implementing measurement and evaluation. The findings of the same study showed that teachers could not get a material and spiritual return for graduate education within the MoNE. According to teachers, one of the most important contributions of graduate education is that it increases their self-confidence (Jablonski, 2001). The results of some other studies on the contribution of graduate education to teachers' professional development have revealed the following points: teachers improve their problem-solving, leadership, and communication skills with graduate

education (Snoek & Volman, 2014; Turhan & Yaraş, 2013); their perspectives towards and interpretations of events change (Alabaş et al., 2012); they can implement what they have learned in an educational environment (Çalışoğlu & Yalvaç, 2019; Kumar & Dawson, 2013; Oluk & Çolak, 2005); they gain critical and analytical thinking skills and they value these skills more than knowledge (Balıkçı et al., 2018; Kershner, Pedder, & Doddington, 2013), and they gain skills of establishing theory-practice relationships (Kowalczuk-Walędziak et al., 2017). These studies have also shown that teachers face some difficulties applying the theoretical knowledge they have learned (Başer et al., 2005; Sezgin, Kavgacı, & Kılınç, 2011). Başer et al. (2005) found that this challenge was attributed to crowded classrooms and lack of materials in schools.

As can be seen, many questions about the role of graduate education in the professional development of teachers have been answered in the literature. However, there are important questions yet to be answered. For example, the reasons why teachers turn to graduate education have been answered to a great extent, while the general contribution of graduate education to their professional development has partially been addressed. In addition to these, whether graduate education affects teachers' attitudes towards the teaching profession and their approach to students are questions worth mentioning. Besides, whether teachers get any benefits in terms of using teaching methods-techniques and learning about measurement and evaluation practices, which can be regarded as a direct indicator of their professional development, are also considered important questions. With this study, which deals with these partially answered or unanswered points in the literature, the aim is to shed light on the role of graduate education in achieving the professional development of teachers. Therefore, the study aims to reveal whether the graduate education process, which is seen as an important tool for teachers' professional development, provides the expected benefits, and the reasons why it cannot be achieved, if otherwise. Furthermore, it is hoped that the results of the present study can contribute to increase the quality of graduate education programs for teachers. For this purpose, the study sought answers to the following questions based on the teachers' opinions.

- 1. What are the reasons that direct teachers to graduate education?
- 2. What is the contribution of graduate education to teachers' professional development?
- 3. How has graduate education affected teachers' perspectives on the profession?
- 4. How has graduate education affected teachers' attitudes towards students?
- 5. How has graduate education affected teachers' use of teaching methods and techniques?
- 6. How has graduate education affected teachers' measurement and evaluation practices?

Method

Research Design

This study employed the qualitative research method and utilized the basic qualitative research design. In qualitative research methods, "the target phenomena are evaluated within their natural course and no statistical analysis is used" (Jackson, 2009). This research method focuses on how individuals make sense of themselves and their lives rather than cause and effect relationships (McBurney & White, 2010). The basic qualitative research design also carries all the features of the qualitative research method and tries to reveal how the researchers "make sense of a situation, process, perspective, or world view" of the participants. In this design, an inductive strategy is used and descriptive results are obtained. The data are presented with rich and descriptive content and discussed using the literature (Merriam, 2002). Using the basic qualitative research design, this study focused on revealing the reasons why teachers receive graduate education and their perception and perspectives towards the effect of graduate education on their professional development, their perspectives on the teaching profession, attitudes towards students, use and knowledge of teaching methods-techniques, and use and knowledge of measurement and evaluation.

The Study Group

In the study, special attention was paid to ensuring the diversity of the working group in terms of age, gender, seniority, undergraduate, and graduate education departments, and degrees obtained in graduate education. Thus, we aimed to ensure the reflection of as many different phenomena and

perspectives as possible in the study. For this reason, the study group was selected among teachers who received graduate education and were working in a province center in the Central Black Sea region of Turkey in the 2018-2019 and 2019-2020 academic years using the maximum variation sampling technique. Robson (2017) suggested a flexible approach when determining sample size in qualitative research. Accordingly, instead of determining a participant number at the beginning, the researcher can stop collecting data when they see that the data collected have reached a saturation point in terms of reflecting the topic being investigated. In this study, the data obtained from the interviews were evaluated along the process, and the number of participants was limited to 25. Table 1 presents information about the participants.

Variable	Sub-Group	Frequency	Total
Age	26-30	2	
	31-35	9	25
	36-40	5	
	41-45	7	
	46 or older	2	
Gender	Female	14	25
	Male	11	
Seniority (years)	6-10	3	25
	11-15	10	
	16-20	8	
	21-25	4	
Field	Mathematics	6	25
	English language	5	
	Turkish language	4	
	Physical education	2	
	Religious Culture and Morals	2	
	Literature	2	
	Social studies	1	
	Biology	1	
	Chemistry	1	
	Food and beverage services	1	
Level of graduate education	Master's degree with a thesis	18	
	Master's degree without a thesis	3	25
	PhD	4	
Department of graduate education received	Education administration and supervision	7	25
	Curriculum and instruction	3	
	Turkish language teaching	3	
	Turkish literature teaching	2	
	Islamic law	2	
	Mathematics	1	
	Mathematics teaching	1	
	History	1	
	Science teaching	1	
	Molecular biology and genetics	1	
	Biochemistry	1	
	Health tourism	1	
	Exercise and training	1	

Table 1. Information about the Participants

As seen in Table 1, the majority of the participants were aged between 31 and 45, 14 were female, and 11 were male. The majority of the teachers had 11 to 20 years of seniority. The teachers in the study group included mainly mathematics, English, and Turkish teachers in line with their rates at schools. In addition, teachers with graduate education were represented by two teachers in each of the physical education, religious culture and morals, and literature fields and by one teacher in each of the social studies, biology, chemistry, and food and beverage services fields. The majority of the participants had a master's degree. Eighteen of the teachers had a master's degree with a thesis and 3 of them had done a master's degree without a thesis. In addition, four teachers with a Ph.D. were also included in the study. The teachers in the study had received graduate education in 13 different fields.

Data Collection Tool

In the basic qualitative research design, data are collected with interview, observation, or document analysis methods (Merriam, 2002). In this study, face-to-face interviews, one of these methods, were adopted, and a semi-structured interview form was developed by the researchers. While preparing the form, first, the relevant literature was reviewed (Balıkçı et al., 2018; Blackwell & Diez, 1998; Kaya, 2014; Croninger et al., 2007; Jablonski, 2001; Kowalczuk-Walędziak et al., 2017; Leonard et al., 2005; Snoek & Volman, 2014; Turhan & Yaraş, 2013). The 13-item draft interview form, which was developed based on the relevant literature, was submitted to the opinions of three educational science experts to achieve the content validity. Two of these experts were from the field of Curriculum and Instruction and one was from the field of Educational Administration and Supervision. While two experts had a Ph.D. degree, one had the title of science expert. The form was restructured in line with the opinions of the experts, and the number of questions was reduced to seven. In the interview form, the teachers were asked about their reasons for receiving graduate education, as well as their demographic information. In addition, there were questions about the effects of the education they received on their professional development, their perspective on the teaching profession, approach to students, use and knowledge of teaching methods-techniques, and use and knowledge of measurement and evaluation. Two examples of questions asked to teachers are as follows.

- When you evaluate yourself in terms of before and after doing your master's/Ph.D. degree, are there any differences in your perspective on the teaching profession? If yes, can you explain it with a few examples?
- When you evaluate yourself in terms of before and after doing your master's/Ph.D. degree, are there any differences in your use of teaching methods/techniques? If yes, can you explain it with a few examples?

Data Collection and Analysis

The study data were collected through face-to-face interviews. The interviews were conducted during the seminar weeks at the end of the 2018-2019 academic year and at the beginning of the 2019-2020 academic year (17-28 June 2019 and 2-6 September 2019). First of all, the school principals were contacted to identify the teachers with graduate education in their schools, and after the permission and approval of the school principal, the teachers were contacted. The purpose and scope of the research were explained to the teachers, and they were asked whether they would volunteer to participate in the research. Face-to-face interviews were held with the teachers who agreed to participate in the interview at times convenient for them. After getting the permission of the participants, the interviews were recorded using a voice recorder. The recorded data were later transcribed and transferred to a digital file. The MaxQda software package was used in the analysis of the data, and the data were analyzed using the content analysis method. To describe the findings as clearly and comprehensively as possible, the display format in Figure 1 was used for the theme, sub-themes, and codes.

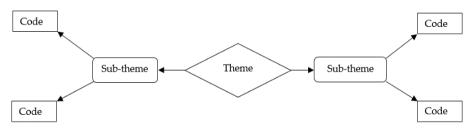


Figure 1. Coding System for Data Analysis

Under Figure 1, the raw data were carefully read first in content analysis, and the opinions of the participants were coded. Secondly, coded participant views were collected under common subthemes. In the third and last stage, sub-themes were collected under themes based on research questions. When making direct quotations, the codes were created to show gender and graduate education levels. The codes of the teachers were specified in the form of T1, T2 according to the order of the interview. The coding of participant characteristics was as follows: F for female and M for male teachers; MA without theses for master's degree without thesis, MA for master's degree with a thesis; PhD for participant with a PhD degree. For example, the teacher who was interviewed first was named as T1, his gender was coded as "M", and his graduate degree was coded as "PhD" as he had a PhD degree. Accordingly, the coded version of the first teacher interviewed reads "T1, M, PhD".

Validity and Reliability Studies

The concepts of validity and reliability in quantitative research are replaced by the concepts of credibility, confirmability, transferability, and consistency in qualitative research, and some measures are taken to ensure the validity and reliability of the qualitative research (Merriam, 2009). Some measures have been taken to ensure the specified conditions in this research, too. Detailed descriptions and depth-focused data collection were included in the study to ensure the credibility. Recording the interviews with a voice recorder under the permission of the participants, transcription of the recorded data into written documents, and frequent inclusion of direct quotations in the findings provided the detailed description and depth-focused data collection. In addition, obtaining in-depth information from the participants according to their responses without any limitation through semistructured forms was a part of depth-focused data collection. To ensure confirmability, two of the participants were requested to read the findings and results obtained in the study and asked whether the analysis of the data reflected the facts they wanted to express, and the participants' confirmation was obtained. To ensure the transferability showing that the research results can be transferred to similar contexts, the data about the characteristics of the study group and the steps for collecting and analyzing the data were explained in detail. Content and face validity of the data collection tool was achieved to ensure consistency in the study. Besides, during the process, while all procedures, such as the design of the research, data collection, and analysis and reporting of the results, were being structured by one of the researchers, the procedures were constantly controlled by the other researcher, and peer debriefing was performed by giving feedback to the researcher. Another process carried out to ensure consistency was that the researchers conducted the analyses in coordination and tried to ensure the consistency of the analysis results by agreeing on common codes and sub-themes by checking them constantly. In determining the consistency coefficient, Miles and Huberman's (1994) formula, "Level of reliability = Agreement / Agreement +Disagreement", was used. The number of agreed themes, sub-themes, and codes was 69; therefore, the reliability coefficient was determined as 69/69 + 4 = 0.94since there were 4 codes that could not be agreed on. The researchers reviewed the data for the codes that they could not agree on and repeated the analysis process together, and these codes were finalized.

Results

Teachers' Reasons for Receiving Graduate Education

The participants were first asked about their reasons for receiving graduate education. The results of the content analysis for this question are described in Figure 2.

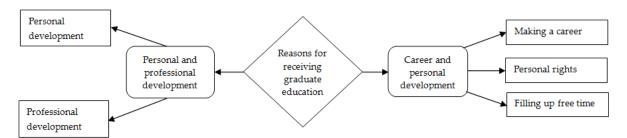


Figure 2. Reasons for Receiving Graduate Education

As seen in Figure 2, teachers' reasons for receiving graduate education were evaluated under the personal and professional development and career and personal rights sub-themes. Explanations on these sub-themes are presented below.

Personal and professional development. The majority of the teachers stated that they applied to graduate education to achieve personal and professional development. One of the teachers who stated that he received education for personal development (T20, M, PhD) said he wanted to improve himself more in his field due to his interest in the field. In addition, the adoption of a more intellectual lifestyle and desire to continue the usual pace of study pursued in undergraduate education were also effective in receiving graduate education to ensure personal development. The following statements can be given as examples of these views: *"I mean, to develop myself more, to be more intellectual, and to progress ... (T18, F, MA)"* and *"You seek to do something again afterward. You want to improve yourself again because you get used to that pace. Going to school and teaching do not satisfy you anymore (T4, F, MA)"*.

The majority of the teachers participating in the study considered their profession as a branch that required continuous improvement and thought that when they did not make an effort to improve themselves after a certain time, they ended up with monotonous lectures and their field knowledge atrophied. For this reason, they started graduate education, thinking that graduate education would have a positive impact on both their professional skills and the development of their field knowledge. One of the teachers said, "*I think education is an endless process*. *That is why I did not want to end my education life. I mean that… when I first started teaching, I always felt that I repeated the same things in the first years. After 3-5 years, I found out that I always taught the same lessons in the same way (T9, M, MA)"*. Another teacher said, "*After I started teaching in the schools of MoNE, I felt that my knowledge started atrophying. There are too many routines in the process of education. To get out of these routines and refresh myself a little more, I thought of doing a master's degree. I usually think that I am lost in the system. That's why I thought I'd take a look at doing a master's degree (T8, M, MA)", which supported this view.*

Career and personal rights. An important part of the teachers stated that they pursued graduate education to build a career, improve their personal rights, and find a job until they were appointed. Making a career followed personal and professional development as another reason for receiving graduate education that the teachers often cited. Especially the goal of making an academic career was seen as a factor for teachers to pursue a master's or PhD degree. Some of the statements of the teachers in this regard were as follows: "*Graduate education was primarily a youth dream for me. I saw that this dream continued after I became a teacher. I received graduate education to improve myself and to become an academician.* (*T17, F, PhD*)" and "*Academic career was always my dream.* (...) *It was a bit late, but since I was always thinking about an academic career, I followed that goal.* (*T1, M, PhD*)". One of the teachers stated that he started a master's degree, not for an academic career but to pursue a career in the Ministry of Education. This

teacher expressed his views as follows: "I did it to become an expert teacher... We think this desire to climb up the career steps is the first-degree factor. At the moment, although the procedure, being appointed as an expert teacher, does not work anymore, I have started it with this aim at first (T10, M, MA)".

It was found that there were also teachers who received graduate education to improve and use their personal rights, such as financial improvements and appointment to a better region. One of the teachers said, "We thought it had a financial return, but it has turned out that it does not. You need to spend too much money while receiving this education. The return is very small, but I mean financially (T12, M, MA)." Another teacher stated that she wanted to be appointed to a better place. She said, "I was appointed to the east of Turkey. I would ask for an easier appointment to my hometown using the education excuse (T16, F, MA)". Finally, a teacher stated that after finishing her university education, she was not appointed immediately, so she did a master's degree to find a job. She said, "I finished school, that's, undergraduate education. By the way, there was no KPSS appointment those days. So I decided to do a master's degree. I had the necessary qualifications. I started it just to fill up my free time (S13, F, MA)".

Contribution to Professional Development

The teachers were asked about their opinions on the contribution of graduate education to their professional development. Content analysis results for this question are displayed in Figure 3.

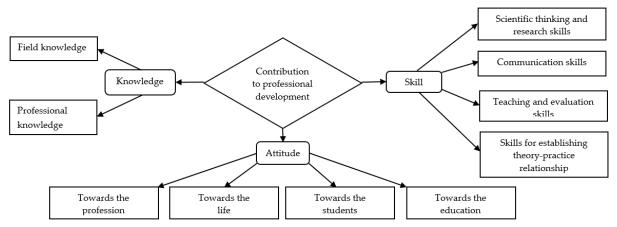


Figure 3. Contributions of Graduate Education to Professional Development

As seen in Figure 3, opinions about the contribution of graduate education to the professional development of teachers were evaluated under three sub-themes: knowledge, skills, and attitudes. The explanations of these sub-themes are as follows.

Knowledge. The majority of the teachers who received education in their branch thought that they developed themselves in terms of field knowledge and that they could contribute to their profession and students. Most of the teachers trained in educational sciences stated that they could apply the knowledge they learned about their teaching profession in the field. For example, T14 (F, MA) said, "For instance, we were doing some things just for the sake of doing at that time (undergraduate education). But, as a teacher in front of students now, the reality is different. Now, I can say it will be better to teach it in this way, not that way. Actually, I am trying to apply it in my class." Some of the teachers also stated that they were able to refresh themselves, develop new perspectives on the profession, and feel more knowledgeable than their colleagues, thanks to the graduate education they received. Some teachers stated that they contributed to their professional development by benefiting from publications related to their fields or educational sciences. A teacher's statement exemplifying this view was as follows: "I used to know nothing about theses or similar things, or how to make use of a thesis after downloading it from the CoHE thesis center ... For example, the results section has useful information. It has provided me with many benefits related to my lesson and students (T7, M, MA)."

Skills. Some of the teachers mentioned that graduate education contributed to their professional development in terms of skills as well as knowledge. The most important contribution of graduate education to teachers was expressed as gaining scientific thinking and research skills. According to the teachers, these skills provided them with information about the way to follow in future researches and to guide their students to prepare projects more easily. One participant said, "*The biggest contribution of graduate education to me was during the thesis preparation phase. You learn how to do research, where to start, and how to advance it.* (…) *You gain knowledge and experience of how to prepare a project or to guide students to prepare projects* (*T11, M, MA*)". The teachers also thought that graduate education contributed to establishing healthy communication with students. One participant's statement exemplifies this view as follows: "(…) it has a huge contribution in terms of communicating with students (*T1, M, PhD*)".

Learning about teaching and evaluation and gaining the ability to put this knowledge into practice was listed among other contributions, and they formed the teaching and evaluation skills code. For example, one participant said he learned new techniques and methods in graduate education and that he benefitted from it, as in the following statements: "*New techniques and new methods have emerged. New teaching techniques and teaching-related functions have emerged. I have learned them. I have benefitted from them a lot (T8, M, MA)*". Another participant stated that she gained skills for applying new methods/techniques as follows: "Methods, at least we had the chance to see the theory in practice. Of course, when I have seen theory and practice together both in my teaching life and in my Ph.D. education, it has become more useful. (T6, F, PhD)".

Attitude. The statements of the majority of teachers showed that they developed positive attitudes towards their profession, life, students, and education thanks to graduate education. Most of the teachers who participated in the study mentioned that graduate education provided them with spiritual satisfaction. This satisfaction has two dimensions, namely, profession and life. For example, one of the teachers stated that this satisfaction was related to the profession as follows: "I was an innovative teacher as much as I could also before my graduate education. However, after graduate education, knowing teaching methods and techniques better, considering learning styles and strategies, and approaching students taking into account the theory of multiple intelligences have increased my job satisfaction and performance (T6, F, PhD)". Another teacher said that he developed positive attitudes towards life as in the following statement: "Accomplishing something, for example, when you are in a thesis defense for a master's degree and when you make it, you receive celebrations, such as 'congratulations! you have become a scientist' ... I mean it has a different spiritual value (T12, M, MA)". The skills such as empathy and communication that teachers gained through graduate education also enabled them to develop positive attitudes towards students. Besides, according to the teachers, graduate education gave them hopes about the future and helped them gain positive attitudes towards education. The following statements reflect these views: "Most of the teachers with graduate education teach classes with good students at school, their words are taken seriously by the administrators, and they have very serious plans for the future (T8, M, MA)" and "We got to know the university, we got to know the professors, and they changed our view of education and students a bit, and made contributions. It was definitely positive (T7, M, MA)".

Perspectives on the Teaching Profession

The teachers were asked about their views on whether their graduate education changed their perspectives on the teaching profession. Teachers were asked to share their opinions about the changes if any, or the reasons, if not any. The results of the content analysis for this question are displayed in Figure 4.

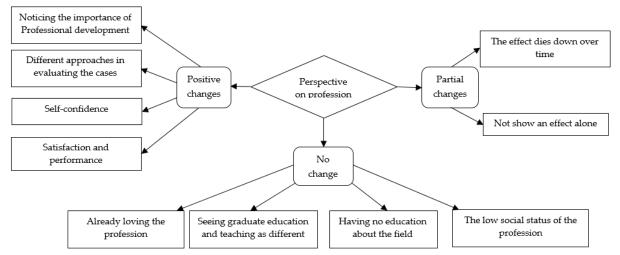


Figure 4. Perspectives on Teaching Profession

As seen in Figure 4, the changes in teachers' perspective on the profession are evaluated under positive changes, partial changes, and no change sub-themes. Under the positive changes sub-theme, teachers' views about the kind of change they experienced were coded, and views about why there was no change were reflected in the coding under the partial changes and no change sub-theme. Below are explanations of these sub-themes.

Positive changes. A significant part of the teachers stated that they realized the importance of professional development with graduate education, they started using different approaches to evaluating events, and that their self-confidence, satisfaction, and performance increased. Thanks to their graduate education, teachers had the opportunity to review their practices in the profession and realized that the practices they knew and performed years ago might not be enough for today's students. One participant stated his view saying, "We have seen that today's children cannot be brought up with the knowledge you learned at the faculty 30 years ago; it was not enough. Classical teaching is not adequate right now (T2, M, MA without thesis)". Another participant supported the view stating, "I have once again seen that teachers should always renew themselves (T22, F, MA)". In addition, some of the teachers stated that they interpreted and evaluated the events differently with the changes in their perspectives thanks to their graduate education. According to some teachers, graduate education can also increase teachers' professional self-confidence. For example, one participant responded to the question, "Has there been a change in your perspective on the teaching profession?" as in "Of course... You have more self-confidence (T21, F, MA)". In addition, one of the teachers mentioned the change in his/her perspective on the profession with the change in his/her satisfaction and performance as he/she could achieve professional development.

Partial changes. Two of the teachers interviewed stated that positive changes occurred in their perspective on the profession in the first years of their graduate education, but this effect gradually died down in the following years. One of these teachers stated his views on this situation as follows: "During that process, your view of teaching changes. You see that change after you have finished the process, but it has been 10 years since I completed it, and in the following period, it is dying down gradually. You cannot experience the same feelings and have the same ideas... When you receive your master's degree, you believe that this convention is wrong and must change. But then the system takes you in, swallows you. Why? Because you cannot maintain your education! The existing traditional system swallows you because you haven't been able to provide sustainability in a way that preserves and even improves your perspective (T11, M, MA)". Two different teachers stated that graduate education had an effect, but that it did not change their perspective alone on the teaching profession along the years. So I can't fully link this to my master's degree (T12, M, MA)".

No change. More than half of the teachers stated that graduate education did not change their perspective on the teaching profession. These teachers attributed their views to different reasons by stating that they already loved their profession, they did not see teaching and graduate education directly related, they had not received the graduate education in their field, and that the profession was thought to have low social status and graduate education would not change this. More than half of the teachers who stated that graduate education did not change their perspective on the teaching profession said that they already carried out their profession with love and that their attitudes towards the profession was already positive. For example, one teacher said, "It hasn't been long. I am a person who already loves her job. Therefore, master's degree has not led to any change in that sense (T25, F, MA without thesis)". Another teacher who said that there was no change explained the reason for this situation by stating that graduate education and the teaching profession were different areas. He said, "That is, it hasn't actually had much impact on my teaching profession. The goal of doing a master's degree is already a little different. I consider the teaching profession from a more occupational point of view. So I think teaching is a different field (T10, M, MA)". Another teacher saw her field and graduate education as different from each other because she had a master's degree in educational administration. She stated that there was no change in her perspective on the profession. She said, "Maybe I would benefit it if I was an administrator since it is in the education management department, but it has not made a contribution to me because I am not an administrator (T13, F, MA)". The last teacher who thought that there was no change stated that the teaching profession was not valued in the social sense, and because of its low status, whatever was done, there would be no change in his perspective on the profession. This teacher stated his views as follows: "Unfortunately... Society has put this profession deep under the ground and poured cement on it. That's why this profession is worthless to society. (...) It is a profession that is humiliated in every platform, everywhere you go. (...) You know, in a world where people think 'you become a teacher even if you cannot achieve anything', there will be no change in my perspective on the teaching profession by doing a master's degree (T8, M, MA)".

Attitudes towards Students

The teachers were asked whether graduate education changed their attitudes towards students and if there was a change, how they would describe it, or why they thought there was no change, if not any. The results of the content analysis for this question are displayed in Figure 5.

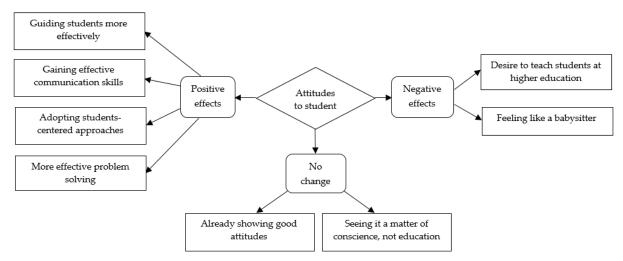


Figure 5. Attitudes towards Students

As seen in Figure 5, changes in teachers' attitudes towards students were determined under positive effects, negative effects, and no change sub-themes. Under the positive effects sub-theme, teachers' opinions about the changes they experienced were coded, and under the negative effects and no change sub-themes, opinions about why there was no change were reflected in the coding. Below are explanations of these themes.

Positive effects. Almost all of the teachers stated that after receiving graduate education, a positive change occurred in their attitudes towards students. These teachers stated that they were able to guide students more effectively, gained effective communication skills, adopted student-centered approaches, and became more effective in problem-solving. In addition to guiding students about inclass activities, their ability to guide students about higher education was another effect that teachers identified. In other words, the teachers could now direct their students to undergraduate and graduate education in a better way because they had seen the university environment and gained information about universities thanks to their graduate education. Also, they thought that they could be role models for their students by receiving graduate education. For instance, two of the teachers' statements reflected these views as follows: "(...) For example, I can say I learned enough about universities, so I can help my students about their university education. What should they do, or what steps they have to go through... (T23, F, MA)" and "I have shared what I learned, my studies, and experiences with them. I have become a role model for them (T22, F, MA)".

Some teachers mentioned that they developed different communication skills, such as addressing, patience, tolerance, and empathy thanks to their graduate education. They reflected their views as in the following statements: "Tolerance... We used to be more impatient; we have seen that we have to be patient (T2, M, MA without thesis)", "I have become patient. I mean master's degree adds some professionalism. I was not expecting such a change (...) So you realize that a child behaving undesirably is actually behaving very normally (T8, M, MA)", and "For example, we obtained a lot of articles every week during the master's degree. We were given assignments, such as reading the articles, preparing presentations, and doing homework. What happens when students are given homework and they do it or don't do it? In this way, we got to know students more closely. We established empathy. We give homework to students and we wonder why they don't do it. We personally experienced it (T7, M, MA)".

Some of the teachers stated that they found out about student-centered approaches thanks to graduate education and that they were able to adopt and use them. For example, one teacher said, "(...) total quality management was very popular back then. There was a student-centered approach there. (...) There was a shift from 'you are doomed to our service and whatever we supply' to 'we exist with you and will exist with you, therefore you are valuable to us'. So that was the understanding that changed my main point of view (T11, M, MA)". Another teacher's statement was an example showing that he gained problem-solving skills through graduate education: "When there is a problem, the way you approach the problem and the problem-solving style and the methods/techniques you employ in solving that problem, of course, have a direct effect on them ... (T10, M, MA)".

Negative effects. It has been determined that there were not only positive but also negative changes in teachers' approach to students after completing the graduate education. Two of the teachers stated that after their graduate education, their approach to students was negatively affected, they started to feel like babysitters, and that they wanted to address to higher-level students. Some of the teachers stated that they wanted to address students at university level. They said, "*Now, teaching university students is a different feeling … Teaching in middle school or primary school is really different. Middle school children are really kids, as the name suggests, and you realize that what you teach is wasted. (<i>T6, F, PhD*)" and "(…) Why wouldn't I address the older in age and higher level in education? I thought like these, of course (*T18, F, MA*)". Also, one of the teachers stated that she started to feel like a babysitter rather than a teacher and that the education she received caused a negative change in her approach to students by saying, "While teaching, you feel like you are a babysitter, an elder sister, instead of being a teacher. So we stop teaching English and start getting more engaged in teaching how to behave. In that sense, I feel emptiness. So my perspective is getting positive professionally, but I fall into a gap in my approach to students. (*T6, F, PhD*)".

No change. Some teachers stated that their approach to students was already good before and that they saw the approach to students as a matter of conscience rather than education, so they did not experience a change in this sense. For example, one teacher said, "I think it is completely related to the

conscience of the person; it is not important whether you have a graduate degree or not, it is completely related to the conscience of the person (T4, F, MA)".

The use of Teaching Methods-Techniques

The teachers were asked about their opinions about the effect of their graduate education on their use of teaching methods and techniques. They were asked to share their opinions on changes in the use of teaching methods-techniques if any, and the reasons, if not any. The results of the content analysis for this question are described in Figure 6.

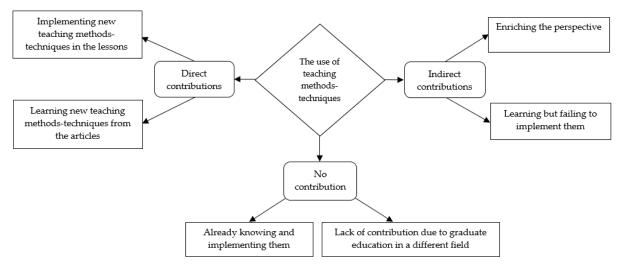


Figure 6. The Use of Teaching Methods-Techniques

As seen in Figure 6, changes in teachers' use of teaching methods-techniques were grouped under direct contributions, indirect contributions, and no contribution sub-themes. Under the direct and indirect contributions sub-themes, teachers' opinions about the contributions they experienced were coded, and under the no contribution sub-theme, the opinions about why there was no contribution were reflected in the coding. Below are explanations of these sub-themes.

Direct contributions. A significant portion of the teachers thought that the graduate education they received had a direct contribution to them in terms of learning and applying new methods and techniques through lectures or the research papers they read. It was determined that teachers who received graduate education especially in the field of educational sciences mentioned that they learned and implemented new methods and techniques during their education. For example, a teacher said, "I can say that it has some contributions (in terms of using methods-techniques). You learn new methods, new techniques, of course, you add them to your knowledge. You try to apply them in classes, as well (T4, F, MA)". Another teacher stated that he could apply the methods and techniques he learned from faculty members during graduate education by saying, "Of course, we use the various methods the teachers have shown to us. It is not only about taking students out and having them play games, but also about many ways, from different drama techniques to play/entertainment, narrative, tale-telling techniques, and so on. Of course, it is reflected on the child like a mirror, simply because we have developed ourselves (T12, M, MA)". One participant, on the other hand, stated that she learned some methods, such as searching for resources, using the library, using technology, and that she had the opportunity to apply these methods together with her students. She said, "We used computers, the Internet, and we did some search in the library. We used technology in many different ways. I employ the method of using the Internet or reviewing different resources, which I developed further there, with my students and at my school by teaching them in different styles (T24, F, MA)". The practice of learning and implementing new methods-techniques from the research was another variable that teachers thought added to their methods-techniques knowledge. A teacher stated that adopting the research culture enabled her to find new methods-techniques. She said, "We are learning methods and techniques through articles because they always have us read articles. Of course, since we have learned the details of methods-techniques, it is easier to apply them (T5, F, MA)".

Indirect contributions. Some teachers stated that graduate education did not teach methodstechniques directly, but they could learn about new methods and techniques thanks to the knowledge obtained during the research process. For example, a participant said, "We learned new techniques thanks to our own skills, but graduate education did not develop a new technique. I knew it because I searched for it a lot. What did it do? It supported me in terms of paving the way for new ideas, in terms of doing some new search. We also prepared a thesis. While doing some search for the thesis, we found out about different methods (T2, M, MA without thesis)". Some teachers stated that they learned some methods-techniques, but could not fully implement them due to reasons such as the conditions of the education system and the different student levels. Some of the teachers reflected their views in this regard as follows: "I mean, when I say methodstechniques, I couldn't go beyond those patterns in the current education system (T15, F, MA)", and "We obtained some knowledge, but it did not fit the students because that method-technique was not suitable for the age level of students, so we could not apply it. OK, it did provide development, but I couldn't apply and transfer all of them (T14, F, MA)".

No contribution. Some teachers stated they already knew and used teaching methodstechniques before graduate education. This was the first reason why they did not learn new methodstechniques in their education. For example, one teacher said, *"There was no change in the methods/techniques I used in my teaching because we had already received education on modern approaches and teaching methods during our undergraduate education (T11, M, MA)"*. Another reason for the lack of contribution was because the teachers had not received their graduate education in a field where they could learn methods-techniques directly. One of these teachers said, *"Master's degree and Ph.D. did not add anything to me in terms of teaching techniques because what we learned there (about movement and training) was not something that would apply to the students here (T1, M, PhD)"*.

Measurement and Evaluation

The teachers were asked about their opinions on whether their graduate education contributed to their measurement and evaluation knowledge and skills. As in the previous questions, they were asked about how the changes, if any, occurred, or the reasons, if not any. The results of the content analysis for this question are displayed in Figure 7.

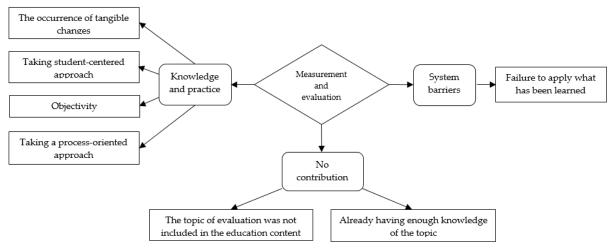


Figure 7. Measurement and Evaluation

As seen in Figure 7, the contribution of graduate education to teachers in measurement and evaluation was grouped under the knowledge and practice, system barriers, and no contribution subthemes. Under the knowledge and practice sub-themes, teachers' views on how they experienced changes were coded, and under the system barriers and no contribution sub-themes, opinions about the reasons for system barriers and lack of contribution were reflected in the coding. Below are explanations of these themes.

Knowledge and practice. Most of the teachers mentioned that there were some tangible changes in their practices in measurement and evaluation after they received graduate education. For example, one participant said, "I softened my measurement and evaluation. I liked the exams that my graduate professors gave us. (...) I made my exams more educational. So I turned the subject into something weird, like measurement teaching, not measurement and evaluation. After all, I consider tests, oral tests, quizzes, and exams in a different way, like 'Can the child learn it a little more?' In fact, I have recently become students' favorite teacher because I'm giving higher grades now (T8, M, MA)". Various teachers mentioned that they tried to be more studentcentered in the process. A teacher stated that he behaved more according to the student-centeredness principle. He said, "... you have a belief that every student has different capacities and abilities. Accordingly, your understanding of putting students under a little more pressure is changing (T11, M, MA)". Similarly, the statement, "We evaluate the tests together with the children. For teachers, this is reticence. They don't usually do it. We evaluate the exams together; transparent. My students participate in giving one or two in-class performance or activity scores. We open it to children. What did you deserve? We say let's evaluate it together. They determine their own grade (T2, M, MA without thesis)", showed that more transparent and democratic practices were included in the process after graduate education. The introduction of a more objective process was another prominent contribution. For example, one participant said, "Of course, more objective, more scaled behavioral scores, and in-class activities are all beneficial. So, you know better how to evaluate or who to give a specific score, rather than grading them with no foundations (T12, M, MA)". The statements of another participant, showing that she moved to a more process-oriented approach, was as follows: "There has been a difference. I do not take the exam results as the sole success criterion. I prefer a process-based evaluation rather than a product-based one. For example, I give performance and project assignments to students during the year and include them in the evaluation process. First of all, I don't want my students to experience anxiety due to grades (T17, F, PhD)".

System barriers. As in methods-techniques and usage, some teachers mentioned that they learned new measurement and evaluation techniques but could not put them into practice due to the existing education system. For example, one of the teachers said, "I am trying to carry out a measurement and evaluation suitable for these children, but unfortunately I have not been able to establish this very well. Since our education system changes a lot, the profiles of new students change every year. Frankly, I suffer from difficulties in our education system as there are many changes (T9, M, MA)".

No contribution. Approximately one-fifth of all teachers interviewed within the scope of the study stated that they did not have any gains in this regard because they were not given education on measurement and evaluation during their education. One of the teachers' expressions supporting this view was as follows: "*Since I did not study educational sciences (I did not receive a graduate education in this field), of course, although it improved and enriched my horizons, it did not make a big difference in terms of methods and evaluation (T22, F, MA)*". A teacher said that she already had enough knowledge and equipment about measurement and evaluation, so graduate education did not contribute to this issue. She added, "I went there with that equipment. That's how I started my graduate education. Therefore, we can say that it did not make any contributions (S13, F, MA)".

Discussion and Conclusion

Reasons for Receiving Graduate Education

The majority of the teachers stated that they pursued graduate education to ensure their personal and professional development. A significant number of them stated that they received graduate education to build a career and improve their personal rights within the MoNE, especially at a university. These results are largely consistent with the results of research conducted in the last 15 years in Turkey. Earlier studies reported the leading reasons why teachers in Turkey did graduate studies as follows: self-development (Alabaş et al., 2012; Başer et al., 2005; Kahraman & Tok, 2016); specialization in the profession (Balıkçı et al., 2018; Baş, 2013; Berkant & Baysal, 2017; Kaya, 2014; Oluk & Çolak, 2005; Turhan & Yaraş, 2013); making an academic career (Alabaş et al., 2012; Balıkçı et al., 2018; Baş, 2013; Başer et al., 2005; Savaş & Topak, 2005; Turhan & Yaraş, 2013); making a career within the MoNE (Alabaş et al., 2012; Baş, 2013; Baş, 2013; Kahraman

& Tok, 2016); obtaining various personal rights (Savaş & Topak, 2005; Turhan & Yaraş, 2013). The reasons were similar in the international literature, such as personal development (Leonard et al., 2005; Snoek & Volman, 2014), improving instructional knowledge and skills (Kowalczuk-Walędziak et al., 2017; Ligus, 2013; Snoek & Volman, 2014), benefiting from different career opportunities (Blackwell & Diez, 1998; Jablonski, 2001), and benefiting from personal rights (Ladd & Sorensen, 2015; Loxley & Seery, 2012).

The findings revealed that teachers sought personal and professional development after they started teaching. Teachers do not want the learning process to stop after an undergraduate degree, they think that they cannot continue their profession for a long time with what they learned at the undergraduate level, and they are afraid of "atrophy" over time. Teachers' pursuit of career and personal rights also seem similar to their motivations in their search for personal and professional development. Teachers who continue graduate education do not want to "stop" in terms of career and personal rights, and they look for career opportunities within the MoNE and mostly at universities.

It is noteworthy that teachers are more in pursuit of a career at universities than a career in the MoNE. Similar to the findings of this study, Karakütük (2000) revealed about 20 years ago that some of the most important problems reported by teachers about doing graduate education were that incentives such as an increase in rank or wage were inadequate and that graduate education was not taken into account in appointments and promotions. In subsequent studies, similar findings were repeated and teachers stated that having a graduate education did not yield a significant financial return for them (Oluk & Çolak, 2005) and that they could not get material and moral returns within the MoNE (Kaya, 2014). According to the results of TALIS 2018, 68.7% of teachers in Turkey indicated the lack of enough incentives as the most important barriers to their participation in professional development activities. More than 70% of the teachers thought that providing teachers with high-quality professional development opportunities was a priority area that should be allocated more resources. The OECD average for the same issue was around 55% (TEDMEM, 2019).

The MoNE is actually aware of this problem, and in the 2019-2023 Strategic Plan, it has stated that the lack of a motivating career system for teachers is one of the weaknesses of our education system and has set the goal of creating a new professional development system to support teachers' professional development (MoNE, 2019). However, this goal is not new and the expected progress in this regard has not been achieved, yet. At the 19th meeting of the National Education Council, which is seen as the highest advisory board of the MoNE, the board has decided to credit the education that teachers receive from universities within the scope of professional development and include it in the career development system. In the same meeting, the board also adopted a principle for encouraging teachers to do graduate education in their own field or educational sciences by increasing payments for extra courses. Besides, to ensure the sustainability of the personal and professional development of teachers, it was recommended that teachers should be given professional and personal development allowance for the education they would attend (Board of Education [BoE], 2014).

The intention of teachers receiving graduate education to continue their careers at universities for various reasons is an important barrier to their working in schools affiliated with the MoNE. One of these reasons is the organizational culture of the MoNE and schools that does not encourage professional development (Sever & Ersoy, 2019). Indeed, for the professional development of teachers, active school leadership and well-structured learning culture should be adopted in schools (Desimone, 2009). According to teachers, graduate education is an intense and weary process (Toprak & Taşğın, 2017), and performing the teaching profession and graduate education together has various economic and psychological difficulties (Balıkçı et al., 2018; Leonard et al., 2005). In addition, the MoNE does not appoint teachers to the place of education (Başer et al., 2005; Karakütük, 2000; Nayır, 2011), and school administrators are reluctant to allow teachers to continue their graduate education and they do not facilitate the process (Sever & Ersoy, 2019). Steps to be taken towards solving these problems may help teachers to pursue graduate education with intentions to continue teaching strongly, not to "leave teaching (transition to university).

Contribution to Professional Development

The teachers thought that they gained some knowledge, skills, and attitudes through graduate education and that their professional development was supported in this way. Especially the teachers who received graduate education in their field thought that they improved themselves in terms of field knowledge. The teachers who received graduate education in the field of educational sciences stated that they improved their knowledge of the teaching profession. Generally, teachers also thought that they could contribute to their professional development by making use of graduate publications in addition to the courses they had taken. Various studies have shown that graduate education that teachers receive has positive effects on their professional development (Eckmier, Ericson, Huetinck, & Sato, 2003; Kowalczuk-Walędziak et al., 2017). Also, the teachers who participated in the study felt more knowledgeable than other teachers. Similarly, the findings of Banville, White, and Fox (2014) also revealed that as a result of graduate education, teachers had more refined and specific insights, especially in their field and knowledge of field education. Although obtaining this information was important for teachers, it can be argued that it is more important to turn them into skills. As a matter of fact, Çalışoğlu and Yalvaç (2019) and Kumar and Dawson (2013) reported that teachers' selfimprovement, learning new things, and ability to apply what they learned especially during graduate education in their schools were the most important achievements. Balıkçı et al. (2018) and Kershner et al. (2013) found that teachers gained critical and analytical thinking skills during graduate education and that they cared about these skills more than knowledge.

The most important contribution of graduate education to the professional development of teachers in terms of skills was determined as scientific thinking and research skills. Teachers stated that thanks to these skills they acquired, they could direct their students to take part in various projects. Considering the importance given to project activities within the MoNE today (TUBITAK 2204, TUBITAK Science Fest, etc.), it is possible to state that the awareness of teachers on this issue will be important in doing project activities. Another interesting finding of the study was that teachers stated that they gained different perspectives by getting to know the university and teaching staff. Besides, gaining the ability to establish theory-practice relationships, communication skills, and various teaching skills were among the prominent results. Similarly, Balıkçı et al. (2018), Kaya (2014) and Kowalczuk-Walędziak et al. (2017) stated that teachers receiving graduate education acquired various teaching skills with the ability to combine theory and practice and found the education they received functional in terms of recognizing and understanding students. Previous studies also revealed that teachers thought that graduate education had a significant contribution to their professional development (Turhan & Yaraş, 2013), they received graduate education to improve their knowledge and skills about their profession, their expectations were met to a great extent in this regard (Kahraman & Tok, 2016), and that they transferred what they learned to their classes (Balıkçı et al., 2018).

The attitude dimension revealed in the study possibly indicated the main and most important gains of teachers from graduate education. Teachers stated that after graduate education, people valued them more differently at school, they experienced personal and professional satisfaction with the pleasure of having accomplished something, and that they gained positive attitudes towards their profession, students, education, and life. These results showed that among the most important contributions of graduate education to teachers were increased self-confidence (Jablonski, 2001; Kaya, 2014) and spiritual satisfaction (Baş, 2013) and that teachers' perspectives and approach to events had changed after completing their graduate education (Alabaş et al., 2012).

Perspectives on the Teaching Profession

A significant portion of the teachers stated that they realized the importance of professional development with graduate education, their approach to evaluating events had changed, and that their self-confidence, satisfaction, and performance increased. Similarly, some studies have shown that teachers' perspectives and interpretations of events change (Alabaş et al., 2012) and their self-confidence

increases (Jablonski, 2001; Kaya, 2014) after completing graduate education. It can be said that one of the most valuable contributions here is the awareness of teachers about the importance of professional development. One of the teacher's statement that he noticed today's children could not be raised with what he learned at the faculty 30 years ago summarizes this awareness-gaining process in the most effective way. It is possible to say that such awareness alone is very revealing for the contribution of graduate education to professional development.

Just as undergraduate education becomes inadequate over time, the knowledge and skills gained through graduate education can also become obsolete over time. Indeed, some of the teachers stated that their view of the profession had changed positively, but that this effect died down over time. This finding is considered very valuable because although time-dependent inadequacy of undergraduate education is frequently mentioned in discussions about the professional development of teachers, it is considered as if graduate education is independent of this effect. Therefore, completing a master's or even Ph.D. education should not be seen as the "peak of professional development", and alternative professional development opportunities should be created for these teachers.

More than half of the teachers stated that their view of the profession did not change with graduate education. The prominent reason for this situation was that they already loved their job. It is thought that this result may be related to the fact that the teachers who pursued graduate education already had a positive attitude towards the profession. As will be remembered, the most important reason for teachers to start graduate education was identified as achieving personal and professional development. Such an attitude is one of the basic requirements of the teaching profession (MoNE, 2017b) and reflects a positive attitude towards the profession. Therefore, the teachers in this study may have thought that they did not experience a change since they already had the desired attitude in this sense.

Some of the teachers who stated that their view of the profession was not affected by the graduate education they received attributed this to various reasons. For example, they said they did not see teaching directly related to graduate education, they did not receive an education related to their field, and that the teaching profession had a low social status and graduate education would not change this. The first two of these reasons are considered important in terms of revealing the importance of graduate education in the teacher's field of study. The importance of graduate education in the field of teaching has been demonstrated by previous research (Croninger et al., 2007; Goldhaber & Brewer, 1997). With a similar understanding, the importance of receiving graduate education in teachers' own field or the field of educational sciences was emphasized in the 19th National Education Council (BoE, 2014). When this finding of the study is evaluated together with the results of previous research and the decisions of the National Education Council, it can be said that it would be appropriate for the MoNE to encourage graduate education in the field of teaching and educational sciences while creating policies to encourage professional development.

It is one of the striking findings that the social status of the teaching profession was evaluated by teachers as low and that this situation was considered as a barrier to the positive effect of graduate education on the profession. In the Draft Teacher Strategy of the MoNE (MoNE, 2017b), a three-stage policy has been adopted to support and strengthen the teaching profession. The first is to attract the best candidates to the profession, the second is to support the professional development of those starting the profession, and the third is to strengthen the social status of the profession. As can be seen, measures for professional development alone are not enough, and other measures need to be taken both before and during the process. Among these, the social status of the profession makes up an important step.

Attitudes towards Students

Some teachers stated that their approach to students was already good, they saw this issue as a matter of conscience rather than education, and therefore that they did not experience a change. Besides, almost all of the teachers stated that their approach to students changed positively thanks to graduate

education. The teachers stated that after completing their graduate education, they could guide students more effectively, gained effective communication skills (addressing, patience, tolerance, empathy), adopted student-centered approaches, and could solve problems related to students more effectively. Also, some of the important findings of the study were that teachers saw the university environment thanks to their graduate education and that they could direct their students to undergraduate and graduate education in a better way and became a role model for their students by doing graduate education. Empathy and ability to communicate effectively (Çalışoğlu & Yalvaç, 2019) and problemsolving and leadership skills (Snoek & Volman, 2014; Turhan & Yaraş, 2013) were among the gains that teachers reported as positive outcomes of graduate education in previous studies. In this respect, the results of the present study support the relevant literature. The development of teachers' counseling skills and their adoption of a student-centered approach show that graduate education guide teachers to adopt a modern understanding of education by moving them away from classical approaches. This is considered a very valuable achievement.

It was determined that there were some negative changes in teachers' approach to students. Few teachers stated that they started to feel like babysitters after graduate education and wanted to address higher-level students. As will be remembered, both the results of this research and the results of previous studies (Alabaş et al., 2012; Balıkçı et al., 2018; Baş, 2013; Başer et al., 2005; Blackwell & Diez, 1998; Kahraman & Tok, 2016; Kaya, 2014; Ladd & Sorensen, 2015; Oluk & Çolak, 2005; Savaş & Topak, 2005; Turhan & Yaraş, 2013) revealed that most teachers started graduate education with an academic career expectation. Apparently, this expectation turns into a more tangible purpose during the graduate education process for some teachers, and this, in turn, affects the teachers' approach to students.

Use of Teaching Methods and Techniques

A significant portion of the teachers stated that they learned new methods and techniques through the lectures or the research articles they read during the graduate education they received and applied them in their lessons. It is noteworthy that among these teachers, those who received graduate education in educational sciences were in the majority. Similarly, studies have shown that teachers review the teaching methods-techniques they use through graduate education (Çalışoğlu & Yalvaç, 2019) and find the education they receive functional in terms of applying different teaching methods-techniques (Kaya, 2014). In this respect, the research results support the relevant literature.

Some teachers stated that they did not learn methods-techniques directly during their graduate education process, but that learned them thanks to research skills they gained (literature review, use of libraries, use of technology, thinking, etc.). Balıkçı et al. (2018) also found that one of the most important gains of teachers from graduate education was gaining critical and analytical thinking skills. Although skills, such as doing research or critical and analytical thinking, do not seem directly related, they can be considered as gains that can positively affect teachers' teaching skills. It can be argued that the main contribution that will increase the quality of the teaching process is not to teach teaching methods and techniques to teachers set forth in the literature, but to enable them to find different methods and techniques through research and to evaluate their own teaching with a critical and analytical perspective. If this can be achieved, teachers can also produce methods and techniques, specific to them, that will increase the quality of teaching. In fact, if teaching methods-techniques directly is compared to "giving fish" to someone who is hungry, teaching skills to question their own teaching can be compared to "teaching how to fish".

A remarkable finding of the study was that some teachers stated that they could not fully implement the methods and techniques they learned due to the conditions of the education system and different student levels. One of the reasons for this situation might be because teachers had difficulty in establishing a link between graduate education and practice (see Blackwell & Diez, 1998). As a matter of fact, one of the most important issues in the organization of graduate education programs aiming to support the professional development of teachers is to establish a balance between theory and practice

(Galluzzo, Isenberg, White, & Fox, 2012; Tom, 1999; White, Fox, & Isenberg, 2011). It was determined that teachers faced difficulties in putting theory they learned during graduate education into practice (Balıkçı et al., 2018; Sezgin et al., 2011) and that they attributed this situation to crowded classes and lack of material in schools (Başer et al., 2005). Although teachers who said that they learned and applied new things were in majority, it is important that there were also teachers who stated that they experienced some problems in practice. It is necessary to clarify exactly what kind of process these teachers, who stated that they had difficulty in putting what they learned into practice, went through so that we can have more advanced insights.

A significant part of the teachers thought that graduate education did not benefit them in terms of teaching methods and techniques. Some of these teachers stated that they already had enough knowledge and skills on this subject. Teachers' views in this regard can be explained by their high self-confidence in teaching methods and techniques. Indeed, Abazoğlu et al. (2014) reported that three-quarters of teachers in Turkey thought they were good at using teaching methods and techniques and developing their own tactics.

Some of the teachers stated that they could not benefit from the graduate education they received because it was not related to their field of teaching. It is remarkable that the majority of those who learned and applied new teaching methods and techniques had done their graduate education in the field of educational sciences and that those who had not received education in the field of teaching could not benefit from the education in this sense. This result shows once again how accurate it was to offer teachers graduate education in their fields or educational sciences (BoE, 2014) at the 19th National Education Council.

Measurement and Evaluation

Most of the teachers mentioned that there were some tangible changes in their measurement and evaluation practices after they completed their graduate education. They stated that they adopted a more student-centered, objective, and process-oriented approach. Kaya (2014) also determined that teachers who received graduate education found the education they received functional in terms of measurement and evaluation. Banville et al. (2014) found that teachers in the USA adopted a more moderate approach to measurement and evaluation as a result of their graduate education. Can (2019) stated that the ability to objectively measure and evaluate student achievement was an important aspect of the teaching profession and that in this sense, it constituted one of the important professional development areas for teachers. Besides, the MoNE determined measurement and evaluation as one of the basic professional skills that teachers needed to have (MoNE, 2017b). The results obtained in this study showed that graduate education made important contributions to the professional development of teachers in terms of measurement and evaluation.

On the other hand, as in the use of methods and techniques, a considerable part of the teachers mentioned that they learned new measurement and evaluation techniques, but that they could not put them into practice due to the various constraints of the existing education system. According to the MoNE, students and teachers in Turkey are currently not accustomed to competence-based measurement applications. Accordingly, it is stated that teachers need training on alternative teaching and measurement-evaluation methods and techniques (MoNE, 2019). Findings of both the use and knowledge of methods-techniques and measurement and evaluation show that education on these subjects alone may not be enough. It is understood that the understanding existing in the education system is an obstacle to putting contemporary educational applications into practice. Studies conducted in Turkey (e.g. Turhan & Yaraş, 2013) shows one of the reasons why knowledge and skills gained in graduate education in the field of education cannot be reflected in practice in the desired manner is because the culture of the institution where teachers work is closed to change. Besides, large classes and an education system focused on multiple-choice tests are the first obstacles that come to mind. However, it is considered that there is a need for studies focusing on this issue to have an advanced discussion.

Finally, a significant portion of the teachers stated that they could not obtain any benefit from the education they received because there were no subjects directly related to measurement and evaluation. The fact that similar results were obtained in terms of the use and knowledge of methodstechniques reinforces the conclusion that teachers' graduate education directly in their field or in educational sciences will yield much more effective results in terms of professional development.

Suggestions

Recommendations for Policy-Makers

Teachers' professional development is affected by many macro and micro contextual factors, such as traditions, culture, political structure, and school environment (Avalos, 2011). Both the inadequate incentive mechanisms of the MoNE and other difficulties faced by the teachers in the process show that the mentioned macro and micro contextual factors should be taken seriously. Otherwise, it seems that teachers will continue to see graduate education as an "escape path" from the MoNE. Moreover, many difficulties await teachers on this path. Teachers who have completed their graduate education with the expectation of becoming an academician define the transition to becoming an academic as an uncertain and difficult process (Balıkçı et al., 2018). The difficulty of the transition to becoming an academic staff is not a situation unique to Turkey. Aspenlieder and Kloet (2014) stated that Ph.D. graduates in Canada had expectations to become academic staff, but that this expectation was not met in most cases. The MoNE can effectively put the career system, which it emphasizes and promises many times, into practice so that teachers with graduate education can focus more on professional development and use the knowledge and skills they acquired for their students.

Hill (2009) stated that the professional development programs that teachers participated in the USA have highly varying qualifications and that there are very few programs that effectively support teachers' professional development. Accordingly, very few teachers have access to these effective professional development opportunities. The fact that teachers participate in a professional development program does not mean that they will get the results they want, and as Trautmann and Krasny (2006) pointed out, the teaching skills of teachers with graduate education improve when research and teaching processes are integrated and student-centered teaching practices are employed. Snoek (2014) stated that teachers who received graduate education undertook the task of establishing a link between their schools and the university and that graduate education programs should be structured by taking the school process into account. Therefore, completing a graduate program alone may not mean that teachers' professional development will be ensured. These programs should be examined in terms of their content, gains, and quality.

In addition to field knowledge, teachers' professional competence areas include skills that can be gained directly through field education or field of educational sciences, such as knowledge of field education, creating learning environments, managing the learning and teaching process, measurement and evaluation, approach to students, and communication and cooperation (MoNE, 2017b). Therefore, when designing the career system of teachers, the MoNE should primarily encourage graduate education in the field of education and educational sciences.

Banville et al. (2014) reported that teachers in the USA faced various obstacles while applying the theoretical knowledge they gained through graduate education in their schools. These obstacles included negative attitudes of colleagues towards new ideas, school environment, and lack of time and technology. Studies conducted in Turkey (Berkant & Baysal, 2017) have shown that teachers have difficulty implementing what they have learned in graduate education in the classroom. The reasons for this include the unsuitability of the current content of the courses for new applications, unsuitability of the levels of the students, crowded classes, and lack of time and equipment. In this study, similar obstacles were expressed in terms of both the use and knowledge of methods-techniques and measurement and evaluation. The Ministry should primarily address such constraints that pose an obstacle to modern education. Otherwise, the knowledge and skills gained in graduate education will not be reflected in practice at the desired rate.

Limitations and Some Recommendations for Future Research

As Little (1993) stated, implementing a standard professional development model that "fits every teacher" independent of the context is a problematic approach (p. 138). This problem (including this research) appears to be a core problem of many studies in the field. Graduate education should not be considered as a single and holistic structure in studies. That the education received is at the level of master's degree without thesis, master's degree with thesis, or PhD, and the main field of education (educational sciences or natural sciences) and the field of science (educational administration or curriculum and education within educational sciences) highly matters. Beyond that, the assumption that each program has equal opportunities and benefits is also problematic, even if it is received under the programs of the same name. For this reason, it is considered that studies questioning the contribution of a particular program or programs that agree on certain standards, albeit with the same name, to the professional development of teachers participating in that program will contribute significantly to the field.

In international literature, especially in studies conducted in the US, teachers' participation in graduate education and similar professional development activities is directly addressed and examined together with student success. In these studies, the relationships between the extra education teachers receive and students' mathematics and reading skills are analyzed by controlling other variables (Badgett et al., 2013; Croninger et al., 2007; Darling-Hammond, 2000; Goldhaber, 2016; Harris & Sass, 2011; Horn & Jang, 2017; Jepsen, 2005; Ladd & Sorensen, 2015; Myrberg et al., 2019; Stronge et al., 2007, 2011). Policy decisions are made according to the positive or negative correlational results of these efficacy-based studies, in which many variables regarding education, students, and teachers are neglected (teacher's job satisfaction, well-being, self-confidence, spiritual satisfaction, etc.). Yet, that teachers' views about their jobs, students, education, life, and their professional attitudes are positively affected is perhaps the most important outcome of graduate education. It can be argued that this positive attitude will increase the effectiveness in the long run. For this reason, carrying out research with an approach emphasizing teachers' professional attitudes may produce more meaningful results.

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