

INVESTIGATING INFORMAL MENTORING PROCESS IN TERMS OF ITS  
POTENTIAL TO SUPPORT STUDENT TEACHER IDENTITY  
DEVELOPMENT: A CASE STUDY

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DEVELOPMENT: A CASE STUDY**

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

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## **ABSTRACT**

### **INVESTIGATING INFORMAL MENTORING PROCESS IN TERMS OF ITS POTENTIAL TO SUPPORT STUDENT TEACHER IDENTITY DEVELOPMENT: A CASE STUDY**

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**M.S., The Department of Educational Sciences, Curriculum and Instruction**

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This case study aimed to investigate how an informal mentoring relationship among student teachers and mentor teachers has worked to support student teachers' professional identity development. The study also aimed to explore the potential of the informal mentoring process on student teacher identity development from the perspectives of student teachers and mentor teachers. The study was conducted within the scope of a classroom management course offered at the faculty of education at a well-known public university in Turkey in the 2020-2021 Spring Term. The multiple data resources included video recordings, semi-structured interviews with mentor teachers, and semi-structured interviews with student teachers. Video recordings captured the informal mentoring process in which 22 student teachers and five mentor teachers co-designed a lesson plan related to a classroom management topic in groups. Also, five mentor teachers and eleven student teachers participated in semi-structured interviews. Thematic analysis method was used for data analysis. All data were analyzed utilizing Izadinia's (2018) principles as a theoretical lens through MAXQDA (2020) software. The data analysis revealed that the informal

mentoring process has the potential to support student teachers' professional identity development. Mentor teachers made use of several principles that has the potential to inform student teachers' professional identity development such as building and maintaining a strong relationship, offering support and encouragement, providing ongoing feedback, making time for reflective activities, creating a positive environment, enabling awareness, self-identifications, and future projections.

**Keywords:** Student Teachers' Professional Identity, Mentoring, Informal Mentoring, Student Teachers, In-service Teachers

## ÖZ

### INFORMEL REHBERLİK SÜRECİNİN ÖĞRETMEN ADAYI KİMLİK GELİŞİMİNİ DESTEKLEME POTANSİYELİ AÇISINDAN ARAŞTIRILMASI: BİR VAKA ÇALIŞMASI

FAZLIOĞLU, Dilek

Yüksek Lisans, Eğitim Bilimleri, Eğitim Programları ve Öğretim Bölümü

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Bu nitel durum çalışması, öğretmen adayları ve rehber öğretmenler arasındaki informal rehberlik ilişkisinin, öğretmen adaylarının mesleki kimlik gelişimini desteklemek için nasıl çalıştığını araştırmayı amaçlamıştır. Çalışma ayrıca öğretmen adaylarının ve rehber öğretmenlerin bakış açılarından, informal rehberlik sürecinin öğretmen adaylarının kimlik gelişimi üzerindeki potansiyelini araştırmayı amaçlamıştır. Araştırma, 2020-2021 bahar döneminde Türkiye'de tanınmış bir devlet üniversitesinin eğitim fakültesinde verilen sınıf yönetimi dersi kapsamında gerçekleştirilmiştir. Çoklu veri kaynakları arasında video kayıtları, rehber öğretmenlerle yarı yapılandırılmış görüşmeler ve öğretmen adaylarıyla yarı yapılandırılmış görüşmeler yer almaktadır. Video kayıtları, yirmi iki öğretmen adayının ve beş rehber öğretmenin gruplar halinde bir sınıf yönetimi konusuyla ilgili bir ders planı tasarladığı informal rehberlik sürecini içermektedir. Ayrıca, yarı yapılandırılmış görüşmelere beş rehber öğretmen ve on bir öğretmen adayı katılmıştır. Verilerin analizinde tematik analiz yöntemi kullanılmıştır. Tüm veriler, MAXQDA (2020) yazılımı aracılığıyla teorik bir mercek olarak Izadinia'nın (2018) ilkeleri kullanılarak analiz edilmiştir. Veri



analizi, informel rehberlik sürecinin öğretmen adaylarının mesleki kimlik gelişimini destekleme potansiyeline sahip olduğunu ortaya koymuştur. Mentor öğretmenler, güçlü bir ilişki kurmak ve sürdürmek, destek ve teşvik sunmak, sürekli geri bildirim sağlamak, yansıtıcı etkinliklere zaman ayırmak, olumlu bir ortam yaratmak, farkındalığı, kendi kendini tanıma ve gelecek bağdaştırmaları mümkün kılmak gibi öğretmen adaylarının mesleki kimlik gelişimini etkileme potansiyeline sahip birçok ilkeden yararlanmışlardır.

**Anahtar Kelimeler:** Öğretmen Adaylarının Mesleki Kimliği, Rehberlik, İformel Rehberlik, Öğretmen Adayları, Hizmet İçi Öğretmenler

*To My Beloved Family*

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## TABLE OF CONTENTS

PLAGIARISM.....	iii
ABSTRACT .....	iv
ÖZ.....	vi
DEDICATION .....	viii
ACKNOWLEDGMENTS .....	ix
TABLE OF CONTENTS .....	x
LIST OF TABLE.....	xiv
LIST OF FIGURES .....	xv
LIST OF ABBREVIATIONS .....	xvi
CHAPTERS	
1. INTRODUCTION.....	1
1.1. Background of the Study .....	1
1.2. Purpose of the Study.....	5
1.3. Significance of the Study .....	6
1.4. Definition of Terms .....	8
2. LITERATURE REVIEW .....	11
2.1. Teacher Identity.....	11
2.1.1. Teacher Identity Development .....	13
2.1.2. Student Teachers' Professional Identity Development .....	14
2.1.2.1. Student Teacher Education.....	15
2.1.2.2. Pedagogies.....	17
2.1.3. Teacher Identity in relation to Classroom Practices and Classroom Management .....	20
2.1.4. Research Studies Related to Teacher Identity Development .....	22
2.2. Mentoring .....	28
2.2.1. Effective Mentoring .....	33
2.2.2. Benefits of Mentoring .....	35

2.2.3. Drawbacks and Limitations of Mentoring.....	37
2.2.4. Student Teachers’ Identity Development through Mentoring.....	39
2.2.5. Izadinia’s (2018) Mentoring Principles to Develop a Robust Teacher Identity.....	42
2.2.6. Research Studies Related to Teacher Identity Development and Mentoring .....	45
2.3. Summary of Literature Review .....	57
3. METHODOLOGY .....	58
3.1. Design of the Study .....	58
3.2. Research Questions .....	62
3.3. Context and Participants.....	63
3.3.1. Context .....	63
3.3.2. Participants .....	67
3.4. Data Collection Instruments.....	70
3.4.1. Video Recordings .....	70
3.4.2. Semi-Structured Interviews.....	71
3.4.2.1. The Pilot Study .....	73
3.5. Data Collection Procedure.....	74
3.6. Data Analysis Procedure .....	75
3.7. Quality of the Research / Trustworthiness .....	78
3.8. Researcher Reflexivity .....	81
3.9. Limitations of the Study.....	84
4. RESULTS.....	85
4.1. How does the Mentor/Mentee Relationship During the Informal Mentoring Process Work in terms of Supporting Teacher Identity Development?.....	85
4.1.1. Building and Maintaining a Strong Relationship.....	86
4.1.2. Offering Support and Encouragement.....	93
4.1.3. Providing Ongoing Feedback.....	101
4.1.4. Making Time for Reflective Activities .....	108

4.1.5. Creating a Positive Environment.....	115
4.1.6. Enabling Awareness, Self-identifications, and Future Projections.	119
4.2. What are the student teacher’s perceptions considering the effect of thementoring process on their professional identity development in terms of classroom management?.....	125
4.2.1. Building and Maintaining a Strong Relationship.....	125
4.2.2. Offering Support and Encouragement.....	128
4.2.3. Providing Ongoing Feedback.....	131
4.2.4. Making Time for Reflective Activities .....	134
4.2.5. Creating a Positive Environment.....	136
4.2.6. Enabling Awareness, Self-identifications, and Future Projections.	137
4.3. What are the student teacher’s perceptions considering the effect of the mentoring process on professional identity development of student teachers in terms of classroom management?.....	142
4.3.1. Building and Maintaining a Strong Relationship.....	142
4.3.2. Offering Support and Encouragement.....	144
4.3.3. Providing Ongoing Feedback.....	146
4.3.4. Creating a Positive Environment.....	148
4.3.5. Enabling Awareness, Self-identifications and Future Projections. .	150
4.4. Summary of the Results .....	151
5. DISCUSSION AND IMPLICATIONS.....	153
5.1. Discussion of the Results .....	153
5.2. Implications .....	163
5.2.1. Implications for Practice .....	163
5.2.2. Implications for Educational Research.....	164
REFERENCES .....	166
APPENDICES	
A. COURSE SYLLABUS.....	184
B. CO-DESIGNED PROJECT TOPICS.....	185
C. LESSON PLAN TEMPLATE.....	186

D. SEMI-STRUCTURED STUDENT TEACHER INTERVIEW .....	188
E. SEMI-STRUCTURED MENTOR TEACHER INTERVIEW .....	193
F. INFORMED CONSENT FORM FOR STUDENT TEACHERS .....	198
G. INFORMED CONSENT FORM FOR MENTOR TEACHERS .....	199
H. THE CODEBOOK .....	200
I. BRAUN AND CLARKE'S (2006) 15-POINT CHECKLIST.....	207
J. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE.....	208
K. TURKISH SUMMARY / TÜRKÇE ÖZET .....	209
L. THESIS PERMISSION FORM / TEZ İZİN FORMU .....	223

## LIST OF TABLE

Table 3.1. Demographic Profiles of Mentor Teachers .....	70
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## LIST OF FIGURES

Figure 3.1. Overall Design of the Study .....	62
Figure 3.2. Distribution of Participants over Groups .....	68
Figure 3.3. Development Process of Interview Questions .....	72
Figure 4.1. Codes Related to Building and Maintaining a Strong Relationship.....	87
Figure 4.2. Codes Related to Offering Support and Encouragement .....	93
Figure 4.3. Codes Related to Building and Maintaining a Strong Relationship.....	102
Figure 4.4. Codes Related to Making Time for Reflective Activities.....	110
Figure 4.5. Codes Related to Creating a Positive Environment .....	115
Figure 4.6. Codes Related to Enabling Awareness, Self-Identifications, and Future Projection .....	120

## **LIST OF ABBREVIATIONS**

ST	Student Teacher
TA	Thematic Analysis

## **CHAPTER 1**

### **INTRODUCTION**

The first chapter introduces the background to the study and presents the purpose, significance, and definitions of the key terms of this study.

#### **1.1. Background of the Study**

Professional teacher identity has been the focus of many recent studies in teacher education research. By providing a framework for teachers on “how to be”, “how to act” and “how to understand” their profession and their place in the society, teacher professional identity is at the center of the teaching profession (Sachs, 2005, p.15).

Professional teacher identity development is rather complex (Akkerman & Meijer, 2011; Beauchamp & Thomas, 2009; Lasky, 2005; Olsen, 2008; Rodgers & Scott, 2008; Taylor, 2017). There are various influential factors for teacher identity development such as teacher backgrounds (Johnston, 2012), beliefs (Göker, 2020; Johnson, 2012; Olsen, 2008), biographies (Lamote & Engels, 2010; Miller, 2009), characteristics (Johnston, 2012; Olsen, 2008), experiences (Cook, 2009; Göker, 2020; Johnston, 2012; Lamote & Engels, 2010; Mockler, 2011; Olsen, 2008), qualifications (Olsen, 2008), knowledge (Lamote & Engels, 2010; Miller, 2009), perceptions (Olsen, 2008), professional practice (Mockler, 2011), understandings and values. Also, teacher identity development is affected by contextual factors (Lamote & Engels, 2010) and interaction with significant others such as students, parents, colleagues, cooperating teachers, mentors, school staff (Izadinia, 2015a; McIntyre & Hobson, 2016; Yuan & Mak, 2018). Furthermore, three phases are substantial for teacher identity development; the

studentship phase, the student education phase, and the in-service phase (Flores & Day, 2006; Yuan & Lee, 2015).

Pre-service teachers' professional identity is the pre-service teachers' sense of agency, awareness, confidence, knowledge, voice, and connection with others such as colleagues, pupils, and parents. Pre-service teacher identity is constructed using educational context, previous experience, and communities (Izadinia, 2013). Within the scope of the current study, student teacher identity development is considered from a socio-constructivist perspective.

Social constructivism puts the emphasis on collaboration and social interactions (Powell & Kalina, 2009). Izadinia (2017) relates student teacher identity development with socio-construction as follows. Student teachers construct and develop their professional identity as they involve in the learning to teach process. Social and professional interactions with significant others within the learning community affect their professional identity in this process.

In relation to how to develop student teacher identity, teacher education and teacher education programs are influential (Arslan, 2018; Beauchamp & Thomas, 2009; Izadinia, 2013; Olsen, 2013; Williams, 2013; Trent, 2012; Van Zoest & Bohl, 2005). Especially the coursework (Carrington et al., 2008; Trent, 2012) and teaching field experience/practice/practicum in teacher education programs are valuable for student teacher identity development (Anspal et al., 2012; Beijaard et al., 2004; Carrington et al., 2008; Çelikdemir, 2018). A robust teacher identity development should not be left to luck (Cattley, 2007). Although student teachers' professional identity development process is expected, the process can be more successful when student teachers are provided opportunities to ponder and study it (Özmen, 2011). Teacher education programs should create intentional opportunities for student teachers so that they can explore, negotiate, and strengthen their professional identities. Furthermore, alternative ways or pedagogies to develop pre-service teachers' professional identity are necessary (Zembylas & Chubbuck, 2015). Benefiting from narratives, stories, reflective

activities, and communities can be considered some of these pedagogies (Alsup, 2004; Flores, 2014; Leijen et al., 2014).

In addition to the teacher identity, the term mentoring is the other cornerstone of this research study. Mentoring is quite a complex process (Ambrosetti, 2014; Ambrosetti & Dekkers, 2010; Ragins & Kram, 2007; Rajuan et al., 2010). The literature provides numerous definitions, yet there is no commonly accepted definition (Ambrosetti et al., 2014; Jacobi, 1991; Palmer et al., 2015). However, the literature reveals some common features related to mentoring (Jacobi, 1991). Palmer et al. (2015) emphasize these shared features of mentoring. Namely, mentoring is based on a personal relationship between a mentor and a mentee, which is mutual and reciprocal. A mentoring relationship requires direct interaction. A mentor generally is more experienced and succeeding than a mentee. A mentor provides emotional and professional support for a mentee and helps the mentee improve their career.

Mentoring can be formal or informal. Formal mentoring is the type of mentoring which is intentional and planned (Long, 1997). The matching of the mentors and mentees is done by the organizations (Wanberg et al., 2003), and the mentoring process is managed by organization itself (Chao et al., 1992). When it comes to informal mentoring, it is the type of mentoring that occurs naturally or spontaneously (Douglas, 1997; Wanberg et al., 2003). An informal mentoring relationship is not initiated externally (Chao et al., 1992; Douglas, 1997). Instead, mutual attraction provides a basis for the mentoring relationship (Kram, 1983). While mentors prefer mentees with whom they can identify themselves (Chao et al., 1992), mentees acknowledge the mentors they see as role models. Moreover, informal mentoring enables the development and adjustment of the aims considering the mentors' and mentees' needs (Ragins & Cotton, 1999). The present study focuses on an informal mentoring relationship.

In terms of teacher mentoring in Turkey, school-based formal mentoring is apparent for student teachers. Namely, student teachers studying in their last year

of teacher education programs experience a mentoring relationship with practice teachers at schools (Akçamete et al., 2010). Faculty-Practice School Partnership Program sets up rules and regulations for this mentoring partnership between education faculties and schools in Turkey. According to this program, mentors are teachers who have training in their own field and at least three years of experience. The practice teachers at schools, who have the mentor role, offer counseling, guidance, and support for student teachers (Yüksek Öğretim Kurulu & Dünya Bankası, 1998). However, the mentoring practices in Turkey are not well systemized throughout all the country. Namely, considerations related to professional context are not adequate. Also, mentoring processes are not consistent or regular (Dağ & Sarı, 2017).

Teacher mentoring advantages mentees, mentors, and the education system itself (Tomlinson et al., 2010). Mentees benefit from the mentoring process by enhancing their esteem (Tomlinson et al., 2010), confidence (Bullough Jr., 2005; Moor et al., 2005; Tomlinson et al., 2010), job satisfaction (Bullough Jr., 2005; Marable & Raimondi, 2007; Moor et al., 2005), feeling of being supported (Marable & Raimondi, 2007; Tomlinson et al., 2010). Moreover, mentoring is beneficial for mentees' professional capacities or skills (Tomlinson et al., 2010) such as classroom management, time management, and workload management (Moor et al., 2005), self-reflection, and problem-solving skills (Tomlinson et al., 2010). When it comes to mentors, the mentoring relationship increases mentors' feeling of satisfaction (Bullough Jr & Draper, 2004), self-fulfillment, self-esteem (Hudson & Hudson, 2010), self-confidence. Mentors feel more motivated and less isolated (Tomlinson et al., 2010). The mentoring process also strengthens mentors' professional practices (Lopez-Real & Kwan, 2005), leadership abilities (Hudson & Hudson, 2010), and teaching identity and teaching practice, too (Walters et al., 2019). In spite of the benefits discussed in the literature, mentoring is not without its drawbacks and limitations (Hobson et al., 2009; Long, 1997; Tomlinson et al., 2010). If the mentoring process does not actualize effectively (Tomlinson et al., 2010), adverse outcomes occur (Hobson et al., 2009). Mentors and mentees can be influenced by these negative outcomes

(Hobson et al., 2009; Long, 1997; Tomlinson et al., 2010) in addition to students, schools, and the broader education system (Hobson et al., 2009; Long, 1997; Tomlinson et al., 2010).

In terms of the relationship between mentoring and teacher identity, the literature emphasizes that mentoring is influential for teacher identity development, reconstruction, or transformation (Devos, 2010). Mentoring affects the components of pre-service teacher identity (Izadinia, 2016). That is why the mentoring relationship positively or negatively informs student teacher identity development (Izadinia 2016, 2015b). Considering how mentoring affects student teacher identity development, the following aspects have been emphasized in the literature. Mentoring impacts teacher identity development by influencing student teachers' self-confidence (Djoudir, 2019; Izadinia, 2016, 2015a; Ticknor, 2014), self-efficacy (Cattley, 2007; Göker, 2020), teacher voice (Beck & Kosnik, 2000; Izadinia, 2016, 2015a; Patrick, 2013), teacher vision (Izadinia, 2016) and sense of agency (Djoudir, 2019; Ticknor, 2014; Williams, 2010). Furthermore, mentoring informs student teacher identity development through its effect on knowledge (McIntyre & Hobson, 2016).

Izadinia (2018) investigates how mentoring affects the teacher identity development process and proposes five principles that promote a robust identity. The principles are building and maintaining strong relationships, offering support and encouragement, providing ongoing feedback, making time for reflective activities, and creating a positive environment. This framework was used to analyze how mentoring affects student teachers' identity development in the present study. A detailed explanation of the framework and its use is explained in detail in the following chapter.

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

The purpose of the present study is to explore the potential of informal mentoring among student and mentor teachers to support student teachers'

professional identity development within the scope of classroom management course. Specifically, the present study seeks answers to the following questions:

1. How does the mentor/mentee relationship during the informal mentoring process work in terms of supporting teacher identity development?
2. What are the student teacher's perceptions considering the potential of the mentoring process on their professional identity development in terms of classroom management?
3. What are the mentor teacher's perceptions considering the potential of the mentoring process on professional identity development of student teachers in terms of classroom management?

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

Teacher professional identity lies at the core of teachers' practices (Beauchamp & Thomas, 2009). From theory to practice, all preferences of teachers are affected by their professional identity (Olsen, 2016). Teacher identity is especially influential while designing the teaching-learning process (Beijaard et al., 2004). Furthermore, teacher identity impacts the behavior management decisions of a teacher (Dugas, 2016). Actually, the quality of education is determined by teacher identity (Olsen, 2016).

Many student teachers come across a wide variety of challenges while developing a coherent professional identity (Beauchamp, 2019). It is especially significant to conduct research studies on how to support the development of teacher identity in the teacher education phase (Riyanti, 2017). That is why, it is worth exploring the topic. This study is significant since it promotes and documents how an informal mentoring relationship supports student teachers' professional identity development within the scope of a classroom management



course in teacher education. Details considering the significance have been addressed in the following paragraphs.

A lot of attention has been paid to the development of student teachers in the literature (Flores & Day, 2006; McIntyre & Hobson, 2016). Literature regarding teacher identity development focused on different factors impacting professional identity development. However, the effect of mentoring on teacher identity development, especially for student teachers, is a less examined area (Devos, 2010; Henry & Mollstedt, 2021; Izadinia, 2013, 2015a, 2016; McIntyre & Hobson, 2016). That is why the related information is somewhat limited (Izadinia, 2013). Furthermore, the research studies about the effect of mentoring in student teacher identity development mainly use the practicum context (Izadinia, 2016). When it comes to the studies conducted in Turkey, there is a limited number of studies on teacher identity issue (Arslan, 2018; Çetin, 2017). When the role of mentoring on student teachers' identity development is studied in Turkey, it is mostly in the teaching practicum context/ teaching practice. Also, formal mentoring relationships have been investigated in general (e.g Bekereci, 2016; İnce, 2020; Taşdemir, 2016; Yazan, 2014). However, the context of the present study is not the practicum/ teaching practice. It is a classroom management course offered to third-year student teachers at a teacher education program. Moreover, the mentoring relationship is informal. The current study contributes to international and national educational research by focusing on the potential of informal mentoring on student teacher identity development and bringing in new perspectives.

Research studies on teacher identity development are also beneficial for the teachers who take part in these studies (Alsup, 2006). Namely, these studies raise awareness on the type of teachers they really are and what kind of teachers they aspire to be (Arslan, 2018). The study contributes to student teachers' identity development as they discover and display various dimensions of themselves as teachers (Beauchamp & Thomas, 2009; Olsen, 2013). Also, the teachers in the

study get the chance to reflect on their understanding of education, pedagogy, schooling, subject matter, practice and promote their professional identities.

A better understanding of how student teachers develop their professional identity has the potential of positively informing teacher education design (Beauchamp & Thomas, 2009). Knowing the factors that positively and negatively affect student teachers' identity helps teacher educators design and conduct teacher education programs that are more productive in professional identity development (Izadinia, 2013). This study provides valuable insights to teacher educators. Especially, those who want to add various mentoring relationships into teacher education programs can benefit from the findings of this study. Furthermore, the Council of Higher Education, the Committee of National Teacher Education, the Ministry of National Education, and teacher education institutions may benefit from the study's findings while planning teacher education courses. In this regard, they can consider the effective aspects of mentoring relationships.

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

The key terms in this study are teacher identity, student teachers' professional identity, mentoring, informal mentoring, student teachers, and in-service teachers. Although there are various definitions in the literature, the terms are defined as follows in the present study.

**Teacher Identity:** This research study uses Akkerman and Meijer's (2011) dialogical approach to define the term teacher identity. Akkerman and Meijer (2011) point out that this approach provides a comprehensive definition by conceptualizing teacher identity as not only multiple but also unitary, not only discontinuous but also continuous, not only social but also individual. According to this approach, teacher identity is

ongoing process of negotiating and interrelating multiple I-positions in such a way that a more or less coherent and consistent sense of self is maintained throughout various participations and self-investments in one's (working) life. (p. 315)

**Student Teachers' Professional Identity:** The term refers to “pre-service teachers’ perceptions of their cognitive knowledge, sense of agency, self-awareness, voice, confidence, and relationship with colleagues, pupils, and parents, as shaped by their educational contexts, prior experiences and learning communities” (Izadinia, 2013, p. 708). Furthermore, student teacher identity is considered from a socio-constructivist perspective in the present study since the collaboration and social interactions are highly significant in socio constructivism (Powell & Kalina, 2009).

**Mentoring:** The term refers to “a non-hierarchical, reciprocal relationship between mentors and mentees who work towards specific professional and personal outcomes for the mentee” (Ambrosetti & Deckers, 2010, p. 52). The mentoring relationship occurs between mentee teachers who are relatively inexperienced and mentor teachers who are relatively more experienced (Hobson & Malderez, 2013).

**Informal Mentoring:** The term refers to the type of mentoring that is not formally structured (Chao et al., 1992). There are not any specific kinds of formats or compulsions. Mentors’ and mentees’ intrinsic motivation and personal commitment are significant in the mentoring process (Joshi & Sikdar, 2015). It is less established and more flexible (James et al., 2015).

**Student Teachers:** The term refers to pre-service teachers who are currently taking the student training in “a course or programme of study which student teachers complete before they begin teaching” (Richards & Schmidt, 2002, p. 416). Furthermore, the terms pre-service teacher and student teacher are used interchangeably in this study.

In-service Teachers: The term refers to teachers who are employed by the ministry of education. They are already teaching as full-time teachers (Richards & Schmidt, 2002).

## CHAPTER 2

### LITERATURE REVIEW

This chapter presents a review of the literature for the current study and discusses the key terms, theoretical foundations, and previous research studies considering teacher identity and mentoring.

#### 2.1. Teacher Identity

Professional teacher identity has been the focus of many studies in teacher education research (Beijaard et al., 2004), and attention has increased substantially over the last decades (Leijen et al., 2014). Teacher identity reflects on significant questions such as “who am I”, “what kind of teacher do I want to be?”, and “how do I see my role as a teacher?” (Korthagen, 2004, p. 81). Just like the term identity is defined in numerous ways in the literature (Gee, 2000), teacher professional identity lacks a clear and shared definition. However, the literature reveals some recurring characteristics considering teacher professional identity (Beijaard et al., 2004).

Beijaard et al. (2004) investigated the relevant professional teacher identity literature between 1988 and 2000 since it was the period when teachers’ professional identity became a specific research area and concluded that there are four main features. Firstly, teacher identity is an ongoing process, so it is not steady. Secondly, teacher identity is about both people and contexts, so teachers’ professional identities are not completely unique. All teachers are expected to act professionally by using some predetermined teaching-related characteristics. However, teachers do not just take on these characteristics. Instead, they act differently while using these characteristics since the value attributed to these characteristics is also different. Thirdly, a teacher’s professional identity

comprises of sub-identities, and these sub-identities are harmonized to some extent. While some sub-identities are the essence of the professional teacher identity, some others are more peripheral. Fourthly, Beijaard et al. (2004) related professional identity to agency and emphasized that teachers should be active while developing professionally.

Akkerman and Meijer (2011) also pointed out a common emphasis on the following features related to professional teacher identity: “the multiplicity”, “the discontinuity”, and “the social nature”. Multiplicity refers to the existence of sub-identities. When it comes to discontinuity, it refers to teacher identity as an ongoing process. Namely, it changes from moment to moment, from context to context, and it is fluid. In terms of the social nature of professional identity, it is constructed related to diverse social contexts and relationships. Akkerman and Meijer (2011) also indicated that considering professional identity as multiple, discontinuous, and social is not enough by itself because these features do not answer some important questions related to professional identity. They lack their counterparts. Thus, they suggest a “dialogical approach” as a more elaborate way to consider teacher professional identity. According to this approach, teacher identity is not only multiple but also unitary, not only discontinuous but also continuous, not only social but also individual. To begin with multiplicity-unity, teacher identity includes multiple I-positions, yet people hold them together in unity. In terms of discontinuity-continuity, although teacher identity changes from moment to moment; from context to context, there is also a concurrent continuity. This continuity is resulted from past, present, and future arrangements. Considering the social-individual aspect of teacher identity, social involves individuals just like individual includes the social. Namely, on the one hand, people are unique because of their multiple I-positions. On the other hand, others make the foundation for these I-positions. Depending on this approach, Akkerman and Meijer (2011) defined teacher identity as “an ongoing process of negotiating and interrelating multiple I-positions in such a way that a more or less coherent and consistent sense of self is maintained throughout various participations and self-investments in one’s (working) life” (p. 315).

Beijaard et al. (2000) provided a framework relating the identity concept with the teaching profession. They described the professional identity in terms of ‘subject matter expertise, didactical expertise, and pedagogical expertise’. In terms of subject matter experts, teachers relate their profession to having extensive knowledge about their field of expertise and transmitting this knowledge to students. While didactical expertise emphasizes how to plan, perform, and evaluate the teaching and learning process, pedagogical expertise is related to supporting the emotional, social, and moral development of students. According to Beijaard et al. (2000), teachers perceive their professional identity as a combination of various aspects of their expertise.

### **2.1.1. Teacher Identity Development**

The development of teacher identity is a complex, multifaceted and dynamic process (Rodgers & Scott, 2008). Teachers develop their professional identity “interactively and iteratively” by joining past, present, personal, and professional details related to their lives (Olsen, 2013, p. 79). Professional identity development is affected by teachers’ attitudes (Miller, 2009), backgrounds (Johnston, 2012), beliefs (Göker, 2020; Johnston, 2012; Olsen, 2008), biographies (Lamote & Engels, 2010; Miller, 2009), characteristics (Olsen, 2008; Johnston, 2012), experiences (Cook, 2009; Göker, 2020; Johnston, 2012; Lamote & Engels, 2010; Mockler, 2011; Olsen, 2008), qualifications (Olsen, 2008), knowledge (Lamote & Engels, 2010; Miller, 2009), perceptions (Olsen, 2008), professional practice (Mockler, 2011), understandings and values. Furthermore, feelings affect teacher identity development (Johnston, 2012). For example, teachers’ self-efficacy, motivation (Beijaard et al., 2000), or tensions are influential for their identity development (Göker, 2020).

Additionally, contextual factors impact teacher identity development. Workplace conditions, curriculum (Miller, 2009), culture (Johnston, 2012) or learning environment can be considered among these factors (Lamote & Engels, 2010). Apart from these, interaction with significant others such as students, parents,

colleagues, cooperating teachers, mentors, school staff affects teacher identity development (Izadinia, 2015a; McIntyre & Hobson, 2016; Yuan & Mak, 2018). Teacher identity development can be investigated under three phases: the studentship phase, the student education phase, and the in-service phase (Flores & Day, 2006; Yuan & Lee, 2015). Throughout their studentship phase, teachers make acquaintance with their future profession. By observing their own teachers, they consider what kind of teachers are effective or ineffective (Alsup, 2006). For example, many teachers mention their previous teachers while explaining their own professional philosophies, which indicates that the studentship phase is influential for teacher identity development (Flores & Day, 2006). Student identity development is explained in detail in the following heading while in-service teacher identity development is excluded for this study.

### **2.1.2. Student Teachers' Professional Identity Development**

Izadinia (2013) defined student teachers' professional identity as "pre-service teachers' perceptions of their cognitive knowledge, sense of agency, self-awareness, voice, confidence, and relationship with colleagues, pupils, and parents, as shaped by their educational contexts, prior experiences and learning communities" (p. 708).

Schepens et al. (2009) adapted Beijaard et al.'s (2004) four main professional identity features, which are explained above, to student teachers' identity development. Schepens et al. (2009) indicated that student teacher identity is a non-steady, ongoing process for the first feature. It is interpreted and reinterpreted throughout teacher education. Secondly, student teacher identity is impacted by contexts. Even if all student teachers are expected to act professionally depending on predetermined standards or essential competencies, they do not simply adopt them. Instead, they act differently depending on their own values. Thirdly, student teachers' professional identities comprise sub-identities, and sometimes these sub-identities are conflicting because of the



theory-practice gap. Fourthly, student teachers are active while developing their professional identity.

When it comes to constructing, developing, and displaying the professional teacher identity of student teachers, the literature emphasizes the student education phase and use of various pedagogies in addition to the factors (e.g student teachers' backgrounds, beliefs, experiences, feelings, knowledge) that are pointed out in the previous subheading.

#### **2.1.2.1. Student Teacher Education**

Teacher education and teacher education programs contribute to student teachers' professional identity development (Arslan, 2018; Beauchamp & Thomas, 2009; Izadinia, 2013; Olsen, 2013; Williams, 2013; Trent, 2012; Van Zoest & Bohl, 2005). Teacher education is a compilation of communities of practices, and it is a powerful tool to develop identities (Williams, 2013). Although further development of professional identity occurs with actual practice, teacher education programs are the best possible starting points (Beauchamp & Thomas, 2009). They can be even considered as the most effective phase to develop professional identity (Izadinia, 2013). Also, compared to the studentship, the teacher education phase is more professional (Van Zoest & Bohl, 2005). With the help of teacher education programs, teachers critically question and intentionally combine multiple aspects of their professional identity, which is in the development process (Olsen, 2013). In these programs, they get knowledge and form intentions and beliefs related to various elements of the teaching profession (Van Zoest & Bohl, 2005). Teacher education both produces the awareness that teachers need to develop an identity and promotes professional identity shifts. As student teachers proceed through teacher education programs, they take over their teacher positions in current challenging teaching contexts (Beauchamp & Thomas, 2009).

Within the scope of teacher education programs, coursework plays a significant role in identity formation and development (Carrington et al., 2008; Trent, 2012). Each course in teacher education programs can be regarded as an individual community that is influential for student teacher identity development. They can potentially affect student teachers' identity in various ways (Antonek et al., 1997). According to Yazan (2017), student teachers negotiate their identities as they situate themselves as teachers and as they are situated by others throughout their teacher education courses. In his study, Yazan (2017) highlighted three main ways to achieve this. The first one is engaging in online and face-to-face course activities such as discussions and assignments. The second one is interacting with teacher educators and teachers about professional topics. The third one is the teaching practice course. Investigating the professional identity development of student teachers in teacher education programs from two different socio-cultural contexts, Gu and Benson (2015) also revealed that attending various coursework and interpersonal communication within various communities is highly significant. Furthermore, the design of the curriculum affects student teachers' identities, too. Namely, practical curriculum design facilitates teacher identity development better than theory-driven curriculum design.

Teaching field experience/practice/practicum in teacher education programs also plays an essential role in identity formation and development (Anspal et al., 2012; Beijaard et al., 2004; Carrington et al., 2008; Çelikdemir, 2018). Beijaard et al. (2004) related teaching practice with student teacher identity development because student teachers observe other teachers, gain some experience related to teaching, get feedback from mentors throughout the teaching practice period. More importantly start to identify themselves as future teachers.

All in all, when university coursework is merged with university field experience, student teachers shape their teaching and learning experience and their professional identity correspondingly (Carrington et al., 2008). Yuan and Lee (2015) also reported that student teachers' professional identity is modified

via teaching practicum and related coursework as student teachers take part in various social activities and have experience with multiple emotions. A study conducted by Anspal et al. (2012) investigated how student teachers in a five-year teacher education program developed their professional identities. The first-year students tried to make sense of their career choice and motivation to teach. Most of the time, student teachers related their choice and inspiration to their previous school experience and their perception of the teaching profession. The second- and third-year students mainly focused on learning their subject matter and increasing their knowledge. In terms of the fourth- and fifth-year students, worries, and fears started to focus since student teachers get closer to taking full responsibility as teachers. Also, they reconsidered their motives to be teachers. Anspal et al. (2012) emphasized that student teachers develop their professional identity in their teacher education programs as peers and mentors support them, they acquire information, and they transfer all the things to themselves as future teachers.

#### **2.1.2.2. Pedagogies**

Teacher education programs are especially expected to offer intentional opportunities for preservice teachers so that they can discover, negotiate, and develop their identities (Zembylas & Chubbuck, 2015). However, this is notably complex and challenging (Beauchamp & Thomas, 2009). That is why, finding alternative ways or pedagogies to develop student teachers' professional identity is required (Zembylas & Chubbuck, 2015). Pedagogies of developing professional teacher identity are not teaching strategies or procedures. Instead, they are the practices or conditions that are especially designed to develop teacher identities with the mutual and synergic relationships of teaching and learning (Loughran, 2014). Studies in the literature on pedagogies of developing professional identity of student teachers point out how various narratives, stories, reflective activities, and communities can be used to develop professional identity of student teachers (e.g., Alsup, 2004; Flores, 2014; Leijen et al., 2014).

To begin with narratives and stories, “identity revolves around its narrative and discursive aspects and the ways in which narrative and discourse shape and are shaped by identity”. Teachers discover and display dimensions of self through narratives about themselves and their practices (Beauchamp & Thomas, 2009, p.181). Both in the oral and written form, narrative activities affect how teachers make sense of themselves and their professions. The best way to support the teachers’ professional development with narratives is by interacting with expert others. Namely, narrative activities with experts who ensure organized and planned intentional mediation are beneficial for the teachers (Golombek & Johnson, 2017). Furthermore, it is reasonable to ask student teachers to share some narratives or give some evidence or anecdotes advocating their professional decisions. In such situations, student teachers would question their long-standing but usually unanalyzed beliefs. Consequently, their past experiences as a student would create awareness on whether their decisions or ideas are logical or not. Especially using the real narratives of experience rather than educational cliches or jargon are highly influential to develop student teacher identity (Alsup, 2004). For example, Flores (2014) conducted a study on pedagogies that were designed to develop a student professional identity in a compulsory teacher education course in Portugal. Students completed various tasks such as written or oral narratives and listen to other student teachers or in-service teachers’ voices throughout the course. Flores (2014) stated that with the help of these pedagogies, student teachers reexamined their experiences as students and questioned their preliminary beliefs about the teaching profession. They reconstructed their perception about how to be a teacher by gaining a teacher perspective. Furthermore, they became active while developing their teacher identities.

Story construction equates to identity construction, too. Identity is not only constructed but also interpreted with various types of stories: stories of ourselves told by ourselves (first-person identities); stories of ourselves told us directly by other people (second-person identities) and stories of ourselves told by a second person to a third person. Stories shift in time depending on contexts and

relationships. It is also quite significant to make those stories public. This process does not have to be in the written sense all the time; oral communication is influential, too (Sfard & Prusak, 2005). Binks et al. (2009), whose research study involved storytelling assignments of student teachers, confirmed that when student teachers are involved in the storytelling process, they form meaning from their experiences. They relate the experience to the knowledge provided by teacher education.

Additionally, reflective approach is majorly sided in student teacher education (Özmen, 2010). Reflection activities such as autobiographies, reflective portfolios, reflection cycles, reflection meetings provide numerous opportunities for student teachers' professional identity development (Izadinia, 2013). Reflections on actions are not only beneficial for improving the teacher role, but also for maintaining the ongoing construction of teacher identity (Walkington, 2005a). Reflective writing can also be used to support student teachers' professional identity (Cattley, 2007). Reflective talk, either as personal storytelling or as analytical talk, can be considered a critical strategy in professional identity work (Cohen, 2010). Self-reflection and guided reflection procedures have a potential, too. Furthermore, joint reflection activities on sample lessons can be used; or various video cases or communities can be preferred throughout the joint reflection processes to develop professional identity of student teachers. Student teachers can act out various classroom scenarios and record their videos to reflect on this experience later. With the help of such practices, student teachers can discover affective and concrete aspects of teacher identity (Leijen et al., 2014). While equipping student teachers with sufficient reflective awareness, or skills is highly significant, there are some aspects to consider. Since student teachers' professional competence and teaching experience are restricted, they might come across with some challenges while understanding and applying the reflection concept. It is only when student teachers get systematic and continuous support about applying critical reflections, they become reflective professionals and realize their identities (Yuan & Mak, 2018).

Engaging in different communities such as professional communities, communities of practice (Wenger, 1998), learning communities also affect the development of professional identity, so student teachers' professional identity can be shaped in the context of various communities. In such communities, teachers have a chance to engage in professional dialogue. They learn about changing practices and situations about schools and classrooms (Le Cornu, 2005). Cohen (2010) emphasize that teacher education should create opportunities for student teachers to interact with their colleagues via planned meetings. These non-classroom-based interactions outside the classroom, in broader social contexts, help the development and the sustainability of satisfying professional identities.

### **2.1.3. Teacher Identity in relation to Classroom Practices and Classroom Management**

Each teacher has a unique way of teaching. Since the teacher identity shapes how teachers approach teaching, it explains the differences and uniqueness of the classrooms (Walkington, 2005a). Teachers come up against various scenarios, outcomes, and social relationships in their professional life. While deciding on the most appropriate and helpful choice, they make use of the structures provided by their identity and enact accordingly (Olsen, 2013). Furthermore, teacher identity directly affects how teachers interpret their experiences. Thus, teacher identity reflects on all the preferences from theory to practice and affects the quality of education (Olsen, 2016).

Teacher professional identity plays a significant role in designing the teaching-learning process (Beijaard et al., 2004). Many choices related to the teaching profession are the products of teachers' perceptions of professional identity (Olsen, 2016): the way teachers plan their lessons (Coldron and Smith, 1999), the arrangement of classroom contents (Beijaard et al., 2004), the activities teachers select from their entire repertoire (Coldron and Smith, 1999), the teaching methods, evaluation methods (Olsen, 2016). Professional teacher

identity influences classroom practices, too (Beijaard et al., 2004; Coldron and Smith, 1999; Mockler, 2011; Olsen, 2016). Professional teacher identity directly influences teacher-student rapport (Olsen, 2016). Furthermore, professional teacher identity is influential on teachers' attitudes (Beijaard et al., 2004), the way teachers communicate in the classroom and school communities (Coldron and Smith, 1999). In addition to these, how teachers participate in a school community, how they respond to the educational encounters, and to what extent they are content or discontent with their performance are affected by their professional identity. Teachers even evaluate the moral appropriacy of their work depending on their professional identity (Coldron and Smith, 1999).

Dugas (2016) also indicate that behavior management decisions are directed by teachers' identities. The analysis of narrative-based interviews has shown that teacher identity affects classroom management decisions in various ways while responding to misbehavior. Namely, teachers aspire to be seen as a specific type of teacher by other teachers or students. While making classroom management decisions, teachers try to stick to this particular type of teacher. Teachers' decisions are also affected by how they want to see themselves as a certain kind of person or teacher. Consequently, identity plays a crucial role and even limits teachers' options while managing their classrooms.

Searching whether teachers with different professional identity profiles also differ in their teaching behavior, Canrinus (2011) investigated interrelationships between teacher identity and teaching behaviors such as "efficient classroom management", "creating a safe and stimulating learning climate" etc. In the study, Canrinus (2011) mentioned three core identity profiles: "unsatisfied and demotivated identity profile", "motivated and affectively committed identity profile", "competence doubting identity profile". The researcher argued that teachers' classroom management efficiency and the clearness of their instruction differed according to their professional identity profiles. Teachers from the unsatisfied and demotivated professional identity profile differed considering their classroom management.

Moore (2017) also elaborates on how critical professional identity is for classroom management. When teachers have a mature or established professional identity, they can use it as a tool to manage the class and deal with the students with various needs. According to Moore (2017), there might be a difference between experienced and less experienced teachers in terms of the reflection of identity on classroom management. Namely, experienced teachers can use their identity actively or shift their identity depending on numerous situations in a class while less experienced teachers can passively reflect upon their identity.

As referred above, a teachers' professional identity is reflected in many different dimensions of class and practice. Therefore, classroom management can be considered as one of the main educational elements constructed by professional teacher identity.

#### **2.1.4. Research Studies Related to Teacher Identity Development**

Initial phases of the teaching profession are highly significant for identity development, so the research studies have concentrated on the professional identity of student teachers (Flores & Day, 2006). Research studies below especially focus on how to develop or facilitate student teachers' professional identity.

To begin with studies conducted abroad, Carrington et al., (2008) investigated how an online classroom simulation named as ClassSim contributed to the professional identity development of pre-service teachers. By aiming to promote a teacher education program in a university, Carrington et al. (2008) designed the simulation. They aimed to combine the coursework with practice by supplying authentic and practical class scenarios. ClassSim allowed pre-service teachers to make some virtual decisions on professional issues such as classroom management, organization of the teaching experiences. Pre-service teachers could also suggest other options that were not provided by the simulation, too.



The participants of this qualitative case study were ten first-year Pre-service teachers who enrolled for a teacher education course. The data was collected through semi-structured interviews, observations, and artifacts. The results pointed out that Pre-service teachers shaped and developed their professional identity since they got the first insight into the teaching profession and learned the significance of preparation and organization. Furthermore, in addition to taking the role of a teacher, Pre-service teachers got some experience in the virtual environment and felt more ready for teaching practicum. Also, they made connections between theory and practice by engaging in various scenarios.

Morton and Gray (2010) investigated the influence of shared lesson planning on pre-service teachers' practical knowledge and professional identity development. The researchers saw lesson planning sessions as settings in which English student teachers became members of a community of practice. The data was collected from six pre-service teachers who registered to a part-time English Language Teaching course. The participants were expected to prepare a plan on assigned parts of the coursebook before the meetings. Then pre-service teachers and a teacher educator analyzed the plan and discussed the ideas and future practice. Within the scope of this study, researchers analyzed eleven lesson planning conferences consisted of 25.000 words. Data analysis implied that shared lesson planning was a rewarding tool for pre-service teachers' professional identity and practical knowledge construction despite its limitations. Pre-service teachers not only had a chance to discuss problems related to teaching and instruction but also suggested some solutions. Although teacher educators could produce more meanings concerning practical knowledge, pre-service teachers had a lot of sharing such as suggesting actions, evaluating, naming elements, and picturing classroom events.

Yuan and Mak (2018) are two such researchers who focused on reflective activities and teacher identity. Seeing reflection as a process involving various tasks, the researchers investigated two student literacy teachers' reflective practices in a teacher education course in Hong Kong. Thirty-two third-year pre-

service teachers took an education course that encompassed various reflective and interactive tasks such as joint lesson planning, group consultation with the instructor, micro-teaching, and videoed reflection. Andrew and Sally among these thirty-two pre-service teachers became the participants of this research study. The data was collected through semi-structured interviews and video reflections that included reflective analysis of pre-service teachers' microteachings. Throughout the data collection process, a specific focus was put on identity development and change through reflective activities. The analysis of the data revealed that participation or lack of participation in reflective practices was influential for professional identity formation and transformation. To start with Andrew, he was 'a student' within the joint lesson planning process since his collaboration and reflection were rather limited. However, he started to take on his teacher identity as he reflected on the lesson plan in the group consultation with the instructor. His identity development went on with micro-teaching since he not only had a chance to turn theory into practice but also, he became a part of a growing teacher community. When it comes to Sally, her lack of participation in practices turned her professional identity from 'a teacher learner' to 'a student who did not care'. The results also attested to the importance of imagination as a source for pre-service teachers' identity development. To illustrate, Andrew developed an imagined literacy teacher identity that would use some theories, practices in his future classroom practice while imagination was missing in Sally's identity development process. Yuan and Mak (2018) highlighted the significance of language use for pre-service teachers identity development, too. For example, Sally used the modal verb "should" while mentioning her powerful commitment to some professional activities. Another finding of this study was the effect of the educational context, rules, culture for the reflective activities and identity development. Namely, some pre-service teachers were dependent on the course instructor as a part of their culture, so they were indifferent to peer feedback and cooperation, so this might be interpreted as a drawback for reflective activities and identity development. In general, the research emphasized that practice ('identity in practice'), language use ('identity in discourse'), and historical and sociocultural contexts ('identity in activity') were

also very significant for reflective practices and identity development of pre-service teachers.

Gutiérrez et al. (2019) also conducted an action research study on how a collaborative, reflective practice workshop influenced the professional identity development of student EFL teachers. The study was conducted at a university in Chile where the teacher education program required pre-service teachers to reflect on their teaching practicum with more experienced teachers and personal journal writings. Intending to form a more holistic approach with peer involvement, the researchers designed a ten-week workshop that predominantly focused on introducing reflective practices. The participants are twelve pre-service teachers who attended the workshop for weekly ninety-minute sessions each ten weeks. The workshop included one induction phase and two application phases, including various reflection tasks on philosophies, principles, theories, and classroom practices. In the induction phase, pre-service teachers were expected to reflect on difficulties of becoming a teacher, and autobiographical factors on their professional identities. Then, the researchers introduced the reflective practice cycle. Pre-service teachers logged a critical event from a different teachers' lesson in the first application phase and reported this to other pre-service teachers in a small group later. Then pre-service teachers discussed the teacher's actions. Finally, working with two of the researchers in the role of mentors, pre-service teachers suggested options to overcome this incident. They also discussed the advantages of reflecting on a different teachers' class. When it comes to the second application phase, the same cycle with some changes was used again. The main difference was that pre-service teachers shared a critical event from their own practicum teaching. They also developed action plans for these incidents and implemented these action plans in their following teaching. Finally, they reflected on the implementation of the action plans, too. Qualitative data was collected through focus group discussions. Thematic analysis of the data demonstrated that pre-service teachers developed and strengthened their professional identity in three main ways as they participate in the workshop. First, pre-service teachers became more confident in

their problem-solving skills. Secondly, they increased their appreciation considering the value of collaboration with peers. Finally, they recognized that being open to change or criticism was significant for teachers. The researchers also said that the participants in the study have changed the way they saw their roles as a teacher and differentiated how to act as a teacher. All these could be indicators of stronger professional identities because a more powerful sense of agency and eagerness to working with colleagues were essential aspects of professional teacher identity.

When it comes to the studies conducted in Turkey, Özmen (2010) conducted a study on the effect of an acting course on developing non-verbal immediacy of ELT student teachers. The researcher also focused on how the acting course contributed to teacher identity development. The study was conducted at the ELT Department of Gazi University during the 2008-2009 spring semester. The participants were forty-four student teachers who took the 'Creative Drama' course. The study was completed in twelve weeks. The researcher collected data by integrating qualitative and quantitative research methods. For the quantitative part, control and experimental groups took Nonverbal Immediacy Scale-Self Report for pre-test and a post-test. Furthermore, the qualitative data were collected via a session journal, essays, observation checklist, and interviews. The data analysis indicated that the experimental group displayed a significant development concerning their nonverbal immediate behaviors. However, the control group did not show a significant change. The researcher emphasized that the acting course contributed to student teachers' awareness, control, autonomy, self-confidence, self-esteem, and thus their professional identity. Namely, all these were considered as "footprints of developing teacher identity". When how the student teacher identity developed was questioned, the participants highlighted acting activities, writing activities, emotional preparation activities, etc. Student teachers also mentioned the effect of analyzing teaching videos of experienced teachers. Namely, when student teachers observed the lesson flow and various strategies, their beliefs and attitudes were affected, impacting their professional identity.

Çelikdemir (2018) carried out a research study on preservice mathematics teachers' professional identities in a video-cased community. The participants were twelve pre-service teachers, and the data was collected within the scope of the school experience course. The participants were expected to watch a video case and write a reflection on what they noticed before the meeting. Then, they were asked to discuss it in a community led by the researcher. Six video cases were discussed for six-week in this community. Data was collected via reflection papers, group discussions, individual interviews, evaluation form, and researchers' reflective memos. Çelikdemir (2018) considered notice of teacher roles and student outcomes as components of pre-service teachers' professional identity and analyzed the data by using teacher identity and noticing frameworks. The results indicated that working with the video-cased community transformed and developed these components of teacher identity. Although what pre-service teachers noticed was various, they increased their interpretation skills. Furthermore, their professional vision and self-awareness developed.

Sallı and Osam (2018) studied how blogging reflections and activities reflected pre-service teachers' possible and feared selves and how blogging contributed to pre-service teachers' identity development. The study was conducted at the ELT Department of Eastern Mediterranean University. The participants were fifteen pre-service teachers who registered for a fourth-year teaching practice course. The course included an online part with a class blog for required tasks. The participants completed the following reflection activities: reflective posts on three movies related to the teaching profession, reflections on pre-service teachers' own lesson plans, pre-service teachers' own video-recorded lesson, peer's video-recorded lessons, peer reflection blog entries. Data for this study included semi-structured interviews and all written reflections for the movies and related teaching practices. The data analysis illustrated that pre-service teachers' professional identity developed as they involved in reflections and interactions in the blogging environment. Namely, pre-service teachers learned from each other, and developed professionally, and this facilitated their professional identity development to some degree. Sallı and Osam (2018) also emphasized that pre-

service teachers developed professional perspectives in this process, and these were aspects of professional identity development, too. Namely, pre-service teachers gained a specific professional attitude while reflecting on the lessons plans, and teaching practice videos and they displayed a critical view considering the teaching profession. They practiced their teacher role while giving feedback. Furthermore, they considered their peers as teachers instead of students in the process.

Ercan (2020) investigated the effect of online participatory reflections on pre-service teacher identity development. The researcher used a mixed-method study design. The quantitative data was collected from thirty-one student elementary Math teachers via pre-test-post-test design. The qualitative data is gained was from seven of these pre-service teachers through semi-structured interviews. The study results indicated that pre-service teachers' professional identity development was affected positively because of this 10-week intervention. The intervention through the online participatory reflections facilitated professional identity development as follows. The intervention promoted pre-service teachers thinking on professional skills. Namely, pre-service teachers thought about their educational philosophies or teaching-related topics that they never considered. They also thought about various aspects of teaching life that they would experience when they start their profession. Pre-service teachers also regarded themselves as teachers. The intervention also facilitated the internalization of the teaching profession. Pre-service teachers' internalization process happened as they acknowledged their feelings and opinions about math, teaching math, and being a math teacher. They internalized their potential of being a math teacher. Apart from these, pre-service teachers strengthened their professional identity by promoting their awareness and gaining new perspectives via the intervention.

## **2.2. Mentoring**

The concept of mentoring originates in the Greek myth of Odysseus (Chao et al., 2006; Donovan, 1990; Jacobi, 1991; Orland-Barak, 2014; Ragins & Kram,

2007). Before going to the war against Troy (Ragins & Kram, 2007), Odysseus confides in Mentor, his wise and trustworthy friend and advisor, about raising his son, Telemachus (Donovan, 1990; Jacobi, 1991; Ragins & Kram, 2007). This original archetypical dyad comprises both male and female characteristics. Namely, although Mentor is a man, Athena, who takes Mentor's form while guiding Telemachus, is the female goddess of wisdom. This situation points out that mentoring relationships overreach culture, time, and gender. Furthermore, despite originating in a myth, mentoring is not a myth. Mentoring is rather authentic, and it has been a massive part of social life for a long time (Ragins & Kram, 2007). It is universally accepted and prevalent for a wide variety of reasons in lots of different professions or fields (Ambrosetti & Dekkers, 2010). It is an acknowledged term in medicine, law, commerce (Donovan, 1990), business, government, and nonprofit organizations (Murray, 2001). Especially, starting from the mid-1970s, it has obtained extensive attention in the education, management, and psychology fields (Jacobi, 1991). When it comes to mentoring in teacher education, its rise is apparent starting from the 1980s (Tomlinson et al, 2010) worldwide, especially while promoting teachers' initial preparation, induction, and early professional development (Hobson et al., 2009).

Mentoring is a rather complex (Ambrosetti, 2014; Ambrosetti & Dekkers, 2010; Ragins & Kram, 2007; Rajuan et al., 2010) and multifaceted process (Ambrosetti et al., 2014). As a result, mentoring is multiple in various aspects such as the definition of the term, related strategies or approaches, implementation, or organization of mentoring practices (Tomlinson et al, 2010), antecedents, outcomes, or mediators of mentoring (Jacobi, 1991). Despite the abundance of the mentoring definitions in the literature, there has not been a widely acknowledged definition (Ambrosetti et al., 2014; Jacobi, 1991; Palmer et al., 2015). Different conceptions of mentoring have both contrasting and shared traits (Tomlinson et al, 2010). The literature even includes definitions that conflict with each other. Sometimes the definitions are even so various that it looks like there are not a lot of common aspects. Furthermore, the term means

various things for different contexts. Namely, mentoring means one thing in psychology while something else in the academy (Jacobi, 1991).

Despite all the differences in definitions, it is possible to see some common components of mentoring (Jacobi, 1991). These common components are as follows. Mentoring is a personal relationship. In this relationship, mentors have more experience and achievement when compared to their mentees. Mentors support their mentees professionally and emotionally; assist their mentees to develop their career and profession and become their role models. Mentoring is mutual and reciprocal. Mentoring comprises direct interaction. A safe environment in which self-exploration and self-management are supported is highly significant for mentoring. Mentoring leads mentees to transform their identity. Finally, mentoring results in positive personal and career consequences (Palmer et al., 2015). For example, Pitton (2006, p.1) defines mentoring as “an intentional pairing of an inexperienced person with an experienced partner to guide and nurture his or her development”. Kiraz (2003) also emphasizes that mentoring is a relationship in which the experienced takes the responsibility of the inexperienced to develop his/him professionally. Ambrosetti and Deckers (2010) indicate that the definition of mentoring differs within the scope of teacher education, too. However, existing definitions of mentoring in student teacher education do not comprise three main components at the same time, which are relationship, process, and context. Instead, they only focus on one or two of these components. Nonetheless, a definition that interconnects all three components presents a more holistic mentoring relationship. A definition by Ambrosetti and Deckers (2010) that involves these three components is:

Mentoring is a non-hierarchical, reciprocal relationship between mentors and mentees who work towards specific professional and personal outcomes for the mentee. The relationship usually follows a developmental pattern within a specified timeframe and roles are defined, expectations are outlined and a purpose is (ideally) clearly delineate. (p.52)

It is possible to categorize mentoring in four main ways. Namely, mentoring can be classified considering the aims of the mentoring itself, the main properties of



the mentees, the main properties of the mentors and the main properties of the mentoring program. To start with the classification by the principal aims, “developmental”, “subject-focused” and “work-related” mentoring fit into this classification. However, this classification is not very enlightening since many mentoring have multiple aims, and all mentoring programs aspire after development. The classification by mentee properties pay attention to mentee selection criteria and includes “at-risk, socially excluded, or social inclusion”, “minority ethnic”, “gifted and talented”, “enterprise and work-experience”, or “subject” mentoring. Thirdly, classification by mentor characteristics includes “community”, “business”, “business and community”, “student”, “peer” and “teacher” mentoring programs. While mentioning teacher mentoring programs, it can also be divided into external and internal mentoring (Miller, 2002). External mentors are the ones who are outside the educational institution, so they are not the colleagues of the mentees. The interaction can be both inside and outside of the educational institution (Hobson & Malderez, 2013). However, internal mentors are the ones who are inside the educational institution. Most of the time, they know the previous history of the mentees. The fourth classification focuses on the characteristics of programs, whether mentoring requires one-to-one or group interaction, whether it is short-term or long-term, or how the mentoring is structured (Miller, 2002).

Mentoring can also be categorized as formal and informal. Formal mentoring is the kind of mentoring that is intentional and planned (Long, 1997), so it is the designated matching of the mentors and mentees by the organizations (Wanberg et al., 2003). However, informal mentoring is the kind of mentoring that develops naturally or spontaneously (Douglas, 1997; Wanberg et al., 2003). It is a “natural component of relationship” that happens in various settings of society. A mentee or a mentor can initiate the process. A mentor or a mentee “gains insight, knowledge, wisdom, friendship, and support from the other one” (Inzer & Crawford, 2005). There are some distinct differences between formal and informal mentoring. This difference is the most salient in the following aspects: how the relationship is initiated, how the structure of the relationship is, and how

the mentoring process works (Ragins & Cotton, 1999). In terms of initiation of mentoring, formal mentoring is managed by organization itself (Chao et al., 1992), generally through established programs (Douglas, 1997). The matching can be random or can be done considering some criteria. Nevertheless, informal mentoring is not formally structured; initiation does not involve external intervention (Chao et al., 1992; Douglas, 1997). While matching the mentors and mentees, mentors select mentees with whom they can identify themselves. They also choose those who are eager to develop (Chao et al., 1992). Mentors prefer the ones with whom they can work in an enjoyable way (Kram, 1983). Furthermore, mentees favor mentors that they see as role models (Ragins & Cotton, 1999). It is the mutual attraction or chemistry that provokes the relationship (Kram, 1983). As a result of this commutual identification, the relationship becomes more intense most of the time. (Ragins & Cotton, 1999). Furthermore, acceptance and consent from both mentors and mentees are more in informal mentoring since the relationship is based on respect and perceived proficiency (Chao et al., 1992). In terms of the relationship structure, the length and formality are different for informal and formal mentoring (Ragins & Cotton, 1999). Formal mentoring is shorter in duration compared to informal mentoring (Douglas, 1997). Moreover, informal mentoring allocates more time for psychological and career development. In formal mentoring, a mentor can be assigned to a different mentee when the existing mentoring ends. Since both mentors and mentees are aware that the relationship is short-term, this restricts trust and emotional closeness. Furthermore, the aim of the relationship is stated at the beginning of formal mentoring by the institution or program coordinator. On the other hand, aims are developed over time and adjusted depending on the needs of the mentors and mentees in informal mentoring. When it comes to the processes in the relationship, even if formal mentors are considered as good communicators by the institution, if this view is not shared by a mentee himself/herself, the relationship can get damaged, and mentoring gets less effective (Ragins & Cotton, 1999). Furthermore, the degree of motivation is different for formal and informal mentoring. Informal mentoring depends on a mentor's enthusiasm to help and a mentee's willingness to get advice. However, formal

mentoring may force mentors and mentees to participate in the mentoring relationship due to their positions. This pressure can reduce a mentors' motivation to help and a mentee's willingness to get advice (Chao et al., 1992).

### **2.2.1. Effective Mentoring**

Five critical factors related to mentoring practices and attributes can be associated with effective mentoring: personal attributes, system requirements, pedagogical knowledge, modelling, and feedback. Firstly, the personal attributes of the mentor that facilitate constructive communication are significant for mentoring (Hudson et al., 2005). Being supportive is highly significant for effective mentoring (Hudson et al., 2005; Izadinia, 2015b; Patrick, 2013; Rajuan et al., 2007). Mentors can provide emotional, psychological (Jacobi, 1991; Tomlinson et al, 2010), or academical (Izadinia, 2015b) support for teir mentees. However, the amount of support should be reasonable, neither too much nor too little. In other words, while receiving support, mentees shouldn't be spoon-fed (Izadinia, 2015b) or be laissez-faire (Tomlinson et al, 2010). Mentees should have enough autonomy while making decisions (Glenn, 2006; Izadinia, 2015b; Rajuan et al., 2007; Tomlinson et al, 2010), and they should develop their styles. To do that, mentors should be open-minded and understanding about the things that are different from their own styles (Rajuan et al., 2007). Other personal attributes that predominantly affects the effectiveness of mentoring are being good at communication (Graves, 2010; Izadinia, 2015b), approachable (Tomlinson et al, 2010), appreciative about efforts, available (Izadinia, 2015b; Rajuan et al., 2007; Tomlinson et al, 2010), trustworthy, respectful, not intimidating (Izadinia, 2015b); willing to learn together (Hudson& Hudson, 2010). When mentors share their experience in a relaxed way, and listen to their mentees attentively, mentees feel encouraged. Also, mentees feel more confident, and display more positive attitudes, too (Hudson, 2010).

Secondly, system requirements are about the curriculum. Mentors are supposed to voice the goals and policies of the education system. Thirdly, effective

mentoring requires mentors to be competent at pedagogical issues to reflect best practices. They need to share various aspects of teaching such as how to plan a lesson, how to implement a lesson, how to ask higher or lower order questions, how to manage time, how to use different resources, how to assess students' learning, or which strategies are helpful for an effective lesson. Additionally, since a mentor has possibly experienced various student profiles and classroom management issues, classroom management strategies should be discussed with the mentee. Also, a mentor needs to investigate whether a mentee has required content knowledge which is appropriate for students' grade level and system requirements (Hudson et al., 2005).

Fourthly, modeling desirable professional features is quite essential for effective mentoring (Hudson et al., 2005). Mentors should be inspiring role models (Izadinia, 2015b). When a mentor models positive traits, a mentee can learn from this. For example, a mentor can model how to form a positive rapport with students. Furthermore, a mentor needs to model proper classroom language, classroom management techniques, and well-prepared lessons. Lastly, feedback is an influential component of effective mentoring. Effective mentors give written and oral feedback about mentees' lesson plans or teaching. They can even provide feedback on their learning environment and self-evaluation considering their performance (Hudson, 2010). Feedback should be constructive, continuous, and honest (Izadinia, 2015b). Feedback should be provided in a nonthreatening way so that mentors and mentees can have genuine communication about the strengths and weaknesses of the mentee (Tomlinson et al, 2010). It is highly significant to discuss not only positive but also negative points in an appropriate way (Izadinia, 2015b; Tomlinson et al, 2010).

Additionally, some conditions are expected to meet to facilitate effective mentoring. Namely, contextual support should be provided. Mentors and mentees should be selected and matched carefully. Appropriate mentoring strategies should be preferred. Furthermore, mentors should be prepared for mentoring (Hobson et al., 2009).

### **2.2.2. Benefits of Mentoring**

Teacher mentoring is considered beneficial for mentees and mentors. As a result, schools and education system benefits from mentoring, too. To start with mentees, mentoring has positive outcomes for mentee teachers in various aspects. Mentees have more self-esteem (Tomlinson et al., 2010), more self-confidence (Bullough Jr., 2005; Moor, et al., 2005; Tomlinson et al., 2010), and more job satisfaction (Bullough Jr., 2005; Marable & Raimondi, 2007; Moor et al., 2005) via mentoring. Mentee teachers with mentors feel safer, less isolated, and more supported (Tomlinson et al., 2010), too. Especially, teachers come across various challenges such as workload, classroom management, depressing responsibilities, and socialization in their first year. They may feel lonely and unsupported. However, mentoring increases their morale and make them feel more supported (Marable & Raimondi, 2007). After mentees face their feeling of vulnerability, and insecurity, they get support on how to put their emphasis on student learning; and how to balance their workload with personal responsibilities (Bullough Jr & Draper, 2004).

Furthermore, mentees grow professionally due to mentoring. Since mentees' emotional situation is enhanced positively via the mentor's psychological and emotional support, mentees' progress also increases (Tomlinson et al., 2010). They improve themselves in terms of classroom management, time management, and workload management (Moor et al., 2005). They develop their self-reflection and problem-solving skills (Tomlinson et al., 2010). They learn how to challenge the existing perspectives, how to be flexible while teaching, and how to identify various teaching duties. They also increase their capacity to ask for assistance (Lindgren, 2005). However, the direct effect of mentoring on mentees' teaching skills is somewhat restricted (Hobson et al., 2009). Finally, when mentoring is implemented properly in a supportive environment, it positively affects mentee teachers' retention (Devos, 2010; Johnson et al., 2005). Especially novice teachers whom a mentor supports are more likely to retain in

the profession. They are also less likely to move to different schools within their teaching profession (Johnson et al., 2005).

When it comes to mentors, mentoring affects them positively, too (Daloglu, 2006; Tomlinson et al., 2010). When mentors witness how their mentees have developed due to their support, they get the feeling of satisfaction (Bullough Jr & Draper, 2004), self-fulfillment, and self-esteem. They feel that they are making a difference (Hudson & Hudson, 2010). The feeling of satisfaction and achievement give them motivation related to their profession and personal life (Walkington, 2005b). Mentors feel enhanced and renewed motivation to teach their students. Furthermore, mentors feel reassured and less isolated when their ideas are affirmed. They enjoy taking part in collaborative activities (Tomlinson et al., 2010), being recognized professionally (Hudson & Hudson, 2010), and getting recognition for their expertise (Hudson & Hudson, 2010). Thus, mentoring reinforces mentors' professional identity and self-worth. Mentors become more self-confident about their teaching, too (Tomlinson et al., 2010).

By involving in the mentoring process, mentors also learn and develop professionally. Namely, they also learn from the mentoring relationship with the help of self-reflection (Lopez-Real & Kwan, 2005). Before sharing their own professional practices, mentors need to question and gain awareness considering their practices (Walkington, 2005b), approaches, attitudes more critically than they generally do reflection. This reflection on the philosophical and pedagogical issues also reflects mentor teachers' actions in his / her lessons. Moreover, self-reflection occurs while observing mentees' teaching practices or providing them feedback since the mentor compares the mentee's and his/her performance or practices. Additionally, mentors learn innovative ideas and strategies from the mentees (Lopez-Real & Kwan, 2005), keep up with the contemporary trends, or consolidate their own knowledge (Hudson & Hudson, 2010). Also, they have a chance to enhance their leadership abilities (Hudson & Hudson, 2010), teaching identity and teaching practice, too (Walters et al., 2019). There is a possibility that mentoring can affect mentors' relationships with students and colleagues

positively (Tomlinson et al., 2010). Investigating the benefits of mentoring for mentor teachers, Daloglu (2006) pointed out that mentoring enabled professional development. Namely, aspiring to be ideal teachers, mentor teachers planned their lessons more detailly, read more, and endeavored new ideas. Furthermore, they self-assessed their practices and took action regarding their weaknesses. Mentor teachers in Daloglu's (2006) study also emphasized that they strengthened their knowledge and teaching skills. Furthermore, almost half of the mentor teachers indicated that they could try new teaching techniques more comfortably since mentees provided feedback to them immediately.

Mentoring also has positive outcomes for students, schools, and the education system in general (Hobson et al., 2009; Moor et al., 2005) despite having restricted direct evidence (Hobson et al., 2009) because of the complexity of investigating it (Tomlinson et al., 2010). Since teacher mentoring decreases the possibility of teacher retention or teacher movement among schools, mentoring is helpful for schools and the education system. Moreover, schools or the wider education system utilize teacher-mentors who have more self-confidence, capability, and commitment due to the mentoring process (Hobson et al., 2009; Tomlinson et al., 2010).

### **2.2.3. Drawbacks and Limitations of Mentoring**

Despite the benefits discussed in the literature, mentoring has some drawbacks and limitations (Hobson et al., 2009; Long, 1997; Tomlinson et al., 2010). When practiced poorly (Tomlinson et al., 2010), potential benefits of mentoring do not realize in practice, and various adverse outcomes occur (Hobson et al., 2009). Long (1997) emphasizes these negative aspects by calling them "the dark side of mentoring." Mentors and mentees are affected by these negative consequences (Hobson et al., 2009; Long, 1997; Tomlinson et al., 2010). Furthermore, mentoring may have some drawbacks and limitations for students, schools, and the wider education system (Hobson et al., 2009; Long, 1997; Tomlinson et al., 2010).

To start with mentees, some studies in the literature reveal that mentoring has drawbacks related to mentees' psychological and emotional well-being, especially when mentors cannot support mentees (Hobson et. al., 2009; Tomlinson et al., 2010). Poor mentoring practices may make mentees feel downhearted, depressed, isolated, or lonely (Hobson & Malderez, 2013). Especially tough mentors who restrict mentees and take away their freedom make the mentees feel pressured and stressed. (Beck & Kosnik, 2000). Moreover, when mentees feel intimidated by mentoring relationship, mentees become silent or use self-censoring (Patrick, 2013). A study conducted by Maguire (2001) found that there are even mentoring cases in which mentees feel bullied. In addition to the well-being of the mentees, the literature includes studies suggesting that ineffective mentoring disadvantages the autonomy of mentees. When mentees are not challenged, not given sufficient responsibility or freedom, the mentoring relationship may be detrimental to mentees. Another drawback of mentoring is that sometimes mentoring is limited to the subject area or technical issues such as classroom management. That's why mentees do not learn enough about how to use reform-minded teaching, examine the underlying principles of practice, or include social issues into the profession (Hobson et. al., 2009; Tomlinson et al, 2010). Poor mentoring experiences may lead mentees towards leaving the profession, too. Although the goal of mentoring is to decrease teacher attrition, ineffective mentoring may cause just the opposite way (Tomlinson et al, 2010). Lastly, ineffective mentoring may break up student teachers' ideal professional identity construction (Yuan, 2016).

To continue with mentors, mentors experience drawbacks considering the enhanced and sometimes unmanageable workload of mentoring relationships. Conducting the mentor role and the teacher role at schools can be demanding for mentors (Hobson et al., 2009; Tomlinson et al, 2010). Allocating enough time for mentoring is another issue. When mentor teachers work in a full-time position, it may not be easy to relieve from the challenges of face-to-face teaching since it takes time to communicate and work with mentees (Hudson & Hudson, 2010). A research study by Walkington (2005b) displayed that



mentoring practices are disruptive for mentors. Namely, they need to pause their professional obligations to meet the time requirements and workload of mentoring. For example, a mentor in this study said that “I want to do everything well, but it takes so much extra time that I worry about other commitments.” Mentoring can also create negative feelings for mentors such as insecurity, inadequacy, nervousness, isolation, etc. (Hobson et al., 2009; Tomlinson et al., 2010). To illustrate, Hudson and Hudson’s (2010) study attested those mentors could feel stressed in the mentoring relationship as they made efforts to be effective mentors. Also, having the evaluator or assessor role created tension or stress for mentees. There were mentors in Walkington’s (2005b) study who felt emotionally drained, too. Furthermore, a few mentors in this research explained they felt inadequate and insecure while performing, explaining things, or being judged.

Finally, it is possible to mention drawbacks and limitations related to students, schools, and the wider education system (Hobson et al., 2009; Long, 1997). It seems like there is no direct evidence on this issue, yet this may result from the lack of research (Tomlinson et al., 2010). Walkington’s (2005b) study clues the literature in this issue. Mentors in the study indicate that they were worried that their students would be negatively affected from the mentoring process. Their students’ learning process would be disrupted. The rapport or the interaction in the class would change in a negative direction.

#### **2.2.4. Student Teachers’ Identity Development through Mentoring**

Through mentoring, teachers and other education professionals construct their professional identities (Heikkinen, 2015). Depending on how mentoring is framed, professional teacher identities are transformed, reconstructed, or promoted (Devos, 2010), so mentoring plays a role in teacher identity development process (Cameron & Grant, 2017).

Significant others such as mentors contribute to teachers' professional identity development by socializing student teachers into teaching profession (Glenn, 2006). Mentoring impacts pre-service teacher identity development because it influences the components of professional identity such as self-awareness, teacher voice, confidence, cognitive knowledge, sense of agency, etc. (Izadinia, 2016). The effects of mentoring relationship on student teachers' identity development can be positive or negative (Izadinia 2016, 2015b).

Although professional teacher identity development is the least concrete advantage of mentoring (Palmer et al., 2015), it is the most significant and enduring one (Johnson, 2007). Mentoring definitely affects teacher identity development process, but how it happens should also be questioned (Izadinia, 2018). Considering this issue, following aspects have been emphasized in the literature.

Mentoring impacts teacher identity development by affecting teachers' self-confidence (Djoudir, 2019; Izadinia, 2016, 2015a; Ticknor, 2014) and self-efficacy (Cattley, 2007; Göker, 2020). When mentors provide adequate guidance, emotional and psychological support, student teachers become more motivated and confident in their future teaching careers. Thus, student teachers' professional identity is strengthened positively (Djoudir, 2019). A study conducted by Ticknor (2014) concluded that student teachers in a supportive mentoring relationship increased their confidence and developed their professional identities. In another study, Mann and Tang (2012) also argued that when student teachers boosted their confidence due to an encouraging mentoring relationship, their professional identity got strengthened. In parallel with this, when the mentoring relationship is negative, the confidence level of pre-service teachers declines, and they feel less like a teacher. Thus, teachers' professional identity development gets affected negatively (Izadinia, 2016, 2015a).

Mentoring also informs professional identity development by affecting teacher voice negatively or positively (Beck & Kosnik, 2000; Izadinia, 2016, 2015a;

Patrick, 2013). As a part of teacher identity, teacher voice contributes to developing teacher identity (Izadinia, 2013). Izadinia (2016) is one such researcher who has investigated the professional identity development of eight student teachers. Encouraging student teachers to reflect on their professional identity development, the researcher claimed that mentoring relationships developed teachers' voice and identity correspondingly. When the mentoring relationship gave student teachers some authority and autonomy, teachers promoted their professional identity. Namely, student teachers started to develop their own teaching style, methods, personality.

Mentoring is also influential for teacher identity development since it affects teacher vision. Student teachers within mentoring relationships consider what kind of teacher they want to be and learn more about teachers' roles. When student teachers come across inspiring mentors who are passionate about the teaching profession, they get rid of their concerns or doubts about teaching. They start to create their own teacher identity (Izadinia, 2016). Participants in Izadinia's (2016) study pointed out that their images of what a teacher does and what teachers' responsibilities are changed due to the mentoring relationship. They made some changes on what kind of teachers they wanted to be and would be. For instance, Anna, one of the participants, was inspired by her mentors' enthusiastic and energetic style and said she pictured herself as such a teacher in her future profession. Sara, another participant, also shared that her ideas about punishment changed due to the interaction she had with her mentor.

Mentoring informs student teacher identity development depending on the power relationship, too. In other words, the power relationship between mentors and student teachers contributes to professional identity development (Ticknor, 2014). When mentors consider mentees as their colleague teachers, the relationship is not characterized by the power relationship itself, and student teachers strengthen and project their professional identity (Djoudir, 2019). Namely, student teachers are in-between status as teachers and students who are learning how to teach. When being recognized as a teacher, student teachers

develop a sense of legitimacy. Being recognized by mentors and legitimizing their teacher status make their professional identity stronger (Chu, 2020; Izadinia 2015a). Furthermore, when the power relationship in mentoring dialogues allows student teachers to take risks, they develop and promote their professional identities (McIntyre & Hobson, 2016). Considering that self-preservation is highly significant in sustaining teacher identity, Cattley (2007) indicates that student teachers' professional identity can be damaged while taking risks. Namely, if mentors criticize the risks taken by student teachers, student teachers' sense of professional identity can be shaken. In such a scenario, the power relationship becomes the center of the mentoring process and causes detrimental effects on professional identity. In his study, Yuan (2016) has implied that negative mentoring relationships that can be characterized with power relationships can break down student teachers' professional teacher identities and create different ones.

Another aspect of mentoring that contributes to teacher professional identity development is its effect on knowledge. Teachers develop their professional identity as they familiarize themselves with the subject they teach. With the help of mentors, mentee teachers can increase their knowledge as subject specialists as they can discuss their subject content. Furthermore, pedagogical knowledge gained through mentoring affects professional teacher identity, too (McIntyre & Hobson, 2016).

Lastly, the literature also points out that interactions in the mentoring process influence student teachers' sense of agency, thus on their professional identity development (Djoudir, 2019; Ticknor, 2014; Williams, 2010).

### **2.2.5. Izadinia's (2018) Mentoring Principles to Develop a Robust Teacher Identity**

Izadinia (2018) investigates how mentoring affects the teacher identity development process and believes that mentoring helps pre-service teachers to

define how they perceive themselves as teachers. A mentoring relationship impacts professional identity development by impacting student teachers' confidence, voice, self-awareness, sense of agency, cognitive knowledge, and relationship with colleagues, pupils, and parents. That is why, when the mentoring experiences are positive, student teachers' professional identity gets stronger. Depending on her research between 2013-2016, Izadinia (2018) concludes five principles that promote a robust student teacher identity depending on mentoring relationship in student teachers' practicum experiences. The principles are as follows.

**Principle 1: Building and Maintaining Strong Relationships:** Izadinia (2018) indicate that mentor teachers strengthen student teacher identity development if their relationship is positive. When mentoring relationship includes mutual trust, explicit expectations, and efficient communication, student teachers feel successful. They believe that they will be successful in their prospective profession too. A strong relationship gives student teachers the message "Yes, you are able to bond with students and colleagues" and "Yes, you CAN be a teacher" (Izadinia, 2018).

For such a strong relationship, mentors are expected to allocate time to interact with their mentees. Thus, mentees can ask for help when they experience emotional challenges. The researcher mentions two different mentor attitudes in her study: one who is enthusiastic about spending time with his mentee and another who is rather busy with her schedule. Izadinia (2018) emphasizes that even short "chit chat" makes a difference for the mentoring relationship. Furthermore, with small conversations, mentors can get information related to mentees' emotional or professional needs and concentrate on them throughout the mentoring process. It is rather significant to consider mentees' needs, strengths, weaknesses, etc.

**Principle 2: Offering Support and Encouragement:** Student teachers feel confident when they get instructional or emotional support and encouragement

from their mentors. When student are self-confident about themselves as teachers and find their teacher voice by experimenting and taking risks, they develop a robust teacher identity (Izadinia, 2018).

Izadinia (2018) suggests that mentors can increase mentees' self-confidence by being interested in mentees' ideas and approaches related to teaching profession; voicing and encouraging mentees' progress; emphasizing their strengths; acknowledging their existing knowledge; by allowing them to actualize their ideas and supporting them when they fail; making them compliments about their teaching skills. Additionally, mentors need to be careful about the amount and content of the support since the student teachers have different expectations and need considering support.

**Principle 3: Providing Ongoing Feedback:** Izadinia (2018) states that when student teachers gain self-awareness about themselves as teachers, they develop their professional identity. When student teachers reflect on feedback given by mentor teachers, they recognize their strengths and weaknesses and increase their self-awareness accordingly. Izadinia (2018) also highlights the importance of constructive feedback to promote strengthened teacher identity. She exemplifies two mentors from her previous research studies: one with constructive ongoing feedback and one with undetailed overall feedback. She states that mentors' feedback should focus on both strengths and weaknesses. It is reasonable to start with the strengths and continue with weaknesses. The feedback should also be clear and continuous. When feedback is ongoing, student teachers can reflect on their own progress, evaluate themselves, and develop self-awareness.

**Principle 4: Making Time for Reflective Activities:** Izadinia (2018) points out that literature shows reflections are useful tools to develop teacher identity. Student teachers have a robust professional identity when they reflect on their teaching practices. The reflection, which can be individual or collective, needs to determine weaknesses, test various ideas and techniques, and improve practices related to the teaching profession.

Izadinia (2018) suggests the following reflection session to develop student teacher identity: determining the things a student teacher is good at and adding them to student teachers' repertoire; identifying problematic aspects; mentees' evaluation of the problematic areas; stressing the possible causes of the problematic areas; analyzing the problem by considering efficient teaching strategies to find differences; finding strategies collaboratively to solve problematic areas; practicing the decided strategies and test their effectiveness.

Principle 5: Creating a Positive Environment: Izadinia (2018) state that negative feelings and tensions experienced by student teachers harm their professional identity development; that is why a positive environment in the mentoring relationship is highly significant. This principle circles two principles stated above: building and maintaining a strong relationship and offering support and encouragement.

While mentioning this principle, Izadinia (2018) emphasizes how important respect and trust are. She also discusses that both mentors and student teachers should be equals in the mentoring process while discussing the ideas, deciding on goals, etc. When the communication is open, mentees can share their ideas freely, so they feel acknowledged. However, a top-down approach with unequal power relationship causes negative feeling and tensions like discouragement, demotivation, passivity, etc., and endangers professional identity development.

#### **2.2.6. Research Studies Related to Teacher Identity Development and Mentoring**

Regarding literature on teacher identity development, researchers conducted various studies on how various factors affect teachers' professional identity development. However, there are a limited amount of studies that have investigated the role of mentoring on teacher identity development, especially for student teachers (Devos, 2010; Henry & Mollstedt, 2021; Izadinia, 2013, 2015a, 2016; McIntyre & Hobson, 2016), so little is known on this issue

(Izadinia, 2013). Furthermore, the literature related to mentoring occasionally mentions teacher identity. Explicit discussions or theories connecting teacher identity to mentoring are pretty rare (Devos, 2010). When the relationship between the mentoring and student teacher identity is studied, it is mainly in the practicum context (Izadinia, 2016).

A study by Yuan (2016) explored how two pre-service teachers, Ming and Yang, constructed their professional identity by interacting with their school mentors within the scope of teaching practicum in China. The data was collected through interviews, reflective journals, and field observations (lesson observations and joint discussion meetings of pre-service teachers with their mentors). The results demonstrated that negative mentoring disintegrated pre-service teachers' ideal professional identities and constructed "different ought and feared" identities, "which impinge on their professional learning and growth." More specifically, before the mentoring relationship, Ming's ideal teacher identity was a "communicative teacher" who was caring and supportive. However, his mentor forced Ming to adopt a traditional teaching style and to have firm control over students. When Ming planned his lessons with interactive activities, his mentor excluded these parts, limited Ming's autonomy, and made him feel like a "puppet." Thus, he could not actualize his ideal identity and constructed the ought and feared identity "a follower". When it comes to Yang, her ideal teacher identity was a "modern teacher." Her mentor treated her as an outsider at the beginning. Then, the mentor saw her as a secretary, made her complete various assignments, and limited her interactions with students. The mentor even interrupted Yang and asked her to move on to another activity if the activity was not in accordance with the mentor's style. Thus, she could not actualize her ideal identity and constructed the ought and feared identities "a mechanical teacher" and "an odd person who might be isolated in the school."

Djoudir (2019) identified the factors constructing professional teacher identity in her study. The researcher collected data from fourteen novice teachers, nine first years and five second years, via semi-structured interviews, written reflections,



and the researcher's journal. As a part of this doctoral study, Djoudir (2019) also focused on the participants' student experiences and investigated the effect of practicum and mentor teachers. The researcher concluded that the mentoring relationship was highly significant while mediating professional identities. When the mentoring experiences were positive and effective, teacher identity development was enhanced. Namely, mentors' positive feedback, support, and interactions promoted pre-service teachers' imagined professional identities. For instance, guidance and support from their mentors made Sonia and Dihia more confident and affected their professional identity positively. The researcher also stressed how power relationship impacted pre-service teachers' identity development. Since Hamida was considered an insider, she positively developed her professional identity. Also, since the mentor let Hamida practice her preferred identity, which was "a creative teacher", instead of asking her to imitate the mentor's practices, the identity development was promoted. The researcher also exemplified that when Mellissa's mentor let her exercise her autonomy and power, the pre-service teacher felt self-confident and developed her professional identity. Djoudir (2019) implied that the mentoring relationship affected these participants' future professional identities, too.

In another study, Chu (2020) explored how pre-service teachers developed their professional identity in a year-long teacher residency program in the United States. Teacher residency required the partnership of schools in Louisiana and a teacher education program, and pre-service teachers participate in co-teaching experiences with their mentors. The data was collected through interviews, classroom observations, and document analysis. The study's findings showed that pre-service teachers learned about curricular activities, pedagogical issues, etc., while interacting with their mentors. Significantly, mentored teaching accelerated pre-service teachers' growth as future teachers. For example, Kaitlyn, a pre-service teacher, likened this process to "a baby bird learning to fly." Chu (2020) also stressed out the importance of the feeling of legitimacy for teacher identity development. Pre-service teachers in the study mentioned that they were accepted as real teachers rather than university students or pre-service

teachers' by their mentors. Chu (2020) related this recognition to promoting emerging teacher identity since pre-service teachers legitimized their teacher status. Besides the legitimacy, this situation helped pre-service teachers embrace the classrooms and student learning and developed their teacher identity. For example, Kaitlyn said when her mentor shared the classroom and students with her, the feeling of belonging increased and her identity as a teacher was strengthened.

In their case study, Henry and Mollstedt (2021) investigated how pre-service teachers constructed their professional identity throughout a five-week school placement in Sweden. Throughout the school placement, pre-service teachers' role was identified by mentors, but in general, they planned some lessons and conducted the plans. Henry and Mollstedt (2021) emphasized that one of the main goals of the placement was that pre-service teachers discovered how they developed their professional identity. For this purpose, pre-service teachers, in pairs, write dialogically focused reflections by using online tools. The study participants were four pairs (eight pre-service teachers), and the data collection was done through online discussions and narrative-focused interviews. In the analysis, a specific teacher identity was referred to as an internal I-position while a mentor was referred to with an external I-position. The results displayed how teacher identity was constructed via dialogical interaction with mentors. Henry and Mollstedt (2021) stated that pre-service teachers' identities developed as a response to mentors, and they were dynamically shifting. Pre-service teachers' identities (internal I-positions) were backgrounded or foregrounded depending on the nature of mentoring. For example, Alexandra foregrounded a "me-as-a junior-colleague" I-position when the "voice" of her mentor supported or encouraged her. However, when the mentor "voice" emphasized inharmoniousness, she backgrounded the "me-as-a junior-colleague" I-position and foregrounded 'me-as-aware-of-student-perspectives' I-position. Eva, another participant, also displayed 'me-as-an-apprentice', or 'me-as-a-collaborator' I-positions depending on her mentors' voice. The researchers pointed out that Eva foregrounded 'me-as-an-apprentice' I-position most of the time since her mentor

interfered with her lesson plan designs and had a directive attitude. However, when the mentoring relationship allowed her active participation, she undertook her 'me-as-a-collaborator' I-position.

Pillen et al. (2013) explored tensions experienced by beginning teachers related to their professional identity. The researchers conducted interviews with twenty-four beginning in-service teachers. The data analysis provided results considering these teachers' student education process, too. The researchers stated that one of the main categories related to tensions was about these teachers' interaction with their mentors during their in-service education. Pillen et al. (2013) named this category as 'Feeling dependent on a mentor (colleague/supervisor) vs. wanting to go your own way in teaching.' The participants in this study remarked that they could not become the teachers they aspired to be; they could not actualize their ideas because they were dependent on their mentors. The researchers emphasized that these tensions made pre-service teachers feel helpless, frustrated and negatively affected their professional identity development. For example, Carrie, one of the participants, exemplified that her mentor interfered with her clothes; at some point, the mentor even recommended her to quit the teaching program. She explained that she felt like a child, and it was a terrible tension for her. As another example, Fred and Ivy mentioned tensions as a result of their conflicts with their mentors. Their mentors were very authoritarian. They did not give any autonomy. Both Fred and Ivy were caught in the trap of following their mentors' way or practicing their own practices.

Different from the studies above, Lynn and Nguyen (2020) searched the mentoring process from the perspective of mentors by conducting a two-year study in Australia. They used Kram's (1983) mentoring framework to explain the mentoring process: initiation, cultivation, separation, and redefinition. The participants were seven experienced mentors from six schools with various contexts, and the researcher collected data via semi-structured interviews. Lynn and Nguyen (2020) found that mentors primarily provided psychological support

in the cultivation process. When the psychological support allowed pre-service teachers to voice their feelings, pre-service teachers experimented their ideas and increase their confidence. Thus, they developed their professional identity. In terms of the separation phase, it was the process when pre-service teachers defined and re-defined their professional identity since they became more autonomous from their mentors. The findings pointed to the importance of confidence and expertise in this phase. When it comes to the redefinition phase, the findings showed that when mentors helped pre-service teachers identify themselves as future teachers, their evolving professional identity was promoted. Namely, pre-service teachers identified what kind of teachers they wanted to be and developed their own styles because of mentoring. The study also stressed that the mentoring process developed pre-service teachers' professional identity via self-reflection and professional learning.

Focusing on a different type of mentoring, Korhonen et al. (2017) studied peer group mentoring. In their study, Korhonen et al. (2017) explained the birth of Paedeia Cafes. Stemming from a project among Denmark, Finland, Portugal, Sweden, and Turkey, Paedeia Cafes were piloted in three countries: Finland, Sweden, Turkey. While project partners in Turkey preferred the many-to-mentoring model, Finland's mentoring required student teachers and novice teachers to meet with teacher educator mentors. On the other hand, the study in Finland, which was conducted by Korhonen et al. (2017), used peer mentoring that included both student and in-service teacher education and was implemented by all teacher education institutions in Finland from 2010-2017. In this particular study, Korhonen et al. (2017) focused on the experiences of nineteen master's students who are student teachers and collected data through their reflective reports. The study results indicated that student teachers considered the peer mentoring experience under four categories: "as a coffee break, peer-support, identity construction and a way of participating in a professional community." Korhonen et al. (2017) explained that student teachers developed their professional identity through peer mentoring as they increased their self-knowledge and attained new tools to reflected on their teacher selves. Namely,

student teachers discovered valuable information about themselves and realized significant values and principles and shared these with other participants. The researchers also emphasized that meaningful discussions on values, principles, future visions affected this identity work.

Besides the studies investigating the impact of mentoring on student teacher identity development, the literature also included studies that relate mentoring and in-service teacher identity development. Urzúa and Vásquez (2008) conducted a study on professional identity development and novice teachers' future-oriented talk during mentoring relationships. The research is conducted in an American University, and the data was collected through two sets of conversations. The first set included twenty mentoring meetings of seven in-service teachers and one mentor, while the second involved the meetings of nine in-service teachers and two supervisors. These meetings mainly included dyadic interactions of a mentor/supervisor with an individual in-service teacher. The mentoring meetings focused on topics concerning classroom instruction, problems faced by in-service teachers, teaching practices, student development, the program, or their subject field, etc., while post-observation meetings were mainly about a specific lesson. In both types of meetings, teaching or classroom practices were reflected. According to the findings, future-oriented talk was majorly used for planning and prediction by novice teachers. By uttering their plans or decisions on the future, novice teachers evaluated their pedagogical practices and their teacher selves; guessed possible outcomes; discovered other alternatives. They considered what kind of teacher they wanted to be; what they should do to become these teachers. Future-oriented talk in the mentoring process helped novice in-service teachers to practice prospective reflection purposefully. In-service teachers thought of themselves in teaching/classroom contexts. They practiced self-presentation and perspective takings as they talked about the future (e.g we'll....; we're going to ...). According to Urzúa and Vásquez (2008), in-service teachers positioned their control, specialty, and authority through future-oriented talk. Especially future-oriented talk based on decision making could be regarded as a cue of student teacher claimed authority

as a teacher. The researchers concluded that all these could be regarded as illustrations of teacher identity construction. Furthermore, metacognitive processes, intentionality, responsibility, self-confidence, commitment in these talks were the instances of professional identity construction.

McIntyre and Hobson (2016) were other researchers who explored how external mentoring impacted the identity development of beginning science teachers in England. The external mentors in this study were non-school-based physics teachers who were experienced and subject specialists. The frequency of the interaction with external mentors ranged from once a week to once a term. The data was collected in three different ways: interviews with twenty-eight beginning teachers who were mentored and thirteen external mentors; case studies of four external mentors (observations of face-to-face meetings between the mentors and mentees, e-mails between the mentors and mentees, follow-up interviews); post-structured interviews conducted with six unmentored participants. The data analysis revealed that non-judgmental support in the external mentoring relationship contributed to beginning teachers' identity development in three ways. Firstly, beginning teachers developed their professional identity by relating to performative school culture. Secondly, beginning teachers promoted their professional identity as they became subject specialists. The results indicated that in-service teachers improved themselves on how to teach physics and overcome challenges while teaching physics. They had a chance to talk about physics, learned innovative methods, and increased their pedagogical knowledge. The researchers also emphasized that this aspect of external mentoring increased in-service teachers' self-confidence and enthusiasm while decreasing their anxiety about teaching physics. Thirdly, beginning teachers strengthened their professional identity as they engaged in communities of practices. Namely, some in-service teachers pointed out that they felt isolated in their school because they did not have any specialist teachers with whom they could talk about physics. However, this professional community created a chance to improve their professional identity. The study's findings also revealed

that external mentoring created spaces for in-service teachers to legitimize risks and thus promoted their professional identity.

Cameron and Grant (2017) also carried out a study on how external mentoring impacted early-career physics teachers' professional identity construction. This study was based on a mentoring project involving eighteen in-service teachers. The data was collected through semi-structured interviews. The findings of this study pointed out that in-service teachers' professional identity was developed, promoted, or suppressed depending on the nature of the mentoring relationship. When the mentoring relationship was effective, professional identity development was affected positively. Some participants even considered the mentoring relationship as their "lifeline." However, when the mentoring relationship was with deficiencies, professional identity development was affected negatively. For example, Cameron and Grant (2017) explained that the mentoring relationship negatively affected the professional identity development of six teachers because the mentors did not provide adequate support. The negative mentoring could even be attributed to the reason why one of the researchers left the profession. The results also stated that the mentoring relationship supported professional identity development by increasing teachers' enthusiasm to teach.

Regarding the research studies conducted in Turkey, the role of mentoring on student teachers' identity development was mostly studied in the teaching practicum context. In his case study, Yazan (2014) explored the effect of teacher education courses and teaching practicum on teacher identity construction. He investigated three student teachers' identity construction process in a thirteen-month MATESOL program. Yazan (2014) used two rounds-of interviews with student teachers, observations, and artifacts such as online discussions or reflection papers to collect data. The data analysis revealed that mentor teachers were crucial for identity construction. Mentoring promoted professional identity development when mentors shared their power and ownership of their classes with their mentees. Namely, this external recognition or acknowledgment by

mentor teachers promoted student teachers' self-image. Also thus, student teachers did not consider themselves less than real teachers. Instead, they developed their own classroom personas. Furthermore, student teachers promoted their professional identity in the mentoring process through guided reflection activities, professional language, and the identification of important aspects of teaching occupation.

One case study by Bekereci (2016) also analyzed how English student teachers from an undergraduate dual diploma program described their professional identities related to local and international practice teaching contexts. The researcher explored student teachers' practice teaching experiences in the Turkish and United States contexts. The data was collected through in-depth interviews, focus group interviews, classroom observations, document analysis, and student teachers' reflective journals. The data analysis revealed that these experiences did not cause any significant changes in student teachers' professional identities since the mentor teachers did not provide sufficient feedback and motivation. For example, Irmak, one of the participants, stressed how significant mentor teachers were for their professional identity development as role models. Also, Bekereci (2016) stated that all student teachers expected constructive feedback from their mentors to learn about their strengths and weaknesses. However, the feedback was insufficient for them, so they could not develop an awareness of their teacher selves. They also could not develop positive perceptions related to their future profession.

In an investigation into the essentials of teacher professional identity, Taşdemir (2016) studied pre-service teachers' identity development through practice teaching courses. The participants of this study were thirty-one student English teachers. Within the scope of practice teaching course, they worked with an assigned mentor at schools. They observed and interacted with their mentors for ten weeks, four hours each week. The data was collected through focus-group interviews and reflective response journals. According to the data analysis, the researcher pointed out that mentors and observing mentors influenced student



English language teachers' professional identity formation because mentors influenced pre-service teachers' skills and knowledge improvement. Furthermore, some of the pre-service teachers in the study highlighted that they learned from their mentors' experiences and reflections on these experiences. Namely, they put themselves in their mentors' places and thought about what they would or would not do. The pre-service teachers also stated that they valued their mentors' feedback and practical ideas.

In her case study, İnce (2020) searched pre-service teachers identity development within the scope of international teaching practicum. Eight Turkish pre-service teachers who attended a two-month international teaching practicum in Canada were the participants of this study. The researchers collected data via mentor teacher reports, reflection papers, portfolios, semi-structured interviews, and an online questionnaire. Data analysis pointed out that mentors cause a change in pre-service teachers' professional identity by acknowledging them as teachers rather than students. They emphasized that mentors in Turkey mostly considered them as students, yet mentors in Canada saw them as teachers. Also, mentors sat examples for the pre-service teachers. Namely, pre-service teachers considered their mentors' ideas, teaching methods, etc. If pre-service teachers thought these methods or ideas fit them as teachers, they took what they liked from their mentors and formed their own teacher identity. Furthermore, autonomy and control given by mentor teachers promoted pre-service teachers' professional identity. According to the study results, mentors' constructive feedback was another factor that positively impacted professional identity development.

In their longitudinal case study, Tokoz-Göktepe and Kunt (2020) explored the identity construction of a novice English teacher, Azra, during three stages of her life: pre-practicum, practicum, and in-service. In this study, Azra had two mentor teachers. The first one was her practicum mentor, who had nineteen years of experience. The second mentor was her induction mentor with twenty-five years of teaching experience. The data was collected for approximately two years via reflective narratives, Azra's pre-practicum observation notes, her diaries, the

field notes, and interviews. The data indicated that her relationship with the mentor was one of the primary sources of her negotiated student teacher identity in terms of her practicum mentor. Although the mentor's practical information, tactics, and feedback contributed to her professionally, the mentors' interventions made her feel uncomfortable and nervous. Also, when the interventions and feedback were provided in front of students, this situation decreased Azra's self-confidence, and feeling like a member of the teaching community became difficult for her. When it comes to her induction mentor, she also limited Azra's practices, although they were in harmony in general about pedagogical issues. The study's findings emphasized that when in-service teachers were restricted by their mentors about experimenting or applying their own perspectives, their professional identity was negatively affected. Furthermore, being on equal levels with the mentor teachers were essential for teacher identity development.

Göker (2020) also investigated student primary school teachers' professional identity development in his study. In his quasi-experimental design, twenty-six pre-service teachers participated in a cognitive coaching program for ten weeks within the scope of the Classroom Management course. Mentors and pre-service teachers completed a three-stage cycle. First, they attended a pre-conference and discuss the lesson planning. An observation stage followed this stage. At the last stage, mentors and pre-service teachers participated in a post-conference, including a reflecting conversation. The data was collected through an efficacy scale, an open-ended survey, and semi-structured interviews. The data analysis indicated that mentors teaching philosophy or pedagogy affected pre-service teachers' identity formation. Namely, pre-service teachers increased their sense of efficacy and developed their identity. Furthermore, pre-service teachers' planning skills, reflection abilities, and performance increased, too.

### **2.3. Summary of Literature Review**

Teacher identity development is argued to be affected by many factors like teacher backgrounds, beliefs, biographies, context, experiences, qualifications, knowledge, perceptions, professional practice, understandings, and values. Furthermore, the literature points out that interacting with significant others such as students, parents, colleagues, mentors, and school staff is essential for professional identity development.

It is especially emphasized that some opportunities should be provided for student teachers' professional identity development. Different pedagogies such as narratives, stories, reflective activities, and communities can be used for this purpose. Mentoring is also emphasized in the literature as a way to support student teacher identity development.

Studies related to the effect of mentoring on student teacher identity development are mainly concerned with formal mentoring processes within the scope of practicum/practice teaching. In terms of the research studies in Turkey, there is a similar situation. Namely, studies usually focus on school-based formal mentoring for student teachers who are in their last year of teacher education programs.

In general, the literature states that mentoring positively or negatively affects student teacher identity development by impacting components of teacher identity. Mentoring informs student teachers' professional identity development by affecting their agency, self-confidence, self-efficacy, vision, knowledge, etc.

## CHAPTER 3

### METHODOLOGY

This chapter is comprised of nine main parts. It starts with the study's overall design and explains the rationale behind the design. After the research questions are outlined, information considering the participants, and the context is provided, and the case's boundaries are displayed in detail. The following part proceeds with the data collection instruments, and ethical considerations. Then, the data collection procedure and the data analysis procedure are described. In the next part, how the quality of the present study is ensured is explained considering its trustworthiness, etc. In the last parts of the chapter, and the study's limitations are included.

#### **3.1. Design of the Study**

This study aimed to investigate how an informal mentoring relationship among student and mentor teachers has worked to support student teachers' professional identity development. The study also aimed to explore the potential of this mentoring process on student teacher identity development from the perspectives of student teachers and mentor teachers. To achieve these aims, a qualitative research approach is utilized in the present study.

Qualitative research studies ‘things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them’ (Denzin & Lincoln, 2005, p.3). Qualitative research investigates how people make sense of their world (Creswell & Creswell, 2018) and allows researchers to conduct in-depth studies on a wide variety of topics (Yin, 2011). As its nature, qualitative research focuses on “how” and “what” questions. Furthermore, qualitative research is conducted to explore topics, explain behaviors, or attain

detailed information about the topic considering participants' perspectives (Creswell, 2013).

To continue with the characteristics of qualitative research, it investigates a topic under real-life conditions. Participants proceed with their daily life roles or express themselves via their own writings or social interactions, so artificial research procedures are at the minimum level (Yin, 2011). Qualitative research focuses on the participants' perspective, so the meanings that participants have attached to a topic are significant rather than the meanings held by the researcher. Furthermore, qualitative research gathers data from people in their natural settings, so the contextual factors such as environmental, social, and institutional conditions are highly significant (Creswell, 2014; Yin, 2011). Another characteristic is that qualitative research is dependent on multiple sources of data (Creswell, 2014; Yin, 2011). Since a more profound understanding of a topic is more important in qualitative research, the focus is not on objective measures or numerical data (Creswell & Creswell, 2018; Yin, 2018).

This study aimed to explore a specific phenomenon (a mentoring relationship) and attain detailed information (Creswell, 2013; Yin, 2011) and understanding about it. Also, the mentoring relationship took place in a natural setting (within the scope of student teachers' classroom management course) (Denzin & Lincoln, 2005). The meanings that participants (mentor in-service teachers and mentee student teachers) attached mentoring relationship was significant rather than the meanings held by researcher herself (Creswell, 2014; Yin, 2011). Furthermore, the study focused on "how" and "what" questions (Creswell, 2013), and how the data gathered and analyzed was in line with qualitative research. Therefore, the qualitative research approach was considered to be appropriate for the present study.

There are different types of qualitative research (Creswell, 2014). A case study design was considered as appropriate for the present research study. A case study

“explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case themes” (Creswell, 2013, p.97). In parallel with this definition, Yin (2018) also emphasizes that a case study investigates a contemporary phenomenon (the case) in detail in its real-life context, particularly when there are no sharp boundaries between the context and phenomenon. A case can be a single person, a group, an event, an organization, a community, a program, and so on (Saldaña, 2011; Yin, 2018). A case can be chosen because of its unique character or being the most typical example. Sometimes, it is basically chosen for convenience (Saldaña, 2011). There are various reasons to use a case study design. First, it is appropriate when “how” and “why” questions are asked about an event/topic. Secondly, it is when the emphasis is on a contemporary event rather than a historical one. Thirdly, it is when the researcher’s control over the phenomenon is little or none (Creswell, 2003). The present study is an example of case study research because it explored a phenomenon (the informal mentoring relationship among student and mentor teachers) in their contemporary educational context (classroom management course). In depth data were collected via multiple sources such as video recordings, student teacher interviews, and mentor teacher interviews.

Case studies can also be categorized as descriptive, explanatory, or exploratory. A descriptive case study aims to provide a complete description of a phenomenon in its real-life context. An explanatory case study aims to explain the causes of a phenomenon, or how an event occurs. An exploratory case study aims to explore a phenomenon by identifying the procedures. Also, an exploratory study focuses on topics with no clear understanding and aims to explore and construct ideas for future research (Yin, 2018). An explanatory case study design was suitable for this study because it aimed to explain how a phenomenon (the informal mentoring relationship among student and mentor teachers) occurred and affected the student teachers’ professional identity

development by using a framework in the literature. The case in the present study was the informal mentoring activity in which student teachers and mentor teachers together planned a lesson plan within the scope of classroom management course and the study adopted explanatory single case design (Yin, 2018), to explain the mentoring process from the perspectives of the participants (student teachers and mentor teachers). According to Yin (2018), using a single-case design is reasonable under five circumstances: When the case is critical, unusual, common, revelatory, or longitudinal. Being critical and unusual applied to this study. The term critical means that a case is critical to a theory that clearly expresses some circumstances within which its suggestions are credited to be true. It is aimed to investigate whether these suggestions are correct or whether there are alternative suggestions (Yin, 2018). This case was critical because the literature (Cattley, 2007; Djoudir, 2019; Izadinia, 2018, 2016, 2015a; McIntyre & Hobson, 2016; Ticknor, 2014) suggests that mentoring relationship affects student teachers' professional teacher identity development. The case of this study was an informal mentoring process involving student teachers and mentor teachers. The case was also unusual. The term unusual means that a case diverges from everyday practices (Yin, 2018). The mentoring process in student teacher education in Turkey occurs mainly in the practicum context. However, the mentoring in this study occurs within the scope of a classroom management course. Also, the mentoring requirement of the course is not a common practice for all classes that take the classroom management course, and the mentoring is informal. That is why the case reveals valuable insights about this process. The overall design of this case study is shown in Figure 3.1.

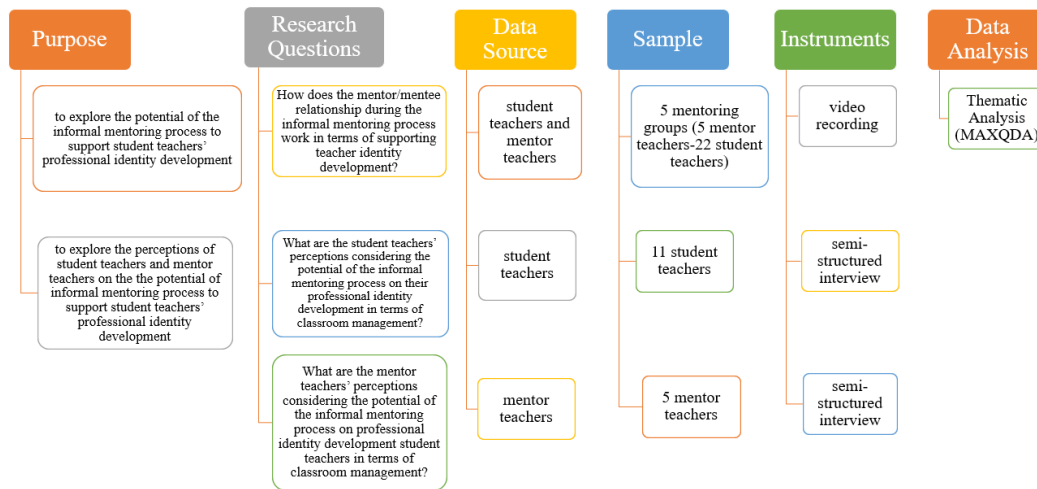


Figure 3.1 Overall Design of the Study

### 3.2. Research Questions

In line with the purpose of exploring the potential of informal mentoring among student and mentor teachers to support student teachers' professional identity development, the present research study aimed to find out answers to the following questions:

1. How does the mentor/mentee relationship during the informal mentoring process work in terms of supporting teacher identity development?
2. What are the student teachers' perceptions considering the potential of the informal mentoring process on their professional identity development in terms of classroom management?
3. What are the mentor teachers' perceptions considering the potential of the informal mentoring process on professional identity development of student teachers in terms of classroom management?



### **3.3. Context and Participants**

#### **3.3.1. Context**

The value of qualitative research grounds in the detailed description of a particular context and themes developed (Creswell & Creswell, 2013). Qualitative research is especially conducted to grasp participants' understanding in a specific context or setting. It is not usually possible to separate people's understanding of a topic from where the topic occurs (Creswell, 2013). Regarding that a case study is the detailed search of a contemporary phenomenon (the case) in its real-life context (Yin, 2018), the followings part of this study explains the broader and specific contexts of the case.

The present study has been conducted at the Faculty of Education at a well-known public university in Turkey in the 2020-2021 Spring Term. The current study was conducted within the Classroom Management course, a bachelor's course offered in the 2020-2021 Spring term. Because of COVID-19 precautions, the course was offered online in this semester. The aim of the Classroom Management Course is 'to improve participants' understanding of the concepts of classroom management and develop skills in establishing and maintaining an effective environment for learning in the classroom setting' as in the course syllabus (see Appendix A for the course syllabus).

The present study was conducted in two sections (classes) of Classroom Management course, which were offered by the same instructor. Student teachers registered to these two sections were expected to attend 14-week coursework. Although Higher Education Council determines the curricula of teacher education programs in Turkey, the university instructors have some flexibilities related to the course content. Therefore, the course requirements included a co-designed lesson planning project with the involvement of an in-service teacher mentor, a group presentation, completion of online activities such as exploration of a classroom management technology, writing reflections, and posting news

related to current classroom management issues, a final exam, attendance, and participation.

The course instructor explained the project in detail in the first week of the semester to be more specific about the mentoring process. Student teachers were expected to form groups of four or five and choose a topic related to the classroom management course from the list provided by the instructor (see Appendix B). The topics were the physical design of the classroom and classroom management; rules and procedures; teacher-student relationship in classroom management; responding to misbehavior; classroom management in the 21st century; working with families; managing seatwork and managing group work; and managing recitations and discussions. Once the student teachers chose their topic, they were expected to collaborate with an in-service teacher to guide them in this process. Student teachers found a mentor teacher from their own networks, or they requested a mentor teacher from the course instructor. When the mentor teachers were matched with the groups, they started working on creating a lesson plan related to the topic they chose. The lesson plans were expected to be designed for student teachers who are enrolled in a teacher education program. As a group they are responsible for planning and preparing activities for an hour-long course and collaborate and work on their lesson plans together with their mentor teachers.

The mentoring process was completed in 10 weeks. Mentor in-service teachers and mentee student teachers had five online meetings in total. Each week, they focused on a specific part/stage of the lesson. During the meetings, first the previous week's decisions were reconsidered and at the end of the meeting they shortly brainstorm about the ideas for the next weeks' meeting. After the meeting, student teachers prepared the next part of their lesson plans and got feedback from their mentors in the following week's meeting. Furthermore, mentor teachers and student teachers were welcome to talk about the mentor's any experiences related to classroom management in general. A more detailed explanation related to the content of each meetings is described as follows:

The First Meeting: The student teachers and their mentors got to know each other in detail. They talked about how the process would work. Student teachers introduced their lesson plan topics and the student teachers and their mentors discussed what kind of lesson they wanted to design in general. The specific focus of the meeting was the objectives of the lesson plan. Student teachers and mentor teachers brainstormed about the lesson plan's objectives by considering what a student teacher should know about their topic before they started teaching and they developed the lesson objectives. They also brainstormed about the possible warm-up activities.

The Second Meeting: The specific focus of the meeting was the warm-up stage. The student teachers talked about the warm-up activities they came up with and the mentor teacher offered feedback, and they talked about how to and what kind of warmup activities they would design together.

They also brainstormed about possible activities they could use, how to order them, and how much time to allocate each activity.

Then the student teachers informed their mentor about the lesson plan part of the upcoming week. They mentioned that s/he is expected to share a case about their topic. For example, if the topic of the group was managing misbehavior, the mentors should think about a case they experienced or know about managing misbehavior. This could be a simple story related to dealing with misbehaviors that took place in their classroom or a story they heard from another teacher.

The Third Meeting: The meeting started with a session during which the mentor teacher offered feedback about the activities that student teachers designed, they talked about the use, the order, and the time allocated for each activity. Then they started talking about the case. They talked about the case and possible ways of using the case as an activity for the lesson they were planning. Finally, they brainstormed about assessment process to be involved in the lesson plan.

The Fourth Meeting: The specific focus of the meeting was how to assess the students' learning. Student teachers and the mentor teacher talked about the assessment techniques. The mentor teacher offered feedback. Then they brainstormed about possible wrap-up activities for the lesson they were planning.

The Fifth Meeting: The last meeting started with a session where the mentor teacher offered feedback about the wrap-up stage of the lesson that the student teachers developed. Also, the lesson plan was considered as a whole, and final feedbacks, suggestion and revisions are made. They checked “constructive alignment” to make sure the proposed learning activities, assessment activities are appropriate for the learning objectives designed at the beginning (Biggs, n.d.).

To be more specific about the lesson plans (see Appendix C for lesson plan template), student teachers were provided a lesson plan template. On the template, student teachers were expected to write three-five objectives related to their classroom management topic. The lesson plan started with a warm-up activity. Student teachers were expected to attract their students' attention and to arouse curiosity by using various tasks such as sample cases, short videos, what if questions, etc. In terms of the lesson itself, the lesson plan included a content presentation to present general terms and issues related to the topic. Furthermore, student teachers designed some activities to encourage active learning such as pair/group work, think-pair-share, jigsaw, debate, discussion, peer review, poster presentations. Also, student teachers were asked to add a short video (5 to 10 minutes) of their mentor teacher explaining their experiences regarding the topic and their advice. Student teachers were also required to include a short written case about their topics. In terms of evaluation activity, student teachers were expected to design an activity to see whether the course objectives are achieved and to check misconceptions (e.g. question-answer, exit tickets, one sentence summaries, short quizzes). When it comes to the closure activity, it was used to wrap up the lesson and make sure the learning lasted long.

### **3.3.2. Participants**

The present study aimed to explore the potential of the informal mentoring process on student teacher identity development. Therefore, mentor in-service teachers and mentee student teachers participated in this study. There were forty-nine student teachers who took Classroom management course from the same instructor in the 2020-2021 Spring term and fourteen in-service teachers who voluntarily participated as informal mentors.

The researcher decided to use purposive sampling to select the participants from this population. Purposive sampling requires the selection of the participants who best help a researcher to understand the research questions (Creswell, 2013). The reason for this sampling was that a case study requires an in-depth analysis of the phenomenon and purposive sampling requires the intentional selection of participants. Purposive sampling takes its power and logic from its emphasis on in-depth understanding and insights through “information-rich cases”. These information-rich cases provide data that are significant to the purpose of the study (Patton, 2002, p. 46). To get the most related and plentiful data (Yin, 2018), the following pre-determined criteria were decided.

Mentor teachers were required to:

- have at least five years of teaching experience
- currently teach full-time at a K-12 school
- be willing to participate voluntarily

Student teachers were required to:

- be third-year students
- be willing to participate voluntarily

The rationale behind the 5-year teaching experience criterion for mentor teachers was the search for experienced teachers rather than novice teachers. Experienced teachers are accepted as those who have many years of teaching. Even if the

saying many years of experience is interpreted differently, studies refer to at least four/five years teaching experience. When it comes to novice teachers, they are accepted as those who have just completed their teacher training or have a limited amount of teaching experience, which is less than two years in general (Gatbonton, 2008). Furthermore, 5-year teaching experience criterion was paid specific attention because “teachers need up to five years to set up their identity”, teachers start to be comfortable with their forming classroom identities within this period (Moore, 2017, p. 23). In terms of the criterion of being a third-year student, the fourth-year students also collaborate with school-based mentors in their teaching practicum. However, this study confined the mentoring process to an informal one, so fourth-year students lied beyond the scope of the study.

Throughout the purposive sampling process, the mentoring group involving the researcher of this study was excluded. Then, depending on the criteria above, five mentoring groups were chosen. There were five mentor teachers and twenty-two student teachers in these groups. The figure 3.2 below outlines student teachers’ and mentors’ distribution among the mentoring groups.

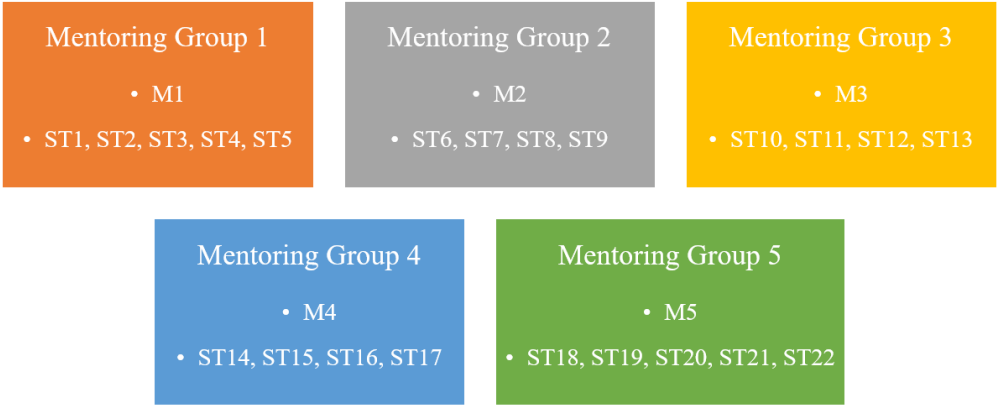


Figure 3.2 Distribution of Participants over Groups

To be more specific about the participants, student teachers formed the first group of participants. Twenty-two student teachers voluntarily contributed to the study by sharing their video recordings related to their mentoring process. Also,

eleven student teachers participated in semi-structured interviews and shared their perceptions about the potential of the mentoring process on student teacher identity development. They all were third-year students who took Classroom Management course in the 2020-2021 Spring term. It was the first time they took this course.

Of the two student teachers, four of them were male, while eighteen of them were female. Considering the distribution of the student teachers according to the departments, eight of them were from Elementary Mathematics Education (EME), six of them were from Foreign Language Education (FLE), four of them were from Physics Education (PHED), three of them were from Elementary Science Education (ESE), and one of them was from Computer Education and Instructional Technology (CEIT).

In the present study, five mentor teachers formed the second group of participants. Five mentor teachers voluntarily contributed to the study by sharing their video recordings related to their mentoring process and participating in semi-structured interviews related to the effect of the mentoring process on student teacher identity development. All mentors taught full-time at a K-12 school in Turkey in the 2020-2021 academic year. The table 3.1 shows demographics related to mentor teachers. Of these mentors, one was between 25 and 30 years of age; one was between 35 and 40 years of age; two were between 40 and 45 years of age, and one was between 45 and 50 years of age. Three of the mentors were female, while two of them were male. Three mentor teachers hold bachelor's degrees, while two mentors had master's degrees. In terms of the subject areas, there were two English teachers, one French teacher, one primary school teacher, and one mathematics teacher. While four mentor teachers were graduates of faculty of education, one mentor teacher was a graduate of faculty of science and literature.

Furthermore, the mentors' teaching experience varied: one mentor between 5 to 10 years of experience, two mentors between 10 to 15 years of experience, and

two mentors between 20-25 years of experience. In terms of the schools where they taught in the 2020-2021 academic year, two mentors were teaching at primary schools, and three were from high schools. While four of them worked at a private school, the rest worked at state schools.

Table 3.1  
*Demographic Profiles of Mentor Teachers*

	Gender	Age	Subject	Professional Experience	Level thought	Education
M1	Male	43	Mathematics	14	middle school-high school	master's degree
M2	Male	37	French	11	high school	master's degree
M3	Female	42	English	21	primary school-middle school-high school	bachelor's degree
M4	Female	48	Elementary School	24	primary school	bachelor's degree
M5	Female	28	English	5	primary school-middle school	bachelor's degree

**3.4. Data Collection Instruments**

The present study used a variety of data collection instruments to explore the potential of informal mentoring on student teacher identity development and perceptions of mentors and student teachers on this issue. The multiple resources of data in this study included video recordings, semi-structured interviews with mentor teachers, and semi-structured interviews with student teachers.

**3.4.1. Video Recordings**

Qualitative audiovisual and digital materials such as photographs, sounds, or video recordings can be used to collect qualitative data (Creswell, 2013). Video recordings were used for data collection in this case study because the researcher



aimed to explore how the mentoring process worked through the dialogues and interpersonal interactions in the video recordings. Also, the video recordings allowed the observation of real-world events (Yin, 2018). Namely, the mentoring process already occurred in an online context because of COVID-19 precautions. Student teachers and mentor teachers conducted their meetings through Zoom, an online video-conferencing platform that helped its users communicate through meetings, chat, and other online events.

The video recordings were shared with the researcher after completing the 10-week informal mentoring process. There were five recordings from each mentoring group. A video recording was about 50-60 minutes.

### **3.4.2. Semi-Structured Interviews**

Interviews are significant data sources for case studies, so researchers commonly prefer them. Since many case studies are about human affairs and behaviors, interviews provide essential insights into these affairs and behaviors. Interviews allow researchers to get explanations considering how and why a phenomenon occurs (Yin, 2018). Moreover, interviews are practical tools to understand what goes on in someone's mind (Patton, 2002). For this study, two different individual semi-structured interviews were developed: semi-structured student teacher interview (Appendix D) and semi-structured mentor teacher interview (Appendix E) The process followed to develop interview questions were explained in Figure 3.3 In the before-preparation stage, the research questions were revisited, and the literature was reviewed. In the during-preparation stage, the research questions were developed based on the literature and research questions. Next, expert opinions considering the content and wording of the research questions were received from three academicians. These academicians had different expertise areas such as measurement and evaluation, teacher education, and teacher identity development. Then, the research questions were revised. For example, research question 9 for mentor teachers, which was formulated as “Do you think the lesson planning process was beneficial for

teacher candidates? What benefits do you think it had?” was transformed into “How do you think the lesson planning process might have affected the professional development of teacher candidates?” since the previous version was leading and based on assumptions. Another example is research question 6 for student teachers were “What kind of feedback did you receive from your mentor teacher? How did the process work? (frequency, content, etc.)” However, it was turned into “What kind of feedback did you receive from your mentor teacher? Did you use the feedback provided? How did the process work? (frequency, content, etc.)” to get more detailed information related to the feedback process. Furthermore, some revisions related to the sequence of the questions were made. For example, research question 4 for student teachers was the 10<sup>th</sup> question. However, since it was identified as highly related to the framework, it was moved up.

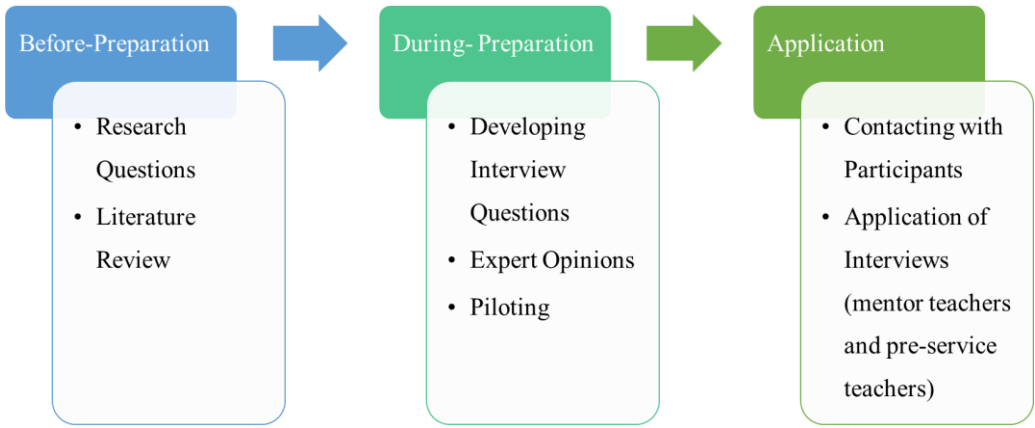


Figure 3.3 Development Process of Interview Questions

After expert opinions, a pilot study was conducted, and the interview questions were revised again. A detailed explanation about the pilot study was provided in the following part. Then, the volunteer participants were contacted. After receiving the participants' consent, eleven student teachers and five mentor teachers were interviewed.

Semi-structured student teacher interviews included fifteen questions. The first questions were about demographics such as age, educational background, the subject area, teaching experience. Then there were questions about perceptions of being a teacher, student teachers' experience on the mentoring process, and suggestions to improve the process. When it comes to the semi-structured mentor teacher interview, it was comprised of thirteen questions. It had a similar design and content to the student teacher interview. The first questions were about demographics such as age, subject area, year, and teaching experience. Then there were questions about teacher perceptions, their experience and understanding of the mentoring process, and suggestions to improve the mentoring process.

#### **3.4.2.1. The Pilot Study**

Conducting a pilot study is beneficial to test one or more study aspects, such as its design, procedures, data collection instruments, and data analysis (Yin, 2011). A pilot case study helps researchers improve the data collection in terms of data content and data collection procedures. The pilot case can be chosen according to its convenience, access, and geographic proximity (Yin, 2018). Therefore, a pilot study was conducted before applying actual semi-structured student and mentor teacher interviews. The pilot study aimed to identify the unclear interview questions and evaluate their content to make necessary revisions. Also, it was aimed to observe the non-verbal reactions of the participants to determine whether there were any discomforting questions. Two student teachers and one mentor teacher participated in the pilot study. The student students were the students who took Classroom Management course in the 2020-2021 Fall Semester. This course also included the mentoring process that was investigated in the current study. The mentor teacher was one of the in-service teachers who provided mentoring in the classroom management course. The participants were selected through convenience sampling. They voluntarily contributed to the pilot study. The pilot study pointed out there were no discomforting questions for the participants. However, the pilot study indicated some modifications related to the

content of the interview questions. Namely, one question (question 11 for mentor teachers) was rephrased, and one more question (question 7 for student teachers and mentor teachers) related to Izadinia's (2018) principles was added to both student teachers' and mentor teachers' interviews. The newly added interview questions were especially used to answer the first research question.

### **3.5. Data Collection Procedure**

After data collection instruments were finalized, informed consent forms for the video recordings and the semi-structured interviews were developed to inform the participants about the study. For ethical considerations and related permissions, necessary forms were presented to the Middle East Technical University Human Subjects Ethics Committee. Then, approval considering the present studies' appropriateness of ethical issues (Appendix J) was obtained.

The data collection procedure started after the approvals of the Ethics Committee. The data for this study were collected during the spring semester of the 2020-2021 academic year. The process started when the researcher took the course instructors' permission and visited two Classroom Management course sections in the first week of the 2020-2021 Spring term. Because of COVID-19, the course was offered online, so the researcher visited the class online, informed the students about the study, and got their contact numbers if they volunteered to contribute to the study. The following week, the mentor teachers were matched to the student teachers. The researcher contacted the mentor teachers via e-mails, informed them about the research study, and got their contact numbers if they volunteered to contribute to the study. After selecting the cases, the informed consent forms were sent to student teachers and mentor teachers through e-mails. The following 10 weeks, the mentoring process took place, so the researcher started the interviews in May. The researcher sent e-mails to the participants and then planned accordingly to decide on the interview schedule. It took approximately three weeks to conduct the student and mentor teacher interviews consecutively.

The student teacher interviews were conducted from 24th May to 11th June. Eleven student teachers participated in the interviews. The purpose of the interviews was to understand student teachers' perceptions on the potential of the mentoring process on their professional identity development.

The student teacher interviews were conducted from 3rd June to 12nd June. Five mentor teachers participated in the interviews. The purpose of the interviews was to understand mentor teachers' perceptions on the potentials of the mentoring process on student teachers' professional identity development using Izadinia's (2018) framework as a theoretical lens.

Before the interviews, participants' consent for audio-recording was also asked to avoid data loss and have more credible data. All participants gave their permission for the audio recordings. Also, the participants were informed that they could cease the interview anytime they wanted. All interviews were conducted through Zoom, which is an online communication platform. Furthermore, the interviews were conducted in Turkish, which is the participants' native language, so that the participants could express their opinions in a much better and more comfortable way.

When it comes to the video recordings, student teachers shared their video recordings with their course instructor after completing the mentoring process. Then the course instructor gathered all the videos and shared the videos of the five mentoring groups with the researcher since each participants' permission was obtained via the consent forms at the beginning of the spring semester. There were twenty-five video recordings in total, and each lasted approximately sixty minutes.

### **3.6. Data Analysis Procedure**

The qualitative analysis aims to get a deeper understanding of data and usually looks "beneath under the surface" (Braun & Clarke, 2013). Data analysis in

qualitative research requires the preparation and organization of data for analysis, reduction of the data through a coding process, and data representation (Creswell &, 2013). More specifically, the present study used thematic analysis method for data analysis, a common practice for qualitative methods in social sciences (Braun & Clarke, 2013).

“Thematic analysis involves the searching across a data set to find repeated patterns of meaning. The exact form and product of thematic analysis varies” (Braun & Clarke, 2006, p.15). Thematic analysis (TA) is not a single method instead, it is a family of methods. It is not bounded to a specific theoretical framework. Therefore, there are various ways to conduct it, and it can be used with multiple qualitative data (Braun et al., 2021).

There are three approaches to thematic analysis: a coding reliability approach, a reflexive approach, and a codebook approach. These approaches are based on different processes and assumptions (Braun et al., 2021). Coding reliability TA focuses on establishing the accuracy and reliability of coding. Whether following a deductive or inductive orientation, a codebook or a coding frame is used for guidance (Braun & Clarke, 2021). In terms of reflexive TA, theoretical flexibility is highly significant. The analysis process focuses on “organic” coding and theme development rather than coding accuracy. Therefore, the coding process is perceived as subjective and interpretive. The coding quality is provided via detailed engagement of the researcher with the data. When it comes to the codebook TA, it can be positioned between coding reliability TA and reflexive TA. Namely, on the one hand, it uses a structured codebook or a coding frame like coding reliability TA. On the other hand, it depends on qualitative philosophy like reflexive TA. Generally, some or all themes are determined in advance, or in the early periods of coding. The codebook is used as a map. Through the coding, the data is organized into themes. However, themes can be refined during or after coding (Braun et al., 2021). The present study used codebook TA for data analysis. A codebook depending on Izadinia (2018)’s principles (Appendix H) was developed to use as a map. However, it also

followed the qualitative philosophy. While coding the data, the researcher did not only consider the codebook. As a result of detailed engagement with the data, a new principle was identified.

Throughout the data analysis process, first, the video recordings were coded. Then, the process continued with coding mentor teachers' interviews and student teachers' interviews, respectively. Furthermore, the data were coded via MAXQDA (2020) software. While coding the data, both interviews and video recordings, the current study followed Braun et al.'s (2021) six phases of thematic analysis: "familiarization with the data", "coding the data", "generating initial themes", "reviewing and developing themes", "refining, defining and naming themes", "producing the report." To familiarize with the data, the researcher transcribed the interviews, then read and reread the transcriptions. In terms of the video recordings, the researcher watched the videos. Then, the data were coded depending on the codebook. However, since codebook TA also emphasizes qualitative philosophy, the researcher coded the significant aspects related to research questions, which were not stated in the codebook. Thus, initial codes were generated. After coding the whole data set, the researcher developed and reviewed possible themes. Then, themes were refined, defined, and named. Finally, the analysis report was prepared. At this point, Braun et al.'s (2021) suggestions are highly significant. According to them, although the six phases are stated in a sequence, the analysis process is not linear all the time. Therefore, sometimes it is required to move back and forth. In parallel with that, the researcher did not move forward through the phases. Instead, the researcher moved back or forward when necessary.

Lastly, another researcher was actively engaged in the data analysis process. The researcher constantly shared her interpretations related to data and related codes and themes.

### **3.7. Quality of the Research / Trustworthiness**

Qualitative and quantitative research differ in their philosophical roots, so they have different reality assumptions (Merriam, 2009). While mentioning reliability and validity issues in qualitative research, trustworthiness is a broad term. Trustworthiness is the persuasive aspect of a study that makes it worth reading (Lincoln & Guba, 1985). Guba's (1981) strategies were utilized in this study to provide its trustworthiness. These strategies are credibility (for internal validity), transferability (for external validity/generalizability), dependability (reliability) and conformability (for objectivity).

**Credibility (for Internal Validity):** The term is used to display the congruence of study findings with reality (Merriam, 2009). To achieve credibility, a researcher can use various methods such as benefiting from prolonged engagement, persistent observation, triangulation, and member checks (Guba, 1981). In the present study, the triangulation method was used. The data were collected from both mentor and student teachers through three different data collection instruments: video recordings, semi-structured student, and in-service mentor teacher interviews. Also, the member check was done with a student teacher and one in-service mentor teacher. A brief summary of the findings was shared with them, and they are invited to checked for accuracy (Lincoln & Guba, 1985).

**Transferability (External Validity / Generalizability):** Although the phenomenon in a qualitative study depends on time and context, some transferability is possible because of similarities between the two contexts. To achieve transferability, suggested methods are collecting thick descriptive data, doing purposive sampling, and developing thick descriptions (Guba, 1981). In this study, the participants were chosen via purposive sampling to maximize the range of data. Also, a thick detailed description was provided related to the research context, the participants, data collection, and analysis procedures.



Dependability (Reliability): The term refers to the consistency of research findings with the data collected (Merriam, 2009). It is essential to use an ‘audit trail’ to ensure dependability, which allows another person to examine the data collection and analysis process. After the documentation of the process, an ‘external auditor’ looks at the audit trail (Guba, 1981). To achieve dependability, detailed information related to the design, the participants, the context, the data collection instruments, and data collection process was provided.

When it comes to the coding reliability, in parallel with Braun et al.’s (2021) suggestions, multiple coders were not preferred, and inter-rater reliability was not checked in this study. The reason for that was Codebook TA leans toward the qualitative philosophy, so the coding reliability is not focused. Similar to reflexive TA (Braun et al., 2021), coding quality can be achieved by single coder or through collaboration rather than consensus among coders if reflexivity is provided, and data are interpreted deeply (Braun & Clarke, 2021). In the present study, another researcher from the field provided collaboration throughout the coding process. The other researcher held a doctoral degree in educational sciences. Furthermore, the researcher was knowledgeable about teacher identity since teacher identity development was among her research interests. She was informed about the theoretical frameworks of the study. Then, she contributed to detailed and profound interpretation of data.

Confirmability (Objectivity): The term is related to objectivity, so the study must be freed from the researchers’ bias. To ensure confirmability, triangulation is important (Guba, 1981). In this study, the triangulation method was employed. Also, the position of the researcher is explained in detailed in the next part. Apart from this, the researcher shared her interpretations with the supervisor of the study, who also reviewed the data, related codes and themes.

Apart from all these, Braun and Clarke’s (2006), 15-point checklist of criteria (Appendix I) for good thematic analysis was utilized to endure the quality of this study. The checklist focused on TA processes: transcription, coding, analysis,

overall, written report. The researchers' response related to the checklist were as follows.

Checklist Item 1: The student teachers' and mentor teachers' interviews were transcribed, and then transcripts were checked for accuracy. Furthermore, after the relevant data were chosen from the video recordings, they were transcribed and checked for accuracy.

Checklist Item 2: All data from the interviews and video recordings were paid equal attention throughout the coding process. All data were reviewed.

Checklist Item 3: Themes were developed after a comprehensive data analysis. Each theme was considered depending on numerous codes.

Checklist Item 4: Whole relevant extracts were blended.

Checklist Item 5: Themes were controlled against one another and considered the data.

Checklist Item 6: Themes were mainly based on Izadinia's (2018) principles. The framework helped with coherency, consistency, and distinction.

Checklist Item 7: As the results suggested, data were not just paraphrased. Instead, they were interpreted.

Checklist Item 8: Results were in harmony with the data itself. The extracts were representative.

Checklist Item 9: The results displayed a well-organized story of the case.

Checklist Item 10: A balanced number of illustrative extracts was used to display analysis.

Checklist Item 11: The analysis was conducted in an appropriate amount of time. The timing was considered carefully.

Checklist Item 12: The methodology part included enough information related to TA approach.

Checklist Item 13: There was a consistency between the methodology and results.

Checklist Item 14: The terminology was consistent throughout the thesis.

Checklist Item 15: The researcher had an active role.

### **3.8. Researcher Reflexivity**

Depending on the subjective nature of the research, researchers convey their values, perspectives, backgrounds to their studies. Therefore, the subjectivity issue should be considered for qualitative research, and reflexivity is a way to do this. Reflexivity is required for the quality check of a research study (Braun & Clarke, 2013). Reflectivity in research is based on a researchers' assuming responsibility for his/ her situatedness in the study in terms of the setting, participants, questions, data collection and analysis (Berger, 2015). Researchers need to reflect on their role functionally and personally (Braun & Clarke, 2013). A researcher can be in an insider or outsider position. Both an insider and an outsider have advantages and disadvantages. Namely, "the insider's strengths become the outsider's weakness, and vice versa" (Merriam et al., 2001, p. 411). As for my position in this study, I was an insider.

To be more specific, I am a graduate of METU FLE Department. Since I started teaching at private schools almost six years ago, I have been an English teacher. I have gained various insights related to the teaching profession throughout this process. I have gained first-hand experience about how challenging being a

teacher is, especially when I was a novice teacher. Classroom management was one of the aspects I had the most difficulty with. To overcome the difficulties, I reconsidered about my student teacher education, and I benefitted from it to some extent. However, my real-class experience was limited to the practice teaching course, so challenges continued. Throughout this process, I was fortunate that some of my colleagues were experienced teachers who were highly enthusiastic to help me. As I became familiar with the classroom management techniques, because of my own experiences and other experienced teachers' suggestions, classroom management has become an area about which I am highly confident right now.

As the researcher of the study, I can be situated as an insider. Namely, I was one of the mentor teachers who was involved in the co-designed project. I worked with four student teachers to co-design a lesson plan related to rules and procedures. The mentoring group I was involved was especially excluded from this study. However, this process provided me with valuable insights. Before the mentoring process, I had thought that learning about my real-life experiences would be the main gain of the informal mentoring process for student teachers. Namely, student teachers would realize what kind of situations I experience related to classroom management and how I deal with these situations. I assumed that student teachers would learn about classroom management strategies, both effective and ineffective ones. Furthermore, I thought they would easily put themselves in my shoes since I started teaching almost six years ago.

Within the scope of this project, I participated in five meetings. One of the student teachers contacted me to schedule the meetings, and we decided the meeting time together. My prominent roles in the meetings were sharing my experience and giving feedback. Unlike my expectations before the mentoring process, the meetings were not only based on my experiences. Namely, we spent a lot of time on my experiences. At the same time, there were many cases in which we discussed how to apply a lesson plan in an actual class. All student teachers in my group were knowledgeable about technical issues about lesson

planning, such as staging a lesson plan, using different types of tasks, etc. However, since they had never been in an actual class, there were times when they had unrealistic expectations. For example, they desired to add various engaging activities for their lesson plans, yet they did not consider how much time the activity would take. Furthermore, the student teachers generally did not consider how the activity would work in reality (e.g. giving its instructions, eliciting answers from their students). I believe the process was beneficial for being realistic while planning a lesson. Apart from these, I tried to motivate student teachers regarding their profession since I realized student teachers' reservations. In general, the process was quite enjoyable for me. I believe discussing various topics and sharing my experiences was helpful to both student teachers and me. Student teachers who had no real class experience had a chance to hear about real classroom situations. They especially realized the challenges and solutions related to classroom management. Also, they developed professionally.

Apart from all these, I kept a reflexive research journal throughout the research process. Braun and Clarke (2013) suggest that having a research journal helps researchers record their feelings, thoughts, and reflections about the research process, and it is beneficial for reflexivity. Depending on these suggestions, I kept a journal. The journal was not a data source. Instead, the journal included details about what I did, how I did, how I felt, etc. I took detailed notes about my ideas related to the informal mentoring process, both while I was a mentor teacher and I was the researcher of this study. The journal was especially beneficial throughout the data analysis process. It helped me see my thought flow clearly and understand why I made some decisions. It allowed me to revisit my ideas and perspective. Thus, I could reflect on my own opinions and practices constantly.

### **3.9. Limitations of the Study**

The present study has certain limitations. First of all, it had a purely qualitative case design, so all the limitations related to qualitative designs in the literature were also valid for this study. For example, no statistical analysis was carried out for the study. However, multiple data gained through semi-structured interviews and video recordings allowed in-depth analysis. Also, the current study was limited to two Classroom Management course sections. Therefore, this population limited the size and quality of the sample. Furthermore, this study had a potential limitation in its generalizability. Although its methodology can be generalized to various geographical locations, it might be challenging to compare its findings to future research if it is not conducted with the same grade level or course. However, inability to generalize from case studies is a common consideration. Case studies are “generalizable to theoretical propositions and not to populations or universes” (Yin, 2018).

Secondly, although various factors affect student teachers’ professional identity development, this study only considered the effect of the mentoring process. As a result, student teachers’ identity development might have been affected by some external factors that were not investigated in this study. Furthermore, the multiple data were collected.

Thirdly, both the interviews and video recordings took place through an online communication platform. Technical difficulties might have affected the interviews, or the conduct of the mentoring process, consequently the video recordings. However, using an online communication platform was the online option because of COVID-19 precautions.

Despite all the limitations, the researcher believes that the study provides significant results because the case was explored in-depth through planned and systematic data collection and analysis.

## CHAPTER 4

### RESULTS

This chapter presents the results of the study under three main parts. The first part reveals how the mentor/mentee relationship during the informal mentoring process works to develop student teacher identity. The results are based on the analysis of the video recordings. In the second part, results related to the student teachers' perceptions considering the potential of the mentoring process on their professional identity development are presented. The third part involves results about the mentor teachers' perceptions considering the potential of the mentoring process on the professional identity development of student teachers. The second and third parts results are based on the analysis of the student and mentor teachers' interviews. Izadinia's (2018) five principles of mentoring practice to support student teachers' professional identity development was utilized the data. The results were based on these principles, also a new principle added.

#### **4.1. How does the Mentor/Mentee Relationship During the Informal Mentoring Process Work in terms of Supporting Teacher Identity Development?**

In observing how the informal mentoring process works in terms of supporting teacher identity development, six main themes were identified as the principles mentor teachers made use of which has the potential to inform student teachers' professional identity development such as: (a) building and maintaining a strong relationship; (b) offering support and encouragement; (c) providing ongoing feedback; (d) making time for reflective activities, (e) creating a positive environment; (f) enabling awareness, self-identifications and future projections. The first five principles were based on Izadinia's (2018) principles. The first principle (building and maintaining strong relationships) focused on the positive

relationship between student teachers and mentor teachers based on mutual trust, explicit expectations, and efficient communication. The second principle (offering support and encouragement) included instructional or emotional support and encouragement from mentor teachers. The third principle (providing ongoing feedback) focused on the nature of the feedback provided by the mentor teachers, while the fourth one (making time for reflective activities) displayed the reflective activities in the informal mentoring process. The fifth principle (creating a positive environment) covered the mentoring process's power relationships and participation level. Additionally, the data analysis revealed that these five principles did not include all salient aspects of the informal mentoring process related to the professional identity development of student teachers. Namely, the video recordings displayed that mentor teachers enabled student teachers' awareness, self-identifications, and future projections. That is why the sixth principle was added.

#### **4.1.1. Building and Maintaining a Strong Relationship**

Maintaining a positive relationship in the mentoring process affects student teachers' professional identity development. Namely, when student teachers create a bond with their mentor teachers, they get the message "Yes, you are able to bond with your colleagues, and Yes, you CAN be a teacher" (Izadinia, 2018, p.112).

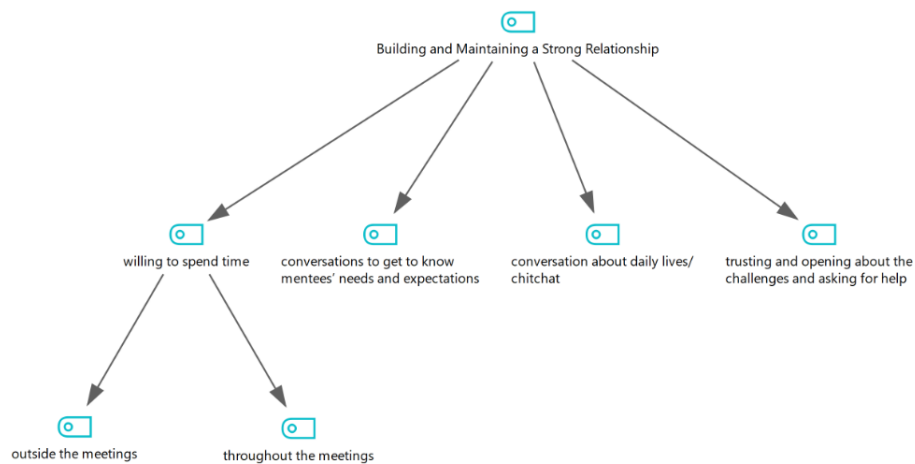
The video recordings in the present study revealed that mentor teachers and student teachers built a strong relationship and maintained it throughout the meetings. Four major codes were identified related to this theme: being willing to spend time; conversations about daily lives/chitchat; conversations to get to know mentees' needs and expectations; trusting and opening about the challenges and asking for help. The codes were visualized in Figure 4.1

Firstly, being willing to spend time rather than being busy with someone's own schedule points out a strong relationship in the mentoring process (Izadinia,



2018). Student teachers and mentor teachers in this study were enthusiastic about creating a relationship and helping each other. Instead of completing the meeting immediately and being busy with their own schedules, they devoted time to each other. Mentor teachers encouraged student teachers to ask questions and express their ideas throughout the meetings. The following conversation exemplified such a situation:

M5: So, is there anything else you would like to ask, add, or discuss? We probably have 2-3 minutes before the meeting ends. So, we can use this time. Do you have any questions now? We can talk if you want.  
 ST14: I think we asked everything we planned. Thank you, hocam.



*Figure 4.1* Codes Related to Building and Maintaining a Strong Relationship

Firstly, being willing to spend time rather than being busy with someone’s own schedule points out a strong relationship in the mentoring process (Izadinia, 2018). Student teachers and mentor teachers in this study were enthusiastic about creating a relationship and helping each other. Instead of completing the meeting immediately and being busy with their own schedules, they devoted time to each other. Mentor teachers encouraged student teachers to ask questions and express their ideas throughout the meetings. The following conversation exemplified such a situation:

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ST14: I think we asked everything we planned. Thank you, hocam.

There were also several instances that mentors were willing to spend more time than initially planned. The excerpt below captured an event in which a mentor was willing to delay his plan to continue the meeting.

ST2: I guess that's it.

M1: So, we can watch the game (everybody laughing). Anyway, take your time, I don't have anything to do. I mean, I'm just watching a basketball game. No problem for me. I can spare as much time as you want.

In addition to spending time throughout the meetings, mentor teachers were willing to spend time outside the meetings. The conversation below showed an example of a mentor teacher who wanted to spend extra time outside the meetings to help student teachers better and to give more detailed feedback about the activities in the lesson plan.

M3: What if we do such a thing? Could you please convert this to pdf and send it to me? I will read it later. I mean, when I have more time. I've said what I wanted to say, but I want to look at this, especially the lesson plan stages.

ST11: All right, hocam.

M3: I will think about what can be better. Maybe something comes to my mind. Then I'll get back to you.

In the same vein, M1 volunteered to spend extra time and effort outside the meetings so that student teachers enrich their lesson plans. When the time restrictions did not allow this, the mentor offered to do the same task twice to be more helpful.

M1: I can do like this. I can record the video in my class after the holiday. If you have a little more time. I mean, I can show the things I'm talking about. I can record the books, magazines, chess sets, board games, the writings written by the children on the walls, the design of the class, the library of the class. You can embed it in the presentation that we just talked about.

ST4: It would be great, but I guess our deadline won't allow it.

M1: Then, let me record a video at home first. Then, I will record one more in the class.

Besides time spent for lesson plan-related tasks, all mentors comforted student teachers to get in contact with them any time they wanted. Mentor teachers ensured that they would not be disturbed to spend time outside the meetings. The following speech within a meeting was such an example:

I say it again. You can always reach me outside of our meeting. You can ask a question, or if there is something I need to do, I can do it. I mean, don't be shy. Don't think like this. Our teacher will be disturbed. I want to make it clear, OK? I think we should not be limited to just this meeting. Let's use our Whatsapp group actively. OK? So, for example, I shared a video or story in the group before. You also wrote your comments there. I want to say this. No one should be disturbed when you ask me a question or when I direct a question to you. I will not feel disturbed. I have time (M2).

Secondly, conversations about learning student teachers' needs and expectations are essential in the mentoring process. When student teachers explain what they need from their own perspectives, it increases the strength of the relationship and allows mentor teachers to adjust the mentoring process correspondingly (Izadinia, 2018). In this study, mentor teachers made time to learn their mentees' needs and expectations in detail at various stages of their meetings. Mentor teachers encouraged student teachers to share their emotional or professional needs to meet these expectations and accommodate their knowledge, approaches, experience, etc. The transcript below showed how a mentor tried to maintain a meeting according to the mentees' wants and needs.

M2: What exactly do you want me to do? Should I share different practices that I do in class? Do you want me to summarize them? Or shall we discuss a specific topic? Let me ask you about it. Then we can continue.  
ST7: Hocam, let's talk about this thing, the case you told us about. If you want it, if it is okay for you.  
M2: Sure, whichever will be more useful to you.

Furthermore, student teachers stated their expectations and needs throughout the informal mentoring process. The communication between student teachers and mentor teachers allowed them to clearly utter their wants and needs. The following dialogue displayed how student teachers explained their expectations openly in the meetings.

ST3: We actually ask you to shoot a video, maximum five minutes. About the classroom setting. A video where you can suggest strategies and talk about your experiences. We will use this video to teach our students our topic.

ST5: Yes, you will actually give advice. Like the advice you just gave us about classroom management and classroom organization.

ST3: For example, how did you solve a problem related to the classroom setting?

ST1: Yes, especially handling a problem would be very good for us, hocam.

The third aspect related to building and maintaining a strong relationship in this study was the chitchat or conversations related to the daily lives of mentor teachers and student teachers. When mentor teachers and student teachers spare time for chitchat, student teachers deduce that their mentor cares about them. They feel more “included and welcome”, which affects the strength of their relationship (Izadinia, 2018, p. 111). In the present study, there were many instances in which student teachers and mentor teachers spared time for chitchat:

M1: (At the beginning of the meeting, the mentor talks to his son) Can you turn on the light, son?

ST1: Is your son there too, hocam?

M1: Well, for three days, we have been walking around like glued together.

ST3: Then your playmate is waiting for us right now.

ST2: (referring to the background picture of Zoom) Your background is very nice, by the way. It just describes you.

M1: That's right. There were a lot of them, but I liked this one.

ST1: I think it's good, hocam.

M1: Also, the room is not always available. Now I have my son behind me, and there are a lot of things (M1 call ST2's name). Your background is Sponge Bob. This is beautiful too.

The topics for chitchat also changed from mentor and mentees' daily lives to current events. For example, the following chit-chat displays how the mentor teacher and student teachers talked about the Covid-19 vaccine, which was one of the current topics those days.

M3: It (referring to the pandemic) is about to be over. For example, I was vaccinated. 2-3 weeks ago. Everyone will be vaccinated.

ST5: I hope, hocam.

M1: It look like there is enough vaccination right now. It was problematic. But now it doesn't seem to be. For example, all teachers can now make an appointment. I got vaccinated a little bit early because I'm over 40. Now other

teachers can also get vaccinated. Then, university students would also be vaccinated, I guess. So, everyone over the age of 18 would be vaccinated.

ST1: I hope Covid would end.

In the majority of meetings, student teachers and mentor teachers mentioned the difficulties they were experiencing:

M4: How is school going? How is online education? Is it difficult?

ST16: Intense and tiring.

M4: It is for all of us. We got relaxed a little when the school opened. At least we were able to get away from the computer a little bit. But, now there is hybrid education.

ST14: Your job is difficult, hocam. Good luck with that.

Similarly, student teachers and mentor teachers talked about their schedules, responsibilities, etc. Rather than immediately focusing on the meetings' tasks, they listened to each other carefully. They also wanted to learn more details about one another's daily lives. To illustrate, a mentor remembered student teachers mentioned that they would be busy with their midterms (exam) in the previous meeting, so before starting that days' task:

M5: Do you have an exam tomorrow?

ST7: Hocam, I have an exam. Educational sciences.

ST9: Hocam, I have an exam too.

M5: Good luck, may it be easy.

ST7: Thank you very much, hocam.

Lastly, building and maintaining a strong relationship with mutual trust is significant in the mentoring process. When student teachers trust their mentors, they can open about the challenges they are experiencing (Izadinia, 2018). Student teachers in this study opened about the difficulties or challenges they were having while preparing their lesson plans. In the conversation below, student teachers talked about the challenges they faced while preparing a rubric for their lesson plan.

ST12: Students are free to do whatever they want while doing the poster activity. Naturally, I had some difficulty in preparing the rubric. I didn't know how to express things. I prepared something, but there are many missing points. I don't know what I need to fix, what exactly is the problem.

M3: Isn't it for evaluation?

ST12: Yes hocam.

ST13: We're not very good at preparing a rubric. How should we prepare a rubric? What is it about? I'm telling you frankly. I was also not very good at the rubrics I prepared before.

Also, when possible, student teachers asked for help from their mentors related to the challenges they were experiencing. After honestly stating their problems or weaknesses they perceive, student teachers asked for guidance on dealing with these issues. For example, student teachers below could not differentiate the evaluation activity from the wrap activity. Facing this challenge, they asked for clarification from their mentors:

ST7: Hocam, there is an evaluation part. We also need to do a wrap-up activity. But when we surfed the internet, the same activities were the same for evaluation and wrap-up activities. So, we didn't really understand the difference between the two.

M2: I will explain the evaluation part, but I did not fully understand the other statement. What did you say?

ST6: It's called wrap-up.

ST7: It is a finishing activity. If you remember, we did a warm-up activity before. This is the end.

M3: Ok, now I understand. Now I will talk about such activities and their differences. The important thing for evaluation is to evaluate how much the subject is understood. But the wrap-up is about that your activity, your lesson reaches a conclusion.

Similarly, writing accurate objectives for each activity in the lesson plan was challenging for the student teachers in mentoring group four. When they could not figure out how to align the objectives with the activities, they expressed the issue in their second meeting and asked for help from their mentors.

ST10: I wonder how it would be if we opened the objectives and looked over together? We thought about the activities. But I guess we didn't think much about the objectives. We didn't pay much attention to them.

ST11: If you want, we can share the objectives again with you, hocam.

M4: Can you open the Turkish version? I'll have a look.

### 4.1.2. Offering Support and Encouragement

Emotional or instructional support provided by mentor teachers is influential in increasing student teachers' self-confidence. Furthermore, when delivered appropriately, support helps student teachers to develop their teacher voice (Izadinia, 2015b). Considering that teacher identity involves teachers' self-confidence and voice, developments related to these make student teachers' professional identity stronger. When mentor teachers provide proper encouragement and support, student teachers develop a robust professional identity (Izadinia, 2018).

The video recordings' analysis showed that mentor teachers in the present study provided support and encouragement throughout the informal mentoring process. This theme included two main codes: instructional support and emotional support. While instructional support involved knowledge and strategies, emotional support was related to encouraging and approving mentees' ideas or progress, recognizing mentees' prior knowledge and skills, and acknowledging mentees as teachers, in line with Izadinia's (2018) principles. The codes were visualized in Figure 4.2

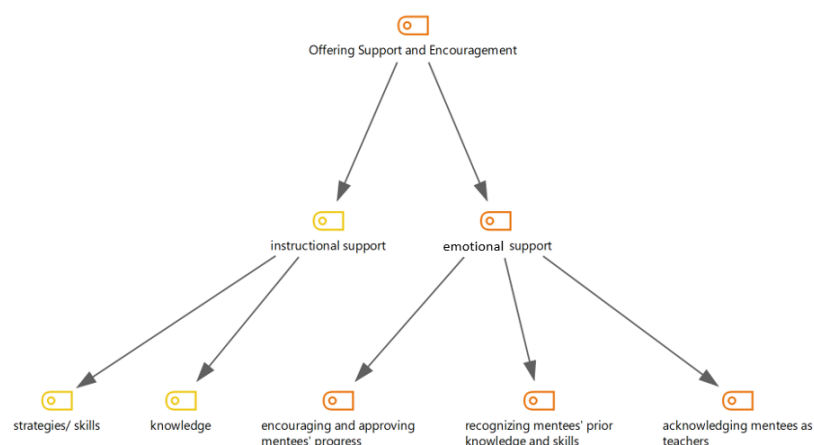


Figure 4.2 Codes Related to Offering Support and Encouragement

To start with the providing a sensible amount of instructional support is essential for student teacher identity development. Student teachers might feel like they are not competent teachers. They might need support and encouragement in various aspects of the teaching profession, such as managing the class, interacting with students, implementing the instruction. To develop a robust professional identity, mentor teachers should give a reasonable amount of instructional support, neither too less nor too much (Izadinia, 2018). Mentor teachers in this study shared many instructional strategies with the student teachers on a wide variety of topics. Topics changed from dealing with misbehavior to actively engaging the students into the activities. There were also many cases in which mentor teachers emphasized the essential points for effective classroom management. For instance, M1 shared the significance of being knowledgeable and reliable for classroom management:

There are essential things to manage the classroom. First of all, for example, you have to really master your subject. You need to be able to give convincing answers to all kinds of questions and you need to be clear. I mean, for example, if you promised something, it could be a reward or a punishment, you should definitely keep your word. Children should know that you will keep your promise and they should trust you (M1).

M2 also focused on the impact of various factors on classroom management. The mentor emphasized that there might be unexpected reasons for a students' misbehavior, so a teacher should consider these before taking action:

Now let's look at this topic from a completely unknown side. What is this? The teacher is excellent in the classroom. Students, the harmony in the classroom is excellent. So there is no problem in the classroom. You have been teaching in this class for 4 years. In the fourth year, misbehavior appears. Why does such a thing happen? As I said, a person is a psychological being. The subconscious is very important. You also need to be aware of this. That is, the teacher must know the students very well. For example, have the parents of a student divorced recently? Or he may have lost one of his parents. Or, a very close friend of the student may have hurt himself because of the student. I know I am talking about very bad things. I mean when the child has a problem subconsciously, he may act out of his own character. So the child is actually okay, the class is okay, the teacher is okay, but there is a problem. Why? Because there are problems in the subconscious of the child who creates a problem (M2).



M4 offered a different strategy related to classroom management. She emphasized the significance of the tone of voice:

The tone of voice is important. You can adjust the tone differently, lower it, raise it. For example, being very quiet, this practice becomes very effective. Imagine you walk in, humming very quietly. The classroom is noisy. Then, the teacher is so quiet. Here comes silence. Everyone stops talking and focuses on the teacher (M4).

Mentor teachers in this study not only shared common strategies for managing the classroom effectively. They also shared specific cases they experienced at the school and suggested some strategies. The following speech showed how M5 suggested some classroom management strategies: some successful, some unsuccessful ones:

I had an eighth-grade class, the most mischievous one among the 8th graders. I was their guidance counselor. All the teachers were constantly complaining about them. For example, when something happened outside, they were all gathering at the window. There was definitely one teacher in each lesson that complained to them to the discipline committee. They were saying things like, 'You look like my ex-girlfriend' to female teachers. With that class, I couldn't stand it anymore after a while. I thought about what I should do. Discipline committee wasn't working anymore. Talking to the parent was not a solution anyway. I used giving rewards, too: I made a promise to them. I said, 'If I don't hear more than three complaints about you in total, I will buy you a nice cake at the end of the semester'. For students in the village, cakes are not very easy to find. They can be very happy with a cake. But after a while, the cake issue was also forgotten. Then, one day, I said to one of the naughtiest students, 'You're going to be the teacher. If you can plan a lesson and present it to the class, I will never warn you again. But I will be a student too, and you will not ask for any help from me.' Then my student made preparations and taught the lesson. In fact, he could not teach. He tried to make the students silent with traditional methods. But the class was terrible. Finally, he said, 'I can't silence the class, teacher. What am I going to do?' He began to clench his fists. Then I said, 'What are you doing? Is it okay? After all, you are a teacher. Is this how we treat you?'. That's the case, why are you getting so angry? He paused. He said it was indeed so. That's when the whole class understood. They started to warn each other in the next lessons (M5).

Mentor teachers in this study also shared strategies to attract students' attention to the lessons. For example, M1 suggested that teachers be aware of their students' interests and integrate this into the lessons.

It can be useful to start the lesson with the students' interests. For example, I had a student who could paint very well. But she was very bad at math. But she was very talented at painting. One day I bought a lot of colored chalk and started writing on the blackboard with those colored chalks. The student came to me during recess and said: 'Teacher, could you always teach like this? Seeing those colors raised my interest'. I was explaining 'functions,' so this was not a simple subject for the student. You have to know the children in order to find out how to attract the attention of the children. You must start from a point that is interesting for students. For example, if a problem student is interested in space, you should give an example about space. Otherwise, it is not possible (M1).

Additionally, M1 shared a strategy to teach students how to manage their own learning processes:

I try very hard for students to gain their own learning habits. How do children gain the ability to manage their own educational processes? How can I teach a child to study? First, you need to know how the students study. For example, a child says that he studied for an exam, he studied for four or five hours, but the next day he cannot do anything in the exam. For example, I did something like this to solve it. I kept the students at school until 11:30 a.m. in the evening before the first exam. I distributed them to the classes in groups of two or three. I said, 'Study. I'll come and see how you work.' I came across things like this. There were students who open their notebooks and write the same things on a piece of paper. Some students started with questions on the book directly. Then, I talked to the students about how they can study at home (M1).

In relation to instructional support, providing related knowledge is also quite essential. Mentoring can contribute to student teachers' knowledge and thus affects their professional identity development (McIntyre & Hobson, 2016). Mentor teachers in this study shared knowledge on various topics in the mentoring process. For instance, M2 reminded the students of Bloom's taxonomy and to what extent five senses contributed to learning:

Previously, I shared information about learning with you in the WhatsApp group. It was about the learning steps. There was also the matter of sense organs. What was it saying? Classroom learning is only five percent. In other words, students do not learn much in classroom learning. In other words, learning has to be done with sense organs. The more sense organs are engaged, the greater the learning (M2).

In another meeting, M1 shared his knowledge related to formative assessment. M2 emphasized why formative assessment was conducted and which aspects teachers should be careful about while preparing related questions.

ST1: With this assessment activity, we will be able to easily find out what level the students are at.

M1: Here is the thing, actually. Rather than understanding what level these students are at, it shows how well the objective of the lesson is understood in the classroom. That is what formative assessment is for. Its purpose is not to grade; it is to assess. Afterwards, you need to set a goal according to the results, according to the data, to improve your students. And the most important thing in this part is to prepare questions. So, it is very important that the questions are clear. In other words, when asking a question, we do not ask a question so that students cannot answer it or make it difficult to understand. Let's be clear; we ask those questions so that everyone can understand the same thing and answer accordingly, so that we can evaluate.

Furthermore, mentor teachers shared their knowledge concerning online tools. Having online lessons because of Covid-19 precautions, mentor teachers mentioned various online tools that might make the lessons more effective. For example, M3 talked about which online tools or platforms can be used in classes.

ST13: If there are interesting applications, we can listen to them as well.

M3: I use Kahoot and Quizizz a lot. I use these applications at the end of a topic. In online teaching, I can't use the games that I normally play in the classroom. It is not very enjoyable for students when it is not interactive. For example, there is 'Edpuzzle', I use it for homework. I also use 'live worksheet'. Both in class and as homework. There is an application called 'Platagon'. Do you know it? You can create your avatar; you can create cartoons. For example, I use it a lot when teaching dialogues, question patterns, etc. Students create their own characters. They record the conversation in their own voice. They can also use the voice of the speaker there, but I want students to speak. It's good for listening. It's good for speaking. It's good for reading.

M4 also informed student teachers that when they start teaching, they can participate in worldwide platforms to learn new knowledge or keep themselves up to date:

M4: There is a training platform used by all Turkish and foreign teachers: E-twinning. Do you know about it?

ST17: No, hocam.

M4: E-twinning is an educational platform. We come together with teacher groups at home or abroad to prepare projects. We do these projects together with the students in the class. We have colleagues from various cities and abroad. We present our projects to each other. We share things or we offer our ideas about what we can do. We implement these projects with our students. This is also very useful. For children to practice.

Different from the examples above, M2 shared his knowledge on which aspects should be considered while preparing a powerpoint presentation for lectures. Mentioning the significance of using texts or visuals effectively in various meetings, M2 especially focused on the importance of giving references in one of the meetings.

This is the issue that especially our university professors care about in the world of science. It is expected to give reference for each sentence. Do you know what I mean? For example, it says, 'The teacher should integrate technology'. Okay, this is good. But what is the resource for this? You can either support it with quotes from the literature or put forward some data. Therefore, it would be great if you add references to the statements here (M2).

Emotional support was the second main code concerning offering support and encouragement. Mentoring affects teacher identity development by impacting teachers' self-confidence (Djoudir, 2019; Izadinia, 2016, 2015a; Ticknor, 2014) and self-efficacy (Cattley, 2007; Göker, 2020). In the present study, emotional support was offered in three ways.

Firstly, encouraging and approving student teachers' progress is strategy to develop student teachers' self-confidence, thus their professional identity (Izadinia, 2018). In this study, mentor teachers often stressed that they were content with student teachers' progress. Mentor teachers put into words that student teachers were good at various things such as planning a lesson, developing related materials, etc. The following example demonstrated that M2 appreciated student teachers' progress, and things that they achieved:

M2: Awesome, very nice. You did it very well. I really liked the images.  
ST8: Hocam, we researched for them a lot.

M2: You are already working very well; you are doing good work. Congratulations.

In the study, there were also times mentor teachers expressed that student teachers were quite successful. Mentor teachers implied that student teachers progressed very well. For instance, M4 utter acknowledged that student teachers progressed, and meant they worked harder than other student teachers: “Well done, well done. I sometimes wonder, does everyone work like you? You worked very seriously, you worked hard”.

M3 also appreciated student teachers’ achievements and especially emphasized the student teachers were different, in a good sense, from the typical student teacher profile.

ST12: Hocam, do you really like it?

M3: Yes, yes, quite nice.

ST12: Because I thought there were lots of missing parts.

M3: I know it is the difference of your university. I do not say anything else.

ST12: I am pleased right now. It was a pleasure to hear that from an experienced teacher like you.

M3: I believe that if you start working in a National Education institution, you will realize how different you are.

Secondly, recognizing student teachers’ prior knowledge and skills is another strategy to increase self-confidence and thus their professional identity (Izadinia, 2018). Mentor teachers in this study acknowledged student teachers’ knowledge and skills and acted accordingly. There were many incidents in which mentor teachers started explaining something and then stopped this since they were aware that student teachers already knew those things. For instance, M2 started sharing some knowledge related to mathematics such as natural numbers. Then M2 discontinued his sentence and said, “You already know this very well. You even know better than me. I will not go into that now”. Another example was that M4 recognized student teachers’ skills concerning asking critical thinking questions and reminded the student teachers of this: “You've done everything very well so far. You also formed questions very well. You already ask questions

that support critical thinking well. You, young minds, can do anything. I believe it. I think you can do better than me”.

Furthermore, mentor teachers realized student teachers’ individual skills and recognized these skills a few times through the meetings. For example, M1 realized ST1’s skills related to computer literacy. M2 often suggested benefitting from ST1’s skills while preparing the lesson plans. The following dialogue showed M1 recognized ST1’s talents:

ST1: If we gather all of the links in a folder, we can do what you say, hocam. We can write under it; we can also add a description.  
M1: Maybe, such things can be added.  
ST1: We’ll handle it, hocam, we can. I think we can.  
M1: (M1 calls ST 1’s name) Actually, you can do it. You are good at such things.

Thirdly, acknowledging mentees as teachers was a way to develop self-confidence, and thus their professional identity (Izadinia, 2018). Moreover, student teachers are in-between status; they are both teachers and students who are in the process of learning how to teach. When student teachers are recognized as teachers, they develop a sense of legitimacy. Being recognized by mentors and legitimizing their teacher status strengthens their professional identity (Chu, 2020; Djoudir, 2019; Izadinia 2015a). In this study, mentor teachers acknowledged student teachers as teachers. Namely, mentors considered student teachers as their colleague teachers rather than students who enrolled in a teacher education program. While addressing student teachers, mentor teachers often used the word “teacher”. For instance, M2 used words like “dear colleagues, dear teachers” while talking to student teachers. Even when M2 used student teachers’ names, he added teacher after the names, and said, “(Name of ST7) teacher, what do you think about this issue?”

Another example was that ST4 recognized student teachers as teachers in the meetings. The dialogue below exemplified M4’s acknowledgment of student teachers as colleagues.

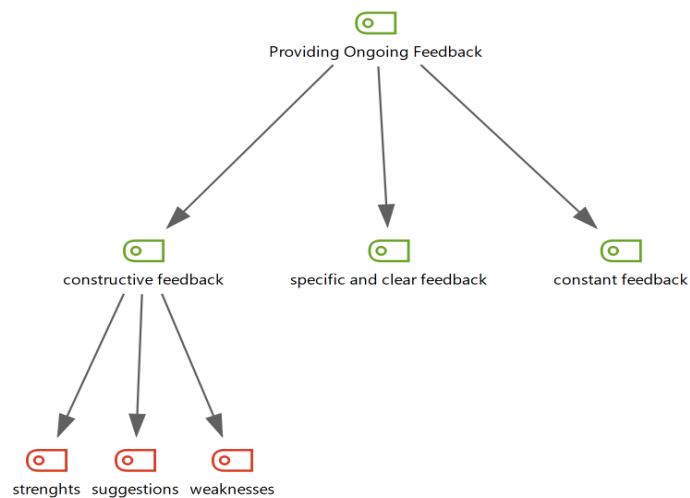
ST14: Thank you again for sparing time for us in between these busy schedules.  
M4: That is no problem. When young, qualified teachers like you ask for something, it's not okay not to do it.

In addition to calling student teachers as teachers, mentor teachers in this study acknowledged them as teachers by aiming to learn something from them. Namely, mentor teachers considered student teachers as teachers and verbalized that they wanted to learn from them. For instance, M1 said, “I hope to I can benefit from your ideas too because as I said, I have a lot to learn from you”. In the same vein, M2 also indicated:

I also want to learn from my (ST6's name) teacher, (ST7's name) teacher, (ST8's name) teacher. Know what I mean? Your thoughts and criticisms are very valuable to me. So, let's keep our WhatsApp group active in this direction. Let me learn from you (M2).

#### **4.1.3. Providing Ongoing Feedback**

Feedback influences student teachers' professional identity development (Beijaard et al. 2004; Djouidir, 2019; Ince, 2020). Ongoing feedback provided in the mentoring process affects student teachers' identity development. As student teachers get feedback from their mentor teachers, they acknowledge their strengths and weaknesses, evaluate their own practices, and increase their sense of self-awareness (Izadinia, 2018), which is a component of professional teacher identity (Izadinia, 2016). The analysis of the video recordings revealed that mentor teachers provided ongoing feedback and thus affected student teacher identity development throughout the informal mentoring process. Concerning this theme, three main codes were identified: constant feedback, constructive feedback, and specific and clear feedback. The codes were displayed in Figure 4.3



*Figure 4.3* Codes Related to Building and Maintaining a Strong Relationship

Firstly, constant feedback from mentor teachers is essential for student teacher identity development. Namely, the continuity of feedback enables student teachers to reflect on their own practices constantly. As a result of constant feedback, student teachers can reconstruct their learning and teaching. Also, constant feedback motivates student teachers since they realize the opportunities to develop their weaknesses (Izadinia, 2018). Student teachers in this study got constant feedback from their mentor teachers. For instance, the dialogue below captured the continuous nature of the feedback:

ST7: We talked about our objectives last week, if you remember. We have prepared several objectives based on your feedback. We would like to share these with you and get feedback on their final version.

ST8: As you can see, we have defined four objectives. If you want, let's examine them together.

M2: All right, let's get started.

Student teachers in this study felt a need to receive constant feedback throughout the meetings. In many meetings, student teachers and their mentors went through the previous weeks' materials or plans. Student teachers reminded their mentors of the previous weeks' feedback and asked to what extent they improved their materials or plans. For example, the following speech showed how student



teachers adapted their materials depending on the previous week's feedback and demanded feedback again from their mentors.

ST14: We have completed the materials and wanted to share the latest version with you again.

ST17: In this part of the slide, first our warm-up activity and then the definitions come. We actually showed you these before. You said that definitions might be insufficient. In addition to these slides, we have added detailed explanations for each of these five strategies separately.

ST14: Hocam, can you take a look at the slide again? (Then, M4 gives feedback to the revised version of the PowerPoint presentation).

The following dialogue was another example of mentors' efforts to provide constant feedback in the informal mentoring process. Namely, student teachers below got feedback for their warm-up activity in the previous meeting. In the following week, they shared the revised version of their warm-up activity with their mentor teacher one more time and asked for feedback again.

ST2: We decided together that we were going to show the photos of five different types of classes. We would ask students to share their ideas about classes and to discuss their advantages and disadvantages. After the feedback we received from you, we turned the activity into something like this. (ST2 shares her screen and explains the changes in the activity in detail). We thought that half an hour would be enough since students would do this warm-up activity in groups. Do you think it's nice?

M1: Unlike last week, it is much better to use visuals. Because If you had said things like, 'What would your dream classroom look like?', students would have thought of very different things. There are at least five examples here... (M1 provides detailed feedback).

Secondly, mentors' constructive feedback was identified another factor that impacted the professional identity development of student teachers in this study. The literature points out that mentor teachers can inform the identity development of student teachers by focusing on the strengths or positive aspects of the mentees' practices while giving feedback (Djoudir, 2019; İnce, 2020). While giving constructive feedback, mentor teachers should emphasize the achievements of the student teachers. However, it is also quite important to focus on weaknesses, too. Namely, when student teachers acknowledge their weaknesses, they gain a sense of self-awareness. Additionally, suggestions to

overcome weaknesses are another aspect of constructive feedback (Izadinia, 2018). In the present study, mentor teachers provided feedback related to the strengths, and weaknesses of the mentees' practices, and gave additional suggestions.

In terms of strengths, mentor teachers in this study provided comments related to the student teachers' lesson plans. They focused on the areas that student teachers are good at and highlighted these areas so that student teachers could clearly understand the reason why their activities or materials were suitable. Many instances were observed in which mentors' feedback were focusing on the strengths:

M5: I mean, I think the lesson is very detailed. It's also very interactive. So there are a lot of web 2.0 tools. It also addresses many skills: writing etc. Also, I think the most important thing is that it provides the objective of the course. Frankly, I think it's a well-thought-out plan. It was a lesson where you gave the necessary details of the topic and made an effective evaluation.

ST21: Thank you hocam.

In relation to giving feedback about the strengths, mentor teachers also highlighted the value of student teachers' tasks to teach their classroom management topics. For instance, student teachers prepared an interactive puzzle activity with visuals to teach some abstract concepts. Therefore, their mentor teachers emphasized that:

ST13: Do you think this activity is appropriate?

M3: It's beautiful. I mean, I think some terms are too abstract. Students really need to see some things. Normally, when the students do things by seeing, they progress a lot. For this reason, it is a perfect activity. Super.

The following feedback also demonstrated how a mentor teacher made positive comments on student teachers' choices while writing lesson plan objectives.

ST8: Hocam, we only prepared these objectives for our lesson. Do you think it is enough?

M2: (M2 reads all the objectives silently). There is no point in making too many additions. Overall, I think it's good. There's also this. Your objectives are pretty

inclusive. Therefore, the sub-objectives are already in them. There is no problem about that. I think, they are quite enough.

ST8: Okay, hocam, thank you very much, thank you.

Regarding the weaknesses, there were not a lot of feedback in the mentoring process. However, mentor teachers in this study focused on areas to improve when necessary. They discussed the weaknesses of student teachers' materials or activities. Without being demotivating, mentor teachers honestly shared their ideas. The following feedback was such an example:

ST2: (explaining how to start an activity) We asked a question like 'If you were a teacher, how would you design the classroom? Why?' We asked students to draw and write their explanations. Do you think this would be appropriate for the warm-up phase, or would you suggest something else? Adding a video, etc.?

M1: We're talking about attracting attention, right? When we get into the subject, we are talking about attracting everyone's attention to the objective you want to give. It didn't seem very remarkable to me. I'm sorry. Namely, the warm-up activity should be very crucial. I think we can find a better one with brainstorming. For example, what do I do in my lessons? (M1 gives various examples, and student teachers brainstorm for better ideas).

The following conversation exemplified a similar situation. Student teachers prepared a power point presentation for the lecture part of the lesson plan, and they wrote the definitions of some classroom management related terms. In relation to this, their mentor teacher focused on a possible weakness, and said:

ST21: Actually, these are strategies to deal with misbehaviors. We explained them on the slides because they are terms.

M5: There is no need to know much about these. You can already understand what the word is when you read it.

While providing feedback related to the weaknesses, mentor teachers raised awareness on why some activities or materials were not suitable. Namely, they made the student teachers understand the reason why they received feedback:

ST5: (speaking of wrap-up activity) We said we would prepare a summary ourselves and give this summary to the students.

M1: It would be a very classic thing.

ST5: Yes, traditional.

M1: Sure. They were doing it in 1960, too (student teachers laugh). Not very suitable for the current era. Do you understand? Now students are learning with more active activities.

Like the example above, M4 did not find a discussion activity appropriate for the lesson plan, so focused on the weaknesses while giving the feedback and explained why the activity was not possibly effective.

M4: Your questions are based on memorization. It is more important to make students think, to understand how much the subject is understood. (M4 reads the lesson plan again). Is fifteen minutes just for this activity?

ST16: Yes, only for this activity.

M4: This time is not enough. You have four questions. Everyone will say something. You will hear different answers. Students will argue over those answers. In order for fifteen minutes to be enough, you have to be fast.

While providing constructive feedback, there were many times in which mentor teachers offered suggestions as well. Mentor teachers suggested many activities to address the weaknesses or improve the student teachers' lesson plans. They sometimes explained what could be done. The following dialogue exemplified the mentor's suggestions to make the lecturing part of a lesson more effective.

M5: Now, did you prepare a word document about the things on this slide? I think students will like it. If you give a 1-2 page handout before the activity. Students can print it out, or they open the handout on one side of the screen. The handout and the slide go parallel. Students can take note of the handout. Students also have a nice notebook record to work with.

ST19: Ok, hocam, we'll add it later.

M5: It increases the workload in this way, though. However, I 'm sure it will be effective.

ST19: All right, hocam, I took notes about this.

Another mentor did not find students' activity effective enough as exemplified in the following dialogue. Although the mentor liked the idea of having a discussion activity, the way the activity was designed was not appealing for him. That was why the mentor suggested an alternative activity to improve student teachers' lesson plan.

You can ask a discussion topic. I agree with the discussion activity. But it might be good if we change the activity a little bit. Let's create different corners in the classroom: strongly agree, disagree, undecided, etc. Everyone can go to a different corner. Then, the groups talk among themselves. You can also allow transitions between groups after these discussions. For example, a student is in the 'I am undecided' group. But then he decides to join the 'I now agree' group.

You can listen to the students' ideas. This can be a very interesting and beautiful activity, especially for students (M2).

Moreover, a few mentor teachers suggested that some materials could be used in an online period, or they could be shared with students for self-study purposes. They reminded the student teachers that the lesson plans should be adapted according to various possibilities, such as an online teaching environment. For example, the mentor below recommended some adjustments related to the PowerPoint presentations that would be shared with the students after the lesson.

M1: You will not present this lesson in class, as I understand it.

ST3: We will not, yes.

M1: Then this activity would be homework. It might be good to add some more information here, as a link. You have some striking sentences on your slide. But it can be more useful if you add a link that directs to other resources.

Lastly, the literature points out that student teacher identity can be promoted when the feedback is specific and clear. Namely, getting detailed and precise information on the areas in need of development is beneficial for student teachers' self-awareness, thus, professional identity (Izadinia, 2018). There were various situations in which mentor teachers' feedback is quite specific and clear. Mentors paid attention to the many aspects while giving feedback, from grammatical to terminological issues. For instance, M1 even gave feedback about the sequence of the objectives after considering many issues related to how to write objectives in a lesson plan. The mentor stated, "I think your fifth objective should be at the top. Because it is our main objective in the lesson and so is our order of activities".

Another example was that after reading a case that would be shared with the students in the lesson, M5 realized a sentence was not grammatically correct. Then, the mentor helped student teachers to correct the mistake:

ST20: Hocam, we gave a different case to the students here.

M5: (M5 reads the case silently). Got it. Did you write the case?

ST20: No, no. We got it from a book, hocam.

M5: Did you take it directly?

ST18: Yes.

M5: I understand, because there are probably some cases and students in the previous part of the book. When you say 'another student' here, I don't understand.

ST19: Hocam, it is like this. Two different cases were given in the book, and another student was having a problem in the previous case. We chose this one because this second case is better. That's why it says 'another student'. But yes, it has been a rough transition.

M5: Yes. You know, it sounded like it wasn't written in very good English. It is clear that it is a continuation of a text.

ST19: Yes.

M5: If you want, you can write 'a student' instead of 'another student'.

ST19: (ST19 writes the sentence again and corrects the mistake.)

Similarly, M1 stressed that the instruction of the wrap-up stage was not explicit enough, so it was possible that student teachers' students would have some difficulties while doing the wrap-up activity. That was why the mentor gave specific feedback on the instruction and guided the students to make the instruction clearer:

ST2: We have prepared one exit card like this. Students will go to this page (Padlet). They will write down three things they remember about the lesson with their names, and the activity will end.

M1: (M1 reads the instruction carefully. The instruction is: Before leaving the class, tell us three things that you learned today.) When you say three things, do you mean three words? three definitions?

ST 3: Hocam, three things.

M1: Could it be a little more clear?

ST2: Actually, it can be three words or three sentences.

M1: Do you want three words? Or do you want students to explain three concepts they learned?

ST4: May some information.

M1: It would be better if you say what you want more clearly.

ST4: I understand, hocam.

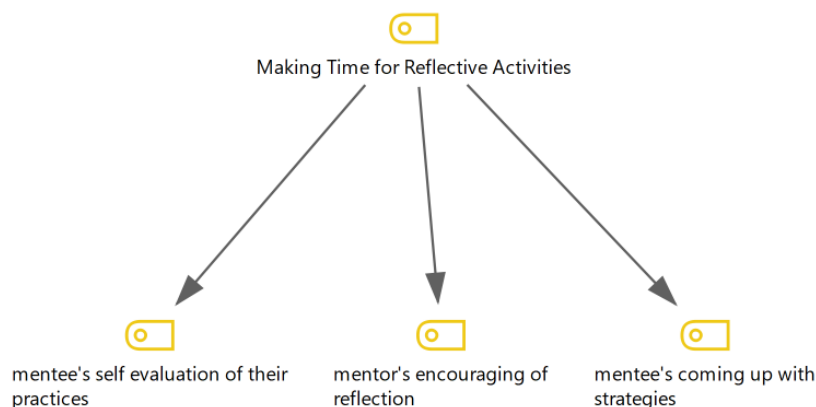
M1: For example, I would ask, 'Hocam, will I write word words?' if I were a student (Then student teachers write a more detailed instruction).

#### **4.1.4. Making Time for Reflective Activities**

Reflections provide opportunities for student teachers' professional identity development (Izadinia, 2013, 2018). Reflections on actions (Walkington, 2005a), reflective talk (Cohen, 2010), or joint reflection activities on sample lessons can be used to develop student teacher identity. With the help of self-reflection and

guided reflection activities, student teachers explore concrete aspects of teacher identity (Leijen et al., 2014). Furthermore, individual or collaborative reflections help student teachers identify their weaknesses, improve themselves, and find practical ideas or solutions (Izadinia, 2018).

The video recordings in the current study uncovered that mentor teachers and student teachers made time for reflective activities throughout the informal mentoring meetings. Three major codes were identified related to this theme: mentors' encouraging of reflection, mentees' self-evaluation of their practices, and mentees' coming up with strategies. The codes were presented in Figure 4.4. Student teachers' professional competence and teaching experience are restricted, so applying the reflection process might be challenging. Student teachers become reflective professionals as they are supported by others systematically and continuously (Yuan & Mak, 2018). In the mentoring process, mentors should be available to supervise the reflection process (Izadinia, 2018). In this study, the first code related to making time for reflective activities was the mentors' encouragement of reflection. Namely, mentor teachers encouraged student teachers to reflect on student teachers' own lesson plans or materials. Mentor teachers asked student teachers to evaluate their activities' strengths, weaknesses, or effectiveness. The following dialogue occurring in a meeting showed how M4 encouraged student teachers to assess whether or not their activities and lesson plan objectives were compatible.



*Figure 4.4* Codes Related to Making Time for Reflective Activities

ST15: Hocam, it seems like an objective is missing. Which one do you think is missing?

M4: Just think about it. Which one could be missing? Are there any objectives related to all activities?

ST17: Actually, it seems to meet all of them.

ST15: (ST15 refers to an activity on the powerpoint presentation). Any questions about it? The objective related to the third item?

ST16: There seems to be no activity or question about the comparison of individual and group work.

ST15: Is there a question comparing individual work with group work? I don't think it is.

ST17: It is.

ST16: The fourth objective says, 'The teacher organizes group work according to the number of students. There is a question about it. But it's not about the difference between individual and group work. The third objective is missing.

M4: Yes, you can also prepare a question about the third outcome (Then, student teachers and mentor teachers brainstorm questions related to the third objective of the lesson plan and revise the activity).

In addition to the reflection activities throughout the meetings, mentor teachers sometimes encouraged student teachers to reflect on their lesson plans or activities outside the meetings, too. They recommended that student teachers could evaluate the effectiveness of their lesson plans after the meetings and consider new ideas to develop these lesson plans. For example, M1 suggested that student teachers needed to think about their wrap-up activity after the meetings. They could evaluate the effectiveness of the activity from different perspectives.



M1: By the way, everyone can think about it until next week. I mean, what's good, what else we can do. Because sometimes it is necessary to think about our own plans and ideas. It may not come to our minds all of a sudden, but when you think about it, many things come to your mind.

ST3: Yes, that's right, hocam.

ST2: Then let's think about this idea and get ready until our next meeting. We will discuss this activity or new ideas at our next meeting.

Throughout the informal mentoring process, mentor teachers not only encouraged student teachers to reflect on student teachers' ideas or practices. There were times when mentor teachers encouraged students to reflect on one another's ideas. The following conversation showed M2 asked ST9 and ST 8 to reflect on ST6's idea.

M2: (talking to ST 9) Do you have anything in mind about the subject? What do you think of your friend's opinion?

ST9: Honestly, I need to think a bit.

M2: It's not a problem. (M2 calls ST8's name). So what do you think about this?

ST8: In addition to my friend's answer, I can say this. After creating a safe environment in the classroom, I think children of all levels will participate to some extent. The important thing is the safe space.

M2: I totally agree. Exactly. I want to add a couple of things to this too.

Mentor teachers also encouraged student teachers to reflect on their own (mentor teachers') ideas or practices. After sharing an idea or suggestion, mentor teachers asked student teachers to evaluate their own practices' strengths, weaknesses, effectiveness, etc. The dialogue below exemplified how M2 encouraged student teachers to reflect on a classroom management strategy he used in his class.

M2: How would you behave? So, for my behavior, do you say, 'Hocam, it was a very gentle behavior'? Or what do you think? I would really like to hear from you all.

ST7: Hocam, I can say. In the past, when our teachers got angry with us, we were hesitant. In fact, children now are not like us. They're feistier, and they're really confident. That's why it's good that you didn't react too harshly to the student in front of his friends. If you didn't do that, I think it would be terrible. I think it was a very good solution to calm the student and talk about it later. It was more effective not to take him seriously but to warn him, and sometimes to be really quiet towards the students. I don't know. what my other friends say but I think like this.

Secondly, mentees' self-evaluation of their own practices was identified as another code in the present study. An effective reflection that promotes a robust student teacher identity is about developing the habit of reflecting on practices or ideas constantly. Student teachers should identify the effective aspects of their own ideas or practices and add them to their repertoires. Similarly, they need to

reflect on their practices or ideas' ineffective aspects or weaknesses and point out the possible reasons for the problematic areas (Izadinia, 2018). In this study, a few student teachers started to develop the habit of constantly evaluating their ideas or practices. Unlike the reflections discussed in the previous code, they engaged in reflective talk without their mentors' encouragement. While sharing their materials, ideas, etc., student teachers did not simply explain the activity. They reflected on the activities' strengths or weaknesses. For instance, the following dialogue captured such a situation. Without M2's encouragement, student teachers explained why they thought their warm-up activity was effective. They reflected on the strengths of the visuals they chose by explaining the advantages for their future lessons:

ST8: (shares the materials related to the warm-up activity on her screen). I'm sharing right now.

ST6: Thank you very much.

ST7: Now, while we were doing these, we thought like this. In fact, we are all currently in a pandemic and online education. Therefore, it is important to draw the attention of the students, which we call preservice teachers, to this subject. At the beginning of the lesson, we will show photos to discuss classroom management in the 21st century. We thought it would make sense to talk about problems about classroom management.

ST8: Hocam, we will show these pictures. This is our first photo, this is our second... Finally, we have this photo. While we were choosing them, we thought they were really remarkable. In our opinion, pictures were very effective in attracting students' attention. Especially this one (On the photo, a teacher is all alone in a classroom. Her computer is on since the teacher is having an online lesson. However, every students' cameras are off). I liked it very much. Because I think it explains the current situation pretty well.

ST7: And it's actually quite effective for the motivation phase you just mentioned. (ST7 calls ST8'S name and says). Can you get to the first picture? (ST8 shows the image. On the picture, a teacher tries to do an activity, but none of his students listen to him. One student is sleeping on his desk. Another student is flying a paper plane in the class while a different student is sending some text messages with his mobile phone.) For example, it also allows us to ask good questions with this picture. What would the teacher do first when he came to the classroom? What could he do to get their attention? etc.

In the same vein, ST11 reflected on the effectiveness of their discussion activity in one of the informal mentoring meetings. ST11 emphasized that the way they planned the activity was successful because it was effective in terms of being compatible with the lesson plan objectives.

ST11: We wanted to do the discussion activity in this way. Because it is more useful to us. For example, let's say a student says two different things. Another student highlights two more differences. In fact, more than one difference will emerge. So, the differences will be discussed. Our second objective 'Creating awareness about differences', will be achieved in the lesson. Teacher candidates will have learned this difference.

Similarly, ST5 reflected on the strengths of their PowerPoint presentation. The student teacher discussed why the visuals and questions on the presentation were successful to teach their classroom management topic:

ST5: Now, we decided to go on with such a visual (a picture that shows the physical design of a classroom). A picture of the classic design. Instead of making a rapid transition, we added a question. (ST5 reads the question). What is the relationship between classroom management and the physical design of the classroom? Thus, our students can reconcile the two subjects. They should also have an idea about the subject in their minds so that they can make a good connection between the two issues. In our opinion, such a transition would be much better.

In this study, there were also times when student teachers reflected on the weaknesses of their materials or lesson plans. While sharing their materials, ideas, etc., student teachers emphasized the negative aspects, too. The following comments of ST 10 could be considered as an example.

ST10: I just realized this. We didn't spend too much time on the misbehavior issue. We just said that technology is good, nice. But there are also things about technology that can be really troubling. I realized that we didn't mention their negativities much. It's like a weakness.

ST13: Our aim is to find a technology that will make the student like the lesson outside of the lesson and increase the interest. I think this part is missing.

In a similar way, ST12 and ST11 reflected on the problematic areas of their rubric. Namely, they prepared a rubric for their lesson plans to evaluate their students' posters. The rubric had criteria such as subject knowledge, content, deadline. However, the student teachers thought their rubric had some weaknesses concerning the clearness of the requirements.

ST12: We couldn't prepare this content knowledge part well. Other criteria are clearer. Is there a grammatical error? Does it meet the delivery date? But when it comes to content knowledge and subject, things are a bit confusing. Evaluation criteria and what we teach in the lesson are not very compatible. Actually, we cannot evaluate technical things.

ST11: We cannot demand things related to font, color, etc.

The last code concerning making time for reflective activities was the mentees' strategies. A reflection activity that promotes a robust student teacher identity is not simply about focusing on strengths or weaknesses. So, student teachers should find some solutions or strategies after their self-evaluation, and then they should put these strategies into practice to test their effectiveness (Izadinia, 2018). In this study, student teachers made an effort to find solutions or strategies to deal with the weaknesses emphasized in reflective talks. For example, the reflective talk continued as follows regarding the rubric issue explained above:

ST11: What if we do such a thing? What if we give three questions to the students in this activity? Or what if they make a cartoon and a poster to answer these questions? Thus, for example, three points will be awarded if a student answers the questions correctly. If one of the questions is answered correctly, it will be two points. Thus, at least we evaluate the activity according to the answers to our questions.

ST12: Can you display our objectives? We can take a look. Maybe we can turn our objectives into questions. Because they are the objectives we want our students to get.

ST11: Yes that's right. I'm opening them right now. Can you see now?

M3: (Student teachers and mentor discuss the objectives). So what about the number issue?

ST11: Hocam, for example, we can do this. A student can divide the poster into two and draws the present on the left and the traditional on the right...

The following dialogue was another example. After reflecting on the insufficient aspects of the evaluation activity, student teachers suggested alternatives to make the lesson evaluation more effective and discussed these ideas with their mentor teacher.

ST17: There were some titles on the video, after the slides. In items. I wonder if we could take three of these items and make the fourth something very unrelated. We give one incorrect information. We expect students to find it?

ST14: It looks pretty rote-based. The students have to memorize all the items.

M4: What does the students have in their minds? It is necessary to evaluate what remains in the mind of the student. It could also be related to this video. It may also be related to the case. Aren't the questions all about objectives?

ST15: If we give another case, hocam? For example, there is a class of twenty students. The teacher cannot control the class.

M4: Of course, it would be better, actually.

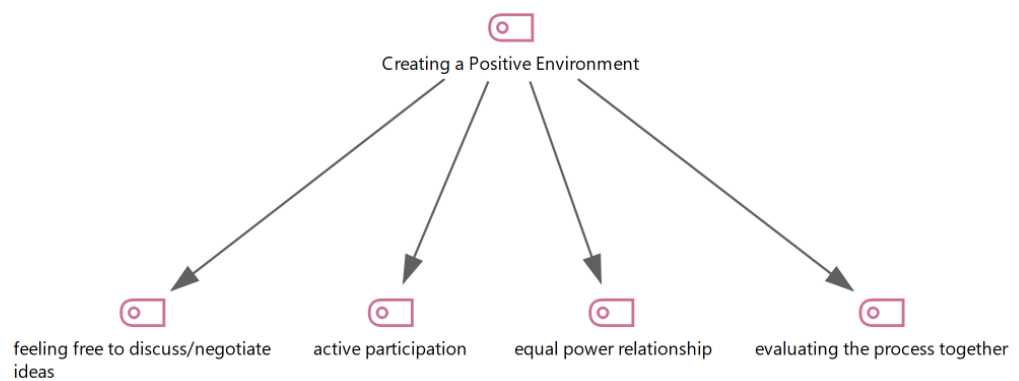
ST15: What if we gave such a case and asked, "Which ones do you think the teacher should apply?"

M: Is it applicable?

ST17: It can actually be a multiple-choice thing.

#### 4.1.5. Creating a Positive Environment

Creating a positive environment in the mentoring process contributes to student teachers' professional identity development. When student teachers work in a positive environment, they feel secure and belong. However, student teachers feel stressed, demotivated, or passive when the environment is stressful or displeasing. These negative feelings endanger professional identity development. On the other hand, a positive environment leads to a positive mentoring experience that contributes to professional teacher identity components (Izadinia, 2018). The video recordings in the current study revealed that mentor teachers and student teachers created a positive environment throughout the informal mentoring process, and four significant codes stand out related to this theme: equal power relationship, active participation, feeling free to discuss or negotiate, and evaluating the process together. The codes were visualized in Figure 4.5



*Figure 4.5* Codes Related to Creating a Positive Environment

Firstly, the power relationship in the mentoring process informs student teacher identity development (Izadinia, 2018; Ticknor, 2014; Yuan, 2016). When the power relationship itself does not characterize the mentoring relationship, student teachers strengthen their professional identity (Djoudir, 2019). Nevertheless, when the power relationship becomes the center of the mentoring

process, it jeopardizes professional identity development (Cattley, 2007). Negative experiences related to power relationships take apart student teachers' professional identities (Yuan, 2016) and make student teachers feel intimidated (Izadinia, 2018). The power relationship between mentor teachers and student in this study was based on equality. The mentor teachers did not have a top-down approach, so there was no hierarchy among the study participants. In the meetings, mentors especially emphasized that student teachers also need to direct the process. Their decisions or ideas were highly significant. Here M4 demonstrated such an attitude.

ST15: Thank you, hocam. Then we will talk about this in a detailed way again.  
ST 17: We can talk about these in detail a little later. What if we get feedback about what we have prepared from you first, hocam?  
M4: Okay, of course. Leave me a few Whatsapp messages on this subject, and I'll think about it a little more. In this process, friends, you have all the control. So whatever you want, we can do it. Be comfortable with that.

Being aware of the equal nature of the power relationship, student teachers and mentor teachers followed a co-decision procedure. They accommodated themselves to each other's ideas, decisions, or suggestions.

M2: Let's do it as you wish.  
ST 6: Hocam, is it okay if we look at those questions again in the next meeting? Is it suitable for you too?  
M2: Of course, why not?  
ST8: Thank you very much.  
ST7: We have about 10 minutes left before our meeting ends. It would be great if we could sum up what we're talking about right away.  
M2: Let's talk about events.  
ST6: Hocam, okay.  
ST8: Let me talk about the events. What activities can we do in the classroom about classroom management in the twenty-first century? We want to brainstorm about this with you.  
M2: It's okay.

Secondly, active participation was identified as another code in this study. The literature points out that when student teachers feel intimidated by their mentor teachers, they do not have an active participation, which affects professional identity development (Izadinia, 2018). For instance, the dialogue below was an

example of the active and enthusiastic participation of student teachers while deciding on an activity for their lesson plan. Namely, all student teachers brainstormed ideas, and shared these ideas with the rest of the group.

ST11: An activity will be prepared for wrapping up. But what could it be?

ST10: Should this activity be like summarizing the whole lesson?

ST13: Shall we design something that we can ask for your ideas? How would you do? Shall we ask such a question?

ST11: But we already gave our mentor's case, just like the activity.

ST13: What if we ask, 'If you teach an online course, what would you do as classroom management?' Or we say 'create a case after what you've learned? Two or three lines'.

ST12: What if we create a single concept map that summarizes the entire lesson? But it would be too wide now.

ST10: It takes such a long time too, so we need one activity of three-four minutes (The discussion continues for three-four more minutes. Then, student teachers decide on what to do with the help of their mentor teachers).

Furthermore, there were some incidents in which that mentor teachers encouraged student teachers for active participation. The next dialogue occurring one of the meetings showed how M2 asked realized that two student teachers were very active, but ST7 listened to her friends instead of sharing her own ideas. Therefore, the mentor encouraged ST7 to actively engage in the discussion.

ST6: Hocam, something came to my mind. We can make a poster and use it in the classroom. Also, my friend (referring to ST 8) had another idea.

ST8: Hocam, we can do an activity using the Kahoot application. We can see the students' perspectives.

M2: Of course, they can be. (M2 calls ST 7's name) Would you like to share your idea? What do you think?

ST7: I am a little pessimistic about the activities we have determined since we can't pinpoint the difference between the evaluation part and this wrap-up activity. I'm a little worried about whether they're suitable or not.

Concerning active participation, student teachers and mentor teachers also emphasized that they were not passive throughout the mentoring process. In the video recordings, there were instances of student or mentor teachers were making comments about their active participation. The following dialogue was such an example:

ST3: Everyone talked at the meeting. We all tried to be knowledgeable about everything.

M1: Yes, you were very active. It's obvious you've already worked.

ST1: We are working cooperatively, hocam.

ST2: Yes, hocam. And that was our favorite feature as a group. Everyone is trying to be active.

Thirdly, feeling free to discuss or negotiate was another code in relation to creating a positive environment in this study. When communication in the mentoring process allows student teachers to discuss their ideas openly, they feel “heard and recognized”. Therefore, mentor teachers should create an environment in which student teachers freely share their ideas to contribute to the development of a robust professional identity (Izadinia, 2018, p. 117). Student teachers in this study did not abstain from expressing their ideas. When they did not find an idea or suggestion reasonable, they openly shared their views. They not only pointed out the strengths of the mentor’s idea but also emphasized possible weaknesses. For instance, ST20 did not find M5’s classroom management technique very logical and suspected a possible weakness. Then, ST20 openly shared this with M5:

M5: Sometimes, I used to do this when there was a problem with classroom management. I discuss what the problem was with the students in order to be able to teach more comfortably in the next lessons. I dedicate at least one lesson hour to this. I say, ‘What is this problem? Is it related to administration? Is it related to your family? Is it about your teachers?’ It usually works. So this method is also good.

ST20: Hocam, aren’t students advantage this approach? Because when I think about it, it seems to me that this approach can be abused. Its effectiveness seems to vary from class to class.

M5: Of course, but then I was using other classroom management activities.

In a similar way, ST1 had some question marks related to one of M1’s classroom management suggestions. Namely, M1 suggested that if a student was misbehaving in class, a teacher could interact more with that student. The teacher could try to make the lesson more appealing for that student. Questioning this suggestion, ST1 openly shared her concerns and stated:



ST1: How did it affect other students when you paid more attention to that student, communicated more with him, and tried to make the subject more attractive to him? Wouldn't it have a negative effect on them?

M1: Other students are actually satisfied with the result. Because hardworking students are also disturbed by the misbehaviors of their friends. When everyone focuses on the lesson, they are also satisfied. But of course, I didn't think much of it from that angle. Maybe it can create some problems too.

Lastly, evaluating the process together was identified as a code to support the student teacher identity development in this study. The literature suggests that a positive environment is established when student teachers and mentor teachers have changes to evaluate the process together. That is why friendly discussions regarding the mentoring process, things that are working and not working are valuable (Izadinia, 2018). The analysis of the video recordings suggested that mentor teachers and student teachers talked about the mentoring process in their meetings from time to time. The conversation referred to such a situation:

M1: In our time, two or three hard workers were doing everything in group work. But you always shared something with me in turn. Everyone spoke at the meetings. I really like that you do this at meetings.

ST4: I also like to brainstorm together, it's effective.

M3 and student teachers had such conversations, too:

ST11: Thank you very much, hocam.

M3: You're welcome, my pleasure.

ST10: I think it was a very productive meeting. We did a lot of things, we discussed a lot.

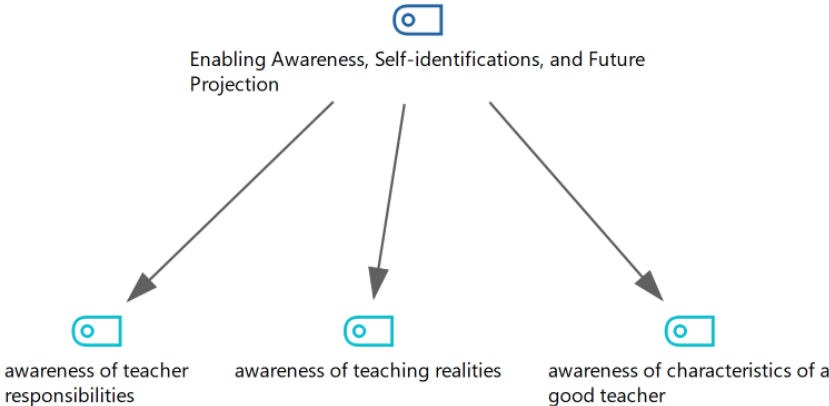
ST11: We started with the smallest, simplest thing to do. Then, by adding on, we came up with something cool. Well, I think this is beautiful. To be inspired by such ideas, or to exchange ideas.

#### **4.1.6. Enabling Awareness, Self-identifications, and Future Projections**

Mentoring affects teacher identity development because of its impact on teacher vision. Student teachers within mentoring relationships learn more about teachers' roles. Student teachers find out what a teacher really does and what kind of responsibilities a teacher has. They can even change what kind of teachers they want to be depending on these (Izadinia, 2016). Furthermore,

gaining awareness and perspectives strengthen student teachers’ professional identity (Ercan, 2020). Authentic narratives of experience rather than educational cliches or jargon are effective in developing student teacher identity (Alsup, 2004). When student teachers listen to in-service teachers’ voices, they question their preliminary beliefs about their future profession. Student teachers actively develop their professional identity because they reorganize their perception of how to be a teacher and get a teacher's perspective (Flores, 2014).

In relation to how the informal mentoring process works in terms of supporting teacher identity development, the last theme was enabling awareness, self-identifications, and future projections. Unlike the previous themes, it was not a part of Izadinia’s (2018) principles. Under this theme, three main codes were revealed: awareness of characteristics of a good teacher, awareness of teaching realities, awareness of teacher responsibilities. The codes were visualized in Figure 4.6



*Figure 4.6* Codes Related to Enabling Awareness, Self-Identifications, and Future Projection

Firstly, many beginning teachers encounter reality shock when they start their profession (Flores & Day, 2006). The reality in schools might be somewhat different from what teachers have learned during their student teacher education, so it is very significant for student teachers to get ready during their initial

education (Anspal et al., 2012). Mentor teachers in this study shared their experiences or ideas related to teaching realities, and student gained awareness about what their future profession might hold for them. For example, M4 emphasized that student teachers might not find enough time to do creative activities they planned, “In the lessons, you won’t have time to do these (referring to various interactive tasks). You have a curriculum to follow and a tight schedule”.

In the following comment, M4 also pointed out another teaching reality: the outnumbering sizes of classes. M4 emphasized that class size created problems at schools both for teachers and students:

For example, my class is 50 people. I am trying to manage a class with 50 students. How do I do it? Every child wants to attend the lesson. It is also very difficult to do this. The seating arrangement is also the same. It's hard for kids sitting in the back. Students always say that they cannot see anything. As a teacher, I have to see the children all the time. I have to constantly wander among them and follow their practices (M4).

Similarly, M2 raised awareness on the issue that student teachers would come across with various misbehavior at schools:

In the previous photo, one of the students was sitting at the table; someone else was eating something. So, you will see this environment in your classroom. When you start your career, you will come across such fantastic classes. In other words, you will experience the cases from the 'hababam' class. Because the classroom environment is a weird environment. Everyone is in their own world (M2).

Mentor teachers in this study also shared their experiences or ideas related to online teaching and raised awareness considering possible future scenarios. The following speech captured how M2 shares challenges associated with scoring in the online teaching period:

In the past, there was a more disciplined education system that distinguished between those who studied and those who did not. The current grades across Turkey are inflated grades. Unfortunately. Let me say this with an apology. In

other words, it does not reflect the full performance of the student. Especially in this online education process. The grades we give are not exactly the grades the student deserves. Why am I now afraid to give a low grade to the student? Do you know why? The student's parent is likely to knock on our door with many defense mechanisms (M2).

In a similar vein, M1 raised awareness on teaching realities related to economic issues. M2 said that many students lack computers and tablets in the online teaching period.

M1: My wife is also a teacher, and we have two children. Now we need 4 computers. In this era, when you think about it, can each family buy 4 computers?

ST3: No, it's not possible, hocam. Many people have already suffered from this.

M1: For example, we collected old tablets for the school where my wife works. Some of the students have tablets. The state was also distributing them, but it is like this. For example, there are 3 siblings, one of them get the tablet. Therefore, children suffer from this.

Throughout the mentoring process, mentor teachers also mentioned some realities considering their colleagues. For instance, the speech below was about how M3 stressed that some teachers in Turkey did not have computer literacy:

I think the best part of the pandemic was that most of our teachers were introduced to computers. I work in a central school, and the average age is very high. These people teach, but they have neither computers nor an interest in technology. There are smart boards in our school, but some of our teachers never use them. We have a teacher who doesn't even know how to turn on them... For example, I turned on the smart board in a classroom. A student said, "I turn on the smartboard. It is my responsibility". Other teachers did not know how to do it. Most teachers were eliminated during this online education process. There are too many retired teachers. Some still struggle with technology. For example, one of our teachers accesses Zoom from his phone, but he cannot hold the phone properly. He neither knows how to turn on the children's camera, nor how to turn off their voices. The teacher doesn't know about screen sharing or anything. He just holds the phone on paper, writing on paper like as if it was a blackboard. He expects 8-year-old children to listen to him for 30 minutes (M3).

Mentor teachers also shared their experiences related to their administrators. The following example was about administrators might not be helpful or fair in reality:

When I was a student, I thought that the administration would approach everyone in the same way or always try to help. After I started working, I realized that this was not the case at all. Administrators do not have the same approach to all teachers. Some administrators are more involved, though. Some administrations always tend to suppress the teacher so that there is no noise in the classroom and the peace of the school is not disturbed. Or they discriminate against teachers. For example, if some teachers are on good terms with the administration, the method of listening to those teachers, the approach to those teachers, and the approach of the administration to others are not the same. In other words, it can go to the point of mobbing instead of support (M5).

Secondly, student teachers in the study gained awareness considering a teacher's responsibilities. Mentor teachers shared their experiences and ideas about what a teacher did in reality and what kind of responsibilities a teacher was expected to fulfill. There were times mentor teachers emphasized that a teacher's duty was not only about teaching a subject. Teachers were expected to take responsibilities related to students' behavior development. M4's comment was in alignment with this perspective, "Now, there are some behaviors you want to teach students. We don't just teach knowledge. As teachers, we have a lot of responsibility. We teach respect. When we say respect, it is not sit-stand, stand-sit either".

M2 also emphasized that being a teacher was actually more than fulfilling teaching responsibilities. Teachers might assume various roles even when there was a tight curriculum to follow:

Here's our job. You become a psychologist in a way. You become like a mother and father, and you become a brother and sister. Also, a teacher. There is a curriculum that you have to complete in a certain time. I mean, it's not that easy (M2).

Additionally, mentor teachers stressed that school management might assign some tasks and assignments. For example, while discussing the evaluation issue with student teachers, M1 mentioned that his administrator expected him to prepare detailed reports considering students' evaluations.

For example, these evaluations are also the responsibility of the teacher. We have to prepare them and deliver them to the school administration. There is a format that I use myself and prepared in excel. For example, let's say I asked 20

questions in the exam. I write down how many points the students got for each question (M1).

Similarly, M1 stated that his administrators expected him to share exam answer keys with students immediately. He pointed out that this was a significant responsibility for him, “It is expected that the answers will be posted on the notice board right after the exam so that students can see the answer keys after the exam. So that's very important”.

Lastly, student teachers in the study gained awareness considering the characteristics of a good teacher. Mentor teachers shared their experiences and ideas on how to be an effective teacher. For instance, the following comments shows M2' ideas related to being an effective teacher.

The most important feature expected from our teachers right now is professionalism. The teacher should be able to explain the lesson very efficiently in the pedagogical sense. I want to share this with you. If you say, 'How can I be a teacher?' A good teacher is not one who knows 100 out of 100 knowledge; a good teacher has 70 knowledge but can reflect 68-69 of them to the student. S/he can enable students to learn. For example, a teacher knows 101 pieces of information but cannot give information to the student. Hence, s/he is not a good teacher (M2).

Similarly, M4 mentioned that an effective teacher should be good at time management.

Sometimes the bell rings while a teacher is teaching. This behavior is unprofessional. If the bell rings before the teacher says the last sentence or a student wants to go out quickly after the bell rings, this is a case of mismanagement of the classroom environment. It also means that the teacher does not use the time well. The most important thing a good teacher should pay attention to is the use of time. It's not about constantly looking at the clock. The important thing is to be able to plan time (M4).

M2 also shared how important to be trustworthy to be a good teacher and raised awareness on this issue.

Let's pay attention to one thing. A student in the class has a problem in his family. The student's friends do not know this, but the teacher does. Just as confidentiality was essential in the relations of the judge, prosecutor, or doctor, confidentiality was also essential in teaching. In other words, the teacher cannot

make comments like, 'This student's mother died, and this student's cat did something like this'. She cannot even tell these to a friend in the teachers' room. S/he can't even tell his wife/ husband. This point is very important. Why? One word leads another, the situation is heard at school. I'm saying for the adolescent group; this has very extreme results. That is, it can go as far as to end his/her life. A good teacher does not share private information with anyone (M2).

As the last example, M1 put an emphasis on the issue that a good teacher should meticulously prepare for the lessons.

What will I be doing tomorrow? What will I do? Everything has to be planned beforehand. In other words, you cannot be an effective teacher in front of children when you do not plan. There is a need to go to school with a plan. Which application will you do, from which course, from which subject, what do you need to do? You should definitely plan these in the evening. The teaching profession does not end when school is over. It continues until midnight (M1).

#### **4.2. What are the student teacher's perceptions considering the effect of the mentoring process on their professional identity development in terms of classroom management?**

Student teachers' perceptions considering the effect of the mentoring process on their professional identity development were identified under six main themes. (a) building and maintaining a strong relationship; (b) offering support and encouragement; (c) providing ongoing feedback; (d) making time for reflective activities, (e) creating a positive environment; (f) enabling awareness, self-identifications, and future projections. The results below were based on the analysis of semi-structured interviews with student teachers.

##### **4.2.1. Building and Maintaining a Strong Relationship**

The analysis of student teacher interviews revealed that student teachers and mentor teachers built and maintained a strong relationship throughout the informal mentoring process. Several student teachers articulated the strength of the relationship by referring to mentors' willingness to spend time throughout the meetings. For example, ST7 highlighted this issue by saying, "He really

devoted most of his time to us. He was able to include us in his plan that day, whenever we wanted. He never had a problem with the lengths of the meetings”. Similarly, ST2 stated:

Usually, we offered to meet our mentor in a very tight time frame. But he was adjusting somehow, not making excuses for anything. When we said let's meet at nine in the evening, he could come to the meeting at nine in the evening. He always accepted the meetings during this process and never delayed us (ST2).

A few student teachers mentioned that mentors’ willingness to spend time throughout the meetings was helpful for them. A representative comment included:

Overall, it was really helpful. For example, we did something wrong once, and we had two days left. Our mentor didn't have much time either. He was doing his doctorate; he had exams and projects. But he had come to the meeting right away, saying he would spare time for us. The attitude of our teacher towards us was also really nice. He said, ‘Ask anything you want to ask. It doesn't even have to be relevant. I have time, and we can talk’. So, we were asking about everything (ST6).

Willingness to spend time outside the meetings was another issue that student teachers expressed. Namely, several student teachers related their strong relationship with mentors by expressing mentors’ willingness to spend time outside the meetings. This issue was reported by ST20 as:

Our mentor told us to tell her what we would do in the meeting beforehand. For example, we were saying that we were going to talk about an introductory activity at this time today. Our mentor teacher was also thinking about the subject or doing research. We really liked that (ST20).

Student teachers emphasized that the mentoring relationship was not restricted to the meeting hours. Their relationship with their mentors allowed continuous communication. Their mentor teachers volunteered to spend time outside the meetings, both for mentoring-related and personal issues. ST5’s comments were as follows:



We were able to reach our mentor whenever we wanted, and we were able to arrange a meeting. Apart from the online meeting, we have set up a WhatsApp group. On there, he continued to guide us constantly. Also, our mentor said that he would take a university trip and come to our university as well. I thought what a good teacher he is. We only asked him to spare a short time, but he would even make time for a face-to-face meeting. He was a very good teacher in that respect. I loved this (ST5).

Furthermore, mentor teachers made time to learn their mentees' needs and expectations within the meetings. Student teachers uttered their wants and needs easily, and mentor teachers responded to student teachers' expectations. About this issue, ST19 pointed out, 'I'm glad we worked with that mentor teacher. Because she was fun. She understood very well what we expected and what we wanted to do. She answered our questions.'

In the interviews, student teachers also emphasized the conversations about daily life and chitchat concerning building and maintaining a strong relationship. Namely, mentor teachers and student teachers spared time for chitchat in the meetings. Concerning this, student teachers' comments included the following points:

He was a friendly teacher. He always asked questions about us. He also tried to chat with us. At the beginning of the meeting, he immediately tried to communicate with us instead of talking about the lesson plan, telling something, and leaving (ST1).

Sometimes we talked excessively. For example, we found ourselves talking about different topics. Our mentor teacher was often saying, 'What did you do today? What did you do this week? We hadn't seen each other for weeks. So, we were not just planning lessons (ST6).

We were chatting with our mentor teacher for five or ten minutes before starting the meeting. How we are, how it is going, etc. That's why our communication was very, very good. Video recordings were always in a conversational mood (ST 16).

Lastly, a few student teachers referred to opening about challenges and asking for help regarding building and maintaining a strong relationship. Namely, experiencing various challenges, student teachers asked for help from their mentors. Mentor teachers provided guidance on a variety of topics. ST 7

exemplified this by saying, “Sometimes we didn't understand something. For example, we couldn't understand the Turkish of a term. We were asking this to the mentor teacher right away: 'Hocam, we are going to do something like this, but we did not understand exactly what it was. Do you have an idea? Our teacher was trying to get us back to the WhatsApp group right away”.

#### **4.2.2. Offering Support and Encouragement**

All student teachers emphasized that their mentor teachers provided support and encouragement in the interviews. Firstly, many student teachers reported the mentors' instructional support. Several student teachers focused on knowledge related to instructional support. Namely, mentor teachers shared knowledge concerning various topics. For example, ST15 focused on this issue by saying, “We talked about the activities in general, but while talking about the events, our mentor teacher also gave brief technical knowledge about the subject”. ST6 also recalled that their mentor teachers shared knowledge related to Turkish terminology.

I realized that we do not have a good command of Turkish terms. I never thought that I would have this much difficulty in this matter. We were talking before the meetings about what the Turkish equivalent of a word is. Our mentor teacher taught us Turkish terms many times and tried to explain them (ST6).

Additionally, a few student teachers shared the mentor teachers provided subject area-related knowledge. For instance, ST2 mentioned M1 shared mathematics knowledge.

Since there were three mathematics teachers in the group, our mentor probably thought: They are also mathematicians, let's give some more content knowledge. He may have thought that it would be better if he gave us the information related to our field directly. Based on what he told us in terms of mathematics knowledge, I can say that he was a good teacher. He was very good; I think he was very knowledgeable (ST2).

Strategies was another issue that several student teachers articulated about instructional support. Student teachers mentioned that mentor teachers' instructional strategies on a wide range of topics. ST7 expressed that they learned classroom-management related strategies by saying:

It was productive work for us. Getting to know different teachers and benefiting from their experiences. We see how classroom management should be in our lessons. But I can say that the experiences shared with us, by a teacher who is currently teaching, showed us a way forward. We learned different strategies (ST7).

Student teachers highlighted that mentors shared not only successful strategies but also mentioned unsuccessful ones. To support this, ST6 exemplified:

For example, while forming an activity, he said, 'I made this, it worked very well. I had done something like this, and it didn't work very well'. Our teacher was not only sharing what he did well. At the same time, he said, 'I did something like this, I am aware that it is wrong'. He was criticizing himself without us telling him. We really liked it, too, because it actually showed us the differences very clearly. So, it was very useful (ST6).

During the interviews, a few students also pointed out specific strategies such as dealing with a particular type of misbehavior, evaluating students depending on the class profile, and engaging students with misbehavior in the lessons. ST15 specifically reported that their mentor teachers shared strategies related to students with special needs.

In every zoom meeting, she told the mistakes she made, the effective activities, what to do to attract attention, how to do to attract attention. For example, she told us how to assess an inclusive student's performance at a meeting, She told us we use a different evaluation. She talked about how we would adjust classroom environment when there are inclusive students or gifted students. I can say that I got more than I expected (ST15).

Similarly, ST20 recalled a strategy to engage students in the lesson. ST20 stressed she found this strategy effective.

One day, our mentor teacher's class had a math exam before her class. Our mentor told us about it: I came to the class; everyone was talking math. Then,

for ten minutes, our mentor talked to the students about the math exam. She got everyone's opinion. Then she said, 'I listened to you, let's go back to our lesson'. Everyone was back to class. This affected me a lot. The teacher said something like this: If you try to silence them by force, they will talk to each other. So let them talk to you. Instead of losing the whole lecture, let them speak for 10 minutes (ST20).

Secondly, student teachers stressed the psychological support provided by mentor teachers throughout the mentoring process. Encouraging and approving student teachers' ideas or progress was raised a couple of times during the interviews. Student teachers highlighted that mentor teachers' encouragement and approval considering their good performance motivated them. Representative comments involved:

I had a dream classroom design; I shared this in the activity I prepared. And it made me feel good that the teacher made a positive comment about it (ST1).

She liked the objective I prepared very much. She said, 'did you write this, did you think about it?' I think it's very good; it's nice to be specific. It will be helpful if you use this while teaching'. Hearing these from an experienced teacher motivated me (ST16).

Similarly, ST13 reflected her feelings when the mentor teacher was content with her progress and ideas. ST13 also recalled negative emotions when other teachers did not encourage her ideas or progress and compared this with her mentor's attitude.

The mentor teacher's comments were very nice, so sweet. We liked it a lot. We were even happy while preparing the activities. But, for example, I have heard harsher, more destructive words from other teachers in my other courses. At that time, I had the thought that the lesson should be over, no matter how many points the teacher gave; I did not care. But this did not happen in these meetings (ST13).

Similarly, the following example demonstrated that a mentor teacher appreciated student teachers' progress and things they achieved.

He told us this: Even when I look at what you've done, I can see that your university is different. In addition to the school where he teaches, our teacher was also working in a private teaching center. He said that they were accepting

graduates there and considering their knowledge and what they've done, they're not as good as us. I think it was motivating us all (ST1).

Given the emotional support issue, some student teachers also uttered that mentor teachers acknowledged them as teachers rather than students, and this situation made them feel good. For instance, ST5 stated that “Our communication was very good. We were like friends. And he always approached us like a teacher.” Similar to this, ST11 emphasized, “I think the mentor teacher actually taught us in a way, too. But she also knew that we are the teachers of the future, and she acted accordingly”.

From another angle, student teachers elaborated that mentor teachers wanted to learn things from them, which was another way to consider them colleagues. ST6 shared, “Our mentor wanted to learn something from us as well. He always said, 'If there's something I don't know, tell me'”. In the interviews, there were many instances that student teachers shared that they contributed to their mentor teachers by sharing their own ideas or practices. The following two comments exemplified this issue:

She also cared a lot about our opinions. We had prepared an assessment activity. She said, 'I'm using a different version of it, but this is nice too. Now I'll take it, I'll use it myself, just so you know.' She had such an attitude, and it felt so good to hear it (ST15).

She said that she couldn't use technological things well. But we have always done the activities using technological applications. The teacher told us that they could actually be used and she would also use them. In other words, we actually influenced the teacher (ST16).

#### **4.2.3. Providing Ongoing Feedback**

In the interviews, all student teachers stressed the ongoing feedback provided by mentor teachers. Student teachers commonly referred to the constant nature of the feedback. Namely, mentor teachers did not give feedback for the same materials only once. Instead, they went through the materials again and again. Receiving feedback, student teachers did necessary corrections or improvements.

Then they got feedback one more time in the next meeting. For instance, the following speech showed the continuous nature of the feedback:

For example, we were getting feedback from our mentor. When we made the corrections, we were asking our teacher again from the WhatsApp group. We were saying that we did such a thing, just so you know. Our teacher was looking at them again, examining them. For example, if there was something he thought was wrong, he would tell us. Or he was saying that you should add this. We had a lovely teacher (ST6).

The constructive nature of feedback was also raised a couple of times. As a common perspective, student teachers mentioned that their mentor teachers gave constructive feedback that emphasized the strengths, and achievements of the student teachers. Mentor teachers explained why the materials and lesson plans were effective. ST7 exemplified this issue by saying “Our mentor teacher always starts like this: Dear friends, firstly, this point is very nice, it was just right, because... Then, he continued to explain. Why the activity we prepared was good. I can say that he enlightened us a lot (ST7).

Student teachers also referred to the mentor teachers’ comments related to the weaknesses of their lesson plans in relation to constructive feedback. The majority of student teachers indicated that mentor teachers highlighted the aspects that the materials or activities were weak and explained the reason behind those weaknesses. Some representative comments were:

(referring to the mentor teacher) We definitely got feedback about what we presented to him. It's about both the good and weak points. Our mentor definitely explained why this was the case (ST1).

We've always progressed through feedback. We showed what we did and said: Hocam, we did it like this; we did it for this purpose. Do you think it is appropriate? Thankfully, she said the mistakes he saw (ST19).

Our teacher was looking and examining again and again. If there was something, he thought was wrong, he would tell us along with the reason (ST6).

Although mentors' providing feedback on weaknesses was the dominant perspective, one of the student teachers stated an opposite idea. Being in the same mentoring group with ST 6, whose view stated above, ST7 stressed that their mentor teacher did not provide any feedback on weaknesses.

Our mentor teacher gave us feedback on positive aspects of all the work we did. Actually, we were expecting a little more negative comment. Because we were aware that we would not be able to perform perfect work, maybe we could have improved ourselves more if our mentor teacher had made more negative comments. In other words, there were aspects of our plan that could be improved in some parts. But since we could not develop it, we left it as it was and presented it to our mentor teacher. However, since our teacher liked it very much in general, he offered different ideas instead of focusing on our activity's weaknesses. We tried to combine those different ideas with what we did. We actually had some problems with those issues (ST7).

In terms of constructive feedback, student teachers also emphasized that their mentor teachers provided suggestions to improve the lesson plans or to remove any weakness related to these plans. For instance, ST2 shared "The mentor teacher had already suggested that we use memes for the warm-up stage. There was an Instagram site that he said. From there, we were able to find memes quickly and it made our job easier".

In the interviews, student teachers explained how they adjusted their materials depending on their mentor teachers' feedback. Some student teachers mentioned that they asked for suggestions from their mentors. Some others also indicated that mentor teachers suggested alternatives without student teachers' demand. The related examples were:

We created a new case for the wrap-up activity, and we named it verbal reflection. Then we asked the mentor, 'how do you think this is?' The teacher said that it was a very negative example for the closing of the lesson. Actually, she told us the story was good, we wrote things that were in line with what she told us, but it was a negative example. She told us something positive and said, 'Write this positive example as well. Ask your students to compare the differences and similarities between the two'. When we thought about it, we said, 'Yes hocam, you are right, we never thought about it'. We thanked her (ST19).

As a last activity, we said let's focus on a problem related to our topic. Our teacher said that would be great too, but you might also use some visual. When we asked what that could be, he said, 'You can ask students to draw a picture or a cartoon about the classroom environment about the 21st century'. We really liked this. We even talked about it as soon as the meeting was over, when our teacher left the meeting (ST6).

Lastly, student teachers gave examples of the specific nature of mentor teachers' feedback. According to the student teachers, mentor teachers paid attention to various aspects of the materials and gave the related feedback. For instance, ST2 indicated that the mentor teacher gave feedback related to timing and even corrected the grammatical mistakes by saying, "Mentor teacher reviewed several of our objectives. He said, these objectives would be appropriate if there was one semester to teach the lesson, but there are too many objectives for a one-hour lesson'. Then we edited them together. There were spelling mistakes, he even corrected them".

Similarly, ST20 stated that their mentor teacher read the plans in detail and gave specific feedback.

We were showing the lesson plan to our mentor teacher, and she was reading what we wrote one by one. For example, she made some corrections in the questions we wrote for the case. Some parts were a little unclear. She read them all, one by one. Then she told us what we needed to fix. We also took notes, corrected them later and talked again at the next meeting (ST20).

#### **4.2.4. Making Time for Reflective Activities**

Student teachers stated they made time for reflective activities with mentor teachers throughout the informal mentoring process. They especially focused on mentors' encouragement of reflection considering this theme. Namely, mentor teachers favored reflective activities in the meetings. Several student teachers reported that mentor teachers asked student teachers to reflect on student teachers' own lesson plans or materials by considering the strengths, and weaknesses. For example, ST20 mentioned that the mentor teacher directed them to evaluate their lesson plan by asking some questions:



She asked us things about the plan that we had never thought of. For example, we were preparing activities, but we were not thinking in detail. He was saying things like, 'Such things could happen in this activity, what are you going to do?' We realized that we had never thought about what we could do. Then we evaluated the activities from different perspectives and discussed which aspects would be good in the classroom and which ones would not (ST20).

Similarly, ST2 said they started evaluating various aspects of their activities after the mentor teachers' questions. The mentor's questions were facilitator for the reflection activities.

We prepared an activity called one sentence summary. But the activity did not fit the course objectives completely. I explained the aspects that I thought I was right. Mentor teacher always asked questions. We discussed the event a lot depending on the questions. Then we looked at the compatibility of the activity with the objectives, we looked at the compatibility with the subject. And everyone agreed that we actually just needed to make a little change (ST2).

A few student teachers articulated that mentor teachers also encouraged them to reflect on mentor teachers' behaviors or strategies. In other words, mentor teachers shared their experiences or some made-up scenarios that student teachers might encounter in the future. Then, they asked student teachers to reflect on the practices in these experiences or scenarios in terms of their effectiveness. ST7 specially said:

There were times when our teacher also asked us about teaching. For example, he talked about his practices in the classroom, and he listened to our comments. Or he asked, 'What would you do if you encountered such a thing?' You know, these made us think a lot. It was a pretty good process in that regard (ST7).

Furthermore, one student teacher highlighted that the mentor teacher encouraged them to reflect on that day's meeting. ST6 stated, "If we had questions, our teacher would answer them one by one at the beginning or towards the end of the meeting. Sometimes he would return to us with questions like, 'What did you learn today?' Or he was asking in what ways the meeting was productive. Or the points we didn't like".

#### **4.2.5. Creating a Positive Environment**

Student teachers in this study emphasized the positive environment throughout the informal mentoring process. Student teachers generally discussed two main aspects: the equal power relationship between them and mentor teachers and feeling free to negotiate and discuss. Firstly, student teachers in this study highlighted that mentor teachers and they were equals in the meetings; there was not any hierarchy between them. They directed the process together and gave mutual decisions. For instance, while talking about having different opinions with the mentor teacher, ST19 mentioned that “Actually, we didn’t have much difference of opinion, but when we had, we found a common path, we adapted each other”.

In the similar vein, ST15 referred to mentor teachers’ attitude about the power relationship. The student teacher indicated that the mentor teacher never forced student teachers to do any change related to the lesson plans by saying, “While giving feedback, she never said such a thing, ‘Change it like this’ etc.; in fact, she said, ‘I think you can do that’. We made the decision”.

Secondly, student teachers in this study stressed that they felt free to express their opinions and negotiate ideas. A few student teachers highlighted how comfortable they were during the meetings:

I was already comfortable because I knew our mentor before, but my friends who did not know him were also comfortable from the first meeting. Other friends also expressed their opinions and asked questions in a very comfortable way (ST16).

I was able to express myself very clearly. I didn't have any hesitation. At the first meeting, my tension went away immediately. There was no problem with that (ST5).

Student teachers mentioned that they openly shared their views when they disagreed with their mentor’s ideas or suggestions. For example, ST7 recalled

that they did not like mentor teachers' suggestions related to the wrap-up activity, and they honestly shared this with the mentor:

There were times when the mentor's idea just didn't make sense to me. For example, we came to a meeting with an idea for the wrap-up part of the lesson. However, our teacher came up with very different ideas. Since we thought that these ideas would not be very appropriate, we stated this. Then, I said, 'Hocam, we had prepared a draft, we would like to share it with you'. Our teacher was also tolerant. In general, we were able to express our own ideas within the scope of the project. We did not experience any hesitation. We talked about whether something was right or wrong, or whether it was appropriate. In this context, we were good at communication (ST7).

One of the student teachers also stated that when they wanted to change something related to the running of the mentoring process, student teachers freely expressed this freely. ST15 indicated that, "For example, I mentioned this in one of our meetings. If we only talk about a certain area, friends from other departments may feel distant. Because it seemed like we were talking about the mentor's subject area. I expressed my own views to talk about classroom management in general (ST15)".

#### **4.2.6. Enabling Awareness, Self-identifications, and Future Projections**

The last theme that student teachers highlighted in the interviews was the enabling awareness, self-identifications, and future projections. Unlike the previous themes, it was not a part of Izadinia's (2018) framework. Furthermore, it was the most emphasized topic by student teachers. The informal mentoring process enabled student teachers to become aware of the realities of their profession and open a space for self-identifications and future projections about themselves as teachers. Concerning this theme, student teachers stressed two main things: awareness of the teaching profession and teaching realities and implications for student teachers' future practice.

Firstly, all student teachers mentioned that their mentor teachers raised awareness of the teaching profession and teaching realities. Namely, student

teachers became aware of different aspects of teaching. ST5 specifically stated that the mentoring process raised awareness on how significant and challenging the teaching profession was, and there were various things to consider:

In this process, I realized that my profession is very important and difficult at the same time. Because when it comes to teaching, I was afraid that I could not learn all the information or transfer the information to the students. That was my only concern. But now I realize that this shouldn't be my only concern. Because there is so much more in the background, I realized that the teacher spent not only forty minutes in the lesson, but much more. That's why I agreed with Atatürk once again about my profession. The next generation will be our work. It will indeed be so because we make a great effort. I saw it more clearly (ST5).

The interviews declared that student teachers gained awareness of various aspects of classroom management. Student teachers started to consider points related to classroom management that they had not even thought about. For example, ST20 pointed out that her mentor's advice raised awareness that being a strict teacher was not necessary to manage a class.

Before I did this project, I thought classroom management was a little easier. As far as I could see, the students were paying more attention to the teacher, who shouted a little more. However, a little more tactical progress is required. In the meetings, our mentor talked about these. In other words, it is not necessary to break the student's heart or shout. We need to reach a compromise. A little more understanding is also required. Because students don't learn from the teacher they don't like, I understood these better after this project (ST20).

In the same vein, ST6 articulated that the mentoring process provided awareness on that communication with parents, group work activities, home check routines, parent-teacher meetings were all parts of classroom management:

Actually, there are families in the classroom; I realized that. I actually realized how important my relationships with students are in classroom management. I can teach my lesson and go, but it doesn't really matter as long as the student does not understand or listen to the lesson in class. It was actually more than I expected. The situation of the class, the students' group work, the homework, whether to check the homework, talking to the families of the students, informing the families of the students' progress... For example, these were not classroom management for me. But it's all classroom management, so I learned this (ST6).

Similarly, ST13 stated that she was not aware of the effect on physical design or technology use on classroom management. However, after the mentoring process, ST13 realized decisions on these issues affect a teacher's classroom management:

I guessed that the physical design of the classroom would affect the student. For example, if a class has dark walls or if the rows are for 5 people, if it is crowded, these would affect the students. But frankly, I did not think that this would affect the teacher's classroom management. I didn't think it would affect student discipline. I thought that group work etc. was at the teacher's own choice. I didn't think it would have an impact on classroom management. The use of technology is also similar. So, for example, you use PowerPoint slides on the smartboard, I write directly on the board one by one. Before these interviews, I honestly did not think that they would impact classroom management (ST13).

Additional representative comments included:

The mentor teacher said that the classroom management changes according to each class according to each age. He said, for example, that he had 3 classes, but rules, procedures, and routines changed in all three. Because classroom management also differs from student to student. Some students know what they have to do. Some need a warning. I was surprised when he said that. I thought I could apply the same rules and procedures in every classroom. But it turns out that the process can be different in each class. It wasn't actually written in this textbook. It did, but it wasn't that clear (ST2).

I thought I could manage the classroom if I was authoritative. I thought that setting up classroom rules would only happen in elementary school. But I learned that classroom rules are something that should have occurred even in university. Because there may be students from different places and countries in the classrooms, I realized that rules could be unique and important because of this. Later, I learned that it is necessary to be a consistent teacher rather than being authoritative. For example, if I warn a student because s/he spoke, and if I don't warn another student when he/she speaks, it is not a good form of classroom management (ST5).

Secondly, student teachers indicated that the mentoring process had some implications for their future practices. After student teachers listened to or reflected on their mentor teachers' experiences or advice, they started thinking about what they would do in the future. They considered the cases that they would encounter when they start teaching, and made some articulations related to their future-selves. For examples, ST2 said, "I was going to say this about

myself. I have the potential to do something when faced with the situations my mentor mentioned. I know how to manage the classroom, how to apply strategies. I have foreseen these about myself. What kind of teacher would I become? I thought about that a little bit. I discovered these about myself”.

Several student teachers mentioned their mentors’ specific advice and added that they would benefit from it when they started teaching. For example, ST19 expressed the mentor teachers’ advice on student-teacher rapport and said how she would enact this advice when she starts teaching.

Our mentor joked with one of her students, but later apologized. After that, the communication between them progressed better. For example, I am shy about these issues. But our mentor told us about similar issues by giving examples both inside and outside the classroom. She said, ‘I have experienced such things, you can experience it too. Correct your mistakes, correct the negative things’. She said keep up the positive things, too. She mentioned that if our communication outside the classroom was strong, that child would respect and value us in the classroom and would also respect our lesson. This really stuck in my mind. I will not be very friendly outside of the classroom in the future. But how can I say, after I set that balance, I think that my communication with the students will be reflected positively in the classroom (ST19).

Apart from the advice, student teachers focused on their mentors’ strategies or activities, and their future teacher-selves would take advantage of these. The topics varied from classroom design to dealing with misbehavior. The following comments exemplified ST 5’s future identification in terms of classroom design and various activities.

In the future, I will definitely not use a classical classroom seating arrangement. Because now, after seeing my mentor's class, I definitely don't want to work in an ordinary classroom. Or rather, I don't want my students to work. So, when I go to class, I will definitely change the classroom design. Also, our mentor mentioned online applications. I would definitely use them too. For example, he said a lot of tools as exit cards. I will use all of them. Thus, my students learn these at a young age. Because when we were in high school, we never knew about such applications. That's why I would like my students to be familiar with them (ST5).

Student teachers indicated that they would at least give a chance to strategies that they learnt in the mentoring meetings. They would try to use these strategies in their classes. For example, ST13 planned putting a specific emphasis focus on class rules in the first meeting, and said:

I will definitely use the classroom rules. I'm not going to write down the classroom rules and post them on the wall, but I realized that the first impact is important. Therefore, in the first lesson, I will share certain rules and say that they must be followed (ST13).

The next comments also demonstrated that student teachers' benefiting from the mentors' strategies in the future. While the first example was about parent-teacher meetings, the second one was about the group work.

There is a matter of meeting with the parents. I am most afraid of meeting with the parents about the future. But in the meetings, we talked about holding a parent meeting at the beginning of the year. To tell our expectations from the parents and get their expectations. I don't know how much I can do, but I think these will be very useful for me in the future (ST20).

Based on these meetings, I can say the following. I will definitely use group work in class. Although it is difficult, even though it is difficult to evaluate, I think I will at least give it a try (ST19).

Lastly, a few student teachers pointed out that they changed their perspectives or practices after the mentoring process, and their future selves would also adhere to these changes. For example, ST6's comments captured that she would become a more self-confident teacher.

I was really afraid of classroom management. I was afraid of not being listened. Because I laugh too much. Actually, I realized that this is a normal thing. My own math teachers were getting a little angry, and sullen. That's why I was nervous about my students won't listen to me, what would happen, how I would manage a class, what I would do if I graduated and start working right away; I'm too young. But I learned that I really shouldn't show it. I don't have a lot of experience, but students don't know that. I have to be in class to gain experience. I will trust myself. Because if I don't trust, I can't do anything. I started saying, 'Yes, I can, why wouldn't I? I already know these things' (ST6).

ST19 also shared that she started improving herself in technology after the mentoring meetings. To become a more competent teacher, she focused on learning knowledge related to technological devices.

When something breaks in the classroom, I need to fix it. For example, when the computer breaks. Or I need to know what to do if a tool is not working. Otherwise, I will not have authority in the classroom. So, if I do not know something, especially about technology, especially in the eyes of children I would be an incapable teacher. That's why I'm trying to learn things about technology now. I'm trying to improve myself on this (ST19).

### **4.3. What are the student teacher's perceptions considering the effect of the mentoring process on professional identity development of student teachers in terms of classroom management?**

Mentor teachers' perceptions considering the effect of the mentoring process on their professional identity development were discussed under five main themes. (a) building and maintaining a strong relationship; (b) offering support and encouragement; (c) providing ongoing feedback; (d), creating a positive environment; (e) enabling awareness, self-identifications, and future projections. The results below were based on the analysis of semi-structured interviews with mentor teachers. Unlike the analysis of video recordings and student teachers' interviews, mentor teachers did not state the mentoring process affected student teachers by making time for reflective activities, so this theme was excluded.

#### **4.3.1. Building and Maintaining a Strong Relationship**

Mentor teachers referred to the strong relationship in the interviews. They mentioned that student teachers and they built a strong relationship and maintained it through the mentoring process. Two major aspects were discussed by mentor teachers under this theme: being willing to spend time outside the meetings, and conversations about daily lives or chitchat.



Firstly, mentor teachers stressed that they were willing to spend time even when they were busy with their own schedules. In other words, they were enthusiastic about creating a relationship and helping student teachers. The following comment exemplified this:

We created a WhatsApp group. In fact, I said, 'Friends, I work like an ATM works 24/7. Ask me questions'. I offered to discuss things. Let me be clear, this is something most of my colleagues would not want. Because my colleagues get tired during the day, they do not want to spare extra time outside of class. Even if they wanted to, they don't have the opportunity. That is because the teaching profession is heavy and tiring. But I said that 'I am not like that. I do not get tired; I do not run out of energy. You ask me; I'll explain as much as I know, as much as I can. I would like to share my experience with you' (M2).

In the same vein, mentor teachers volunteered to spend extra time and effort outside the meetings so that student teachers enrich or improve their lesson plans. For example, M3 stated that she spent time reading articles to better help student teachers. Also, there were times she provided feedback outside the meetings. On this issue, M3 said:

I researched as much as I could, even after the meetings. I read a few articles to get an idea about the subjects. For example, they sent me the file they prepared. I read the file, then I wrote what came to my mind in the WhatsApp group (M3).

Apart from these, M1 also expressed that they continued their relationship even after the lesson planning was over. M1 stated that he willingly continued to help student teachers via an online messaging application.

Meanwhile, we did not leave our WhatsApp group. We communicated after the lesson plan. There is a website called Wolfram. I was sent some information about it to one of the student teachers. If such a thing does not happen again during the year (referring to Covid-19 restrictions), I will meet them for tea in September (M1).

Secondly, mentor teachers highlighted that they strengthened their relationship with student teachers via conversations about daily lives. There were many instances when they spared time for chitchat. For example, M4 expressed that "I

mean, I was delighted. We always started every meeting with a conversation first. How are you? Are you okay? etc. So, the process went well”.

In the interviews, mentor teachers sometimes exemplified their chitchat with the student teachers. For instance, M2 talked about a chitchat related to a student teachers’ university entrance exam.

She said, ‘Hocam, I was very afraid of one of my teachers. I was studying hard so that he wouldn’t get angry. In fact, a friend of ours answered all the questions in the university exam’. I said, ‘I can say two things about it. One is that fear increases learning, so let this be our first hypothesis. My second hypothesis is that your friend passed the test because she was so smart. It wasn’t about your teacher’. We even discussed these (M2).

#### **4.3.2. Offering Support and Encouragement**

Mentor teachers focused on offering support and encouragement in the interviews. Firstly, mentor teachers believed that they provided instructional support on a wide range of topics. Mentor teachers generally referred to the strategies related to classroom management while mentioning instructional support. For example, M4 stated providing instructional support related to how to manage group work, how to increase participation, how to design an effective learning environment.

I gave information about how they should do group work. What should they do with students who do not participate in group work? What should we do with students who don’t have many skills? How can we involve them in group work? In which environments should we do group work? Or how should the classroom be designed for effective learning in the classroom? I gave a lot of information on these issues. They also benefited from it (M4).

There was also an emphasis on instructional support related to lesson planning. Mentor teachers focused on the strategies or essential points for lesson planning. For example, M1 pointed out:

In many cases, I tried to explain how I would have done something if it were me. Apart from that, I tried to help completely with planning. I mean, how they

will plan the subject they will teach. For example, I insisted on them, 'First define the terms and then use them. One by one, thinking about objective by objective. So, try not to give more than one thing together'. The most important part while teaching a subject is planning it. In this regard, I think they have already made some progress from the very first meeting to the last (M1).

In a similar vein, M2 stated that he focused on significant aspects related to time management and lesson planning stages, such as warm-up and wrap-up, in the meetings. M2 also especially emphasized that student teachers gained experience in time management after the mentoring process.

I especially emphasized that the main objectives should be given in the first 20 minutes and then there should be a general summary in the last 10 minutes. I tried to emphasize the stages of the lesson, such as pre-motivation, drawing attention, and wrap-up. I said that there is a preparation period that is needed a lot, especially in time management. Have the meetings contributed to student teachers? It certainly contributed. I think that my colleagues have already gained experience in time management (M2).

Secondly, mentor teachers in this study expressed that they provided emotional support for the student teachers; they tried to motivate student teachers. Concerning the emotional support, M2 explained how he tried to encourage student teachers by saying, "I was in a coaching role for our teachers, so I tried to motivate them. I tried to explain that teaching would not be that difficult and that they can be much more productive only after developing human relations, empathy and sympathy, and communication skills".

Similarly, M4 reported that she appreciated student teachers' development and often told this to the student teachers:

I saw their efforts, I said that I liked their hard work. I have always appreciated them; they were novice teachers who knew their responsibilities and cared about everything. That's why I said this to them at every meeting, every time, 'I am really happy that young teacher candidates like you work this way and attach this much importance to teaching' (M4).

Acknowledging mentees as teachers was another highlight of the interviews. In the informal mentoring process, a few mentor teachers declared that they

acknowledged the student teachers as teachers, rather than university students. Mentor teachers made an effort so that student teachers could sense this situation, too. For example, M2 shared he intentionally used the word teacher to address student teachers. The mentor teacher wanted to motivate them:

First of all, I tried to establish a friendship. I mean, I said, 'I'm a teacher, and you're one of us (referring to teachers)'. In fact, I always called them 'teacher'. Because when I was at university, I was very happy when someone called me 'teacher'. I wanted them to experience that happiness too, so that I can motivate them. It's a rude term, but I wanted to fire them. Actually, I like to say teacher because in my meetings they were teachers all the time (M2).

Mentor teachers also stated that there were times student teachers assumed their teacher role and taught things to them. In service teachers emphasized student teachers' this role in the meetings. M1 said that he specifically shared this with student teachers:

I also learned a lot from them. So, for example, I showed them some ways or told them some web pages. But they found more. I have learned the alternatives. So it was a mutual process. I mean it was the learning phase. That's why I mentioned this to the students at the last meeting. I had such a talk with them, they taught me a lot (M1).

### **4.3.3. Providing Ongoing Feedback**

In the interviews, mentor teachers commented on providing ongoing feedback. Mentor teachers laid stress on three main characteristics of their feedback: constructive feedback, specific and clear feedback, and constant feedback.

In terms of constructive feedback, mentor teachers stated that they gave feedback so that student teachers could develop their lesson plans. There were times they focused on strengths and weaknesses. However, all mentor teachers especially mentioned that they provided suggestions. M1's comments on this issue were following:

I also emphasized when I saw a weakness. For example, I did not like the first warm-up activity. Of course, I didn't say I didn't like it. I offered things like, 'If you do this, it would be better'. Then, they discussed this (M1).

In the same vein, M3 stated the constructive nature of the feedback. According to the mentor, the feedback was effective for student teachers to improve the weaknesses in their lesson plans. The following comments exemplified how the mentor provided constructive feedback related to the first activity (M3).

I gave feedback to develop them. For example, the first activity seemed very simple to me. I gave feedback like, 'You can do it like this, this is very ordinary. You can add a different activity'. I gave ideas. I think they also paid attention to them somehow. Because we made evaluations together, I saw the materials on the screen. I think we had a productive time (M3).

In terms of specific and clear feedback, a few mentor teachers pointed out that they provided quite detailed feedback so that student teachers can precisely understand their strengths and weaknesses of their lesson plans. For instance, M2 indicated "I gave feedback on each of the things our prospective teachers have prepared. Of course, my feedback is not a sentence or two. Let me be frank, my friends are definitely satisfied with the feedback. They may even say that I have told too much".

Mentor teachers also indicated that student teachers received feedback for different aspects of the lesson plans. It was not only about the staging of a lesson, or the materials developed. For example, M5 exemplified that she even gave feedback concerning the punctuation or the effectiveness of online tools by saying, "For example, let me put it this way, even when I saw a simple spelling mistake, I asked, 'Is it correct, are you sure?' Or, for example, I said, instead of this tool, there is another tool".

In terms of constant feedback, mentor teachers stated that they provided feedback continually in the meetings. The meetings were based on feedback. Furthermore, once they gave feedback to a material, student teachers did the required changes and asked for feedback one more time. M3 exemplified this issue follows:

Whatever I said, they immediately took notes, especially important sentences I said, and after taking notes, they prepared and brought them to the next meeting time. Since they took notes, I could see that they worked more regularly and in a planned manner. In other words, every time we talked about a different application, they were returning as implemented. At our next meeting, they were presenting it to me again and asking for feedback. I really liked it too (M3).

Similarly, M5 shared that student teacher received feedback constantly in the mentoring process. The example provided by M5 was:

As I went over each material, I gave feedback at that moment. I didn't leave it for later. They always took notes too. In our next meeting, they said the things they changed, in line with my feedback, and showed both the old version and the new version. Then we talked and compared them again (M5).

#### **4.3.4. Creating a Positive Environment**

Mentor teachers described the mentoring meetings as a positive environment in the interviews. They emphasized two main issues related to the environment: equal power relationships and feeling free to discuss or negotiate.

Mentor teachers stated student teachers and they created a positive environment based on equal power relationships. They did not have a top-down approach, so there was no hierarchy among them. Mentor teachers were not the decision-makers, and everybody's ideas were equally significant. M1's comments reflected this side of the mentoring process:

I never said 'let's do this, let me tell you that first.' I just came up with an idea. We discussed it together and came to the next meeting after some reflection on the subject we were discussing. More precisely, the students came with suggestions. Other than that, I never said anything like, 'let's do this or do that'. I only mentioned possible alternatives (M1).

In a similar vein, M2 pointed out he made an effort to make student teachers feel comfortable. By benefiting from humor, M2 aimed that student teachers would not refrain from him and no hierarchy would occur among them. The related comments were:

I was making jokes from time to time, just to have fun. I was saying, 'I'm young too; 'don't treat me like an old man'. Of course, these are jokes. I wanted to create a sincere environment, and I wanted to create a synergy. This is how I approached it. Frankly, I didn't want authority, a shyness. But they were such ladies, too. They were all very respectful and very careful. So, they didn't say, 'What's up, dude?' It was also very nice that they were able to adjust the dose of sincerity (M2).

In terms of feeling free to discuss or negotiate, in-service teachers indicated that student teachers and they could openly express their ideas in the mentoring environment. Everybody discussed ideas openly, there was an open communication. For instance, M3 stated that "We talked very freely. I mean, I said everything, my opinions openly. They told me the same as well. They comfortably said let's do this, let's do that."

M5 highlighted that she tried to create an environment in which everybody could share their ideas honestly and added that the positive environment improved as student teachers and she knew each other better.

I felt very comfortable, and I expressed my thoughts very comfortably. As much as possible, I tried to make them more comfortable with me or while explaining the course materials. Of course, as time went on, as our sincerity increased, the things they asked me or wanted to share with me increased. You know, the first meeting was a little more formal. But over time, they also expressed themselves more easily (M5).

One of the mentor teachers also recalled an instance in which student teachers did not abstain from honestly criticizing their mentors. Namely, M2 mentioned he announced exam results in the class. When student teachers did not find it effective, one of them openly shared her views. She emphasized the weakness of the mentor's behaviour.

The reaction of my teacher candidate friend was as follows. She said, 'I wish you hadn't read the exam grade in the classroom. The child may have been offended by his grade in the classroom environment'. That was a nice approach, and it was a counter-argument. She criticized my behaviour, and I explained the situation transparently (M2).

#### **4.3.5. Enabling Awareness, Self-identifications and Future Projections.**

The last theme that mentor teachers stressed in the interviews was the enabling awareness, self-identifications and future projections. Unlike the previous themes, it was not a part of Izadinia's (2018) framework. Concerning this theme, mentor teachers stressed two main things: awareness of the teaching profession and teaching realities and implications for student teachers' future practice.

Firstly, all in service teachers highlighted that the mentoring process possibly contributed student teachers since they raised awareness of the teaching profession and teaching realities. In other words, student teachers realized or confirmed various aspects of teaching profession when they shared their own experiences. For example, M1 explained this issue by saying, "I think it can be very positive for them, and even better when it becomes widespread. Because, as teachers at the field, we explain the situations we encounter to them in a way. It can be even more enlightening for the future".

Similarly, M3 emphasized that student teachers learnt about the situations that they would encounter in the future, and what could be done in these situations by saying:

I think that getting ideas from a working teacher gave them some ideas. What can happen, what can be done? They saw a different perspective. We talked about some of my experiences. I think that some of the incidents I have experienced will definitely remain in their minds (M3).

M5 specially reported that student teachers raised awareness of various teaching environments, student profiles, parent profiles, or colleague profiles. The mentor recalled that she did not have any chance to learn about being a teacher in a village when she was a student teacher:

I think this process had a very positive effect on teacher candidates. Let me say this. The environment, student profile, parent profile, and even teacher profile that each teacher will encounter when they start their profession is different. In



these meetings, they had at least an idea about different environments. For example, I was a village teacher until 3 months ago. I talked about many situations that I had experienced in the village. When I was a student, none of our instructors talked about such a situation. So, I tried to provide such an angle and point of view (M5).

Secondly, mentor teachers indicated that the mentoring process had some implications for student teachers' future practices. Namely, when student teachers encounter a similar situation, they could benefit from their mentor's experiences and advice.

If you ask what about the student teachers? The advantages for them can be as follows. They can say, 'Our experienced teachers are doing like this'. So, they may interpret, 'I am not competent on this subject'. It will also provide a great advantage for them, especially in terms of experience. Our prospective teachers will start the profession without thinking about some details. But in these unprepared situations, these suggestions of experienced teachers will be a solution for them (M2).

In the same vein, M3 recalled that student teachers themselves mentioned that they would use some of the strategies and explained, "They have already said it themselves, 'We learned a lot; at least when we started teaching, we will keep these in our minds and apply them'. They were really involved".

#### **4.4. Summary of the Results**

The analysis of the video recordings and semi-structured interviews with student teachers and mentor teachers indicated that mentor teachers used six principles that can potentially inform student teachers' professional identity development. These principles were building and maintaining a strong relationship; offering support and encouragement; providing ongoing feedback; making time for reflective activities, creating a positive environment; enabling awareness, self-identifications and future projections.

To start with building and maintaining a strong relationship, data analysis indicated that mentor teachers and student teachers built a strong relationship

and maintained it throughout the informal mentoring process. Being willing to spend time; conversations about daily lives/chitchat; conversations to get to know mentees' needs and expectations; trusting and opening about the challenges and asking for help were identified as the related codes.

Secondly, mentor teachers in this study provided support and encouragement throughout the informal mentoring process. Instructional support and emotional support were related codes. While instructional support involved knowledge and strategies, emotional support was about encouraging and approving mentees' ideas or progress, recognizing mentees' prior knowledge and skills, and acknowledging mentees as teachers.

Thirdly, mentor teachers in the present study provided ongoing feedback. Concerning the nature of the feedback, constant feedback, constructive feedback, and specific and clear feedback were identified.

Fourthly, data analysis revealed that mentor teachers and student teachers spared time for reflective activities throughout the meetings. Mentors' encouraging of reflection, mentees' self-evaluation of their practices, and mentees' coming up with strategies were identified as related codes.

Fifthly, mentor teachers and student teachers created a positive environment throughout the informal mentoring process via equal power relationships, active participation, feeling free to discuss or negotiate, and evaluating the process together.

Lastly, the informal mentoring process enabled awareness, self-identifications, and future projections by creating awareness of characteristics of a good teacher, teaching realities and responsibilities. Also, student teachers gained self-identifications as teachers and had some implications for their future practices.

## CHAPTER 5

### DISCUSSION AND IMPLICATIONS

The purpose of the present study was to investigate how an informal mentoring relationship among student and mentor teachers has worked to support student teachers' professional identity development. The study also aimed to explore the potential of this mentoring process on student teacher identity development from the perspectives of student teachers and mentor teachers. This chapter seeks to discuss the results of the present study. Afterward, implications for practice and further research are presented consecutively.

#### 5.1. Discussion of the Results

In this part, the present study results are discussed in light of the relevant literature. The following sections include the discussion of results concerning six themes created from the analysis of the video recordings, student teachers' interviews, and mentor teachers' interviews. First, related results are integrated and summarized and then they are discussed under the themes (a) building and maintaining a strong relationship; (b) offering support and encouragement; (c) providing ongoing feedback; (d) making time for reflective activities, (e) creating a positive environment; (f) enabling awareness, self-identifications, and future projections. To understand how the informal mentoring process worked, if any, in terms of supporting the student teachers' professional identity development, the findings were analyzed and discussed based on Izadinia's (2018) five principles of mentoring practice to support student teachers' professional identity development and with a new principle added.

The present study pointed out that informal mentoring process included the principles which had the potential to support student teachers' professional

identity development according to the framework adopted (Izadinia, 2018). This result is in line with the recent studies that highlighted mentor teachers were the significant others who were influential in the teacher identity development process (Cameron & Grant, 2017; Henry & Mollstedt, 2021; Izadinia, 2015a; McIntyre & Hobson, 2016; Yuan & Mak, 2018). Similarly, Cohen (2010) pointed out that interacting with other teachers through planned meetings allowed the development of satisfying professional identities because of the non-classroom-based interactions outside the classroom. In this study, student teachers' interactions with mentor teachers outside their education program is found to be potentially influential on their professional identity development.

The study results indicated that mentoring process had the potential to affect student teachers' identity development in six ways. Firstly, the results pointed out that a strong relationship built and maintained in the informal mentoring process informed student teachers' professional identity development. In the literature a strong relationship between the mentor teachers and mentees reported to be important in terms of mentees professional identity development (Izadinia, 2015a, 2018). For example, in her study, Izadinia (2015a) mentioned that a student teacher lacked rapport and personal connection with his mentor teacher, therefore his professional identity development was affected negatively. The student formed an 'identity of non-participation' since he was not valued. In their study, Rajuan et al., (2007) found that student teacher substantially needed to form a personal relationship with their mentor teachers. The researchers highlighted that "finding time for them" and "being available" were indicators of a good personal relationship according to the student teachers in the study. Thus, student teachers could develop their teacher-selves comfortably, and confidently. Student teachers and mentor teachers in the present study were enthusiastic about creating a strong relationship and helping each other.

In video analysis of the mentoring process and both in student and mentor teacher interviews, it was observed that they allocated time for each other, both throughout the meetings and outside and they also were willing to spend more

time than initially planned. In all the data sets, there were findings indicating that mentor teachers ensured that they would not be disturbed to spend additional time, so student teachers could easily get in contact with them, which indicated their commitment and the strength of the relationship they have. As when mentor teachers work in a full-time position, it is not easy to allocate time for mentees (Hudson & Hudson, 2010). The literature includes studies in which mentor teachers give insufficient time or no extra time for mentoring (Tomlinson et al., 2010). Walkington's (2005b) study reported that spending time for student teachers was perceived as an extra task requiring long hours by in-service teachers. Even when in-service teachers had the desire, they could not spend time, energy, or resource. Similarly, in their study, Hobson and Malderez (2013) stated that some mentors did not or could not allocate sufficient time for their mentees. However, this was not the case in this study. Most probably student teachers in this study felt valued depending on mentor teachers' willingness to spend time. Therefore, they got more comfortable to actively engaged in the informal mentoring process and benefitted more from the mentoring.

Concerning building and maintaining a strong relationship, Izadinia (2018) suggested, even small chitchat made a difference, and student teachers felt more included and welcome in the mentoring process. The results of this study also indicated that mentor teachers and mentees spared time for chitchat, or conversations related to their daily lives, too. Having this kind of talk/relationship with their mentor teachers would signal student teachers that they are able to connect with the members of the professional community and therefore enable them to feel more welcome to the profession (Izadinia, 2018). Video analysis pointed out that mentor teachers in this study made time to chitchat. They also learned their mentees' needs and expectations in detail at various stages of their meetings and accommodated their knowledge, approaches, experience, etc. and the student teachers also stated their expectations and needs. This finding was also supported by the student and mentor teacher interviews, in which participants mentioned that they had a very effective communication in terms of expectations form each other. This open

and clear communication could positively impact student teachers' identity development (Izadinia, 2015c).

Secondly, the analysis showed that mentor teachers in the present study provided support and encouragement throughout the informal mentoring process and positively affected student teachers' professional identity development. This result is congruent with Djoudir's study (2019) that found that emotional and psychological support by mentor teachers increased teachers' motivation and confidence considering their future careers. Another similar finding was reported by Ticknor (2014) who stated supportive mentoring relationship increased student teachers' confidence, thus was helpful to develop their professional identities. Video analysis in this study revealed many instances during which mentor teachers offered support and encouragement and congruent with this finding the student teachers mentioned that they had received adequate support that also supported their professional identity development, contrary to the results of the Cameron and Grant (2017), which reported that the mentoring relationship negatively affected the professional identity development of six teachers because the mentors did not provide adequate support.

In this study, the findings indicated that mentor teachers were able to offer instructional support as could be seen in the video analysis and as reported by student and mentor teachers during the interviews at the same time. Offering an appropriate level of instructional support has the potential to nourish student teachers' identity development (Izadinia, 2018). The instructional support offered by mentor teachers were mainly on instructional strategies and found to be very effective by the student teachers. This is in line with other research studies that reported student teachers learnt about pedagogical issues (Chu, 2020; McIntyre & Hobson, 2016), practical information, tactics (Tokoz-Göktepe & Kunt, 2020) in the mentoring process and this promoted their professional identity development (Chu, 2020; McIntyre & Hobson, 2016; Tokoz-Göktepe & Kunt, 2020). More specifically, Chu (2020) indicated that some student teachers in his study learned about pedagogical issues and classroom management

techniques by the help of mentoring, thus increased their self-confidence about being a teacher. Similarly, Tokoz-Göktepe & Kunt (2020) reported that mentor teacher in their study promoted a student teacher's professional development by providing some tactics and practical suggestions based on his own experience. Like the current study, Anspal et al. (2012) emphasized that student teachers developed their professional identity as mentors supported them and they acquired information related to strategies from the mentors. It is highly possible that in this study the student teachers have strengthened their professional identity through these instructional strategies. Learning about strategies, especially about classroom management, they would start their future profession more confidently. The video recordings revealed that student teachers gained knowledge on various topics such as their subject matter and online tools. This aspect of the mentoring process was mentioned by student teachers, and mentor teachers too.

The results showed that emotional support in addition to instructional support provided during the mentoring process has the potential to affect student teachers' identity development. Some research in the literature showed that emotional support provided by mentor teachers strengthened student teachers' professional identity since it increased their confidence (Djoudir, 2019; Lynn & Nguyen, 2020). In this study, the findings of the video analysis and interviews showed that providing emotional support occurred in three ways: mentor teachers' encouraging and approving mentees' ideas or progress; mentor teachers' recognition of student teachers' prior knowledge and skills; mentor teachers' acknowledgment of student teachers as teachers. As Beijaard et al.'s (2000) emphasized motivation can function as a resource for teacher identity development.

One of the most outstanding aspects of the mentoring process that has the potential to positively affect student teachers' professional identity was acknowledging student as teachers. All mentor teachers considered student teachers their colleagues rather than students who enrolled in a teacher education

program. A few mentor teachers specifically addressed student teachers using the word ‘teacher.’ Various research studies in the literature identified similar results. For example, Chu (2020) concluded that being accepted as real teachers rather than university students by their mentor teachers created legitimacy and promoted student teachers' emerging teacher identity. Similarly, investigating professional identity development throughout a five-week school placement in Sweden, Henry and Mollstedt (2021) found that student teachers’ identities (internal I-positions) are backgrounded or foregrounded depending on the nature of mentoring. When a mentor teacher acknowledged a student teacher as a teacher, the student teachers foregrounded his a “me-as-a junior-colleague” I-position. However, ‘me-as-aware-of-student-perspectives’ I-position was foregrounded in the opposite situations. In this study, neither the video recordings nor the interviews revealed acknowledgment of student teachers only as university students. This result was also not congruent with İnce’s (2020) study on student teacher identity development within the scope of international teaching practicum. In this study, İnce (2020) concluded that mentors in Canada caused a change in student teachers’ professional identity by acknowledging them as teachers rather than students, while the mentors in Turkey mainly considered them as students. In this study mentor teachers also acknowledged student as teachers by their actions too, like they explicitly mentioned that they wanted to learn from them. In the interviews, mentor teachers mentioned that they considered student teachers as teachers and verbalized that they wanted to learn from them too. A similar result was also reported in Walkington’s (2005b) study, in which the mentor teachers were also reported to be open learning things in the mentoring process. This kind of positioning during the mentoring process could make student teachers to feel more like a teacher than student, and therefore promote teacher identity development.

Previous literature also highlighted the importance of mentor feedback in terms of supporting professional teacher identity development (Bekereci, 2016; Djouidir, 2019; Izadinia, 2018; İnce, 2020; Tokoz-Göktepe & Kunt, 2020). Specific and clear feedback throughout the mentoring process is effective for



self-awareness and professional identity development (Izadinia, 2018). And as it was suggested by Izadinia (2015b) and Tomlinson et al. (2010), the constructive feedback in this study was related to both strengths and weaknesses of the student teachers' lesson plans. In this study all the data showed evidently that mentor teachers offered constant feedback, constructive feedback, and specific and clear feedback in this study which is likely to support student teacher identity development. The results indicated continuous feedback enabled student teachers to consider their strengths and weaknesses and constantly created growth opportunities. In that sense, this result was in parallel with İnce's (2020) study, in which mentor teachers in Canada also informed student teachers' identity development by providing constructive feedback and different from the finding of Bekereci (2016), in which the student teachers expressed that they expected constructive feedback from their mentors, however they reported that the feedback was insufficient, so they could not develop an awareness of their teacher selves. However, in Hobson and Malderez's (2013) study, there are participants stated that they felt demoralized, disheartened, or lonely because of the mentor teachers' constructive criticism. On the contrary the findings of this study proposed that constructive feedback was provided in the informal mentoring process, and this contributed to the self-awareness of student teachers. Video and student teacher interview analysis were in conversation with the previous research about the effect of reflection. More specifically, reflection activities were found to be influential for student teacher identity development (Binks et al., 2009; Ercan, 2020; Flores, 2014; Leijen et al., 2014; Riyanti, 2017; Yazan, 2014; Yuan & Mak, 2018). In this study, the analysis showed that mentor teachers and student teachers made time for reflective activities throughout the informal mentoring meetings, there were many instances when mentor teachers encouraged and guided student teachers for reflection. Mentor teachers mainly encouraged student teachers to reflect on their own ideas, lesson plans, and materials. Alsup (2004) emphasizes that it is essential for student teachers to give some evidence or anecdotes advocating their professional decisions. Thus, they would question their long-standing but usually unanalyzed beliefs. Also, they would raise awareness on whether their decisions or ideas are logical or not.

Lynn and Nguyen (2020), and Sallı and Osam (2018) reported that student teachers' professional identity developed as they were involved in reflections during the mentoring process. Similarly, mentor teachers in this study provided opportunities for student teachers to evaluate and reflect on their decisions and lesson plans in terms of their strengths, weaknesses, or effectiveness. Mentor teachers also encouraged student teachers to reflect on the mentor teachers' ideas or practices, too. After sharing an idea or practice depending on their own experiences, mentor teachers asked student teachers to evaluate these practices' strengths, weaknesses, effectiveness. This aspect of the reflection process deserves attention because, as Alsup (2004) indicated, the authentic narratives of experience rather than educational cliches or jargon were highly influential in developing student teacher identity. This could also help student teachers to develop the habit of constantly evaluating their ideas or practices without their mentors' encouragement. After reflecting on strengths or weaknesses, they tried to find solutions or strategies in reflective talks. Morton and Gray (2010), who investigated the influence of shared lesson planning on student teachers' practical knowledge and professional identity development, also found a similar result. The researchers concluded that shared lesson planning was a rewarding tool for student teachers' professional identity. In this process, they had a chance to discuss problems related to teaching and instruction. They also suggested some solutions or actions.

The literature includes studies that focus on the importance of mentor teachers' attitude in terms of teacher identity, they specifically mentioned mentor teachers' authoritarian attitude affected teachers' identity development negatively (Henry and Mollstedt, 2021; Pillen et al., 2013; Tokoz-Göktepe & Kunt, 2020; Yuan, 2016). For instance, Yuan (2016) implied that negative mentoring relationships characterized by power relationships broke down student teachers' professional teacher identities and created different ought to and feared identities. However, in a positive environment in which equal power relationship was guaranteed, mentoring could inform student teacher identity development positively (Tokoz-Göktepe & Kunt, 2020; Ticknor, 2014). In this study, all the data set analysis

presented an equal power relationship between the mentor teachers and student teachers, student teachers were free to discuss and negotiate, and evaluate the process together with the mentor teachers. This positive environment could stimulate professional identity development. This result is congruent with Tokoz-Göktepe and Kunt's (2020) study, which highlighted that being on equal levels with the mentor teachers is essential for teacher identity development. Furthermore, in this study the mentor teachers did not have a top-down approach, so there was no hierarchy among the study participants. Mentor teachers did not direct the process. As in the case reported in İnce's (2020) study, in this study data showed that student teachers had autonomy. This result was also in line with Djouidir's (2019) study saying that when a mentor teacher let a student teacher practice his/her preferred identity, instead of asking him/her to imitate the mentor's practices, identity development could be promoted. Djouidir (2019) concluded that when mentor teachers let student teachers exercise their autonomy and power, they felt self-confident and developed their professional identity. In this study, data showed that student teachers and mentor teachers followed a co-decision procedure smoothly and they accommodated each other's ideas, decisions, or suggestions. The results of this study also indicated that the positive environment throughout the informal mentoring process allowed student teachers' active participation, and which could also affect their professional identity development, as Yuan and Mak (2018) suggested active participation of pre-teachers in practices is essential for professional identity development.

The last principle observed to be effective in terms of developing student teachers' professional identity development that was created from the video analysis, student teacher and mentor teacher interview analysis was enabling awareness, self-identifications and future projections during the mentoring process. This was observed predominantly in videos of mentoring and in-student teacher interviews although it was also present in mentor teachers' interviews. The mentor teachers mentioned that they believed the student teachers benefited the mentoring process as they would become more aware of the realities they would face, develop an idea about possible actions they could take as teacher

when they face those, and had the chance to learn from experience before starting teaching. As it is reported in Yazan's (2014) study, identifying the essential aspects of teaching occupation can promote student teachers' professional identity development in the mentoring process.

Furthermore, video analysis and student teacher interview analysis also indicated that the process enabled student teachers to think about teaching-related topics that they had never considered before and consider what their future profession might hold for them. The analysis indicated that student teachers gained awareness and new perspectives about themselves and their profession, which is parallel to the findings of İnce's (2020) and Ercan's (2020) studies that argued gaining awareness and developing perspectives strengthens student teachers' professional identity development. As Izadinia (2015c) and Lindgren (2005) addressed, interacting with mentor teachers enabled student teachers identify various teaching duties or responsibilities, in this study too.

Especially the video analysis and student teacher interview analysis indicated that the informal mentoring process enabled opportunities for self-identification as a teacher and for future projections. Therefore, it could be assumed that their professional identity development was affected positively. Considering that teacher identity reflects on important questions such as "what kind of teacher do I want to be?" (Korthagen, 2004), student teachers in this study started thinking about what they would do in the future. They considered the situations they would encounter when they began teaching and made some articulations related to their future selves. Similar to this study, research studies by Anspal et al. (2012), Djoudir (2019), Yuan & Mak (2018), Taşdemir (2016) stated that mentoring relationships affect student teachers' future professional identities in this sense. The results indicated that student teachers considered what they would or would not do in the future, as it was also stated in other research studies (Anspal et al.,2012; Taşdemir, 2016). Furthermore, student teachers started considering what they should do to become the type of teacher they wanted. A similar result was also found by Urzúa and Vásquez (2008). Although

Urzúa and Vásquez's (2008) study was conducted with in-service teachers instead of student teachers, the future-oriented talks were similar to the present study. The researchers emphasized that future-oriented talk based on decision-making could be regarded as a cue of illustrations of teacher identity construction. Student teachers also indicated that they would take what they liked from their mentors' ideas or practices and add to their own practices, as found in Lynn and Nguyen's (2020) study.

## **5.2. Implications**

This study documented the potential of an informal mentoring relationship to support student teachers' professional identity development within the scope of a classroom management course in teacher education. The study's results also lead to implications for education practice and further research.

### **5.2.1. Implications for Practice**

The study results indicated that an informal mentoring process has the potential to support student teachers' professional identity development. Regarding that developing teachers with a strong sense of teacher identity shouldn't leave up to chance (Cattley, 2007), and finding alternative ways to develop student teachers' professional identity is required (Zembylas & Chubbuck, 2015), the current study reveals some practical implications for teacher education programs and teacher educators. Firstly, teacher educators should acknowledge the potential of informal mentoring for student teacher identity development. Therefore, there should be more time devoted to informal mentoring activities. Teacher educators should integrate informal mentoring relationships into various courses. The course should not be limited to classroom management; method courses can also be preferred. Furthermore, instructors in the teacher education programs can offer informal mentoring to student teachers in their courses. They should consider the informal mentoring process's effective aspects that were discussed in detail in the previous part and provide their instruction accordingly.

Mentor teachers, both in formal and informal mentoring relationships, should also prioritize the effective mentoring aspects that was highlighted in this study. They should build a strong relationship with student teachers, offer instructional and emotional support and encouragement, provide ongoing constructive feedback, make time for reflective activities, and create a positive environment. Similarly, both in formal and informal mentoring relationships, student teachers should consider the aspects discussed in this study.

### **5.2.2. Implications for Educational Research**

It is believed that the present study will add to the literature on professional teacher identity development and mentoring. In the following part, the implications for future research are presented to guide educational researchers for further studies on these and similar topics.

Firstly, the present study kept its data sources limited to video recordings and semi-structured interviews of student teachers and mentor teachers. Despite its rich data, a semi-structured interview with the course instructor and student teachers weekly' reflections on the informal mentoring process can be used to see teacher professional identity development from a broader perspective.

Secondly, this study investigated the informal mentoring process that was completed in ten weeks. That is why student teachers' professional identity before the mentoring process was not studied. Similarly, the prolonged effect of the informal mentoring process on student teachers was not investigated. A longitudinal study with a pre-post design might be conducted to explore the changes in student teachers' professional identity.

Thirdly, having the same subject matter was not a criterion in this study. Namely, all student teachers did not work with mentor teachers who had the same subject matter with them. Therefore, subject matter differences and their impact on the informal mentoring process were not investigated. Further studies

with mentor teachers and student teachers who have the same subject matter can be conducted. Furthermore, a comparison study can also be preferred.

Fourthly, the conduct of the mentoring process took place through an online communication platform because of COVID-19 restrictions. The online conduct of the informal mentoring process was not investigated in this study. Further studies might focus on the potential of the online informal mentoring process on student teachers' professional identity development.

Fifthly, this study adopted a single case design. A research study with a multiple-case design might examine the informal mentoring process across many cases and compare and contrast them.

Lastly, this study explored the potential of an informal mentoring process to support student teachers' identity development. Further studies might also focus on the potential of an informal mentoring process to support mentor teachers' identity development. Similarly, the potential of other student teachers to support professional identity development throughout the informal mentoring process might be investigated.

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## APPENDICES

### A. COURSE SYLLABUS

#### - Classroom Management Spring 2020-2021

**Course Description:** This course aims to improve participants' understanding of the concepts of classroom management and develop skills in establishing and maintaining an effective environment for learning in the classroom setting.

#### Course Objectives

- understand the classroom context from physical, social, psychological, and cognitive perspectives.
- discuss a variety of approaches and models to classroom management.
- analyse strategies in establishing and maintaining a healthy learning environment (managing time, seatwork, group-work, recitations, and discussions, and preventing problem behaviours).
- apply various strategies and procedures for managing classroom misbehaviours.
- develop awareness of teacher-parent cooperation in maintaining effective teaching and learning processes.
- examine classroom management issues for developing a critical perspective to classroom management strategies.
- value teaching ethics and conduct ethical decisions in the instructional process.

#### Course Learning Outcomes

- organize classroom context from its physical, social, psychological, and cognitive perspectives.
- describe the conditions for effective classroom environments.
- explain various classroom management models and approaches.
- select classroom management models that align with various classroom contexts.
- prepare a classroom management plan to establish and healthy learning environment for managing time effectively.
- prepare a classroom management plan to establish and healthy learning environment for effective seatwork, group-work, recitations, and discussions.
- prepare a classroom management plan to establish and healthy learning environment through preventive approaches.
- use effective strategies to address misbehaviours.
- assess the effectiveness of the strategies used in addressing misbehaviours.
- develop strategies for building teacher-parent cooperation.
- demonstrate willingness in establishing cooperation with parents.
- discuss the pros and cons of various classroom management strategies in dealing with different classroom management issues.
- demonstrate interest in ethical conduct in the classroom.
- respect diverse needs of students in the learning environment

## **B. CO-DESIGNED PROJECT TOPICS**

### CLASSROOM MANAGEMENT TOPICS FOR CO-DESIGNED PROJECT

- Physical Design of The Classroom and Classroom Management
- Rules And Procedures
- Teacher-Student Relationship in Classroom Management
- Responding To Misbehavior
- Classroom Management in the 21st Century
- Working With Families
- Managing Seatwork and Managing Group Work
- Managing Recitations and Discussions

## C. LESSON PLAN TEMPLATE

### Lesson Plan Template

<b>Due date:</b> <input style="width: 100%; height: 20px;" type="text"/>	<b>Objectives of the unit;</b> What will the students be able to do at the end of the term? (3-5 objectives would be fine depending on your topic).
<b>Warm-up;</b> <ul style="list-style-type: none"> <li>• <i>The aim is to attract students' attention and to arouse curiosity</i></li> <li>• <b>You can use;</b> Sample cases, short videos, stories, real-life experiences, what if questions or any warmup activity you choice. <b>(Anything you believe good)</b></li> </ul>	
<b>Due date:</b> <input style="width: 100%; height: 20px;" type="text"/>	<b>Lesson;</b> <ul style="list-style-type: none"> <li>• <b>content presentation;</b> <i>to present general terms and issues related to the topic</i></li> <li>• <b>You can use;</b> Ppt slides, audio presentations, videos, summaries of the important points, provide bullet point principles. <b>(Anything you believe good)</b></li> <li>• <b>You can/should design some activities to encourage active learning, to develop critical-thinking, communication, and decision-making skill;</b> Pair/group work, think-pair-share, jigsaw, debate, discussion, peer review, poster presentations ...</li> <li>• <b><u>You should/must</u> ☺ add a short video</b> (5 to 10 minutes) of the teacher you are working with explaining his/her experiences regarding the topic, and their advice for the pre-service teachers. They can talk about what is important, how to develop your skills as a teacher, give examples regarding the topic.</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>You should/must ☺ add a short case about your topic. It can come from the teacher you are in contact with or from any other teacher you know. It is going to be a written case, not too long, not a video. At the end of the case, you can ask your students to write a response paper, or you can ask a few questions, whatever you want. PLEASE do record the original version of the story form the teachers and share it with</b></li> </ul>
<b>Due date:</b> <input type="text"/>	<b>Evaluation;</b> <ul style="list-style-type: none"> <li>• <i>The aim is to see whether the course objectives are achieved or not and to check misconceptions</i></li> <li>• <b>You can use;</b> Question-answer, exit tickets, one sentence summaries, short quizzes. <b>(Anything you believe good)</b></li> </ul>
<b>Due date:</b> <input type="text"/>	<b>Closure;</b> <ul style="list-style-type: none"> <li>• <i>The aim is to wrap-up the lesson and make sure the learning lasts long.</i></li> <li>• <b>You can use;</b> reflections activities (there are many different reflection activities you can find tons of examples online; pick <b>anything you believe is good</b>).</li> </ul>

PS. You should be in contact with your mentor teachers who guide you in this process.

## D. SEMI-STRUCTURED STUDENT TEACHER INTERVIEW

**Görüşme Yapılan Kişi:**

**Tarih ve saat:**

**Görüşme Süresi:**

### **Giriş**

Sayın Hocam,

Merhaba. Ben Dilek Fazlıoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim (EPÖ) Anabilim Dalı'nda yüksek lisans öğrencisiyim. Yüksek Lisans Tezim kapsamında, öğretmen adaylarının mesleki kimlik gelişimini desteklemek için aday öğretmenler ve rehber öğretmenler arasındaki sosyal etkileşim ile ilgili bir çalışma yürütmekteyim. Bu araştırma ile ortaya çıkacak sonuçların, aday öğretmenler ve rehber öğretmenler arasındaki etkileşimin durumunu ortaya koymak ve karar vericilere bilgi sağlamak açısından önem taşıyacağını düşünüyorum.

Bu görüşmenin yaklaşık 30-35 dakika süreceğini tahmin ediyorum. Görüşme sürecinde vereceğiniz cevapların tümü gizli tutulacaktır. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Araştırma sonuçlarında bireylerin ismi kullanılmayacak, araştırmacı tarafından gizlenecektir. Ayrıca görüşmeyi istediğiniz zaman yarıda bırakabilirsiniz.

Veri kaybını önlemek ve analizi kolaylaştırmak için görüşmeyi izninizle kaydetmek istiyorum. Onay veriyor musunuz?

Görüşme sorularına geçmeden önce aklınıza takılan ya da sormak istediğiniz herhangi bir konu var mı?

İzninizle görüşmeyi başlatmak istiyorum.

### **Görüşme Soruları**

1. Kendinizden kısaca bahsedebilir misiniz? (alan, sınıf, yaş, öğretmenlik tecrübesi)
2. Öğretmenlik mesleğini tanımlar mısınız? Nasıl bir öğretmen olmak istersiniz?

3. Rehber öğretmeniniz ile birlikte ders planlama sürecinizi kısaca anlatabilir misiniz?
  - Ders planlama sürecinin olumlu yanları nelerdi?
  - Ders planlama sürecinin olumsuz yanları nelerdi?
  - Bu süreçteki rol ve sorumluluklarınız nelerdi?
  - Rehber öğretmenin bu süreçte rolü neydi? (geri bildirim sağlama, soru sorarak düşündürme, örnek verme, açıklama, vb.)
  - Rehber öğretmeniz, ders planlama sürecinde sizden farklı bir yaklaşım önerdiğinde/ farklı bir bakış açısı sunduğunda süreç nasıl ilerledi? Somut bir örnek vermeniz mümkün mü?
4. Rehber öğretmeniniz ile iletişiminiz nasıldı? Bu iletişimin ders planlama sürecine nasıl bir etkisi oldu?
5. Ders planlama sürecinde rehber öğretmenden neler öğrendiniz? Rehber öğretmeninizle etkileşimleriniz sınıf yönetimi becerileriniz nasıl etkiledi?
6. Rehber öğretmeninizden nasıl geri bildirimler aldınız? Verilen geri bildirimleri kullandınız mı? Süreç nasıl işledi? (sıklık, içerik, vb.)
7. Görüşmeler sırasında kendinizi nasıl hissettiniz? Düşüncelerinizi açık bir şekilde ifade edebildiniz mi?
8. Rehber öğretmeniniz nasıl biriydi? (kişilik özelliği, mesleki yeterliliği)
9. Rehber öğretmenden beklentileriniz nelerdi? Beklentilerinizi karşıladı mı?
10. Ders planlama sürecinde öğretmen adayı arkadaşlarınızdan neler öğrendiniz? Onlarla olan etkileşimleriniz sınıf yönetimi becerilerinizi nasıl etkiledi?
11. Ders planlama sürecinde sergilendiğiniz performans ve gelişim hakkında ne düşünüyorsunuz?
  - Henüz projeye başlamadan sınıf yönetimi sizin için neydi? Bu çalışmadan önceki ve sonraki görüşleriniz arasında farklılık var mı? Varsa, neler?
  - İlk ve son görüşmeyi karşılaştırdığınızda rehber öğretmenle iletişiminiz açısından bir değişiklik oldu mu?
12. Bu ders planlama sürecinde kendiniz ve mesleğiniz ile ilgili neler öğrendiniz?

13. Mesleğe yakında başlayacak bir öğretmen olarak, bu süreçte edindiğiniz ve gelecekte kullanabileceğinizi düşündüğünüz bir bilgi, beceri, yöntem ya da strateji var mı?
14. Bu projeyi uygulamak isteyen diğer öğretmenlere sürecin daha etkili olmasını sağlamak için neler önerirsiniz?
15. Konuştuklarımıza (rehber öğretmenle ders planlama konusunda) eklemek istediğiniz herhangi bir konu / soru / öneri var mı?

**Interviewed Person:** **Date and time:**

**Interview Time:**

### **Introduction**

Dear ...,

Hello. I'm Dilek Fazlıoğlu. I am a graduate student at METU Institute of Social Sciences, Department of Curriculum and Instruction. Within the scope of my master's thesis, I am conducting a study on the interaction between student teachers and mentor teachers to support student teachers' professional identity development. I think that the results of this research will be significant in terms of revealing the interaction between student teachers and mentor teachers and providing information to decision-makers.

I estimate that this interview will take about 30-35 minutes. All of your answers during the interview will be kept confidential. No one other than the researchers can see this information. The names of individuals will not be used in the research results and will be hidden by the researcher. You can also leave the interview midway at any time.

I would like to record the interview to prevent data loss and facilitate analysis with your permission. Do you approve?

Do you have any questions or questions that you want to ask before moving on to the interview questions?

With your permission, I would like to start the conversation.



## **Interview Questions**

1. Could you briefly tell me about yourself? (subject matter, class, age, teaching experience)
2. Can you describe the teaching profession? What kind of teacher would you like to be?
3. Could you briefly describe your lesson planning process with your mentor teacher?
  - What were the positive aspects of the lesson planning process?
  - What were the negative aspects of the lesson planning process?
  - What were your roles and responsibilities in this process?
  - What was the role of the mentor teacher in this process? (providing feedback, asking questions, giving examples, explanations, etc.)
  - How did the process progress when your mentor teacher suggested a different approach/presented a different perspective from you in the lesson planning process? Can you give a concrete example?
4. How was your communication with your mentor teacher? How did this communication affect the lesson planning process?
5. What did you learn from the mentor teacher during the lesson planning process? How did your interactions with your mentor teacher affect your classroom management skills?
6. What kind of feedback did you receive from your mentor teacher? Did you use the feedback provided? How did the process work? (frequency, content, etc.)
7. How did you feel during the interviews? Were you able to express your thoughts clearly?
8. What was your mentor teacherlike? (personality trait, professional competence)
9. What were your expectations from the mentor teacher? Did it meet your expectations?
10. What did you learn from other student teachers during the lesson planning process? How did your interactions with them affect your classroom management skills?
11. What do you think about your performance and development during the lesson planning process?

- What was classroom management for you before you started the project? Is there a difference between your views before and after this study? If so, what?
- When you compared the first and last meeting, was there a change in your communication with the mentor teacher?

12. What did you learn about yourself and your profession during this lesson planning process?

13. As a soon-to-be-starting teacher, is there any knowledge, skill, method, or strategy you have acquired during this process and that you think you can use in the future?

14. What would you recommend to other teachers who want to implement this project to make the process more effective?

15. Are there any topics/questions/suggestions you would like to add to what we talked about (lesson planning with the mentor)?

## E. SEMI-STRUCTURED MENTOR TEACHER INTERVIEW

**Görüşme Yapılan Kişi:**

**Tarih ve saat:**

**Görüşme Süresi:**

### **Giriş**

Sayın Hocam,

Merhaba. Ben Dilek Fazlıoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim (EPÖ) Anabilim Dalı'nda yüksek lisans öğrencisiyim. Yüksek Lisans Tezim kapsamında, öğretmen adaylarının mesleki kimlik gelişimini desteklemek için aday öğretmenler ve rehber öğretmenler arasındaki sosyal etkileşim ile ilgili bir çalışma yürütmekteyim. Bu araştırma ile ortaya çıkacak sonuçların, aday öğretmenler ve rehber öğretmenler arasındaki etkileşimin durumunu ortaya koymak ve karar vericilere bilgi sağlamak açısından önem taşıyacağını düşünüyorum.

Bu görüşmenin yaklaşık 25-30 dakika süreceğini tahmin ediyorum. Görüşme sürecinde vereceğiniz cevapların tümü gizli tutulacaktır. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Araştırma sonuçlarında bireylerin ismi kullanılmayacak, araştırmacı tarafından gizlenecektir. Ayrıca görüşmeyi istediğiniz zaman yarıda bırakabilirsiniz.

Veri kaybını önlemek ve analizi kolaylaştırmak için görüşmeyi izninizle kaydetmek istiyorum. Onay veriyor musunuz?

Görüşme sorularına geçmeden önce aklınıza takılan ya da sormak istediğiniz herhangi bir konu var mı?

İzninizle görüşmeyi başlatmak istiyorum.

### **Görüşme Soruları**

1. Kendinizden ve mesleki geçmişinizden kısaca bahsedebilir misiniz? (eğitim, alan, tecrübe, çalıştığı kurum/lar)
2. Öğretmenlik mesleğini tanımlar mısınız?
3. Siz nasıl bir öğretmensiniz?

4. Öğretmen adayları ile birlikte ders planlama sürecinizi kısaca anlatabilir misiniz?
  - Ders planlama sürecinin olumlu yanları nelerdi?
  - Ders planlama sürecinin olumsuz yanları nelerdi?
  - Bu süreçteki rol ve sorumluluklarınız nelerdi? (geri bildirim verme, örnek verme, farklı bakış açısı sunma, vb.)
  - Öğretmen adayları ders planlama sürecinde sizden farklı bir yaklaşım önerdiğinde/ farklı bir bakış açısı sunduğunda süreç nasıl ilerledi? Somut bir örnek vermeniz mümkün mü?
5. Aday öğretmenler ile iletişiminiz nasıldı? Bu iletişimin sürece nasıl bir etkisi oldu?
6. Aday öğretmenlere nasıl geri bildirimler verdiniz? Aday öğretmenler verilen geri bildirimleri kullandı mı? Süreç nasıl işledi? (sıklık, içerik, vb.)
7. Görüşmeler sırasında kendinizi nasıl hissettiniz? Düşüncelerinizi açık bir şekilde ifade edebildiniz mi?
8. Aday öğretmenlerin ders planı geliştirme sürecindeki rol ve sorumlulukları nelerdi? Bu rol ve sorumlulukları yerine getirme düzeyleri konusunda neler söyleyebilirsiniz?
9. Sizce ders planlama süreci öğretmen adaylarının mesleki gelişimini nasıl etkilemiş olabilir?
10. Ders planlama sürecinin size bir faydası oldu mu? Olduysa nasıl?
11. Proje boyunca birlikte çalıştığınız öğretmen adaylarının performansları hakkında ne düşünüyorsunuz?
  - İlk ve son görüşmeyi karşılaştırdığımızda aday öğretmenlerin sizinle iletişimleri açısından bir değişiklik oldu mu sizce?
  - İlk ve son görüşmeyi karşılaştırdığımızda aday öğretmenlerin öğretmenlik mesleğine ve sınıf yönetimine karşı tutumları açısından bir değişiklik oldu mu sizce?
12. Bu projeyi uygulamak isteyen diğer öğretmenlere sürecin daha etkili olmasını sağlamak için neler önerirsiniz?

13. Konuřtuklarımıza (aday ğretmenlerle ders planlama konusunda) eklemek istediđiniz herhangi bir konu / soru / neri var mı?

**Interviewed Person:**  
**time:**

**Date and**

**Interview Time:**

### **Introduction**

Dear ...,

Hello. I'm Dilek Fazlıođlu. I am a graduate student at METU Institute of Social Sciences, Department of Curriculum and Instruction. Within the scope of my master's thesis, I am conducting a study on the interaction between student teachers and mentor teachers to support student teachers' professional identity development. I think that the results of this research will be significant in terms of revealing the interaction between student teachers and mentor teachers and providing information to decision makers.

I estimate that this interview will take about 25-30 minutes. All your answers during the interview will be kept confidential. No one other than the researchers can see this information. The names of individuals will not be used in the research results and will be hidden by the researcher. You can also leave the interview midway at any time.

I would like to record the interview to prevent data loss and facilitate analysis with your permission. Do you approve?

Do you have any questions or questions that you want to ask before moving on to the interview questions?

With your permission, I would like to start the conversation.

### **Interview Questions**

1. Could you briefly talk about yourself and your professional background? (education, subject matter, experience, institution/s)
2. Can you describe the teaching profession?
3. What kind of teacher are you?

4. Could you briefly describe your lesson planning process with the student teachers?

- What were the positive aspects of the lesson planning process?
- What were the negative aspects of the lesson planning process?
- What were your roles and responsibilities in this process? (giving feedback, giving examples, presenting different perspectives, etc.)
- How did the process progress when student teachers suggested a different approach/presented a different perspective than you in the lesson planning process? Can you give a concrete example?

5. How was your communication with the student teachers? What effect did this communication have on the process?

6. How did you give feedback to student teachers? Did student teachers use the feedback provided? How did the process work? (frequency, content, etc.)

7. How did you feel during the interviews? Were you able to express your thoughts clearly?

8. What were the roles and responsibilities of student teachers in the lesson plan development process? What can you say about the level of fulfillment of these roles and responsibilities?

9. How do you think the lesson planning process might have affected the professional development of student teachers?

10. Did the lesson planning process help you? If so, how?

11. What do you think about the performances of the student teachers you worked with during the project?

- When you compare the first and last interview, do you think there has been a change in the communication of the student teachers with you?
- When you compare the first and last meeting, do you think there has been a change in the attitudes of the novice teachers towards the teaching profession and classroom management?

12. What would you recommend to other teachers who want to implement this project to make the process more effective?

13. Do you have any topics/questions/suggestions to add to what we talked about (lesson planning with prospective teachers)?

## F. INFORMED CONSENT FORM FOR STUDENT TEACHERS

### ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Bu araştırma, ODTÜ Eğitim Programları ve Öğretim Anabilim Dalı Yüksek Lisans öğrencisi Dilek Fazlıoğlu tarafından Yrd. Doç. Dr. Nur Akkuş-Çakır danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

#### **Çalışmanın Amacı Nedir?**

Araştırmanın amacı, sınıf yönetimi dersi kapsamında öğretmen adaylarının mesleki kimlik gelişimini desteklemek için öğretmen adayları ve rehber öğretmenler arasındaki etkileşimin potansiyelini araştırmaktır.

#### **Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?**

Araştırmaya katılmayı kabul ederseniz, sizden bir rehber öğretmen ve aday öğretmenlerden oluşan bir grupta çalışmanız beklenmektedir. Yaklaşık olarak birer saat sürmesi beklenen beş farklı görüşme planlanmaktadır. Bu görüşmelerde, sınıf yönetimi dersi ile ilgili eğitim ve etkinlikleri içeren ders planları tasarlamanız istenmektedir. Daha sonra tematik analiz ile değerlendirilmek üzere görüşmelerinizin görüntü ya da ses kaydı alınacaktır.

#### **Sizden Topladığımız Bilgileri Nasıl Kullanacağız?**

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir. Katılımcılardan elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

#### **Katılımınızla ilgili bilmeniz gerekenler:**

Çalışma, genel olarak kişisel rahatsızlık verecek sorular veya uygulamalar içermemektedir. Ancak, katılım sırasında herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz çalışmayı yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda çalışmayı uygulayan kişiye çalışmadan çıkmak istediğinizi söylemek yeterli olacaktır.

#### **Araştırmayla ilgili daha fazla bilgi almak isterseniz:**

Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Eğitim Bilimler öğretim üyelerinden Yrd. Doç. Dr. Nur Akkuş-Çakır (E-posta: [nur.akkus@odtu.edu.tr](mailto:nur.akkus@odtu.edu.tr)) ve da yüksek lisans öğrencisi Dilek Fazlıoğlu (E-posta: [dilek.fazlioglu@odtu.edu.tr](mailto:dilek.fazlioglu@odtu.edu.tr)) ile iletişim kurabilirsiniz.

***Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.***

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad

Tarih

İmza

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## G. INFORMED CONSENT FORM FOR MENTOR TEACHERS

### ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Bu araştırma, ODTÜ Eğitim Programları ve Öğretim Anabilim Dalı Yüksek Lisans öğrencisi Dilek Fazlıoğlu tarafından Yrd. Doç. Dr. Nur Akkuş-Çakır danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

#### **Çalışmanın Amacı Nedir?**

Araştırmanın amacı, sınıf yönetimi dersi kapsamında öğretmen adaylarının mesleki kimlik gelişimini desteklemek için öğretmen adayları ve rehber öğretmenler arasındaki etkileşimin potansiyelini araştırmaktır.

#### **Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?**

Araştırmaya katılmayı kabul ederseniz, sizden üç ya da dört aday öğretmenden oluşan bir grupla çalışmanız beklenmektedir. Yaklaşık olarak birer saat sürmesi beklenen beş farklı görüşme planlanmaktadır. Bu görüşmelerde, sınıf yönetimi dersi ile ilgili eğitim ve etkinlikleri içeren ders planları tasarlanmanız istenmektedir. Daha sonra tematik analizi ile değerlendirilmek üzere görüşmelerinizin görüntü ya da ses kaydı alınacaktır.

#### **Sizden Topladığımız Bilgileri Nasıl Kullanacağız?**

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir. Katılımcılardan elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

#### **Katılımınızla ilgili bilmeniz gerekenler:**

Çalışma, genel olarak kişisel rahatsızlık verecek sorular veya uygulamalar içermemektedir. Ancak, katılım sırasında herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz çalışmayı yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda çalışmayı uygulayan kişiye çalışmadan çıkmak istediğinizi söylemek yeterli olacaktır.

#### **Araştırmayla ilgili daha fazla bilgi almak isterseniz:**

Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Eğitim Bilimler öğretim üyelerinden Yrd. Doç. Dr. Nur Akkuş-Çakır (E-posta: ) ya da yüksek lisans öğrencisi Dilek Fazlıoğlu (E-posta: ) ile iletişim kurabilirsiniz.

***Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.***

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad

Tarih

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## H. THE CODEBOOK

Code	Description	In vivo description
<b>willing to spend time-outside the meeting</b>	Mentor teachers volunteer to spend time outside the meetings to help student teachers.	I say it again. <u>You can always reach me outside of our meeting. You can ask a question, or if there is something I need to do, I can do it.</u> I mean, don't be shy. Don't think like this. Our teacher will be disturbed. I want to make it clear, OK? <u>I think we should not be limited to just this meeting. Let's use our Whatsapp group actively.</u> OK? So, for example, I shared a video or story in the group before. You also wrote your comments there. I want to say this. No one should be disturbed when you ask me a question or when I direct a question to you. <u>I will not feel disturbed. I have time</u> (M2).
<b>willing to spend time-throughout the meetings</b>	Mentor teachers volunteer to spend time throughout the meetings to help student teachers	M5: So, is there anything else you would like to ask, add, or discuss? <u>We probably have 2-3 minutes before the meeting ends. So, we can use this time. Do you have any questions now? We can talk if you want.</u> ST14: I think we asked everything we planned. Thank you, hocam.
<b>conversations to know mentee's needs and expectations</b>	Mentor teacher wants to learn student teachers' needs expectations or student teachers openly share their needs or expectations.	<u>M2: What exactly do you want me to do? Should I share different practices that I do in class? Do you want me to summarize them? Or shall we discuss a specific topic? Let me ask you about it.</u> Then we can continue. ST 7: <u>Hocam, let's talk about this thing, the case you told us about.</u> If you want it, if it is okay for you. M2: <u>Sure, whichever will be more useful to you</u>
<b>conversations about daily life/chitchat</b>	Participants engage in conversations which are not related to co-designed project.	<u>M4: How is school going? How is online education? Is it difficult?</u> <u>ST16: Intense and tiring.</u> <u>M4: It is for all of us. We got relaxed a little when the school opened. At least we were able to get away from the computer a little bit. But, now there is hybrid education.</u> <u>ST 14: Your job is difficult, hocam. Good luck with that.</u>
<b>trusting and opening about challenges and asking for help</b>	Student honestly share the difficulties that face. If necessary, ask for help.	ST7: Hocam, there is an evaluation part. We also need to do a wrap-up activity. But when we surfed the internet, the same activities were the same for evaluation and wrap-up activities. <u>So we didn't really understand the difference between the two.</u> M2: I will explain the evaluation part, but I did not fully understand the other statement. What

		<p>did you say?  ST6: It's called wrap-up.  ST7: It is a finishing activity. If you remember, we did a warm-up activity before. This is the end.  M3: Ok, now I understand. Now I will talk about such activities and their differences. The important thing for evaluation is to evaluate how much the subject is understood. But the wrap-up is about that your activity, your lesson reach a conclusion.</p>
<b>instructional support-strategies</b>	Mentor teachers share strategies related to classroom management and teaching profession.	<u>The tone of voice is important. You can adjust the tone differently, lower it, raise it. For example, being very quiet, this practice becomes very effective. Imagine you walk in, humming very quietly. The classroom is noisy. Then, the teacher is so quiet. Here comes silence. Everyone stops talking and focuses on the teacher (M4).</u>
<b>instructional support-knowledge</b>	Mentor teachers provide knowledge on various topics such as subject matter, online tools, etc.	<p>ST13: If there are interesting applications, we can listen to them as well.  M3: I use <u>Kahoot and Quizizz</u> a lot. I use these applications at the end of a topic. In online teaching, I can't use the games that I normally play in the classroom. It is not very enjoyable for students when it is not interactive. <u>For example, there is 'Edpuzzle', I use it for homework. I also use 'live worksheet'. Both in class and as homework. There is an application called 'Platagon'. Do you know it? You can create your avatar; you can create cartoons. For example, I use it a lot when teaching dialogues, question patterns, etc. Students create their own characters. They record the conversation in their own voice. They can also use the voice of the speaker there,</u> but I want students to speak. It's good for listening. It's good for speaking. It's good for reading.</p>
<b>emotional support-encouraging and approving mentees' progress</b>	Mentor teachers put into words that student teachers were good at various things.	<p>ST12: Hocam, do you really like it?  M3: <u>Yes, yes, quite nice.</u>  ST12: Because I thought there were lots of missing parts.  M3: <u>I know it is the difference of your university. I do not say anything else.</u>  ST12: I am pleased right now. It was a pleasure to hear that from an experienced teacher like you.  M3: <u>I believe that if you start working in a National Education institution, you will realize how different you are.</u></p>

<p><b>emotional support-recognizing mentees' prior knowledge and skills</b></p>	<p>Mentor teachers realize student teachers' individual/common skills and recognize these skills a few times through the meetings.</p>	<p>ST1: If we gather all of the links in a folder, we can do what you say, hocam. We can write under it; we can also add a description.  M1: Maybe, such things can be added.  ST1: We'll handle it, hocam, we can. I think we can.  M1: (M1 calls ST1's name) <u>Actually, you can do it. You are good at such things.</u></p>
<p><b>emotional support-acknowledging mentees as teachers</b></p>	<p>Mentor teachers consider student teachers as their colleague teachers rather than students who enrolled in a teacher education program.</p>	<p><u>(Name of ST7) teacher</u>, what do you think about this issue?</p>
<p><b>constructive feedback-strengths</b></p>	<p>Mentor teachers focus on the areas that student teachers are good at and highlight these areas.</p>	<p>M5: <u>I mean, I think the lesson is very detailed. It's also very interactive. So there are a lot of web 2.0 tools. It also addresses many skills: writing etc. Also, I think the most important thing is that it provides the objective of the course.</u> Frankly, I think it's a well-thought-out plan. <u>It was a lesson where you gave the necessary details of the topic and made an effective evaluation.</u>  ST1 : Thank you hocam.</p>
<p><b>constructive feedback-weaknesses</b></p>	<p>Mentor teachers discuss the weaknesses of student teachers' materials or activities.</p>	<p>M4: <u>Your questions are based on memorization.</u> It is more important to make students think, to understand how much the subject is understood. (M4 reads the lesson plan again). Is fifteen minutes just for this activity?  ST16: Yes, only for this activity.  M4: <u>This time is not enough.</u> You have four questions. Everyone will say something. You will hear different answers. Students will argue over those answers. In order for fifteen minutes to be enough, you have to be fast.</p>
<p><b>constructive feedback-suggestions</b></p>	<p>While giving feedback, mentor teachers offer suggestions.</p>	<p>M5: Now, did you prepare a word document about the things on this slide? I think students will like it. <u>If you give a 1-2 page handout before the activity. Students can print it out, or they open the handout on one side of the screen. The handout and the slide go parallel. Students can take note of the handout. Students also have a nice notebook record to work with.</u>  ST19: Ok, hocam, we'll add it later.  M5: It increases the workload in this way, though. However, I'm sure it will be effective.  ST19: All right, hocam, I took notes about this.</p>

<p><b>specific and clear feedback</b></p>	<p>Mentors' feedback is detailed and precise.</p>	<p>ST20: Hocam, we gave a different case to the students here.  M5: (M5 reads the case silently). Got it. Did you write the case?  ST20: No, no. We got it from a book, hocam.  M5: Did you take it directly?  ST18: Yes.  M5: <u>I understand, because there are probably some cases and students in the previous part of the book. When you say 'another student' here, I don't understand.</u>  ST19: Hocam, it is like this. Two different cases were given in the book, and another student was having a problem in the previous case. We chose this one because this second case is better. That's why it says 'another student'. But yes, it has been a rough transition.  M5: <u>Yes. You know, it sounded like it wasn't written in very good English. It is clear that it is a continuation of a text.</u>  ST19: Yes  M5: If you want, you can write 'a student' instead of 'another student'.  ST19: (ST19 writes the sentence again and corrects the mistake.)</p>
<p><b>constant feedback</b></p>	<p>Mentor teachers provide continuous feedback.</p>	<p>ST7: <u>We talked about our objectives last week, if you remember.</u> We have prepared several objectives based on your feedback. <u>We would like to share these with you and get feedback on their final version.</u>  ST8: As you can see, we have defined four objectives. <u>If you want, let's examine them together.</u>  M2: All right, let's get started.</p>
<p><b>mentees' self-evaluation of their practices</b></p>	<p>Student teachers reflect on their ideas or practices without the mentors' encouragement.</p>	<p>ST11: We wanted to do the discussion activity in this way. <u>Because it is more useful to us. For example, let's say a student says two different things. Another student highlights two more differences. In fact, more than one difference will emerge. So, the differences will be discussed. Our second objective 'Creating awareness about differences', will be achieved in the lesson. Teacher candidates will have learned this difference.</u></p>
<p><b>mentors' encouraging of reflection</b></p>	<p>Mentor teachers encourage student teachers to reflect on mentor teachers', their own, one another's ideas, practices, or lesson plans.</p>	<p>ST15: Hocam, it seems like an objective is missing. Which one do you think is missing?  M4: <u>Just think about it. Which one could be missing? Are there an objective related to all activities?</u>  ST17: Actually, it seems to meet all of them.  ST15: (ST15 refers to an activity on the powerpoint presentation). Any questions about it? The objective related to the third item?</p>

		<p>ST16: There seems to be no activity or question about the comparison of individual and group work.</p> <p>ST15: Is there a question comparing individual work with group work? I don't think it is.</p> <p>ST17: It is.</p> <p>ST16: The fourth objective says, 'The teacher organizes group work according to the number of students'. There is a question about it. But it's not about the difference between individual and group work. The third objective is missing.</p> <p>M4: Yes, you can also prepare a question about the third outcome (Then, student teachers and mentor teachers brainstorm questions related to the third objective of the lesson plan, and revise the activity).</p>
<p><b>mentees' coming up with strategies</b></p>	<p>After reflecting on lesson plans, materials, or ideas, student teachers suggest some strategies.</p>	<p>ST11: <u>What if we do such a thing? What if we give three questions to the students in this activity? Or what if they make a cartoon and a poster to answer these questions?</u> Thus, for example, three points will be awarded if a student answers the questions correctly. If one of the questions is answered correctly, it will be two points. Thus, at least we evaluate the activity according to the answers to our questions.</p> <p>ST12: Can you display our objectives? We can take a look. <u>Maybe we can turn our objectives into questions.</u> Because they are the objectives we want our students to get.</p> <p>ST11: Yes that's right. I'm opening them right now. Can you see now?</p> <p>M3: (Student teachers and mentor discuss the objectives). So what about the number issue?</p> <p>ST11: Hocam, for example, <u>we can do this. A student can divide the poster into two and draws the present on the left and the traditional on the right...</u></p>
<p><b>feeling free to discuss / negotiate</b></p>	<p>Student teachers do not abstain from expressing their ideas.</p>	<p><u>There were times when the mentor's idea just didn't make sense to me.</u> For example, we came to a meeting with an idea for the wrap-up part of the lesson. However, our teacher came up with very different ideas. <u>Since we thought that these ideas would not be very appropriate, we stated this.</u> Then, I said, 'Hocam, we had prepared a draft, we would like to share it with you'. Our teacher was also tolerant. <u>In general, we were able to express our own ideas within the scope of the project. We did not experience any hesitation. We talked about whether something was right or wrong, or whether it was appropriate. In this context, we were good at communication</u> (ST7).</p>

<p><b>participation (active/ passive)</b></p>	<p>Participants (especially student teachers) are actively engaged in the mentoring activities.</p>	<p><u>ST11</u>: An activity will be prepared for wrapping up. But what could it be?  <u>ST10</u>: Should this activity be like summarizing the whole lesson?  <u>ST13</u>: Shall we design something that we can ask for your ideas? How would you do? Shall we ask such a question?  <u>ST11</u>. But we already gave our mentor's case, just like the activity.  <u>ST13</u>: What is we ask 'If you teach an online course, what would you do as classroom management?' Or we say 'create a case after what you've learned? Two or three lines'.  ST12: What if we create a single concept map that summarizes the entire lesson? But it would be too wide now.  ST10: It takes such a long time too, so we need one activity of three-four minutes (The discussion continues for three-four more minutes. Then, student teachers decide on what to do with the help of their mentor teachers).</p>
<p><b>power relationship (equal/unequal)</b></p>	<p>The power relationship between mentor teachers and student in this study is based on equality or the authority of the mentor teacher.</p>	<p>While giving feedback, <u>she never said such a thing, 'Change it like this' etc.: in fact, she said, 'I think you can do that'. We made the decision (ST15).</u></p>
<p><b>evaluating the process together</b></p>	<p>Mentor teachers and student teachers talk about the mentoring process, make comment about the process.</p>	<p>ST11: Thank you very much, hocam.  M3: You're welcome, my pleasure.  <u>ST10: I think it was a very productive meeting. We did a lot of things, we discussed a lot.</u>  <u>ST11: We started with the smallest, simplest thing to do. Then, by adding on, we came up with something cool. Well, I think this is beautiful. To be inspired by such ideas, or to exchange ideas.</u></p>
<p><b>awareness of teacher responsibilities</b></p>	<p>Mentor teachers make student teacher aware of what kind of responsibilities a teacher has apart from teaching topic.</p>	<p><u>Here's our job. You become a psychologist in a way. You become like a mother and father, and you become a brother and sister.</u> Also a teacher. There is a curriculum that you have to complete in a certain time. I mean, it's not that easy (M2).</p>
<p><b>awareness of teaching realities and teaching profession</b></p>	<p>Mentor teachers make student teacher aware of the realities about the teaching profession.</p>	<p>When I was a student, I thought that the administration would approach everyone in the same way or always try to help. <u>After I started working, I realized that this was not the case at all. Administrators do not have the same approach to all teachers. Some administrators are more involved, though. Some administrations always tend to suppress the</u></p>

		<u>teacher so that there is no noise in the classroom and the peace of the school is not disturbed. Or they discriminate against teachers. For example, if some teachers are on good terms with the administration, the method of listening to those teachers, the approach to those teachers, and the approach of the administration to others are not the same. In other words, it can go to the point of mobbing instead of support (M5).</u>
<b>awareness of characteristics of a good teacher</b>	Mentor teachers make student teacher aware of how to become a good teacher.	Sometimes the bell rings while a teacher is teaching. This behavior is unprofessional. If the bell rings before the teacher says the last sentence or a student wants to go out quickly after the bell rings, this is a case of mismanagement of the classroom environment. It also means that the teacher does not use the time well. <u>The most important thing a good teacher should pay attention to is the use of time. It's not about constantly looking at the clock. The important thing is to be able to plan time (M4).</u>
<b>future projection</b>	Student teachers make some articulations related to their future-selves.	<u>In the future, I will definitely not use a classical classroom seating arrangement. Because now, after seeing my mentor's class, I definitely don't want to work in an ordinary classroom. Or rather, I don't want my students to work. So, when I go to class, I will definitely change the classroom design. Also, our mentor mentioned online applications. I would definitely use them too. For example, he said a lot of tools as exit cards. I will use all of them. Thus, my students learn these at a young age. Because when we were in high school, we never knew about such applications. That's why I would like my students to be familiar with them (ST5).</u>



## I. BRAUN AND CLARKE'S (2006) 15-POINT CHECKLIST

Table 2: A 15-Point Checklist of Criteria for Good Thematic Analysis

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.
Analysis	7	Data have been analysed - interpreted, made sense of - rather than just paraphrased or described.
	8	Analysis and data match each other - the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organised story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done - i.e., described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as <i>active</i> in the research process; themes do not just 'emerge'.

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

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



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14 NİSAN 2021

Konu : Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi : İnsan Araştırmaları Etik Kurulu Başvurusu

**Sayın Dr.Öğretim Üyesi Nur AKKUŞ ÇAKIR**

Danışmanlığını yaptığınız Dilek FAZLIOĞLU'nun "The Role of Mentor Teachers in Pre-Service Teachers' Professional Identity Development" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve **115-ODTU-2021** protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Dr.Öğretim Üyesi Şerife SEVİNÇ  
İAEK Başkan Vekili

## K. TURKISH SUMMARY / TÜRKE ÖZET

### Giriş

Öğretmen kimliđi kavramı, öğretmen eğitimi arařtırmalarında son zamanlarda yapılan birçok çalıřmanın odak noktası olmuřtur. Öğretmenlere mesleklerini ve toplumdaki yerlerini “nasıl olunması”, “nasıl hareket etmeleri” ve “nasıl anlayacakları” konusunda bir çerçeve sağlayarak, öğretmenlik mesleđinin merkezinde öğretmen mesleki kimliđi yer almaktadır (Sachs, 2005, s. 15).

Öğretmen adaylarının mesleki kimliđi, öğretmen adaylarının eylemliliđi, farkındalıđı, güveni, bilgisi, öğretmen sesidir. Ayrıca meslektařlar, öğrenciler ve ebeveynler gibi başkalarıyla kurduđu bağlantıdır. Öğretmen adayı kimliđi eğitim bağlamı, önceki deneyimler ve topluluklar kullanılarak oluşturulur (Izadinia, 2013).

Güçlü bir öğretmen kimliđi geliřimi řansa bırakılmamalıdır (Cattley, 2007). Öğretmen adaylarının mesleki kimlik geliřtirme süreci beklense de, öğretmen adaylarına üzerinde düşünme ve çalıřma fırsatları sunulduđunda süreç daha başarılı olabilir (Özmen, 2011). Öğretmen eğitimi programları, öğretmen adayları için profesyonel kimliklerini keřfedebilmeleri, müzakere edebilmeleri ve güçlendirebilmeleri için kasıtlı fırsatlar yaratmalıdır. Ayrıca, öğretmen adaylarının mesleki kimliklerini geliřtirmek için alternatif yollar veya pedagojiler gereklidir (Zembylas & Chubbuck, 2015).

Öğretmen kimliđinin yanı sıra rehberlik terimi de bu arařtırmanın diđer köře taşıını oluřturmaktadır. Rehberlik oldukça karmařık bir süreçtir (Ambrosetti, 2014; Ambrosetti ve Dekkers, 2010; Ragins ve Kram, 2007; Rajuan ve diđerleri, 2010). Rehberlik ve öğretmen kimliđi arasındaki iliřki açısından literatür, rehberliđin öğretmen kimliđinin geliřimi, yeniden yapılandırılması veya

dönüştürülmesinde etkili olduğunu vurgulamaktadır (Devos, 2010). Rehberlik, öğretmen adayı kimliğinin bileşenlerini etkiler (Izadinia, 2016). Bu nedenle rehberlik ilişkisi öğretmen adaylarının kimlik gelişimini olumlu veya olumsuz yönde etkilemektedir (Izadinia 2016, 2015b).

Rehberliğin öğretmen adayı kimliği gelişimini nasıl etkilediği göz önüne alındığında, literatürde aşağıdaki yönler vurgulanmıştır. Rehberlik, öğretmen adaylarının özgüvenlerini (Djouidir, 2019; Izadinia, 2016, 2015a; Ticknor, 2014), öz yeterliklerini (Cattley, 2007; Göker, 2020), öğretmen seslerini (Beck ve Kosnik, 2000; Izadinia, 2016, 2015a; Patrick, 2013), öğretmen vizyonlarını (Izadinia, 2016) ve eylemlilik duygularını (Djouidir, 2019; Ticknor, 2014; Williams, 2010) etkileyerek öğretmen kimliği gelişimini etkiler. Ayrıca rehberlik, bilgi üzerindeki etkisiyle öğretmen adaylarının kimlik gelişimini bilgilendirir (McIntyre ve Hobson, 2016).

Izadinia (2018), rehberliğin öğretmen kimliği geliştirme sürecini nasıl etkilediğini araştırmış ve sağlam bir kimliği teşvik eden beş ilke önermiştir. Bu ilkeler, güçlü ilişkiler kurmak ve sürdürmek, destek ve teşvik sunmak, sürekli geri bildirim sağlamak, yansıtıcı faaliyetler için zaman ayırmak ve olumlu bir ortam yaratmaktır. Bu çerçevede, bu çalışmada mentorluğun öğretmen adaylarının kimlik gelişimini nasıl etkilediğini analiz etmek için kullanılmıştır.

Bu çalışmanın amacı, sınıf yönetimi dersi kapsamında öğretmen adaylarının mesleki kimlik gelişimini desteklemek için öğretmen adayları ve rehber öğretmenler arasında informel rehberliğin potansiyelini araştırmaktır. Bu çalışmada özellikle aşağıdaki sorulara yanıt aranmaktadır:

1. Informel rehberlik sürecinde mentor/menti ilişkisi öğretmen kimliği gelişimini desteklemek açısından nasıl işliyor?
2. Informel rehberlik sürecinin mesleki kimlik gelişimi üzerindeki potansiyelini sınıf yönetimi açısından değerlendiren öğretmen adaylarının algıları nelerdir?

3. Informel rehberlik sürecinin öğretmen adaylarının mesleki kimlik gelişimine yönelik potansiyelini sınıf yönetimi açısından değerlendiren rehber öğretmenin algıları nelerdir?

Öğretmen kimliği, öğretmen uygulamalarının merkezinde yer alır (Beauchamp & Thomas, 2009). Özellikle öğretmen yetiştirme aşamasında öğretmen kimliğinin gelişiminin nasıl destekleneceğine yönelik araştırma çalışmalarının yapılması önemlidir (Riyanti, 2017). Bu yüzden konuyu incelemeye değerdi. Bu çalışma, öğretmen eğitiminde bir sınıf yönetimi dersi kapsamında informel rehberlik ilişkisinin öğretmen adaylarının mesleki kimlik gelişimini nasıl desteklediğini tanıtmaya ve belgelemeye açısından önemlidir.

Alan yazında öğretmen adaylarının gelişimine çok dikkat edilmiştir (Flores ve Day, 2006; McIntyre ve Hobson, 2016). Ancak rehberliğin özellikle öğretmen adayları için öğretmen kimliği gelişimine etkisi daha az incelenen bir alandır (Devos, 2010; Henry ve Mollstedt, 2021; Izadinia, 2013, 2015a, 2016; McIntyre ve Hobson, 2016). Ayrıca, rehberliğin öğretmen adaylarının kimlik gelişimindeki etkisine ilişkin araştırma çalışmaları ağırlıklı olarak staj bağlamını kullanmaktadır (Izadinia, 2016). Ancak, mevcut çalışmanın bağlamı staj/öğretmenlik uygulaması değildir. Bir öğretmen yetiştirme programında üçüncü sınıf öğretmen adaylarına sunulan bir sınıf yönetimi dersidir. Ayrıca, rehberlik ilişkisi informeldir. Mevcut çalışma, öğretmen adaylarının kimlik gelişimine yönelik informel rehberliğin potansiyeline odaklanarak ve yeni bakış açıları getirerek uluslararası ve ulusal eğitim araştırmalarına katkıda bulunmaktadır. Ayrıca çalışma, öğretmen adaylarının öğretmen olarak kendilerinin çeşitli boyutlarını keşfedip sergiledikleri için kimlik gelişimine de katkı sağlamaktadır (Beauchamp ve Thomas, 2009; Olsen, 2013). Son olarak, bu çalışma öğretmen eğitimcilerine değerli bilgiler sunmaktadır. Özellikle öğretmen yetiştirme programlarına çeşitli rehberlik ilişkileri eklemek isteyenler bu çalışmanın bulgularından yararlanabilirler.

## Yöntem

Nitel araştırma yaklaşımı, daha spesifik olarak nitel araştırma desenlerinden biri olan vaka çalışması, bu çalışma için uygun görülmüştür. Yin (2018), bir vaka çalışmasının, özellikle bağlam ve olgu arasında keskin sınırlar olmadığında, güncel bir olguyu (vakayı) gerçek yaşam bağlamında ayrıntılı olarak araştırdığını vurgular. Bir vaka tek bir kişi, grup, olay, organizasyon, topluluk, program vb. olabilir (Saldaña, 2011; Yin, 2018). Mevcut çalışma, bir olguyu (öğretmen adayları ve rehber öğretmenler arasındaki informel rehberlik ilişkisi) çağdaş eğitim bağlamında (sınıf yönetimi dersi) araştırdığı için vaka çalışması araştırmasının bir örneğidir.

Bu çalışma, 2020-2021 bahar döneminde Türkiye'de tanınmış bir devlet üniversitesinin eğitim fakültesinde gerçekleştirilmiştir. Mevcut çalışma, 2020-2021 bahar döneminde verilen bir lisans dersi olan sınıf yönetimi dersi kapsamında gerçekleştirilmiştir. Bu çalışma, aynı öğretim üyesi tarafından verilen sınıf yönetimi dersinin iki sınıfında gerçekleştirilmiştir. Bu iki sınıfa kayıtlı öğretmen adaylarının 14 haftalık derslere katılmaları bekleniyordu. Ders gereksinimleri, hizmet içi bir rehber öğretmenin katılımıyla tasarlanmış bir ders planlama projesini içeriyordu.

İlgili öğretim üyesi, rehberlik süreci hakkında daha spesifik olmak için yarıyılın ilk haftasında projeyi ayrıntılı olarak anlamıştır. Öğretmen adaylarının dört veya beş kişilik gruplar oluşturmaları ve öğretim üyesi tarafından sağlanan listeden sınıf yönetimi dersi ile ilgili bir konu seçmeleri beklenmiştir. Rehber öğretmenler gruplarla eşleştirildiğinde seçtikleri konu ile ilgili ders planı oluşturmaya başladılar. Ders planlarının bir öğretmen yetiştirme programına kayıtlı olan öğretmen adayları için tasarlanması bekleniyordu. Mentorluk süreci 10 haftada tamamlandı. Mentor öğretmenler ve öğretmen adayları toplamda beş çevrimiçi toplantı yapmıştır.

Katılımcılara gelince, bu çalışmaya rehber öğretmenler ve öğretmen adayları katılmıştır. Araştırmacı, araştırmacının araştırma sorularını anlamasına en iyi şekilde yardımcı olacak katılımcıları seçmek için amaçlı örnekleme yöntemi kullanmaya karar verdi (Creswell, 2013). Mentor öğretmenlerin en az beş yıllık öğretmenlik deneyimine sahip olmaları, şu anda bir K-12 okulunda tam zamanlı öğretmenlik yapmaları ve gönüllü olarak katılmaya istekli olmaları gerekiyordu. Öğretmen adaylarının üçüncü sınıf öğrencisi olmaları ve gönüllü olarak katılmaya istekli olmaları gerekiyordu. Bu kriterlere bağlı olarak beş mentorluk grubu seçilmiştir. Bu gruplarda beş rehber öğretmen ve yirmi iki öğretmen adayı bulunmaktadır.

Bu çalışmadaki çoklu veri kaynakları arasında video kayıtları, rehber öğretmenlerle yarı yapılandırılmış görüşmeler ve öğretmen adaylarıyla yarı yapılandırılmış görüşmeler yer almaktadır. Her mentorluk grubundan beş kayıt vardır. Bir video kaydı yaklaşık 50-60 dakikadır. Bu çalışma için iki farklı bireysel yarı yapılandırılmış görüşme geliştirilmiştir: yarı yapılandırılmış öğretmen adayı görüşmesi ve yarı yapılandırılmış rehber öğretmen görüşmesi.

Bu çalışmada, sosyal bilimlerde nitel yöntemler için yaygın bir uygulama olan veri analizi için tematik analiz yöntemi kullanılmıştır (Braun ve Clarke, 2013). Mevcut çalışmada, veri analizi için Kod Kitabı TA (Braun ve diğerleri, 2021) kullanılmıştır. Harita olarak kullanılmak üzere Izadinia (2018) ilkelerine dayalı bir kod kitabı geliştirilmiştir. Ancak, araştırma aynı zamanda nitel felsefeyi de takip etmiştir. Araştırmacı verileri kodlarken sadece kod kitabını dikkate almamıştır. Verilerle yapılan detaylı etkileşim sonucunda yeni bir ilke belirlenmiştir.

Verilerin analiz sürecinde öncelikle video kayıtları kodlanmıştır. Daha sonra süreç sırasıyla rehber öğretmen görüşmeleri ve öğretmen adayları görüşmelerinin kodlamasıyla devam etmiştir. Ayrıca veriler MAXQDA (2020) yazılımı ile kodlanmıştır. Hem görüşmeler hem de video kayıtları kodlanırken, mevcut çalışma Braun ve diğerlerinin (2021) tematik analizin altı aşamasını takip etmiştir.

## Bulgular

İlk araştırma sorusuyla ilgili olarak, öğretmen kimliği gelişimini desteklemek açısından informel rehberlik sürecinin nasıl işlediğini gözlemlerken, rehber öğretmenlerin kullandığı ve öğretmen adaylarının mesleki kimlik gelişimini bilgilendirme potansiyeline sahip olan ilkeler olarak altı ana tema belirlenmiştir: (a) güçlü bir ilişki kurmak ve sürdürmek; (b) destek ve teşvik sunmak; (c) sürekli geri bildirim sağlamak; (d) yansıtıcı faaliyetler için zaman ayırmak, (e) olumlu bir ortam yaratmak; (f) farkındalığı, kendi kendini tanıma ve gelecek bağdaştırmaları mümkün kılmak. İlk beş ilke, Izadinia'nın (2018) ilkelerine dayanmaktadır. Ek olarak, veri analizi, bu beş ilkenin, öğretmen adaylarının mesleki kimlik gelişimi ile ilgili informel rehberlik sürecinin tüm göze çarpan yönlerini içermediğini ortaya koymuştur. Bu yüzden altıncı ilke eklenmiştir.

Mevcut çalışmadaki video kayıtları, rehber öğretmenler ve öğretmen adaylarının güçlü bir ilişki kurduğunu ve toplantılar boyunca sürdürdüğünü ortaya koymuştur. Bu temaya ilişkin dört ana kod belirlenmiştir: zaman geçirmeye istekli olma; günlük hayat sohbetleri; öğretmen adaylarının ihtiyaç ve beklentilerini tanımak için sohbetler; zorluklar hakkında güvenmek, açılmak ve yardım istemek. Bu çalışmadaki öğretmen adayları ve rehber öğretmenler, bir ilişki kurma ve birbirlerine yardım etme konusunda hevesliydi. Toplantıyı hemen bitirip kendi programlarıyla meşgul olmak yerine birbirlerine zaman ayırdılar. Rehber öğretmenler toplantılarının çeşitli aşamalarında aday öğretmenlerin ihtiyaç ve beklentilerini ayrıntılı olarak öğrenmek için zaman ayırmışlardır. Bu çalışmada ayrıca, öğretmen adaylarının ve rehber öğretmenlerin sohbet için zaman ayırdığı birçok örnek vardı. Sohbet konuları arasında rehber öğretmenlerin ve aday öğretmenlerin günlük yaşamları, güncel olaylar ve benzerleri yer aldı. Bunlara ek olarak, öğretmen adayları ders planlarını hazırlarken karşılaştıkları zorluklardan bahsetti. Ayrıca, öğretmen adayları yaşadıkları zorluklarla ilgili olarak mümkün olduğunda mentorlarından yardım istediler.



Video kayıtlarının analizi, bu çalışmadaki rehber öğretmenlerin, informel rehberlik süreci boyunca destek ve teşvik sağladığını göstermiştir. Bu tema iki ana kodu içermektedir: öğretimsel destek ve duygusal destek. Öğretim desteği bilgi ve stratejileri içerirken, duygusal destek, Izadinia'nın (2018) ilkeleri doğrultusunda öğretmen adaylarının fikirlerini veya ilerlemesini teşvik etmek ve onaylamak, öğretmen adaylarının ön bilgi ve becerilerini tanımak ve öğretmen adaylarını öğretmen olarak kabul etmekle ilgilidir. Bu çalışmada rehber öğretmenler, çok çeşitli konularda öğretmen adaylarıyla birçok öğretim stratejisini paylaştılar. Konular, istenmeyen davranışlarla başa çıkma, öğrencileri aktif olarak etkinliklere dahil etme ve benzerleriydi. Rehber öğretmenlerin etkili sınıf yönetimi için temel noktaları vurguladığı birçok durum da vardı. Bu çalışmada rehber öğretmenler rehberlik sürecinde çeşitli konularda bilgi de paylaştılar. Ayrıca görüşmelerde genellikle öğretmen adaylarının ilerlemesinden memnun olduklarını vurgulamışlardır. Rehber öğretmenler, öğretmen adaylarının ders planlama, ilgili materyal geliştirme gibi çeşitli konularda iyi olduklarını ifade etmişlerdir. Rehber öğretmenler ayrıca öğretmen adaylarının bilgi ve becerilerini kabul etmiş ve buna göre hareket etmişlerdir. Dahası rehber öğretmenler, öğretmen adaylarının bireysel becerilerini fark etmiş ve toplantılarda bunları da dile getirmişlerdir. Bu çalışmada, rehber öğretmenler öğrenci öğretmenleri öğretmen olarak kabul etmişlerdir. Son olarak rehber öğretmenler, öğretmen adaylarını öğretmen yetiştirme programına kayıtlı öğrencilerden ziyade meslektaşları olarak görmektedirler. Rehber öğretmenler aday öğretmenlere hitap ederken sıklıkla “öğretmen” kelimesini kullanmışlardır. Sürekli geribildirim sağlama ilkesi ile ilgili olarak, video kayıtlarının analizi, rehber öğretmenlerin sürekli geri bildirim sağladığını ve dolayısıyla informel rehberlik süreci boyunca öğrenci öğretmen kimliğinin gelişimini etkilediğini ortaya koymuştur. Bu temayla ilgili olarak üç ana kod belirlenmiştir: sürekli geri bildirim, yapıcı geri bildirim ve özel ve net geri bildirim. Bu çalışmadaki öğretmen adayları, rehber öğretmenlerden sürekli geri bildirim aldı. Birçok toplantıda, öğretmen adayları ve rehber öğretmenler önceki haftaların materyallerini veya planlarını gözden geçirdiler. Ayrıca rehber öğretmenler, ders planlarının güçlü ve zayıf yönleriyle ilgili yapıcı geri bildirim sağlamış ve ek

önerilerde bulunmuştur. Mentor öğretmenlerin geri bildirimlerinin oldukça spesifik ve net olduğu çeşitli durumlar da vardı. Mentorlar geri bildirim verirken dilbilgisinden terminolojik konulara kadar birçok konuya dikkat ettiler.

Yansıtıcı faaliyetlere zaman ayırmak ilkesi ile ilgili olarak, mevcut çalışmadaki video kayıtları, rehber öğretmenlerin ve öğretmen adaylarının, informal rehberlik toplantıları boyunca yansıtıcı etkinlikler için zaman ayırdıklarını ortaya çıkardı. Bu temayla ilgili olarak üç ana kod belirlenmiştir: rehber öğretmenlerin yansımayı teşvik etmesi, öğretmen adaylarının uygulamalarını kendi değerlendirmeleri ve öğretmen adaylarının strateji geliştirmeleri. Bu çalışmada, yansıtıcı etkinliklere zaman ayırma ile ilgili ilk kod, rehber öğretmenlerin yansıtmayı teşvik etmesi olmuştur. Yani, rehber öğretmenler, öğretmen adaylarını, öğretmen adaylarının kendi ders planları veya materyalleri üzerinde düşünmeye teşvik etti. Rehber öğretmenler, öğretmen adaylarından etkinliklerinin güçlü, zayıf yanlarını veya etkililiğini değerlendirmelerini istedi. Rehber öğretmenlerin aday öğretmenleri birbirlerinin fikirleri ya da rehber öğretmenlerin fikirleri üzerinde düşünmeye teşvik ettiği zamanlar oldu. Bu çalışmada ayrıca, birkaç öğretmen adayı, fikirlerini veya uygulamalarını sürekli olarak değerlendirme alışkanlığını geliştirmeye başlamıştır. Önceki kodun aksine, rehber öğretmenlerin teşviki olmadan yansıtıcı konuşmaya katıldılar.

Olumlu bir ortam yaratma ilkesi ile ilgili olarak, mevcut çalışmadaki video kayıtları, rehber öğretmen ve öğretmen adaylarının informal rehberlik süreci boyunca olumlu bir ortam yarattığını ve bu temayla ilgili dört önemli kodun öne çıktığını ortaya koymuştur: eşit güç ilişkisi, aktif katılım, tartışma ve müzakerede özgür hissetme ve süreci birlikte değerlendirme. Bu çalışmada rehber öğretmen ve öğretmen adayları arasındaki güç ilişkisi eşitlik üzerine kurulmuştur. Rehber öğretmenlerin yukarıdan aşağıya bir yaklaşımı yoktur, bu nedenle çalışma katılımcıları arasında bir hiyerarşi bulunmamaktadır. Görüşmelerde rehber öğretmenler özellikle öğretmen adaylarının da sürece yön vermesi gerektiğini vurguladılar. Öğretmen adaylarının kararları veya fikirleri son derece önemliydi. Güç ilişkisinin eşit doğasının farkında olarak, öğretmen adayları ve rehber

öğretmenler ortak karar prosedürü izlediler. İkinci olarak, bu çalışmada aktif katılım bir başka kod olarak belirlenmiştir. Ayrıca bu çalışmada öğretmen adayları fikirlerini ifade etmekten çekinmemiştir. Bir fikir veya öneriyi makul bulmadıklarında görüşlerini açıkça paylaştılar. Son olarak, video kayıtlarının analizi, rehber öğretmenler ve öğretmen adaylarının toplantılarında zaman zaman rehberlik süreci hakkında konuştuklarını ortaya koymuştur.

Informel rehberlik sürecinin öğretmen kimliği gelişimini destekleme açısından nasıl çalıştığıyla ilgili olarak, son tema farkındalığı, kendi kendini tanıma ve gelecek bağdaştırmaları mümkün kılma ilkesiydi. Bu çalışmada rehber öğretmenler, öğretim gerçekleriyle ilgili deneyimlerini veya fikirlerini paylaştılar ve aday öğretmenler gelecekteki mesleklerinin kendileri için neler getirebileceği konusunda farkındalık kazandı. Rehber öğretmenler ayrıca çevrimiçi öğretimle ilgili deneyimlerini veya fikirlerini paylaşmış ve olası gelecek senaryolarını dikkate alarak farkındalık yaratmıştır. İkinci olarak, çalışmadaki öğretmen adayları, öğretmenin sorumluluklarını ile ilgili farkındalık kazanmıştır. Rehber öğretmenler, bir öğretmenin gerçekte neler yaptığı ve bir öğretmenden ne tür sorumluluklar yerine getirmesi beklendiği konusunda deneyimlerini ve fikirlerini paylaştılar. Son olarak, öğretmen adayları iyi bir öğretmenin özellikleri ile ilgili farkındalık kazanmıştır. Rehber öğretmenler, nasıl etkili bir öğretmen olunacağına dair deneyimlerini ve fikirlerini paylaşarak farkındalık oluşturdular.

İkinci araştırma sorusuna gelince, öğretmen adaylarının informel rehberlik sürecinin mesleki kimlik gelişimine etkisine ilişkin algıları altı ana tema altında belirlenmiştir. (a) güçlü bir ilişki kurmak ve sürdürmek; (b) destek ve teşvik sunmak; (c) sürekli geri bildirim sağlamak; (d) yansıtıcı faaliyetler için zaman ayırmak, (e) olumlu bir ortam yaratmak; (f) farkındalığı, kendi kendini tanıma ve gelecek bağdaştırmaları mümkün kılmak.

Son araştırma sorusuna gelince, rehber öğretmenlerin informel rehberlik sürecinin mesleki kimlik gelişimine etkisine ilişkin algıları beş ana tema altında ele alınmıştır. (a) güçlü bir ilişki kurmak ve sürdürmek; (b) destek ve teşvik sunmak; (c) sürekli geri bildirim sağlamak; (d), olumlu bir ortam yaratmak; (e)

farkındalığı, kendi kendini tanıma ve gelecek bağdaştırmaları mümkün kılmak. Bu sonuçlar, rehber öğretmenlerle yapılan yarı yapılandırılmış görüşmelerin analizine dayanmaktadır. Video kayıtları ve öğretmen adaylarının görüşmelerinin analizinden farklı olarak, informel rehberlik sürecinin öğretmen adaylarını yansıtıcı etkinliklere zaman ayırarak etkilediğini belirtmediği için bu tema çıkarılmıştır.

## **Tartışma**

Bu çalışma, informel rehberlik sürecinin, benimsenen çerçeveye (Izadinia, 2018) göre öğretmen adaylarının mesleki kimlik gelişimini destekleme potansiyeline sahip ilkeleri içerdiğine işaret etmiştir. Bu sonuç, rehber öğretmenlerin öğretmen kimliği geliştirme sürecinde etkili olan diğer önemli kişiler olduğunu vurgulayan son araştırmalarla uyumludur (Cameron & Grant, 2017; Henry & Mollstedt, 2021; Izadinia, 2015a; McIntyre & Hobson, 2016; Yuan & Mak, 2018).

Araştırma sonuçları, rehberlik sürecinin öğretmen adaylarının kimlik gelişimini altı şekilde etkileme potansiyeline sahip olduğunu göstermiştir. İlk olarak, sonuçlar informel rehberlik sürecinde kurulan ve sürdürülen güçlü bir ilişkinin öğretmen adaylarının mesleki kimlik gelişimini bilgilendirdiğini göstermiştir. Literatürde rehber öğretmenler ile mentiler arasında güçlü bir ilişkinin mentilerin mesleki kimlik gelişimi açısından önemli olduğu belirtilmektedir (Izadinia, 2015a, 2018). Rajuan ve diğerleri (2007) yaptıkları çalışmada, öğretmen adaylarının rehber öğretmenleri ile kişisel bir ilişki kurması gerektiğini bulmuşlardır. Araştırmacılar, araştırmadaki öğretmen adaylarına göre “onlara zaman ayırmanın” ve “müsait olmanın” iyi bir kişisel ilişkinin göstergeleri olduğunu vurgulamışlardır. Literatür, rehber öğretmenlerin rehberlik için yetersiz zaman ayırdığı veya fazladan zaman ayırmadığı çalışmaları içermektedir (Tomlinson vd., 2010). Ancak, bu çalışmada durum böyle değildi.

İkinci olarak, analiz, bu çalışmadaki rehber öğretmenlerin, informel rehberlik süreci boyunca destek ve teşvik sağladığını ve öğretmen adaylarının mesleki

kimlik gelişimini olumlu yönde etkilediğini göstermiştir. Bu sonuç, Djoudir'in (2019) rehber öğretmenler tarafından verilen duygusal ve psikolojik desteğin, öğretmenlerin gelecekteki kariyerlerine yönelik motivasyonlarını ve özgüvenlerini artırdığını tespit eden çalışmasıyla uyumludur. Mevcut çalışmada rehber öğretmenler tarafından sunulan öğretim desteği, ağırlıklı olarak öğretim stratejileri üzerineydi ve öğretmen adayları tarafından çok etkili bulundu. Bu, öğretmen adaylarının rehberlik sürecinde pedagojik konular (Chu, 2020; McIntyre & Hobson, 2016), pratik bilgiler, taktikler (Tokoz-Göktepe & Kunt, 2020) hakkında bilgi edindiklerini ve bunun onların profesyonel kimliklerini geliştirdiğini bildiren diğer araştırmalarla uyumludur (Chu, 2020; McIntyre & Hobson, 2016; Tokoz-Göktepe & Kunt, 2020). Sonuçlar, rehberlik sürecinde sağlanan öğretim desteğine ek olarak duygusal desteğin, öğretmen adaylarının kimlik gelişimini etkileme potansiyeline sahip olduğunu göstermiştir. Literatürdeki bazı araştırmalar, rehber öğretmenler tarafından sağlanan duygusal desteğin, öğretmen adaylarının özgüvenlerini artırdığı için profesyonel kimliklerini güçlendirdiğini göstermiştir (Djoudir, 2019; Lynn ve Nguyen, 2020).

Mentor geribildiriminin öğretmen kimliği gelişimini destekleme açısından önemi önceki literatürde de vurgulanmıştır (Bekerici, 2016; Djoudir, 2019; Izadinia, 2018; İnce, 2020; Tokoz-Göktepe ve Kunt, 2020). Mentorluk süreci boyunca spesifik ve net geri bildirimler, öz farkındalık ve profesyonel kimlik gelişimi için etkilidir (Izadinia, 2018). Izadinia (2015b) ve Tomlinson ve diğerleri (2010) tarafından önerildiği gibi, bu çalışmadaki yapıcı geribildirim öğretmen adaylarının ders planlarının hem güçlü hem de zayıf yönleriyle ilgilidir. Bu çalışmada tüm veriler açıkça göstermiştir ki, rehber öğretmenler sürekli geri bildirim, yapıcı geri bildirim ve net geri bildirim sundular.

Video ve öğretmen aday görüşme analizi, yansımanın etkisi hakkında önceki araştırmalarla uyum halindeydi. Daha spesifik olarak literatürdeki çalışmalarda yansıtma etkinliklerinin öğretmen adaylarının kimlik gelişiminde etkili olduğu bulunmuştur (Binks vd., 2009; Ercan, 2020; Flores, 2014; Leijen vd., 2014;

Riyanti, 2017; Yazan, 2014; Yuan ve Mak, 2018). Bu çalışma da rehber öğretmenlerin ve öğretmen adaylarının, informel rehberlik toplantıları boyunca yansıtıcı etkinlikler için zaman ayırdıklarını göstermiştir.

Literatürde rehber öğretmenlerinin tutumlarının öğretmen kimliği açısından önemine odaklanan çalışmalar yer almakta, özellikle rehber öğretmenlerin otoriter tutumunun öğretmenlerin kimlik gelişimini olumsuz etkilediğinden bahsetmektedir (Henry ve Mollstedt, 2021; Pillen vd., 2013; Tokoz- Göktepe ve Kunt, 2020; Yuan, 2016). Ancak eşit güç ilişkisinin garanti altına alındığı olumlu bir ortamda rehberlik, öğretmen adayı kimlik gelişimini olumlu yönde bilgilendirebilir (Tokoz-Göktepe ve Kunt, 2020; Ticknor, 2014). Bu çalışmada, tüm veri seti analizleri, rehber öğretmenler ve öğretmen adayları arasında eşit bir güç ilişkisi sunmuştur. Öğretmen adayları, rehber öğretmenleri ile birlikte tartışma, müzakere ve süreci değerlendirmekte özgürdüler. Bu olumlu ortam, profesyonel kimlik gelişimini teşvik edebilir.

Video analizi, öğretmen adayı ve rehber öğretmen görüşme analizinden oluşturulan, öğretmen adaylarının mesleki kimlik gelişimini geliştirmede etkili olduğu gözlemlenen son ilke, farkındalığı, kendi kendini tanıma ve gelecek bağdaştırmaları mümkün kılmaktır. Bu, mentor öğretmenlerle yapılan görüşmelerde de mevcut olmasına rağmen, ağırlıklı olarak videolarda ve öğretmen adayı görüşmelerinde gözlemlendi. Yazan'ın (2014) çalışmasında da belirtildiği gibi öğretmenlik mesleğinin temel yönlerini belirlemek, öğretmen adaylarının rehberlik sürecinde mesleki kimlik gelişimini destekleyebilir. Ayrıca, video analizi ve öğretmen adayı görüşmesi analizi, sürecin öğretmen adaylarının daha önce hiç düşünmedikleri öğretimle ilgili konular hakkında düşünmelerini ve gelecekteki mesleklerinin onlar için neler getirebileceğini düşünmelerini sağladığını göstermiştir. Analiz, İnce'nin (2020) ve Ercan'ın (2020), farkındalık kazanma ve bakış açıları geliştirmenin öğretmen adaylarının mesleki kimlik gelişimini güçlendirdiğini savunan bulgularına paralel olarak, öğretmen adaylarının kendileri ve meslekleri hakkında farkındalık ve yeni bakış açıları kazandıklarını göstermiştir. Izadinia (2015c) ve Lindgren'in (2005) belirttiği gibi,

rehber öğretmenlerle etkileşim, bu çalışmada da öğretmen adaylarının çeşitli öğretim görev ve sorumluluklarını belirlemelerini sağlamıştır.

## Öneriler

Mevcut çalışma, öğretmen eğitimi programları ve öğretmen eğitimcileri için bazı pratik çıkarımları ortaya koymaktadır. İlk olarak, öğretmen eğitimcileri, öğretmen adayı kimliğinin gelişimi için informal rehberliğin potansiyelini kabul etmelidir. Bu nedenle, informal rehberlik faaliyetlerine daha fazla zaman ayrılmalıdır. Öğretmen eğitimcileri, informal rehberlik ilişkilerini çeşitli derslere entegre etmelidir. Ders, sınıf yönetimi ile sınırlı kalmamalıdır, yöntem dersleri de tercih edilebilir. Ayrıca, öğretmen yetiştirme programlarındaki öğretim elemanları, derslerinde öğretmen adaylarına informal rehberlik sunabilmektedir. Öğretim elemanları bir önceki bölümde ayrıntılı olarak tartışılan informal rehberlik sürecinin etkili yönlerini dikkate almalı ve buna göre eğitimlerini vermelidirler. Ayrıca hem formel hem de informal rehberlik ilişkilerinde rehber öğretmenler, bu çalışmada vurgulanan etkili rehberlik yönlerine de öncelik vermelidir.

Bu çalışmanın öğretmen kimliği geliştirme ve rehberlik ile ilgili literatüre katkı sağlayacağı düşünülmektedir. Takip eden bölümde, eğitim araştırmacılarına bu ve benzeri konularda daha fazla araştırma yapmaları için rehberlik etmesi için gelecekteki araştırmalara yönelik öneriler sunulmaktadır. İlk olarak, bu çalışma veri kaynaklarını video kayıtları ve öğretmen adayları ve rehber öğretmenlerle yarı yapılandırılmış görüşmelerle sınırlı tutmuştur. Zengin verilerine rağmen, öğretmen kimlik gelişimini daha geniş bir perspektiften görmek için dersin öğretim üyesi ile yapılan yarı yapılandırılmış bir görüşme ve öğretmen adaylarının haftalık yansıma raporları kullanılabilir. İkinci olarak, bu çalışma on haftada tamamlanan informal rehberlik sürecini araştırmıştır. Informel rehberlik sürecinin öğretmen adayları üzerindeki uzun süreli etkisi araştırılmamıştır. Öğretmen adaylarının mesleki kimliklerindeki değişiklikleri araştırmak için ön-son tasarımı bir çalışma yapılabilir. Üçüncüsü, aynı branşı öğretiyor olmak bu

araştırmanın kriterlerinden biri değildi. Aynı bransa sahip rehber öğretmenler ve öğretmen adayları ile başka çalışmalar yapılabilir. Ayrıca karşılaştırmalı bir çalışma da tercih edilebilir. Dördüncüsü, rehberlik sürecinin yürütülmesi, COVID-19 kısıtlamaları nedeniyle çevrimiçi bir iletişim platformu üzerinden gerçekleşti. Bu çalışmada informal rehberlik sürecinin çevrimiçi yürütülmesi araştırılmamıştır. Daha ileri çalışmalar, çevrimiçi informal rehberlik sürecinin öğretmen adaylarının mesleki kimlik gelişimi üzerindeki potansiyeline odaklanabilir. Beşinci olarak, bu çalışma tek bir vaka tasarımı benimsemiştir. Çoklu vaka tasarımına sahip bir araştırma çalışması, informal rehberlik sürecini birçok vakada inceleyebilir ve bunları karşılaştırabilir. Son olarak, bu çalışma, öğretmen adaylarının kimlik gelişimini desteklemek için informal bir mentorluk sürecinin potansiyelini araştırdı. Daha ileri araştırmalar, rehber öğretmenlerin kimlik gelişimini desteklemek için informal bir rehberlik sürecinin potansiyeline de odaklanabilir. Benzer şekilde, diğer öğretmen adaylarının, informal rehberlik süreci boyunca profesyonel kimlik gelişimini destekleme potansiyeli araştırılabilir.



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