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Cover Page Footnote

Final version active voice used as much as possible.

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Abstract

This study aimed to investigate the identities of pre-service teachers and the effects of teaching practice and video reflections on the identities of pre-service teachers enrolled in the Turkish Language Teaching Department. The researcher used a qualitative research design, primarily a case study, in this study. Six senior pre-service teachers enrolled in the Teaching Practicum course during the spring semester of 2019 volunteered to participate in this study. The author collected data through video reflections, pre-practice and post-practice teaching focus group interviews and analyzed data through a cyclical-reiterative analysis process. The results showed that the identities of pre-service teachers could be grouped under three sub-identities: the subject-matter expert, didactical expert, and pedagogical expert identities. Also, pre-service Turkish Language teachers saw their identity at the beginning as being more cue-based and exemplar-based. However, at the end of the practicum, they heavily displayed rule-based identities due to the requirements of the Turkish educational system or schema-based identities that mainly emerged with the impact of contextual factors and conditions of the practicum schools. Lastly, the author discussed the findings in detail and provided implications for practice and future research.

Keywords: Pre-service teacher training, teacher identity, teaching practicum, video reflections.

Introduction

The question ‘What makes a good teacher?’ has been examined by educators, researchers, policy-makers and teachers for many centuries (Calderhead & Shorrock, 1997). Researchers emphasized different aspects of a teachers’ role, such as a person who is an expert in their subject, a facilitator of learning, a motivator and source of inspiration, and an upholder of moral standards (Arslan, 2018; Balban, 2015; Beijaard et al., 2000; Calderhead & Shorrock, 1997; Çelikdemir, 2018; Danielewicz, 2001; Hamiloğlu, 2013; Taşdemir, 2016; Xu, 2013). Danielewicz (2001) stated that since teaching is so complicated and deep, teachers should adopt an identity.

Danielewicz (2001) defined identity as our understanding of who we are and who we believe other people are and added that people do not share a single identity. Nonetheless, it is made up of multiple, often conflicting identities. Furthermore, it is stated that identity is linked to the cultural, educational, historical, political and social context and is constructed, maintained, and negotiated through discourse (Tsybulsky & Muchnik-Rozanov, 2019; Varghese, Morgan, Johnston, & Johnson, 2005; Yuan & Mak, 2018). Similarly, Block (2009) stated that identity is a socially constructed, self-conscious, ongoing narrative that individuals

perform, interpret, and project in dress, bodily movements, actions, and language (p. 27). In terms of teacher identity, Zembylas (2003) stated that it includes attitudes, emotions, beliefs, and values which are coherent, individualized, and intentional. Also, it serves as a repository for particular experiences, thoughts and actions in classrooms and schools. As a result, it can be deduced that teacher identity is related to self-image; however, it is also related to teachers' roles both inside and outside of the classroom. In other words, teacher identity is related to teachers' thoughts on what sort of teacher they want to be and how they see their position as teachers (Beijaard, Verloop, & Vermunt, 2000). In this study, I used 'teacher identity' instead of similar terms like 'professional identity', or 'professional teacher identity' to be consistent throughout the paper.

Teacher identity is affected by gender, role models, self-descriptions of prior experiences, and current teaching context (Furlong, 2012; Olsen, 2008). Furthermore, pre-service teacher education courses, working conditions, curriculum, cultural differences, social demographics of the school and students, institutional practices, resources, access to professional development, and so on all have an impact on teacher identity (Aykaç, Yıldırım, Altinkurt, & Marsh 2017; Izadinia, 2013; Miller, 2009; Yuan & Mak, 2018). Krzywacki-Vainio (2009) expanded the factors influencing teacher identity by including collaboration with other teachers and mentor teachers during teaching practice. In addition, Beijaard, Meijer, and Verloop (2004) also listed immediate family, significant others, the apprenticeship of observation, atypical teaching episodes, policy context, teaching traditions and cultural archetypes, tacitly acquired understandings, the subject they teach, their relationship with students and interactions with colleagues, the disagreement among colleagues, etc. among the factors that affect teacher identity. Finally, Beijaard, Meijer, and Verloop (2004) argued that teacher identity formation is a process of practical knowledge-building characterized by an ongoing integration of what is individually and collectively seen as relevant to teaching. Teachers' professional identities play an essential role in classroom practices and, therefore, in student gain and achievement (Olsen, 2008).

Beijaard, Verloop, and Vermont (2000) discussed teacher identity under three headings: (1) The teacher as a subject matter expert, whose identity is based on transmitting subject matter knowledge and diagnosing student misconceptions and levels of student understanding. (2) The teacher as a didactical expert, focusing on the planning, implementation, and evaluation of teaching and learning processes. In other words, it is also about the ability to create a positive classroom environment by establishing rapport, designing effective courses through the incorporation of appropriate materials and technology, as well as communication skills and use of effective body language. And (3) the teacher as a pedagogical expert, in which the teacher identity is primarily based on knowledge and skills to support students' social, emotional, and moral development. They also stated that teachers are a synthesis of these three types of identities, which are influenced by the school environment, context, the teachers' teaching experience, and learning history.

In addition, Xu (2013) revealed that more attention should be paid to the formation of imagined identities of pre-service teachers to help them make a more realistic evaluation. Xu (2013) classified teacher identity as based on rules, cues, exemplars, and schemas. While cue-based identities are based on the various characteristics (such as being a caring, sympathetic, etc. teacher) and skills (being able to engage students in the lesson via appropriate materials and teaching methods, using technology efficiently, being good at communication, being adept at classroom and time management, etc.) and necessitate taking the appropriate action based on the various features of a profession, exemplar-based identities are aligned with

individuals' role models. Furthermore, rule-based identities are manipulated by concrete rules such as schedules, routine affairs, and the law; schema-based identities are composed of a set of social cognitions and behaviors in response to a dynamic context and are, for the most part, culture-specific (Xu, 2013).

Beijaard, Meijer, and Verloop (2004) emphasized the importance of self-reflection during the formation of a teacher's identity in terms of relating practical experiences to personal knowledge consciously. They said that through self-reflection, pre-service and in-service teachers relate their experiences to their knowledge, feelings and become willing to integrate what is relevant into their identities as teachers. Izadinia (2013) stated that reflective activities in teacher education curricula result in positive changes in pre-service teachers' self-knowledge, cognitive, and emotional perceptions as teachers. Furthermore, Yuan and Mak (2018) revealed that reflection raised awareness about the importance of teacher identity, which guided teachers to improve their professional practice. In addition, it is stated that reflection supports the formation of pre-service teachers' roles as well as ways of nourishing the continuous development of a teacher identity that has been formed and will continue to be shaped over time (Tsybulsky & Muchnik-Rozanov, 2019).

Dewey (1933) proposed the concept of 'reflection'. According to him, reflection is active, persistent and careful consideration of any belief or knowledge based on underlying evidence. Valli (1997), following Dewey, defined reflective teachers as practitioners who "can look back on events, make judgments about them, and change their teaching behaviors in light of craft, research, and ethical knowledge (p.70)". In other words, it can be said that through reflection, pre-service teachers may examine problems, issues, dialogues that take place among students or between teachers, and students by drawing on experience and theory in order to create new meaning in terms of teaching-learning, planning, classroom management, etc., which results in learning and a change in conceptual perspective. Similarly, Shoffner (2009) added that high-quality teachers must be able to connect what they know about the subject matter, pedagogy, school discourse, personal histories, and curriculum with their emotional understanding, and one of the ways to achieve this aim is through reflection. As a result, reflection can help teachers be aware of their own thought patterns and emotional and behavioral reactions in different school contexts. Cattley (2007) expressed that pre-service teachers constructed the links between reflection and identity formation through the reflection upon their past experiences, present applications and expected future outcomes of their actions and through explaining what they did both within the classroom and in the broader school context, how they felt, and why.

In this sense, several researchers have employed different approaches to support reflection, such as group discussions, journal writing, case studies, action research projects, and electronic portfolios (Hatton & Smith, 1995; Yang, 2009). Yet, studies investigating the role of reflective writing (Cattley, 2007; Koc & Yildiz, 2012; Oruc, 2013), e-portfolios (Trent & Shroff, 2013) in the formation and development of teacher identity during practicum indicate the use of video reflections are very scarce. In the literature, many studies revealed the importance of written and video recorded reflections (Bower, Cavanagh, Moloney, & Dao, 2011; Debbag & Fidan, 2020; Roberts, 2011; Toraldo, Islam, & Mangia, 2016; Tsybulsky, & Muchnik-Rozanov, 2019). While written reflections rely on the writers' writing abilities, the advantage of video reflections is that those who struggle to express themselves through writing are allowed to do so through spoken language. A video reflection is the collection of data on participants' experiences over an extended period and it is used in a similar way to written reflections for research (Buchwald, Schantz-Laursen & Delmar, 2009; Yuan & Mak,

2018). The use of video reflections may provide qualitative data in different contexts as a way of obtaining rich socio-cultural, educational, medical, and biographical materials (Debbag & Fidan, 2020; Joseph, Griffin, & Sullivan, 2000; Noyes, 2004; Yuan & Mak, 2018).

The video reflections capture the various emotions, experiences and insights students feel at particular moments in particular personal and social spaces (Cashmore, Green, & Scott, 2010). Through video reflections, participants can express their experiences, ideas, feelings and emotions that are relevant at a particular time, without the interference of the researcher (Jones et al., 2014). Noyes (2004) compared interview data with video reflections in which children described their experiences in terms of learning and studying mathematics, such as their feelings, disappointments, and thoughts about using mathematics outside of school, test results, and constructive suggestions, they revealed that video reflections had a more profound quality, eliciting data with a more compelling, narrative character. Bower, Cavanagh, Moloney, and Dao (2011) used an online video reflection to investigate the development of undergraduate students' cognitive, behavioral, and affective communication competencies, and Roberts (2011) discovered that video reflections were far more successful than written reflections in capturing the development of student learning. Moreover, video reflections offer the advantage of allowing the researcher to replay the recordings several times to scrutinize details and correct possible misconceptions (Joseph et al., 2000). In a study conducted by Debbag and Fidan (2020), pre-service teachers revealed that *creating* diaries in text format was more challenging, time-consuming, and tedious compared to creating them in video format.

In the literature many researchers (Joseph et al., 2000; Toraldo, Islam, & Mangia, 2016) stated that video reflections can be considered a multi-modal method of research as they provide the opportunity to capture both sound and vision. Similarly, Noyes (2004) stated that video reflections provided complex and deep data by revealing looks, body language, clothing, etc. Besides, they have a lasting quality which makes them an enduring research method. In addition, since video reflections transfer nonverbal data, they can elicit data that would not otherwise be obtained (Buchwald, Schantz-Laursen & Delmar, 2009). It can be concluded that video reflections may allow pre-service teachers to rethink and talk about their teaching, feelings, thoughts, and values, using appropriate professional language with verbal and nonverbal responses, and replaying their videos to construct their teacher identities during the practicum process. According to literature, some review studies investigated formation of teachers' identity, characteristics of teacher identity, and the effects of teacher identity on instruction (Beauchamp & Thomas, 2009; Beijaard et al. 2004; Izadinia, 2013). In addition, some studies focused on the identity development of pre-service teachers (Beijaard, Verloop & Vermunt, 2000; Cattley, 2007; Lamote & Engels, 2010). In Turkey, many studies have focused on the English Language in-service and pre-service teachers' identities in terms of types of identities, factors affecting their identity formation, practices in preparatory classes, and examining the professional identity perceptions of English teachers from outside the field (Aslan, 2016; Atmaca, 2017; Balban, 2015; Ekizer, 2016). However, there is a limited number of studies that investigate the professional identity perceptions of Turkish Language pre-service teachers.

Varghese, Morgan, Johnston and Johnson (2005) pointed to the fact that teacher identity is the main focus of teaching and learning. The teacher education process is one of the most important stages in establishing a teacher's identity. Pre-service teachers tend to examine their professional identities through their teaching during the teaching practicum (Cattley,

2007). Pre-service teachers are confronted with school culture, rules, and regulations during their practicum processes. The teaching practicum offers pre-service teachers an adaptation process since they appear in front of a classroom and take on the role of a teacher, which might be a challenging task at the beginning. However, these practices are of great importance in the process of forming a teacher identity and provide important opportunities for pre-service teachers to obtain a chance to observe and experience the features and limitations of schools while developing their own professional identities (Krzywacki-Vainio, 2009).

The Aim of the Study

This study aimed to investigate the identities of pre-service teachers and the effects of teaching practice and video reflections on the identities of pre-service teachers enrolled in the Turkish Language Teaching Department. Based on these purposes, I sought answers to the following questions:

1. What constitutes teacher identity according to pre-service Turkish Language Teachers?
2. How do pre-service Turkish Language Teachers perceive the development of their teacher identities during practicum?

Method

Since I collected data in a natural setting, including the voices of pre-service teachers in specified contexts, I used a qualitative research design, primarily a case study (Cresswell, 2013; Stake, 1995; Yin, 2009). Moreover, since case studies examine a case or multiple cases over a period of time, researchers engage in in-depth data collection through observations, interviews, audio-visual materials, and documents to obtain detailed information about the case(s) (Stake, 1995). In this study, I investigated pre-service teachers' identity formation and developments through pre- and post-interviews and video reflections about the teaching-learning process, and their interactions with the course instructor, mentor teachers, students, and managers in practicum schools. Furthermore, this study was a single instrumental case study since I investigated senior year pre-service teachers' identity formation. Also, I explored identity formation within a bounded case chosen: being senior year pre-service teachers enrolled in practice teaching course provided by the Turkish Language Teaching Department of a state university in the spring semester of 2019.

Context

This study was conducted at a state university in the spring semester of 2019 with senior pre-service Turkish Language Teachers taking the Teaching Practice course. The university assigned six pre-service teachers to two different secondary schools (one was located in the center of the province, and the other school was located in the village) for this course. Each pre-service teacher had a mentor Turkish Language Teacher. Pre-service teachers spent two weeks at the practicum schools observing their mentor teachers. Then they implemented teaching practices. Mentor teachers observed each pre-service teacher during these practices. The Practice Teaching course lasted six hours for 10 weeks. In addition to teaching practicums in schools, pre-service teachers attended a 2-hour course at the university. In these courses, pre-service teachers and the course instructor discussed their experiences related to teaching practice, interactions with mentor teachers and students, time and classroom management, the observations of pre-service teachers about their mentor teachers' classes, the applications of mentor teachers and their teaching process, etc. Pre-service teachers took

videos of their reflections on the events, processes, interactions, and problems they encountered in their teaching practicum or school-related issues.

Participants

Participation in this study was voluntary, and it included six senior pre-service teachers from the Turkish Language Teaching Department who were enrolled in the Teaching Practicum course in the spring semester of 2019. The researcher coded the six participants as “F”, “M”, “N”, “ND”, “Ş”, “Y”. Among pre-service teachers three (N, ND, Y) of them were female and three (F, M, Ş) of them were male. These pre-service teachers are preparing to teach Turkish to students who study at the second level of primary education, mainly 5th, 6th, 7th, and 8th graders.

Data Collection Methods

In this study, I collected information through video reflections, pre- and post-interviews, as I explain below.

Video Reflections

In this study, pre-service teachers prepared video reflections to respond to applications, interactions, or issues they observed or encountered in their practice schools. I provided them with questions, but they knew that they could reflect on anything that they thought was important. In this way, they were open to reflect on points that were important for their identity construction. Among the sample reflection questions were: ‘What kind of teacher is the teacher you observe?’, ‘Do you do exactly what s/he does or change it?’, ‘Please explain: do you believe you could teach your lessons more effectively in another way?’, ‘Please describe the events that have had a positive or negative impact on your development as a teacher based on your teaching this week.’, ‘Please describe the events of this week that has upset or affected you.’, ‘Could you please explain how you interact with the teachers at practicum school?’, ‘With whom else do you communicate at practicum school?’, ‘Do you spend time in the teachers’ room? What are you discussing with other teachers? Do you have a dialogue in mind?’, ‘Did the education you received at university prepare you to become a teacher in such a school?’. While preparing their video reflections, pre-service teachers had the opportunity to think about the teaching processes, communication with students, the effectiveness of their classroom management, their subject-matter knowledge, the classroom environment, their interactions with mentor teachers and managers, and the connections between these types of concepts.

Pre- and Post-Interviews

I conducted two focus group interviews in this study to learn about pre-service teachers’ experiences, the meaning they derived from the school practicum, and the impact of these experiences on their teacher identities before and after the teaching practicum (Seidman, 2013). I either adapted some of the pre- and post-interview questions after investigating the literature (Abednia, 2012, Arslan, 2018; Beijaard, Verloop, & Vermunt, 2000; Cattley, 2007; Hamiloğlu, 2013; Oruc, 2013; Taşdemir, 2016; Timostuk & Ugaste, 2010) or newly written. After writing the questions, I obtained an expert opinion in terms of the order, clarity, and value of questions that might reveal the identities of pre-service teachers. The sample questions from the pre-interviews were: ‘What do you want to do when you graduate?’, ‘What are your plans?’, ‘How would you describe yourself as a prospective teacher?’, ‘In which areas of teaching profession do you feel strong/weak?’, ‘What are the important qualities that a teacher should have?’, ‘How would you describe effective teaching and effective learning?’, ‘What are your expectations from this teaching practice?’, ‘How do you

think teaching practice will contribute to the development of your profession?', 'What kind of teacher do you want to be in the future?', and so on. Moreover, after teaching practice, post-focus group interviews were conducted. Some of the sample questions were: 'How would you describe your teaching practicum?', 'Could you please describe your typical teaching practice day?', 'Could you tell me a little about your practice school's environment?', 'How would you describe your relationship with other teachers and school administration in your practice school?', 'What are the most important benefits of your teaching practicum?', 'What is the most challenging part of your teaching practice experience?', 'What were the times when you felt like a teacher most during teaching practice?', 'What were the factors that were helpful during the teaching practice?', 'Did the teaching practice course live up to your expectations?', etc. The pre- and post-focus group interviewees lasted approximately 50 minutes. I audio-recorded all of the interviews and transcribed them verbatim as stated by Josselson (2013).

Data Analysis

In this study, I transcribed video reflections and interviews verbatim before the data analysis process using a cyclical-reiterative analysis process. It first involved reading, coding, and categorizing the emergent codes, then combining them into themes, interpreting them, and finally reporting the interpretation (Miles & Huberman, 1994; Saldana, 2009). Saldana (2009, p.3) stated that during the data analysis process, a word or short phrase that includes a notable reminder of a critical attribute should be used as a code. Then the author coded data by using "descriptive codes (such as subject matter area, subject matter knowledge, loveable, sympathetic, enthusiastic, intimate, friendly, caring, love to teach, interested in students, make the lesson more enjoyable, merciful, have a passion for teaching, being a role model, have good communication skills, motivate students, adept at classroom management, integrate technology, include different teaching strategies, methods, techniques, know about the general profile, hobbies, experiences of students, and their needs, adjust teaching methods, teach students why to learn, etc.)," which "assign basic labels to data to provide an inventory of their topics (first cycle coding)" (Saldana, 2009, p.66). Following this, explanatory or inferential codes I created pattern codes (second cycle coding) to identify emergent themes, configurations, or explanations (Miles & Huberman, 1994; Saldana, 2009, p.152). This also allowed identification of the categories "to organize and group similarly coded data" (Saldana, 2009, p. 8). Finally, after dividing codes into interrelated categories, I reached themes that are broad units of information consisting of several codes aggregated to form a common idea (Creswell, 2013, p.202). The themes for the first research question were "teacher as a subject-matter expert", "teacher as a didactical expert", "teacher as a pedagogical expert"; and for the second research question, they were "Cue-based and exemplar-based identities" and "Rule-based and schema-based identities," and I explain them in the results section.

Trustworthiness of Research

Because of being involved in close and collaborative relationships with pre-service teachers, I considered various precautions such as prolonged engagement, triangulation, peer debriefing, inter-rating and inter-coding, audit trial, and detailed and thick description to ensure and enhance trustworthiness (Creswell, 2013).

Results

In this part, I present and explain the results obtained from video reflections, pre- and post-interviews in line with the first and second research questions.

Results Related to the first Research Question**Table 1***The constituents of teacher identity*

Teacher as a subject-matter expert	Teacher as a didactical expert	Teacher as a pedagogical expert
<p>Teachers should</p> <ul style="list-style-type: none"> • know the subject matter area • develop subject matter knowledge • be able to transfer their knowledge effectively • be open to changes and advancements in their fields. 	<p>The skills of teachers: Teachers should</p> <ul style="list-style-type: none"> • integrate technology, appropriate materials, • be adept at classroom management, • manage time effectively, • have good communication skills, • be able to motivate students, • make students curious, • be able to capture students' attention, • engage students in the lesson, • include different teaching strategies, methods, techniques, • help students find the answers through proper clues, • manage the group discussions better, • lessen the stress level of the students related to upcoming exams, • take into account the level of students, • not threaten to give a low grade, <p>Affective characteristics: Teachers should (be)</p> <ul style="list-style-type: none"> • sympathetic, loveable, enthusiastic, intimate, friendly, caring, love to teach, interested in students, make the lesson more enjoyable, merciful, have a passion for teaching, be a role model, and guide, not be self-righteous, not be ignorant to students' mistakes and destructive behaviors. 	<p>Teachers should</p> <ul style="list-style-type: none"> • be aware of the general profile, hobbies, experiences and needs of students, • adjust teaching methods, • teach students why to learn, • make the students believe in achieving things if they want, • help students to develop themselves, • help students feel special, • leave their private problems out of the classroom, • be flexible to adjust to changing situations, • be physically, emotionally prepared for teaching, • be able to deal with students who are in need of special education.

Subject-Matter Expert Identity

All pre-service teachers stressed the properties of teachers as subject-matter experts and they mainly stated that subject-matter expert teachers should know the subject matter area (ND, Ş, M), transfer their knowledge effectively (Ş, M), be open to changes and advancements in their fields (F, ND) as can be seen in Table 1. By stressing the importance of subject matter knowledge, (M) stated:

I have to study the subject before I teach because a teacher has to have a strong field knowledge that when students asked questions, he can say I don't know once, then students say that this teacher doesn't know anything, but he comes to teach us.

Similarly, (ND) said in both pre-interview and video reflections that “*the field knowledge of a teacher affects even his or her classroom management. The teacher's most powerful asset must be his or her subject knowledge... Teachers can bond with children through their knowledge without frightening them, without establishing authority.*” Moreover, one of the pre-service teachers, (Ş), observed his peer and reflected on the videos: “*Because the friend was not prepared well, he always looked at his notes... sometimes the lesson had to be stopped... the students were distracted...*” and (Ş) concluded that this affected the effectiveness of the lesson negatively.

Didactical Expert Identity

As shown in Table 1, pre-service teachers mentioned that the didactical expert teacher identity is mainly related to teachers' skills and affective characteristics. At the beginning of the practicum, pre-service teachers stressed the affective characteristics of teachers. For instance, they said that a teacher should be loveable (ND, F, N, Ş). (F) explained as follows:

First of all, a teacher should make students love himself... If the students in middle school dislike the teacher, they will dislike the lesson... For example, I observed that there are students who do not like mathematics lessons and are very poor at mathematics, but because they love the teacher, they sit still and listen to the lesson.

Furthermore, before practicum, all pre-service teachers agreed that a teacher should be friendly and warm. However, they put a line between being a friend and being close to them to help when they need help (N, ND, Ş, Y). (ND) stated the following: “*Students shouldn't treat me like a friend, but I want them to respect me for loving me... not out of fear.*” After the practicum, they related being a friend and having intimate relationships with students to effective communication skills and classroom management properties of the teacher. (F) said, “*even maintaining good classroom management goes through good communication... making yourself loved ...*”

Furthermore, pre-service teachers stressed didactical expert identities by stating teachers should be adept at motivating students (N, ND, F), capture the attention of students (M, N, Ş, Y), engage students in the lesson (F, N, ND, Ş), attempt to include all students actively and use different teaching strategies, methods, techniques (N, ND, Ş, Y), and so on. For example, at the beginning of the practicum, (F) said, “*We can motivate students by asking questions... We can make students curious and attract their attention with questions, and make them participate in the lesson*”. In the video reflections, they motivated students by telling them that the course topics would be asked in the national exam or by asking and answering questions that had been previously asked in national exams so that students believed they could solve these types of questions in the exam.

Furthermore, before practicum, all pre-service teachers identified creating a positive classroom environment, engaging students in the lesson, incorporating various instructional methods, and so on as essential properties associated with didactical expert teacher identity. (§) stated the following: *“Before I teach, I will study the topic. I will learn like a student and research different methods. Using the same methods to teach always leads to stereotypes... Students get tired after a while...”* Also, (Y) stated, *“Some topics need to be lectured, but we can at least include question and answer technique to engage as many students as we can.”* They mainly included a question-answer technique to engage students, but they did not mention the role of this technique in assessing the students’ learning. Similarly, (ND) stated,

It is important not only to present knowledge, but also how we effectively transform it to students. How we present it visually, aurally, etc., is important. If you support the instruction with different activities as long as you know the students' differences, effective teaching can be achieved.

It can be understood from the last statement that some of the pre-service teachers are also aware of the teacher as a pedagogical expert identity by referring to individual differences, which is an essential variable in choosing materials and instructional techniques. Moreover, they also expressed that students should be ready for the upcoming course before the classes. For instance, (M) explained it as follows in his video reflection: *“When students were unprepared for the drama activity, the activity did not achieve its purpose.”* Also, (F) stated, *“... if students do not attend the class prepared... After all, there is no difference between trying to teach a group of students who do not participate in the lesson or lecturing to an empty class”*.

During video reflections, all pre-service teachers stressed the importance of student-centered activities. For example, they highlighted some of the active teaching techniques, such as explaining the properties of sentences they drew from the jar, preparing comic books, interviewing, preparing brochures, drama, and brainstorming. In this way, they emphasized the importance of students’ participation in the lesson without fear, which was linked to a positive classroom environment. They stated that providing a safe classroom environment is a prerequisite for effective teaching. This didactical expert identity might have stemmed from the Teaching Methods courses they took in previous years. (M) expressed in his video reflection that he always wanted different students to answer the questions, even those who did not raise their hands to answer. Therefore, he asked, *“What do you think about this question?”* Furthermore, he stated that *“all students who want to contribute to the course should be permitted; otherwise, they may not raise their finger again,”* confirming the Beijaard et al.’s (2000) findings discussing that teachers should be on the lookout for signs of student involvement; and this property is related to the teachers' didactical expert identity.

Following practicum, they gained experience with various teaching skills and roles, which helped shape their didactical teacher identities. (F) said the following at the post-interview: *“We learned how to manage the class, use the blackboard, know what is going on behind you when you turn your back to the class while writing on the blackboard...”* In addition, at the beginning of the practicum, all pre-service teachers added that teachers should be able to integrate and use technology effectively as an important variable in the development of the didactical expert identity of a teacher. (§) stressed the following:

There are smart boards in all schools... We have to improve ourselves with technology, but I realized that we have some deficiencies... We can include animations, games... Only presenting the subject does not attract the attention of students, which does not attract our attention as well...

However, during the video reflections, they mostly mentioned the use of technology to present the subject and solve questions that might be encountered in the national exam. (M) stated the following: *“I explained the subject by using PowerPoint slides, students noted the features of the writing types in their notebooks... I answered the questions which were uploaded to the smartboard”* and this might be related to subject-matter expert teacher identity. However, the same pre-service teacher also reflected in his weekly video reflection: *“While we were examining the Belkız Theatre text, I asked the students what happened next? They thought... Then I had them watch the original video, I wanted them to compare what they thought and what the real situation was.”* It can be deduced that pre-service teachers are aware of the effective use of technology, its contribution to permanent learning and a positive classroom environment. For this reason, they attempted to incorporate it as much as possible in accordance with the didactical expert teacher identity.

Pedagogical Expert Identity

According to Table 1, all pre-service teachers stressed the properties of teachers as pedagogical experts: Teachers should know about the general profile, hobbies, experiences of students, and their needs, adapt teaching methods according to individual differences, be flexible to changing situations. (ND) stated as follows:

Teachers should learn the ideas of students such as what they read to get to know them... In this way, teachers can go down to their world... The more we interact, the more we share, the better we know each other's world and address their individual needs,

which was also stated by Beijaard et al. (2000) that the well-being of students is the starting point for the lessons. Similarly, in the study conducted by Balban (2015), pre-service teachers noticed the importance of quality communication with students. They added that mastering the field and connecting with the students, and understanding how students feel matter. Moreover, (F) added the following: *“Somehow I need to help students engage in the lesson... How does this happen? By observing their psychological state, attitudes, and motivation... These are important...”* Furthermore, (M) stated that teachers should get to know their students as well as their society. For example:

When I was in high school, an inspector came to our class and asked about a mathematics problem that required knowing the price of bread. We, on the other hand, make bread at home, have no idea how much it costs, and never go out to buy bread...The teacher should first get to know the student so that he can prepare activities and ask questions accordingly.

Furthermore, when pre-service teachers visited their practice schools before the practicum process to meet with their mentor teachers and students, they noticed a student who required special education. So, they explained their ideas about students who are in need of special education in line with the pedagogical expert teacher identity. For instance, (N) stated as follows:

I believe he is interested in computers... That kid is interested in turning the computer on and off, opening and closing the slides but he has nothing to do with the lesson. But if I were the teacher, I would try to include him in the lesson with questions at his level or with activities he could attend.

Moreover, after the practicum, pre-service teachers expressed the importance of adjusting the instruction according to the level and characteristics of students. (N) stated that in her video reflection: “*Class 6B fell behind Class 6A in terms of grammar. I explained the subject gradually, giving more concrete examples... I emphasized the key points of the subject.*” Also, (S) expressed in the post-interview and video reflections: “*I had a little difficulty in adjusting the depth of subject to the levels of the students... I was not sure whether the students would understand or not. It was hard to decide and I tried different methods.*” (ND) stated that as follows:

Knowing the topic is by no means enough, the important thing is how I can explain it effectively... So I constantly challenge myself... What examples I can give to be remembered by students... How I would like to learn if I were a student...

She revealed the pedagogical expert teacher’s identity.

Moreover, pre-service teachers stressed the role of teachers as pedagogical experts in getting feedback about their instruction. (ND) explained during video reflections that she solicits student ideas before teaching by asking questions such as “*How should we continue instruction?... By discussing together or do you want me to lecture? Should we solve questions from the textbook?*” In addition, pre-service teachers tried to find ways to deal with student misbehavior. For instance, (M) stated as follows:

I first came close to a distractive student, put my hand on his shoulders, silently warned him using my body language, and later warned him explicitly... But there was not much change... Later, I talked to my friend from the guidance department. He said it would be better to ignore misbehavior, which would fade in time.

Results Related to the second Research Question

Table 2

Teacher identity development during practicum

Cue-based and exemplar-based identities	Rule-based and schema-based identities
<ul style="list-style-type: none"> • teacher characteristics (being a friend, enjoying teaching, enthusiastic, caring, guiding, having a passion for teaching, etc.) • teaching skills (subject matter expert, efficient use of technology, engaging students in the lesson via appropriate materials and teaching methods, good communicator, provider of positive classroom environment, adept classroom manager, efficient time manager, etc.) • role models • follow the dress code 	<ul style="list-style-type: none"> • routine processes • classroom management • teachers’ authority in the classroom • teachers’ responsibilities • classroom rules • the practicum school's procedures

Cue-Based Teacher Identities

Cue-based teacher identity, as shown in Table 2, includes teacher characteristics. All the pre-service teachers said at the pre-interview that teachers should be benevolent, sympathetic, caring, etc., but they also mentioned the problem of abuse of goodwill. For example, (N) stated the following: *“You can sit down and help a student to write his article... or you can sit together outside in the garden, but there must be a line between the teacher and students and it must be protected...”* Similarly, (M) stated that *“a teacher should be flexible, but s/he should have authority... The teacher must maintain a professional demeanor while remaining friendly and maintaining a safe distance.”* Also, as shown in Table 2, cue-based teacher identity includes teaching skills. For instance, teachers should be able to engage students in the lesson (N, Ş, A). (Ş) highlighted the following at the pre-interview: *“When I ask questions, I want a class that raises hands with excitement, attends the lesson all the time... I tell myself that I need to be prepared to answer their questions and try to improve myself further...”* All pre-service teachers stressed a teacher should have "good communication" skills. (F) stated as follows: *“I’m actually good at communicating with kids. I also like to teach. The way to good teaching goes through good communication.”* Moreover, they added that a teacher should be a guide as an example of cue-based identity. For instance, (ND) stated, *“I want to contribute to the lives of these primary school children, touch their lives, and not only teach lessons, not only theoretically.”*

Exemplar-Based Teacher Identities

By referring to their previous teachers, pre-service teachers stressed an exemplar-based teacher identity. At the beginning of the practicum, pre-service teachers went to their internship schools to meet with their mentors and students. According to their observations, (Y) stated the following:

One of our teachers is very good. He is very interested in his students. He engages students actively, struggles with them, and loves them. He uses different techniques... I liked his applications... They were really nice... I can use them as well.

However, some of the pre-service teachers explained that they do not take another mentor teacher as a model: (N) stated as follows: *“The teacher opens a video from the smartboard and makes the students solve the questions in the activities... She does nothing else... I do not think that these kinds of teachers will guide me in my career.”* In addition, (ND) reflected on a video as follows:

There are many methods to be included in Turkish lessons... We can read a beautiful poem with students, prepare a theatre together with the class, I can share a story which will touch their lives because our high school teachers affected us like this...

Rule-Based Teacher Identities

After the practicum, the prevalent identity of pre-service teachers mostly turned to a rule-based identity. All pre-service teachers evaluated *“having good subject matter knowledge”* as a compulsory property of a teacher's identity. Moreover, after the practicum, (Y) stated the following: *“I wanted to include games, but it was not possible because there is a pre-determined curriculum... We have to explain the subject according to the flow of the curriculum....”*

Furthermore, all pre-service teachers evaluated *“good management of the class”* as a compulsory property of a teacher's identity. During the post-interview, some of them

expressed their concerns about the warm relationship with the students undermining their authority in the classroom. (M) stated as follows: *“We had a brother-and-sister-like relationship, but we just couldn't traverse it to a teacher-student relationship... After a while, the teacher must take the leadership...”* In contrast to the current study, in Furlong's (2012) study, pre-service teachers associated classroom management with being a good planner; they stated that teachers might otherwise lose control, which leads to discipline problems.

Moreover, all of the pre-service teachers evaluated the “dress code” as a compulsory property of teacher identity in both pre- and post-interviews. (Ş) expressed as follows:

A teacher is the one who knows the subject matter area, has a certain image of dressing... has a certain style while communicating with people outside of the school... A teacher must be different from an ordinary guy... Around 40 students listen to him, everybody learns something from him... If a person makes a mistake, it is usually overlooked... Still, when a teacher makes a mistake, it can inevitably be very glaring, no matter how simple it is ... A teacher must be very careful with his behaviors.

It can be deduced that the cue-based identities of teachers were integrated with their rule-based identities, demonstrating adherence to rules, under the influence of Turkish culture, where teachers are seen as idols of the community. This identity construction is in line with the explanation of Block (2009) that individuals interpret identity and project it in dress, bodily movements, actions, and language through social interactions.

Schema-Based Teacher Identities

Schema-based teacher identity is formed through the effect of contextual factors. When the researcher asked pre-service teachers in the pre-interview about the evaluation process, none of them mentioned objective evaluation procedures. (Ş) stated as follows: *“I can evaluate learning according to participation in-class activities.”* (M) added,

I think it is not correct to assign students grades according to multiple-choice exam results. We had friends in middle school who participated in class activities the most, but due to the stress of the exam, they could not get higher grades.

However, after the practicum, they noticed how the national exams, like TEOG (Transition from Primary Education to Secondary Education Exam) structured the instructional process. Pre-service teachers asked and solved questions related to the subjects that were previously asked in TEOG.

Furthermore, because the practicum school performed well on national exams, students were extremely competitive. For this reason, pre-service teachers were expected to solve multiple-choice test questions or reteach the subjects the teachers taught in the previous courses to prepare students for the exam. For instance, (ND) stated as follows:

We usually included lecturing and question and answer techniques... We solved questions that were previously asked in the national exams ... But I would like to teach using different materials and techniques... To start the lesson by reading a story or poem...

(F) added, *“We could teach the stories of well-known writers like Sait Faik... But due to exams, unfortunately, we had to teach grammar...”* and this showed how institutional factors affected their identity and transformed it into a schema-based teacher identity.

Two of the pre-service teachers (F, ND) stated in both pre- and post-interviews that they would like to teach in a private school and have a Masters' Degree. Evaluating the context of state schools, (F) stated the following: *“Some teachers teach what they were teaching in the '90s in state schools. However, the environment and societies are constantly changing. Therefore, we have to improve ourselves according to the changing situations and conditions....”* He wanted to constantly update himself to meet the demands of teaching in a private school, which revealed a schema-based teacher identity.

Discussion, Conclusion and Implications

In this study, to investigate the identities of pre-service teachers', I collected data from video reflections, pre- and post-interviews. Participants created their reflections in video formats which revealed the pre-service teachers' real feelings and thoughts, gestures, facial expressions, pitch, and loudness of their voices. In this study, video reflections let pre-service teachers talk freely without interference from the researcher, as stated by Jones et al. (2014).

Video reflections prepared by pre-service teachers provided an opportunity to reflect on events, make decisions about their actions, and, if necessary, change their teaching behaviors, resulting in the formation of teacher identities. Similarly, as also stated by Roberts (2011), video reflections allowed the speeches of pre-service teachers to be recorded and then replayed, engendering further speeches, which resulted in deeper reflections. Furlong (2012) added that through critical reflection and inquiry, pre-service teachers' identities are formed and reformed during their practicums. Video reflections benefitted pre-service teachers by increasing their confidence, enthusiasm and professional learning, as also stated by Maclean and White (2007). When pre-service watched their video reflections, they could see themselves as their students, peers, and mentor teachers saw them and provided the opportunity to examine both verbal and nonverbal responses that would not be obtained otherwise. Also, Bower, Cavanagh, Moloney, and Dao (2011) stated that video reflections on the topic provided the opportunity for pre-service teachers to develop cognitive understanding, which affected the formation of professional teacher identities.

The results of the study showed that the identities of pre-service teachers could be grouped under three sub-identities: the subject-matter expert, didactical expert, and pedagogical expert identities. In this regard, the reflections of pre-service teachers perfectly fit into the literature (Balban, 2015; Beijaard et al., 2000; Calderhead & Shorrock, 1997; Çelikdemir, 2018; Taşdemir, 2016). According to the study's findings, at the beginning of the practicum, most of the pre-service teachers defined themselves more as subject matter and didactical experts and less as pedagogical experts, as in line with the findings of Beijaard et al. (2000). In the current study, pre-service teachers did not doubt the fact that teachers should be experts in subject matter knowledge and they even related the effect of subject matter expertise on classroom management as a way of inspiring students, as also stated by Balban (2015). Also, pre-service teachers mentioned the didactical expert identity that is mainly related to teachers' characteristics (being loveable, intimate, and being friendly, etc.) and skills (motivating students, creating a positive classroom environment, engaging students in the lesson, incorporating various instructional methods, etc.). Similarly, Furlong (2012) constructed the picture of the didactical expert teacher identity as a caring, warm, approachable teacher who facilitates children's learning while remaining in control and commanding respect. As also stated by Danielewicz (2001), people do not have a single identity.

Beijaard et al. (2000) expressed that teachers' perceptions of professional identity shift, particularly throughout teachers' careers. In the literature, the results of many studies have revealed the change in identities before and after the practicum (Arslan, 2018; Danielewicz, 2001; Hamiloğlu, 2013; Taşdemir, 2016; Xu, 2013). According to Çelikdemir (2018), the subject matter expert identity roles have decreased significantly following the video case-based community. In their initial orientations, participants emphasized being knowledgeable teachers and transmitting knowledge as subject matter experts; however, these roles lost importance after the video case-based community. It can be explained that the beliefs that a teacher's identity is based on are formed and reformed throughout the practicum period. As pre-service teachers continue to teach and do their job, their identities might continue to evolve. More frequently, pre-service teachers shift from didactical to subject-matter expert identities or vice versa. For instance, they mentioned including active teaching methods and asking questions and solving them as their didactical expert identity. However, they also thought that students would learn the subject better and be prepared for the national exams through traditional methods by stressing their subject matter expert identity, which corroborates Danielewicz (2001) that people have an identity composed of multiple, sometimes conflicting identities.

Moreover, as in this study, Beijaard et al. (2000) stated that teachers mainly possessed subject-matter and didactical expert identities, but they did not possess a strong pedagogical teacher identity. Furthermore, in contrast to the study conducted by Beijaard et al. (2000), pre-service teachers in the current study mentioned pedagogical expert roles such as dealing with students who are in need of special education, students dealing with problems related to parents or health issues, and so on. Furthermore, similar to the current study, Çelikdemir (2018) stated that establishing positive relationships and healthy interaction with students was the most emphasized pedagogical role mentioned by all pre-service teachers. The reason for the lower priority of the pedagogical teacher identity might be related to teaching activities designed by institutional regulations. In this practicum process, pre-service teachers retaught the topics by including lecturing and solving questions asked previously at the national exams rather than reading poems, stories of well-known writers and discussing them together with students, which might have affected their interaction with students and the formation of their pedagogical teacher identity.

Furthermore, results from the second research question revealed that, at first, pre-service Turkish Language teachers perceived their identities as more cue-based and exemplar-based. As stated by Olsen (2008), a teacher's identity is affected by role models and self-descriptions of prior experiences. Similarly, Izadinia (2013) stated that pre-service teachers' emotions and perceptions, self-awareness, self-confidence, and prior experiences have a significant influence on a teacher's identity. However, at the end of the practicum, they heavily displayed rule-based identities due to the requirements of the Turkish educational system, as also revealed in the study conducted by Hamiloğlu (2013) or schema-based identities that mainly emerged from the impact of the contextual factors and conditions of the practicum schools. In the study conducted by Balban (2015), English teachers have to comply with the requirements of standardized proficiency tests of the university where they wanted to apply communicative techniques. Similarly, many studies have revealed a shift from a cue or exemplar-based identities to rule-based or schema-based identities that stemmed from the institutional principles prescribed for teaching tasks by the governmental education authority (Hamiloğlu, 2013; Taşdemir, 2016; Xu, 2013). However, this finding does not simply mean that pre-service teachers abandon their cue-based and exemplar-based identities completely because of institutional rules and regulations. It can be inferred that there is a competition

between teacher identities. On one hand, there is the formation of teacher identities related to teachers' thoughts on what sort of teachers they want to be at the beginning of the practicum, which is related mostly to cue-based and exemplar-based identities, but on the other hand, there is the formation of teacher identities which affects how they act, which is influenced by different variables such as curriculum, social demographics of the school and students, mentor teachers, managers, institutional practices, resources, etc., and which is mostly related to schema-based and rule-based identities at the end of the practicum. Also, according to Yuan and Mak (2018), identities form through different practices that teachers engage in, visualizing how they view their experiences and imagining their future as well as how they coordinate their interactions within the larger socio-cultural milieu. It can be concluded that during practicum, the beliefs that create teachers' identities are developed and reformed. As pre-service teachers keep teaching and do their duties, their identities will continue to change. Similarly, Varghese, Morgan, Johnston and Johnson (2005) stated that social, cultural, and political contexts are crucial in a teacher's identity formation and may change even according to grade levels. In the current study, during practicum, pre-service teachers taught grammar and solved multiple-choice test questions to prepare students for the national exam in the 8th grade, as these activities were expected by their mentor teachers. However, they may conduct instruction using different materials and techniques, introduce students to different writers or poets at 5th, 6th, and 7th grades, which might affect the formation of teacher identities differently.

In addition, in the literature, the results of many studies confirmed that teacher identities change after teaching practicum periods (Arpacı & Bardakçı, 2015; Beijaard, Meijer, & Verloop, 2004; Krzywacki-Vainio, 2009; Lamote & Engels, 2010; Olsen, 2008). This might happen because pre-service teachers are more willing to self-question and think deeply, as also stated by Cattley (2007). During the teaching practicum, pre-service teachers experience many opportunities to change themselves and be changed by the influences of different school contexts and interactions within the school and in broader communities (Beauchamp & Thomas, 2009; Oruç, 2013). As also stressed by Krzywacki-Vainio (2009), collaboration with other teachers and mentor teachers during teaching practice is an important factor influencing the formation of teacher identity. Again, by confirming earlier statements, Maclean and White (2007) stated that identities are not in a constant state. Nonetheless, every action the teachers take or word they speak as teachers serves to reshape or reconstruct their identity. It can be seen that there is a tension between identities, which might be alleviated through effective mentoring, as also mentioned by Varghese, Morgan, Johnston and Johnson (2005).

Finally, as stated by Beijaard et al. (2000), teachers' perceptions of their professional identity influence their efficacy, willingness to deal with educational issues, and ability to implement instructional innovations. Similarly, Zembylas (2003) expressed that identity includes attitudes, emotions, beliefs, and values that are coherent, individualized, intentional, and serve as a repository of particular experiences for actions in classrooms and schools. Therefore, it can be concluded that teacher identity is established through social roles internalized by individuals and does not stay stable through negotiations within social contexts and situations, as in line with the literature (Danielewicz, 2001; Varghese, Morgan, Johnston & Johnson, 2005).

Some implications may be suggested based on the findings. Teacher educators, mentors, and school administrators may assist pre-service teachers during the teacher training process in order to more effectively and positively guide the formation and transformation of teacher

identities. Furthermore, teacher educators may provide more opportunities for pre-service teachers to understand the teaching profession from a more realistic standpoint by improving pre-service teachers' awareness of institutional rules, procedures, and potential student misbehaviors rather than solely through theoretical learning, which was also stated by Balban (2015).

The focus of this study was to identity development of pre-service teachers; however, the study was only a semester-long. For this reason, I suggest that future research might investigate the change in teacher identity through the teaching profession by conducting longitudinal studies. Also, future studies might investigate the role of video reflections in forming teacher identity or the feelings, positive perceptions, and difficulties of pre-service teachers while preparing videos. Moreover, future studies might investigate the role of creating reflections in video and text formats and their effect on identity formation, since Jones et al. (2014) stated the downside of video reflections as not all participants feel comfortable with a camcorder and some participants might feel burdened by the responsibility of preparing video reflections. These issues may have influenced pre-service teachers' reflections and might be investigated further in future research studies. In addition, in this study, the video reflections were based on the pre-service teachers' own performance. However, one of the video reflections might be watched by peers and discussed in groups. This might allow comparisons between their practices and others, help pre-service teachers to learn their strengths and weaknesses in the teaching process and lead to more realistic reflections which in turn will help to form more concrete teacher identities. Tsybulsky and Muchnik-Rozanov (2019) showed that project-based learning practices in science classes through team-teaching fostered professional identity construction. Also, Yuan and Mak (2018) investigated how two pre-service teachers formed their identities in an English class that involved collaborative lesson planning, group discussions, micro-teaching, and individual video reflections. Further research might investigate the effect of different practical experiences in classrooms on the identity development of pre-service teachers during practicum.

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