



**T.C.**  
**DOKUZ EYLÜL ÜNİVERSİTESİ**  
**EĞİTİM BİLİMLERİ ENSTİTÜSÜ**



**DEPARTMENT OF FOREIGN LANGUAGE EDUCATION  
ENGLISH LANGUAGE TEACHING PROGRAM  
DOCTORAL DISSERTATION**

**A PATHWAY FOR IMPROVING CLASSROOM LANGUAGE  
OF PRE-SERVICE ENGLISH TEACHERS:  
AN ACTION RESEARCH STUDY**

**EDA CEYLAN**

**İzmir  
2023**

**DOKUZ EYLUL UNIVERSITY**  
**INSTITUTE OF EDUCATIONAL SCIENCES**  
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**EDA CEYLAN**

**SUPERVISOR**

**Prof. Dr. Hatice İrem Çomoğlu**

**İzmir**

**2023**

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Tarih: 29/05/2023

**Tez Başlığı:**

A Pathway for Improving Classroom Language of Pre-Service English Teachers: An Action Research Study

Yukarıda başlığı belirtilen tez çalışmamın a) Kapak sayfası, b) Giriş, c) Ana bölümler ve d) Sonuç kısımlarından oluşan toplam **115** sayfalık kısmına ilişkin, **28/05/2023** tarihinde **tez danışmanım tarafından** Dokuz Eylül Üniversitesi Kütüphane ve Dokümantasyon Daire Başkanlığı'nın sağladığı İntihal Tespit Programından (Turnitin-Tez İntihal Analiz Programı) aşağıda belirtilen **filtreleme tiplerinden biri** (uygun olanı işaretleyiniz) uygulanarak alınmış olan orijinallik raporuna göre, tezimin **benzerlik oranı % 13' tür**.

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**Adı Soyadı** : Eda Ceylan  
**Öğrenci No** : 2019010102  
**Anabilim Dalı** : Yabancı Diller Eğitimi  
**Programı** : İngilizce Öğretmenliği Doktora  
**Statüsü** : Yüksek Lisans ☐ Doktora ☒

**ÖĞRENCİ**

**DANIŞMAN**

Eda Ceylan  
29.05.2023

Prof. Dr. Hatice İrem Çomoğlu  
29.05.2023

## ACKNOWLEDGMENTS

Writing this dissertation has been a journey full of stories, challenges, and valuable lessons that have taught me so much. I am incredibly grateful for the guidance and support of the remarkable people who made this journey possible.

First and foremost, I want to express my deepest appreciation to my supervisor, Prof. Dr. İrem Çomoğlu. Her unwavering support, invaluable guidance, and endless encouragement throughout the entire process have been invaluable. I am truly grateful for her patience and flexibility, especially during the most challenging times. I knew that I could always count on her to be there for me, and her presence was a great comfort. She allowed me to grow both personally and academically, and I feel honored to have had her as my mentor. I also want to extend my heartfelt thanks to my committee members, Assist. Prof. Dr. Gülşah Külekçi and Prof. Dr. Nesrin Oruç Ertürk. Their insightful feedback and constructive criticism were invaluable in helping me refine my research and thinking. I am grateful for their contributions to my work and for their support throughout the entire process.

Additionally, I would like to extend my gratitude to the pre-service teachers who generously volunteered their time to participate in my research, without whom this study would not have been possible. I would like to take this opportunity to express my sincere gratitude and cordially acknowledge the generous support of The Scientific and Technological Research Council of Turkey, specifically through their BİDEB 2211 Graduate Study Grant Program.

I am also grateful to my family and friends for their unwavering support and encouragement throughout this journey. Their love and belief in me kept me going. I am truly blessed to have such a supportive network, and I could not have done this without them. Thank you all from the bottom of my heart.

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## **ABSTRACT**

### **A PATHWAY FOR IMPROVING CLASSROOM LANGUAGE OF PRE-SERVICE ENGLISH TEACHERS: AN ACTION RESEARCH STUDY**

As our understanding of how to learn to teach evolves, it has become increasingly important to move away from traditional, decontextualized lectures and instead integrate collaborative inquiry-based approaches into university courses, which might prepare pre-service teachers (PSTs) for the complex realities of teaching. In this regard, this study, informed by sociocultural theory (SCT), aims to investigate and provide insights into the pre-service EFL teachers' participation in the Collaborative Action Research (CAR) project based on classroom interaction-based reflective practice, embedded in a practicum course. Additionally, the study seeks to explore how the CAR project based on classroom interaction-based reflective practice mediates the pre-service EFL teachers' classroom interactional competence (CIC). The study utilized CAR as its research design and was carried out with a cohort of seven fourth-year PSTs at a public university in western Turkey during the 2020-2021 academic year. The data for the study were obtained during a period of eight months from two CAR cycles, utilizing diverse data collection sources, namely semi-structured interviews, written reflection reports, focus group interviews, a researcher journal, observations, field notes, as well as video-recordings of group meetings, pre-lesson conferences, and post-lesson conferences. The data were analyzed through a reflexive thematic analysis and a sociocultural discourse analysis (SCDA). The thematic analysis revealed that the participation in the CAR project led to changes in the PSTs' understanding of professional development and their teacher identities. Their engagement with the project's content and each other was shaped by the nature and characteristics of the CAR community formed during the project. The PSTs also stressed the value of co-reflection on pedagogical issues through the use of videos and extracts. Based on the SCDA of classroom interaction-based reflective practice, the study found that the quality of dialogic interactions and the mediations by both the teacher educator and peers were crucial for the PSTs' developmental process regarding CIC. The implications for initial teacher education are discussed in light of these findings.

**Keywords:** Collaborative action research, pre-service EFL teachers, classroom interactional competence, sociocultural theory

## ÖZET

### İNGİLİZCE ÖĞRETMEN ADAYLARININ SINIF DİLİ KULLANIMINI GELİŞTİRMELERİ İÇİN BİR YOL: BİR EYLEM ARAŞTIRMASI ÇALIŞMASI

Öğretmeyi öğrenme anlayışımız geliştikçe, geleneksel, bağlamından koparılmış derslerden uzaklaşmak ve bunun yerine öğretmen adaylarını (ÖA) öğretimin karmaşık gerçeklerine hazırlayabilecek işbirliğine dayalı sorgulama temelli yaklaşımları üniversite derslerine entegre etmek giderek daha önemli hale gelmiştir. Bu bağlamda, sosyokültürel teori (SCT) tarafından bilgilendirilen bu çalışma, İngilizce öğretmen adaylarının bir uygulama dersine yerleştirilmiş, sınıf içi etkileşime dayalı yansıtıcı uygulamaya dayalı İşbirlikçi Eylem Araştırması (İEA) projesine katılımlarını araştırmayı ve içgörü sağlamayı amaçlamaktadır. Ayrıca, çalışma, sınıf içi etkileşime dayalı yansıtıcı uygulamaya dayalı İEA projesinin, İngilizce öğretmen adaylarının sınıf içi etkileşim yeterliliğinde (CIC) nasıl bir role oynadığını keşfetmeyi amaçlamaktadır. Araştırma deseni olarak İEA'nın kullanıldığı çalışma, 2020-2021 akademik yılında Türkiye'nin batısındaki bir devlet üniversitesinde dördüncü sınıfta öğrenim gören yedi öğretmen adayından oluşan bir grupla yürütülmüştür. Çalışmanın verileri, yarı yapılandırılmış görüşmeler, yazılı yansıtma raporları, odak grup görüşmeleri, araştırmacı günlüğü, gözlemler, saha notları ve ayrıca grup toplantılarının, ders öncesi konferansların ve ders sonrası konferansların video kayıtları gibi çeşitli veri toplama kaynakları kullanılarak iki İEA döngüsünden sekiz aylık bir sürede elde edilmiştir. Veriler, refleksif tematik analiz ve sosyokültürel söylem analizi (SKSA) yoluyla analiz edilmiştir. Tematik analiz, İEA projesine katılımın, öğretmen adaylarının mesleki gelişim anlayışlarında ve öğretmen kimliklerinde değişikliklere yol açtığını ortaya koymuştur. Projenin içeriğiyle ve birbirleriyle olan ilişkileri ve katılımları, proje sırasında oluşan İEA topluluğunun doğası ve özellikleri tarafından şekillendirilmiştir. Öğretmen adayları ayrıca ders video ve alıntılarının kullanımı yoluyla pedagojik konular üzerinde birlikte düşünmenin değerini vurgulamıştır. Sınıf içi etkileşime dayalı yansıtıcı uygulamanın SKSA'sı ise diyalojik etkileşimlerin ve hem öğretmen eğitimeisinin hem de akranların verdikleri desteklerin kalitesinin, öğretmen adaylarının sınıf içi etkileşim yeterliliği ile ilgili gelişim süreçleri için çok önemli olduğunu ortaya koymuştur. Bu bulgular ışığında aday öğretmen eğitime yönelik çıkarımlar tartışılmıştır.

**Anahtar Kelimeler:** İşbirlikçi eylem araştırması, İngilizce öğretmen adayları, sınıf içi etkileşim yeterliliği, sosyokültürel teori

## **CHAPTER I**

### **INTRODUCTION**

#### **1.1. Introduction**

This chapter serves as a brief introduction to the study. It begins by presenting the problem statement, which explains the issues that the study aims to address. Following the problem statement, the purpose and significance of the research are presented and then proceeds to introduce the research questions. The limitations of the study are also presented, highlighting any potential constraints or limitations that may influence the research. Lastly, the chapter provides definitions of key terms used throughout the research.

#### **1.2. Statement of the Problem**

In the post-method era, there has been an emphasis on the need for “a context-sensitive, location-specific pedagogy” that is grounded in a deep understanding of the “local linguistic, social, cultural, and political particularities,” as noted by Kumaravadivelu (2001, p. 544). As a result, there has been a growing call to revision initial teacher education programs and prepare PSTs who can effectively navigate the unique complexities of each language classroom. Rather than simply providing them with a set of prescriptive instructional practices, it has been suggested that PSTs should be equipped to “theorize from their practice” and “practice what they theorize” (Kumaravadivelu, 2012, p.15). Many researchers have argued that they should be provided opportunities to become teacher researchers, knowledge generators, decision makers, and active agents in their own professional development and learning (see Burns, 2009; Dikilitaş, 2020; Kumaravadivelu, 2001; Ulvik & Riese, 2016; Yan, 2017). Moreover, with the influence of the sociocultural perspective in the field of teacher education, there has been a shift in the view of teachers from being mere “operators utilizing the methods engineered by researchers” to being recognized as individuals with their own beliefs and experiences regarding language teaching and learning, shaped by their previous experiences as learners (Yazan, 2018, p.22).

Despite the significant changes in the view of teachers, the teaching of theory or concepts through decontextualized lecturing, in which PSTs are typically positioned as passive recipients of knowledge given by an expert, remains widespread in teacher education programs (Johnson & Golombek, 2011). According to Vygotsky (1994a), “a straightforward learning of concepts always proves impossible and educationally fruitless”. He further argues that teachers

who rely on this approach usually achieve nothing but “a meaningless acquisition of words, mere verbalization” (pp. 356-357). In this regard, it can be stated that teacher educators who use decontextualized lecturing in their courses fill their students’ memory more than their thinking. In other words, decontextualized lectures lead PSTs to develop “empty verbalism” and engage in “parrot-like repetition of words” without internalizing the scientific concepts related to language teaching and learning (Johnson, 2019, p. 150). While they may be able to name and identify these concepts, they are unable to use them as “psychological tools” to enhance their thinking and practices (Johnson & Golombek, 2011, p. 3). This means that the process of internalizing concepts is not a direct one, but a mediated process in which PSTs actively participate in co-constructing knowledge through dialogic interactions with peers, teacher educators, mentors, and other relevant parties while utilizing cultural artifacts and concepts within purposeful activities (Johnson & Golombek, 2011; Johnson & Golombek, 2016; Li, 2019). In this regard, previous research suggests that teacher educators should create “multiple structured mediational spaces” in which PSTs engage in joint intellectual activities and make joint sense of experiences. Researchers emphasize the importance of “a self-inquiry dimension”, where teacher educators and PSTs collaborate to trace their professional development over time and place (Johnson & Golombek, 2020, p.4). Given the changing landscape of teacher education and evolving views on learning to teach, in this study, CAR was chosen as a tool in which PSTs can engage in structured mediational spaces over an extended period of time, through their sustained participation in social activities that are purposeful and directed towards a common goal. Moreover, CAR was chosen since it is an inquiry-driven model of teacher professional development which PSTs can be positioned as active agents of their own learning and development (Burns, 2009; Dikilitaş, 2020).

In this study, the topic area for the CAR project was selected based on the concern that pre-service EFL teachers face challenges in effectively using classroom language and managing interactions with learners during the constant flow of classroom discourse. This issue has been highlighted by various researchers (Atay, 2004; Eröz-Tuğa, 2013; Gürbüz, 2006; Merc, 2010). Unclear instructions, scarce use of referential questions, insufficient wait time, and failure of reformulation of learners’ outputs are some having been reported as PSTs’ ineffective use of classroom language in the previous research. In parallel to these findings, many scholars suggested that PSTs should be supported to overcome this problem (Aşık & Kuru Gönen, 2016; Atay, 2004; İnceçay, 2010; Sert, 2015; Skinner, 2016; Walsh, 2002, 2006). They pointed out the criticality of raising awareness of PSTs about classroom language and interaction. However, the development of classroom interaction competence (CIC), defined as

“teachers’ and learners’ ability to use interaction as a tool for mediating and assisting learning” (Walsh, 2006, p. 132), has often been overlooked in teacher education programs (Walsh, 2011). As Walsh (2011) noted, while most language teacher education programs provide methodology and subject-based courses, only a few devote enough time to improving CIC of PSTs. In a similar vein, the examination of the courses offered by English language teacher education programs in Turkey shows that they do not offer any course concerning classroom language and interaction. Due to this lack, it can be argued that many pre-service EFL teachers in Turkey complete their programs without understanding the value of classroom interaction and without learning how to use interaction for facilitating learning and enhancing students’ participation.

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

Considering the aforementioned two-fold problem in initial teacher education programs, namely decontextualized lecturing and neglect of CIC, the present study aims to offer insights to the field by creating a CAR project that offers a space for PSTs to work collaboratively with a teacher educator and peers, with the goal of enhancing their CIC. In this regard, the significance of this study is twofold. First, it provides an alternative to transmission-based initial teacher education practices by integrating CAR in a university course and empowering PSTs to take on roles as knowledge generators, problem solvers, and researchers. Through this project, PSTs can experience firsthand the process of conducting research with the guidance and support of their teacher educator and peers. Thus, this study can provide insights into PSTs’ participation in a CAR project integrated in a university course (i.e., practicum course). Second, this study addresses a neglected issue in initial teacher education, namely CIC, and provides insights into how reflective practices based on classroom interaction, implemented in the CAR project, mediate the development of PSTs’ CIC.

### **1.4. Research Questions**

The current study seeks to answer the following two generic research questions:

1. What are the insights into the pre-service EFL teachers' participation in the CAR project on classroom interaction-based reflective practice from a sociocultural perspective?
2. In what ways does the CAR project based on classroom interaction-based reflective practice play a role in the pre-service EFL teachers’ CIC?

### 1.5. Limitations

Like any study, the current study has its own limitations that need to be acknowledged and considered when interpreting the findings. Due to the disruptions caused by the COVID-19 pandemic, traditional forms of education have been severely impacted, prompting the conduct of this study in the context of an e-practicum course. Given the fact that the realities of an e-practicum course may differ from those of a face-to-face practicum, the findings and insights from this study should be interpreted with this limitation in mind. Moreover, since online lessons were conducted with cameras turned off, it was not possible to examine important multimodal features of classroom interaction such as gestures and orientations to artifacts, which could have provided more comprehensive insights. Another limitation of this study is the lack of collaboration with mentor teachers, who play an important role in the practicum course. While the involvement of mentor teachers could have potentially enhanced the study, their participation was deemed impractical due to the unpredictable and constantly changing conditions brought about by the pandemic. Therefore, the decision was made to solely collaborate with the PSTs while recognizing the potential value that mentor teachers could have brought to the research.

### 1.6. Definitions of Terms

**Collaborative Action Research (CAR):** It can be defined as a systematic inquiry in which a group of stakeholders (e.g., PSTs, teacher educators, researchers) work together to examine an issue of common interest or concern to gain a better understanding of it and to create improvement and meaningful change in their practice (Burns, 2011; Stringer, 2007).

**Classroom Interactional Competence (CIC):** It is defined as “teachers’ and learners’ ability to use interaction as a tool for mediating and assisting learning” (Walsh 2006, p. 132).

**Practical Tools:** They refer to classroom practices, strategies, and resources that have immediate and specific uses, rather than broad conceptions that guide a wide range of decisions related to teaching (Grossman et al., 1999). In this study, wait-time and referential questions are some examples of practical tools that fall under the broader conceptual tool of CIC.

**Responsive Mediation:** It refers to a type of mediation that is “responsive to teachers’ immediate and future needs” (Johnson & Golombek, 2020, p. 4). It is characterized as “emergent, dynamic, and contingent” (Johnson & Golombek, 2016, p. 31).

**Perezhivanie:** It refers to “emotional experience” (Vygotsky, 1994b, p. 339). Perezhivanie functions as “a prism” which refracts what is encountered on inter-mental plane (Vygotsky, 1994b, p.340).

**Cognitive/emotional Dissonance:** It can be defined as a sense of instability that individuals experience when there is a conflict between their expectations and reality (Golombek & Doran, 2014; Johnson & Worden, 2014). The moments of cognitive/emotional dissonance are considered as potential “growth points” (Johnson & Golombek, 2016, p. 45).

**Interthinking:** It can be defined as “use of language for thinking together, for collectively making sense of experience and solving problems” (Mercer, 2000, p. 1).



## **CHAPTER II**

### **THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

#### **2.1. Introduction**

The chapter presents the theoretical framework and research studies that inform the current study. It begins with a brief introduction to Vygotskian sociocultural theory (SCT), which serves as the theoretical foundation for this study. The chapter then discusses the key concepts of SCT that are most relevant to this research, including mediation, internalization, the zone of proximal development (ZPD), responsive mediation, and the dialectic unity of cognition and emotion. Subsequently, the chapter introduces the concept of CAR and explains how it serves as a mediational tool for PSTs' professional development, providing a review of previous studies and discussing how CAR has been utilized in these studies. Then, the chapter presents the concept of CIC and the frameworks developed to improve teachers' CIC, including empirical studies that have used the frameworks. Finally, the chapter introduces classroom interaction-based reflective practice, which is used in the current study and is based on the propositions put forward by Johnson and Golombek (2020).

#### **2.2. Sociocultural Theory**

Vygotskian sociocultural theory is the theoretical framework being used in the current study. SCT, which is originated in the works of Lev Vygotsky in the 1920s, is a psychological theory of learning that aims to explain higher-order conscious processes (Antón, 2015; Lantolf & Poehner, 2014). SCT argues:

the way in which human consciousness develops depends on the specific social activities in which we engage and the culturally constructed materials and semiotic artifacts or tools, the most important of which is language, which we use to participate in those activities (Johnson, 2009, p. x).

That is, in contrast to cognitive learning theories, Vygotskian sociocultural theory does not view psychological processes as internal processes isolated within the learner's mind, but instead emphasizes the role of social and physical contexts in the learning process (Johnson, 2009) and posits that "cognitive development is a socially mediated process" (Johnson & Golombek, 2003, p. 730). This perspective has been influential in various fields, including language teacher education. Many researchers have advocated its use as a framework for understanding and facilitating language teacher learning and development by highlighting that

behaviorist and cognitive perspectives are insufficient to explain the complexities of teachers' cognition and practices (Cross, 2010; Freeman & Johnson, 1998; Johnson & Golombek, 2003, 2011, 2016; Kubanyiova & Feryok, 2015; Maggioli, 2023; Nguyen, 2019). In their seminal paper, Freeman and Johnson (1998) made a call for a reconceptualization in the knowledge base for teacher education and they defined learning to teach as “a long-term, complex, developmental process that operates through participation in the social practices and contexts associated with learning and teaching” (p.402).

### **2.2.1. Mediation**

Mediation is one of the core concepts of SCT. From sociocultural perspective, our interaction with the environment is not direct, but a mediated process through which “humans deploy culturally constructed artifacts, concepts, and activities to regulate (i.e. gain voluntary control over and transform) the material world or their own and each other's social and mental activity” (Lantolf & Thorne, 2006, p. 79). That is to say, we create and use various tools to regulate, organize, and facilitate our activities and relationships with the world. These tools or “mediational means” include physical tools and psychological tools (Johnson & Golombek, 2011, p.4). A physical tool can be simple like a knife used to mediate eating and cutting activity or complex like an airplane used to mediate traveling activity. In the context of teacher education, examples of physical tools may include lesson plans, articles, books, video-recordings of lessons, and classroom extracts, to name a few (Maggioli, 2023). As for psychological tools, which allow us to regulate our mental activities (i.e., memory, perception, and attention), they include signs, symbols, language, texts, concepts, and so on (Kozulin, 1998). In teacher education, theories, concepts, and principles related to learning and teaching can be given as examples of psychological tools used to mediate PSTs' thinking and actions (Maggioli, 2023).

Both physical and psychological tools are culturally constructed and taught new generations through social or human mediation. For example, when children see a book for the first time, they do not understand its function and they tend to tear up its pages, however as an adult mediates their interaction with the book, that is, s/he shows what it is used for and how it is used, they begin to turn its pages, look at the pictures in it, and eventually read it. That is to say, from sociocultural perspective, “children learn to use these tools in and through sustained social interaction with adults, first on the social plane (external or interpsychological) and later on the mental plane (internal or intrapsychological) plane as the child begins to self-regulate” (Johnson & Golombek, 2016, p. 22).

In this study, the PSTs participated in a CAR project, which is a culturally constructed tool, designed to mediate their thinking and practice of research, teaching, and learning. They used a variety of tools (e.g., CAR cyclical framework, videos and extracts from real classrooms, concepts related to classroom interaction) in and through prolonged dialogic interactions with more capable others (i.e., their peers and the teacher educator) within the context of CAR project. That is, the current study created a mediational space in which physical and psychological tools could be used and internalized.

### **2.2.2. Internalization**

Internalization is another core concept of SCT. It can be defined as “the process through which a person moves from carrying out concrete actions in conjunction with the assistance of material artifacts and of other individuals to carrying out actions mentally without any apparent external assistance” (Lantolf, 2000, p.14). Through internalization, learners “gain control over natural mental functions by bringing externally (socioculturally) formed mediating artifacts into thinking activity” (Lantolf & Thorne, 2006, p. 153). For example, when a learner internalizes a psychological tool, s/he no longer relies on mediational means. The psychological tool becomes an “inner cognitive tool” regulating and organizing her or his thinking and activities (Kozulin et al., 2003, p. 3). This cognitive transformation occurs through three levels of regulation, namely object regulation, other regulation, and self-regulation.

In object regulation, as its name implies, people are controlled or regulated by the objects in their surroundings. That is, they use objects around them to guide their thinking and control their actions. To exemplify, PSTs are typically controlled by textbooks or lesson plans. In other words, they usually follow textbooks or lesson plans without deviating from them in order to maintain control over their teaching. In other regulation, people are guided by implicit and explicit forms of support from more knowledgeable or capable people (e.g., teachers, peers, mentors). For instance, PSTs who participate in CAR studies are usually guided and scaffolded by university teachers, researchers, peers, and mentor teachers. At the final level, self-regulation, people are expected to “develop voluntary control” of their activities and perform them with minimal or no support from the environment (i.e., other people or objects) (Johnson & Golombek, 2016, p. 10).

The transformation, from object-regulation and/or other-regulation to self-regulation, is not automatic or straightforward (Johnson & Golombek, 2003; Johnson & Golombek,

2011). That means that not every interaction with the environment (i.e., other people or objects) results in cognitive development (Johnson & Golombek, 2016). For example, Vygotsky (1986) argued that in the context of formal schooling, students' interaction with scientific concepts in a decontextualized lecture results in "empty verbalism, parrot like repetition of words" (p.150) and he claimed that:

A straightforward learning of concepts always proves impossible and educationally fruitless. Usually, any teacher setting out on this road achieves nothing except a meaningless acquisition of words, mere verbalization in children, which is nothing more than simulation and imitation of corresponding concepts which, in reality, are concealing a vacuum. (Vygotsky, 1994a, pp. 356-357)

Vygotsky (1986) saw linking scientific concepts to students' everyday concepts, based on their experiences and observations in their daily lives, as a key to internalization. He argued that when everyday concepts, which are "informal, implicit, episodic, and unanalyzed" (Verity, 2011, p. 153), and scientific concepts, which are abstract, systematic, and explicit (Karpov, 2003; Lantolf & Poehner, 2014; Verity, 2009), are linked in a practical activity, the scientific concepts are gradually brought down to the practical level of daily life and the everyday concepts are brought up to the level of abstraction, leading to the emergence of the "true concepts" (Vygotsky, 1986, p.148), "a synthesis between the two" (Glassman, 1994, p. 295).

Drawing on this conceptualization of internalization, Johnson and Golombek (2020) stress that since PSTs enter teacher education programs with schooling experiences as students, they have already everyday concepts about what should and should not happen in the classroom, however, these concepts are "unanalyzed, superficial, erroneous, or prejudiced" since they observe teaching from the "other side of the desk" (p. 122). Similarly, Maggioli (2023) emphasizes that the everyday concepts of PSTs, i.e., "the naïve understandings of teaching and learning, which are the product of the student teachers' prior experiences as a learner", are unreflective and rarely questioned (p. 13). To exemplify, a PST may think that correcting students' errors is wrong because it might hurt students' feelings. This understanding related to error correction, which is based on her or his previous experiences as a student, is biased and superficial. Hence, as Maggioli (2023) suggested, PSTs' everyday concepts need to be brought to light and contrasted with scientific concepts. They should be linked to scientific concepts in activities of teaching/learning (e.g., preparing lesson plan, reflecting on video-recordings from their lessons) (Johnson & Golombek, 2016). That is, it is essential to

create “structured mediational spaces” in which PSTs can reconstruct their everyday understandings of teaching and learning in tandem with scientific concepts (Johnson & Golombek, 2020, p. 123). Additionally, for internalization of scientific concepts, “within these structured mediational spaces, teacher educators should identify the upper levels of teachers’ potential” (Johnson & Golombek, 2020, p. 123).

### **2.2.3. Zone of Proximal Development**

The zone of proximal development (ZPD) is one of the best-known concepts of SCT and closely related to the concepts of mediation and internalization. Vygotsky (1978) defines ZPD as “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers” (p. 86). It can be described simply as “an arena of potentiality” (Johnson, 2009, p. 19). With the ZPD, SCT has challenged the notion that children's psychological functions need to reach a certain level in order to benefit from instruction (Johnson & Golombek, 2016). That is, the sociocultural perspective argues that when children struggle with internalizing a psychological tool (e.g., a concept), teachers should not wait until they are ready to internalize it but should create conditions that support their development (Poehner, 2008). In brief, cognitive development is not “a one-way street” (Verity, 2011, p. 153) but two-way process in which more capable others attempt to facilitate it by organizing or reshaping their mediation or instruction according to the novices’ ZPD, and the novices attempt to adopt “external forms of social interaction” (Johnson & Golombek, 2011, p. 1).

According to Vygotsky (1986), an instruction which is appropriately organized “marches ahead of development and leads it” (p. 200). That means that good instruction is the one which is tailored to “ripening” cognitive processes instead of being adjusted according to already ripen cognitive processes (Vygotsky, 1986, p. 200). That is, for instruction to be effective, it should be “oriented toward the future not the past” and focus not on what learners can already accomplish on their own, but on “the upper threshold” of their abilities. For teacher education, this means that more capable others who play an important role in the development of PSTs need to engage in joint activities with PSTs to achieve a goal, monitor their supported performance, identify their needs, and provide them with mediation responsive to their ZPDs (Johnson & Golombek, 2016).

#### 2.2.4. Responsive Mediation

Drawing on Vygotskian sociocultural perspective, Johnson and Golombek (2016) proposed the concept of “responsive mediation” to highlight the importance of being contingent and responsive to PSTs’ immediate needs during dialogic interaction. They argued that mediation needs to be “emergent, dynamic, and contingent” (p. 31) since “an individual’s ZPD is dynamic rather than stable” (Lantolf & Poehner, 2010, p. 30). That is, it can be stated that the mediation, tailored to ZPD, “cannot be predicted beforehand” and that its success depends on the mediator’s ability to identify and target the emerging and evolving needs of novices (Johnson, 2015, p. 518). According to Johnson and Golombek (2020), it is critical to learn what PSTs bring to the interaction, i.e., their histories, abilities, goals, and ideal future selves, in order to recognize and address the needs emerged during the interaction. For responsive mediation to take place, Johnson and Golombek (2016) also suggest that:

We need to be mindful of our motives, intentions, and goals when designing, sequencing, and enacting pedagogy. We need to be mindful of who our teachers are, where they are in cognitive, affective, and experiential terms, how they are experiencing both being and becoming teachers, and what we collectively are attempting to accomplish throughout our time together. (p. 164)

Johnson and Golombek (2016) also emphasize that even if mediators or more knowledgeable ones play an important role in responsive mediation, they are not the only one who is active in shaping the quality of mediation. Novices also play an active role during interactions with the mediator, in both explicit (e.g., by seeking for support) and implicit (e.g., by expressing negative emotions) ways (Johnson & Golombek, 2016). To put it differently, mediation can be viewed as co-regulation, in which the learner’s response to the teacher’s mediation also regulates the teacher and subsequent attempts s/he makes to help the learner (Lantolf & Poehner, 2010; Johnson & Golombek, 2016). In this regard, it can be stated that the mediator and the learner engage in “interthinking” (Mercer, 2000), that is, they “use language to carry out joint intellectual activity and to make joint sense of experience” (Johnson & Golombek, 2016, p. 48). Through interthinking, learners can begin to “understand the objects and events in a learning situation from the expert’s point of view” (Johnson & Golombek, 2016, p. 30). In this way, a sense of intersubjectivity (Wertsch, 1985), a shared understanding of a situation, is created, which is essential for responsive mediation.

Based on the concept of intersubjectivity, Mercer (2000) proposed the term, “intermental development zone (IDZ)”, a shared communicative space, in which “teacher and learner (or a group of learners) stay attuned to one another’s changing state of knowledge and understanding” (p. 141). Johnson and Golombek (2016) argue that for responsive mediation to be effective, it is crucial to create an IDZ in which both parties become attentive to changing state of understanding and knowledge, but they also add another aspect to be attuned to during dialogic interaction: PSTs’ emotions.

### **2.2.5. The Dialectic Unity of Cognition and Emotion**

Most teacher education programs view learning to teach as a cognitive activity in which emotions are pervasive; however, they often fail to recognize the role of emotional expressions in PSTs’ learning and development (Johnson & Golombek, 2016; Johnson & Worden, 2014). That is, it can be stated that emotions are usually given a secondary role in teacher education. However, Vygotsky (1987) argues against the secondary role of emotions in cognitive development and accentuates the unity of cognition and emotion by stating: “there is a dynamic meaningful system that constitutes a unity of affective and intellectual processes. Every idea contains some remnant of the individual’s affective relationship to that aspect of reality which it represents” (p.50). With regard to the unity of cognition and emotion, Vygotsky (1994b) introduced the concept of *perezhivanie*, a Russian term, which can be defined as “emotional experience” (p. 339). According to Vygotsky (1994b), “emotional experience [*perezhivanie*], arising from any situation or from any aspect of his environment, determines what kind of influence this situation or this environment will have on the child” (p. 339). In other words, the same situation will be experienced differently by different children because of their *perezhivanie*, thus the insights they gain from the situation will be different. It can be stated that *perezhivanie* functions as “a prism” which refracts what is encountered on inter-mental plane (Vygotsky, 1994b, p. 340).

Drawing on the concept of *perezhivanie*, Johnson and Golombek (2016) emphasize that PSTs’ *perezhivanie*, based on their schooling experiences, can vary widely. For example, while one PST may admire and respect the teacher who uses English-only policy, another may view the same teacher as strict and controlling. These two PSTs will naturally have different perspectives on the students’ use of L1, and it is possible that the one who admires the teacher using English-only policy will experience a discomfort if her or his students continue to speak L1 or choose not to participate in class because of this policy. In this regard, as Johnson and Golombek (2016) suggest, it is important to gain insight into PSTs’ “*perezhivanie*, both past

(e.g., apprenticeship of observation) and present (e.g., how they are experiencing the practices of teacher education)” (p.43) to reconstruct their thinking and mediate them responsively.

Additionally, given the unstable nature of ZPD, cognitive development does not proceed in a stable and smooth manner, hence it is expected that PSTs can experience a discrepancy between what they expect to happen and what actually happens (Johnson & Worden, 2014). Such moments of discrepancy “create a sense of instability or cognitive/emotional dissonance that may be both mystifying and debilitating for novice teachers” (Johnson & Golombek, 2016, p. 45). In other words, PSTs come to the classroom with preconceived conceptions of teaching and learning. However, what they encounter in the actual teaching may not align with their existing understandings or beliefs, leading to moments of cognitive/emotional dissonance. According to Golombek and Doran (2014), such contradictions and the cognitive/emotional dissonance they create are crucial to the developmental process. Johnson and Golombek (2016) see the moments of cognitive/emotional dissonance as potential “growth points” (p.45). That is, when the cognitive/emotional dissonance PSTs experience is recognized by more knowledgeable others and mediated by considering their *perezhivanie*, PSTs’ thinking and understanding can be transformed and they can experience cognitive congruence (Golombek & Doran, 2014; Johnson & Golombek, 2016).

### **2.3. CAR in Pre-service Teacher Learning and Development**

CAR can be basically defined as a systematic inquiry in which a group of stakeholders (i.e., PSTs, researchers, mentor teachers) work together to examine an issue of common interest or concern to gain a better understanding of it and to create improvement and meaningful change in their practice (Burns, 2011; Stringer, 2007). Drawing on Vygotsky's SCT, Edward (2017) defines CAR as a “mediating agent” promoting professional growth by facilitating people’s interactions with their environment (i.e., tools, concepts, and other people) (p.73). Similarly, Johnson (2009) argues that CAR is an inquiry-based professional development model which creates “a powerful and seemingly supportive and sustainable mediational space for professional development” (p. 112). According to Burns, Edwards, and Ellis (2022), engagement in CAR facilitates professional learning and development by providing the opportunity to internalize various symbolic or physical tools such as theories and concepts related to the chosen CAR topic, the cyclical CAR framework itself, the insights they gain from their CAR explorations, and the instructional materials they develop during the CAR process. Eun (2008) emphasizes that professional development activities such as CAR,

which involve collaborative research and discussion, serve as a context for “collective scaffold” through which participants can achieve something beyond what they can achieve alone (p. 143).

Additionally, Johnson and Golombek (2011) point out that decontextualized lectures, which are still widely used in language teacher education, likely lead to “empty verbalism” in which PSTs can name scientific concepts but cannot employ them as psychological tools for thinking (Johnson & Golombek, 2011, p. 3). CAR, however, has the potential to facilitate the development of true concepts by linking scientific concepts with everyday concepts in the activities of actual teaching (Johnson, 2009). In other words, CAR can create a space for the interaction of scientific concepts and everyday concepts, which leads to new ways of thinking about and interpreting lived experience.

Empirical research also shows that CAR is a mediating goal-directed activity that creates a new lens through which PSTs can reinterpret their views of learning and teaching. For example, Hagevik et al. (2012) examined PSTs' experiences and insights related to their engagement in a CAR project in which they were supported by mentor teachers, university supervisors, and peers through collaborative discussions. They found that by participating in CAR, the PSTs had the opportunity to reflect on and question their everyday insights and beliefs and to develop new personal theories about effective student learning. Similarly, Aras (2021), who explored PSTs' experiences of participating in CAR, found that through dialogue and interactions with their peers, teacher educators, and students within the context of CAR, the PSTs were able to critically examine their own beliefs and practices and consider alternative teaching practices.

Additionally, previous research reported changes in PSTs' professional identity as a result of participating CAR studies (e.g., Banegas & Consoli, 2021; Capobianco & Riordáin, 2015; Dikilitaş & Çomoglu, 2022; Levin & Rock, 2003; Marsh & Vagliardo, 2002; Price, 2001; Smith & Sela, 2005; Trent, 2010). In their study, Marsh and Vagliardo (2002) explored how the experience of involving in a CAR project influenced PSTs' professional identity. Results showed that the PSTs began to see themselves as teacher researchers rather than just students as they actively engaged in the research process by collaboratively formulating and solving problems. They also reported feeling motivated to use action research in their future teaching. Another study exploring the role of action research in PSTs' identity construction belongs to Trent (2010). He found that since action research created a space for bridging theory and practice, the PSTs had the opportunity to apply theories they learnt in their programs to

practice; however, the application was not straightforward and easy. Thus, the PSTs experienced a sense of instability and started to question their ideal teacher identity (i.e., becoming a modern teacher who uses group work and inductive grammar instruction). Through reflective space which action research created, they noticed that context (e.g., the school, the classroom, a particular group of students) was an important factor affecting instructional practices. In other words, the PSTs' involvement in the projects gave them the chance to explore alternative meanings of learning and teaching and abandon their rigid understanding of what teaching should be like, thus this research process helped them (re)form their teacher identities.

Previous studies also indicated that engagement in CAR projects (re)constructed PSTs' conceptions of research and improved their research skills (e.g., Aras, 2021; Banegas & Consoli, 2021; Faikhamta & Clarke, 2015; Trent, 2010; Ulvik et al., 2018; Yan, 2017). For instance, in Trent's (2010) study, the PSTs reported that they came to realize how research is connected to teaching. Their understanding of research as an unhelpful and irrelevant activity transformed into research as an integral part of teaching. Similarly, Banegas and Consoli's (2021) study demonstrated that the PSTs' everyday understandings of research were challenged and reformed when they saw how action research linked theory and practice. Upon realizing that research could improve the quality of their classroom practice, they began to value it.

In addition to changes in conceptions of research, the review of previous studies revealed that PSTs' understanding of collaboration was transformed through engaging in CAR studies (e.g., Arefian, 2022; Amir et al., 2017; Capobianco & Ríordáin, 2015; Levin & Rock, 2003; Yan, 2017). As a result of working in CAR teams, PSTs began to see collaboration as an essential part of their professional growth. However, the studies also noted that the dynamics of collaboration could influence how PSTs conceptualize it. More specifically, the findings differed depending on the power relations between the partners and the support they received. The studies revealed that PSTs started to value collaboration when action research process is supported by more symmetrical relations, which encourage PSTs to talk about sensitive issues more openly. For instance, Levin and Rock (2003) studied insights of five PSTs who designed, conducted, and evaluated action research projects with the help of mentor teachers. They found that collaboration and open discussion were highly valued by the PSTs because there was a less hierarchical relationship between the mentor teachers and the PSTs and a safe space was created for co-reflection. However, the PSTs in Burbank and Kauchak's

(2003) study reported that the strict hierarchical relationship was detrimental to open dialogue because they felt vulnerable as students who would be evaluated by their mentor teachers. One of the PSTs stated that her main priority as a team member was to please and impress the mentor teacher rather than openly discuss issues that came up during the AR project.

In spite of these advantages outlined above and the widespread promotion of CAR as a tool to facilitate professional growth of PSTs, the previous research also points out that teacher educators and researchers who want to work with PSTs need to consider contextual conditions that might constrain or facilitate the effect of CAR on PSTs. For example, the literature review revealed that CAR studies in initial teacher education were mostly embedded in the context of a practicum course in which PSTs are “outsiders” and have little or no control over the rules and norms of the practicum school, hence PSTs had difficulty carrying out their action research projects. In a study by Price (2001) of 11 PSTs working on individual action research projects in the practicum school, results indicated that some of the mentor teachers were skeptical of the ideas the PSTs planned to explore in their projects and inadvertently placed limits on the PSTs’ actions. The PSTs reported that they felt constrained, and they had to give up some activities or ideas they wanted to apply in their projects because they did not want to have a conflict with their mentor teachers. Similarly, in Darwin and Barahona’s (2019) study of 11 PSTs who had engaged in action research as part of a practicum, results showed that the practicum classrooms and schools in which they temporarily taught English did not naturally serve as environments conducive to research. Some mentor teachers saw research as something irrelevant to teaching. Therefore, they did not want PSTs to do research in their classrooms. Some of them did not offer any support even if they allowed PSTs to do research in their classrooms.

Another point highlighted in the earlier studies was related to the use of action research as an assessment tool. The results indicated that using action research for assessment could negatively influence how PSTs conceptualized it (e.g., Darwin & Barahona, 2019; Jakhelln & Pörn, 2019; Ulvik, 2014; Ulvik & Riese, 2016). According to Cochran-Smith et al. (2009), the obligation to submit a project paper or report might inhibit some PSTs from adopting an inquiry mindset that supports their continuous professional growth by focusing their attention on the demands of the project. For instance, in Darwin and Barahona’s (2019) study, the PSTs engaged in action research projects used as an assessment tool. The results showed that the PSTs were primarily concerned with meeting the criteria prescribed for assessment. As a result, the desired outcomes of integrating action research into initial teacher education, such

as professional growth and empowerment of PSTs, could not be realized. For the PSTs, conducting an action research study became a mandatory task that had to be completed.

CAR studies are inherently based on partnerships between stakeholders. However, earlier studies indicate that poor communication or lack of communication between stakeholders lessens the impact of CAR on PSTs' learning and development (e.g., Burbank & Kauchak, 2003; Çomoglu & Dikilitaş, 2020; Darwin & Barahona, 2019; Jakhelln & Pörn, 2019; Ulvik, 2014; Ulvik & Riese, 2016). In their study, Jakhelln and Pörn (2019) examined the experiences of ten PSTs engaging in action research projects in the context of university-school collaboration and found that tripartite collaboration was lacking as some university teachers and mentor teachers avoided boundary crossings, i.e., they tended not to engage with each other. Therefore, as the authors highlighted, PSTs were unable to receive sufficient support during the research process.

Another issue highlighted in previous studies is related to the lack of time (e.g., Capobianco & Riordáin, 2015; Faikhamta & Clarke, 2015; Price, 2001; Smith & Sela, 2005; Ulvik, 2014; Ulvik & Riese, 2016). Smith and Sela (2005) point out that because CAR is typically conducted as part of a practicum course in initial teacher education, PSTs need to fulfill the roles of student, teacher, and researcher simultaneously. Given that they are not familiar with two of the given roles, that is, teaching and conducting research, involvement in CAR in this context can be demanding and time-consuming for PSTs. For instance, the PSTs who took part in Price's (2001) study stated that they had to spend most of their time deciding what to teach instead of thinking about how to teach it. The results also revealed that PSTs were able to gather data for their projects but struggled to find time to write and reflect on their journals.

Prior research has pointed not only to constraining contextual conditions, but also to contextual conditions that facilitate the impact of CAR on PSTs' learning and development. For example, Amir et al. (2017) examined a research course in which PSTs designed and conducted action research projects. Results showed that creating a "safe space" built upon more symmetrical power dynamics, mutual respect and trust, and acceptance enabled the PSTs to discuss sensitive issues more openly and become more open to mediation and support from the learning community (p.238). Similarly, in Smith and Sela's (2005) study, the PSTs appreciated the chance to address their problems and weaknesses in a non-judgmental setting. In his study, Yan (2017) found that the opportunity for PSTs to conduct research on issues that genuinely concern or interest them and the continuous methodological and emotional support

from the teacher educator were the aspects that facilitate the research process. Based on her own experiences related to CAR studies and the literature, Burns (2015b) pointed out that mutuality, equality, collectivism, reciprocity, sustainability, affirmation, and re(generation) are critical for successful collaborative research (p. 11).

In this study, the aforementioned contextual factors, which facilitate and constrain CAR process, were taken into account to create a safe and supportive space for fostering PSTs' learning and development. In essence, the current study sought to contribute to the literature by exploring insights into PSTs' participation in the CAR project in a context characterized by more symmetrical power relations, sustained dialogic interaction, joint inquiry, shared sense of ownership, and collective scaffold.

#### **2.4. Classroom Interactional Competence (CIC)**

This study adopted the concept of Classroom Interactional Competence (CIC) (Walsh, 2006, 2011) as the primary concept to focus of the CAR project. Walsh proposed the concept by drawing on conversation analysis and the sociocultural perspective of teaching and learning and defined it as "teachers and learners' ability to use interaction as a tool for mediating and assisting learning" (Walsh, 2011, p. 153). Through this concept, Walsh (2012) stresses that interaction is at the heart of teaching and learning and argues that teachers need to develop their CIC to create opportunities for learner engagement and co-constructed learning. CIC includes the following features: (1) maximizing interactional space; (2) shaping learner contributions; (3) effective use of eliciting; (4) using goal-convergent language; (5) instructional idiolect (Sert, 2015; Sert & Walsh, 2013; Walsh, 2011, 2012, 2013; Walsh & Li, 2013).

Maximizing interactional space essentially means providing students with more opportunities to participate in classroom interaction and contribute to the lesson with extended turns. This can be achieved through the use of practical tools, including extending wait time, allowing planning time, asking for elaboration and further explanation, and encouraging additional learner participation. The other feature, shaping learner contributions, "involves taking a learner response and doing something with it rather than simply accepting it" (Walsh, 2011, p. 168) to foster learning and participation. It occurs during the feedback move, which is part of the initiation-response-feedback (IRF) sequence (see Sinclair & Coulthard, 1975). Typically, the teacher poses a question, the student responds, and then the teacher gives feedback on the student's response. However, Walsh (2012) argues that teachers can shape

students' responses by a variety of practical tools such as paraphrasing, summarizing, extending, scaffolding, and recasting instead of only evaluating them. Effective use of eliciting is also one of the features that show the evidence of teacher CIC. Elicitation is mostly done with questions (Walsh, 2013); therefore, for effective elicitation, teacher educators can introduce to PSTs different types of questions (e.g., display questions, referential questions) and explain how they affect student engagement and participation (Sert, 2015; Walsh, 2013). Sert (2015) also suggests that "designedly incomplete utterances" (Koshnik, 2002), i.e., teachers' intentional incomplete turns which students are expected to complete, can be introduced as a practical tool to elicit student responses. Another feature of CIC is using goal-convergent language, which basically means using language that is appropriate or convergent to the pedagogical goals of the activities. Walsh (2013) argues that it is important for teachers to be aware of the goal at a given point in a lesson and to align their language with that goal, otherwise they can obstruct participation. In this regard, PSTs' interactional awareness can be raised, for example, by explaining how to address student errors in different classroom contexts (i.e., meaning-and-fluency context and form-and-accuracy context) (Sert, 2015). In addition, with regard to CIC, PSTs' awareness of their own instructional idiolect, i.e., their speech habits, should be heightened because teachers' personal style of using language outside the classroom may influence their language in the classroom (Walsh, 2006).

With the growing body of research on classroom interaction, new features have been added to Walsh's original concept of CIC. For example, Sert (2015) identified four new features, including (1) successful management of claims/displays of insufficient knowledge, (2) increased awareness of unwillingness to participate, (3) effective use of gesture, and (4) successful management of code-switching. Sert (2011) argues that successful management of claims/displays of insufficient knowledge is an evidence that indicates teachers' CIC and notes that students' claims/displays of insufficient knowledge, demonstrated through nonverbal cues such as smile, gaze-aversion and/or verbal expressions such as "I don't know", are typically handled by turn allocation, but they can also be handled through various practical tools, including deictic gestures, translation, embodied vocabulary explanations, and designedly incomplete utterances. In this regard, he suggests that PSTs should be introduced these tools which promote participation. Sert (2015) also argues that since students' unwillingness to participate can lead to troubles in the classroom interaction, PSTs should be alert to nonverbal cues (e.g., prolonged silences and withdrawal of mutual gaze) and verbal cues (e.g., minimal contributions and quiet talk) that indicate unwillingness to participate. He also suggests that the effective use of gestures as a feature of CIC should be introduced in various instructional

practices such as elicitation, correction, and explanation (Sert, 2015). Finally, Sert (2019) highlights the importance of successfully managing code-switching in foreign language classrooms and points out that PSTs can be illustrated how they can respond to the use of the first language by the students.

#### **2.4.1. Frameworks for Improving CIC**

Given the importance of CIC in creating a more dialogic and engaging classroom, researchers have developed and used tools and frameworks to foster teachers' CIC. For example, Walsh (2006) developed the Self Evaluation of Teacher Talk (SETT) framework as a means to help teachers improve their CIC and consider classroom interaction as a means to enhance the quality of teaching and learning. SETT framework, which allows teachers to conduct "fine-grained, up-close" analysis in their contexts (Walsh, 2013, p. 69), consists of four micro-contexts (i.e., managerial mode, classroom context mode, skills and systems mode, materials mode), each of which is characterized by different interactional features. The managerial mode, in which setting up activities is the primary goal, includes interactional elements such as an extended teacher turn in the form of explanations, confirmation checks, and transition markers. Classroom context mode, where the main goal is to elicit students' feelings, ideas, and attitudes, is characterized by extended learner turns, short teacher turns, minimal repairs, content feedback, referential questions, scaffolding, and clarification requests. In the skills and systems mode, the focus is on a particular linguistic element or a specific skill. This mode features longer teacher turns, direct repairs, display questions, and form-focused feedback. Finally, the material mode, where the main goal is to provide language practice around a piece of material, can be identified by the prevalence of IRF pattern, extensive use of display questions, form-focused feedback, and corrective repair.

The SETT framework was used for teacher development in various contexts, including Iran (Ghafarpour, 2017), Mexico (Zotzmann, 2018), and Turkey (Aşık & Kuru Gönen, 2016). Highlighting the importance of observing, analyzing, and evaluating classroom discourse, Ghafarpour (2017) investigated how the SETT framework influences the interactional awareness of a teacher with seven years of teaching experience. In the study, the teacher audio-recorded her lessons, analyzed her classroom interactions using the SETT framework, and kept a diary to reflect on them. Results showed that by using the SETT framework, the teacher was able to critically evaluate her classroom practices and become more aware of how online interactive decisions should be made depending on the pedagogical goal of the activity.

In her study, Zotzmann (2018) also examined the experiences of four in-service teachers regarding the use of the SETT grid to analyze their own teaching. The participants were first introduced to the SETT grid and asked to use it to analyze their own lessons. They then shared and discussed their analysis with the researcher and finally evaluated and talked about their experiences with SETT. The results showed that the use of SETT fostered their reflexivity and awareness of classroom interaction. They became aware of various aspects which might increase student participation, including “function of questions, length of pauses, quality of feedback and so on” (Zotzmann, 2018, p. 248). Zotzmann notes, however, that while the use of SETT has raised teachers’ awareness, a longer-term study is needed to see how it affects their actual teaching practices. In addition, the results have shown that the framework of SETT needs to be further developed, as the four modes are not sufficient to capture the complex and messy nature of the classroom, where goals are sometimes unclear and contested.

Another study conducted to investigate how the SETT framework affects teacher professional development belongs to Mischefski (2017). In her study, Mischefski shared her own experiences and insights with regard to using the framework. Similar to previous studies, she recorded her lessons, listened to the recording immediately following each lesson, and used the framework to analyze and reflect on classroom interaction. As a result of this experience, she reported that SETT is a useful tool for better understanding of teacher-student interaction, however understanding the framework and its terminology takes too much time.

In contrast to other studies that focused on in-service teachers’ experiences with SETT, Aşk and Kuru Gönen’s (2016) study examined PSTs’ perceptions of their development through the use of SETT. A total of 23 PSTs majoring in ELT departments of two Turkish universities first participated in a 10-hour training on the use of the SETT instrument. After the training, they recorded three 15-minute excerpts from their lessons and analyzed them using the SETT framework. They then viewed the recordings and discussed them in peer sessions. After each session, they kept a reflection journal. Later, they discussed their perspectives about the entire process in a semi-structured interview. The findings showed that this experience helped the PSTs critically evaluate their interactions with students and become aware of various aspects that might limit student participation, such as excessive use of teacher’s echo, lack of extended wait-time, and teacher interruptions. The study also indicated that through collaborative analysis of classroom interaction in the peer sessions, they were able to discuss their problems and benefit from other perspectives.

Another framework, IMDAT, which integrates CIC, conversation analysis, and reflection into teacher education, was proposed by Sert (2015). The framework includes five successive steps: “(I)ntroduction of CIC to teachers, (M)icro/initial-teaching experiences, (D)ialogic reflection on video-recorded teaching practices with the help of a mentor/supervisor/trainer, (A)nother round of teaching observed by a peer and (T)eacher collaboration for peer-feedback” (Sert, 2019, p. 227). IMDAT fundamentally relies on video-recordings, micro-analysis of classroom discourse, and different forms of reflective practices. Sert (2019) claims that using this framework makes it possible to track how PSTs' interactions in the classroom have changed over time. The literature review has shown that the IMDAT framework has been used in a few studies (Bozbıyık, 2017; Bozbıyık et al., 2021; Sert, 2015). For instance, in her study, Bozbıyık (2017) examined how PSTs developed their CIC with the emphasis on teacher questioning practices through the IMDAT framework. During the study, the PSTs participated in a range of reflective practices, including receiving feedback from mentor teachers, offering feedback to their peers, and writing self-reflections. The results showed that the PSTs were able to use various teacher questioning practices to promote learners' contribution.

These frameworks and previous studies make valuable insights into improving PSTs' CIC. They show that the use of classroom videos, micro-analysis of classroom interaction, and evidence-based reflective practices can foster PSTs' CIC. In this study, the classroom-interaction based reflective practice was developed by incorporating the core elements of the frameworks mentioned earlier, including the use of recorded classroom interaction, conducting fine-grained analysis of classroom discourse, and engaging in reflective practices. Nevertheless, the design of the reflective practice was not confined to these frameworks alone. It also drew on the propositions put forth by Johnson and Golombek (2020), which are grounded in the Vygotskian sociocultural theoretical framework. These propositions were chosen because they align with the theoretical underpinnings of the study. Their first proposition suggests that teacher professional development practices must be “located” or specifically tailored to the needs and context of the PSTs involved. That is, teacher educators need to “create locally appropriate professional development opportunities, practices, and resources that are socially, culturally, historically, and institutionally situated in and responsive to teachers', students', and community needs” (Johnson & Golombek, 2020, p. 5). This proposition aligns with what Kumaravadivelu (2001) refers to as a “pedagogy of particularity,” which can be achieved when teachers identify problems in their teaching, develop solutions, and evaluate their effectiveness (p. 539). In this regard, it can be argued that this CAR study

was context-sensitive, as the PSTs developed their own solutions to the issue at hand, taking into account their own context and needs, and evaluated them.

The second proposition suggests that it is important for teacher educators to continuously “learn more about who the teacher, pre-service or in-service, is as a whole historically and culturally situated person with a particular knowledge base, identity, emotionally and cognitively constructed way of perceiving themselves and their teaching activities” (Johnson & Golombek, 2020, p. 120). In this regard, Johnson and Golombek also argue that gaining a sense of teachers’ *perezhivanie* (i.e., emotional experience), which refracts what they experience on the instrumental plane is essential for responsively mediating their professional development. Unlike previous studies on teachers’ development of CIC, in this study, dialogic spaces were created for the PSTs to tell who they are, who they want to be, and what emotional experiences they have related to teaching and learning. That is, in the process of developing their CIC, they were viewed as historically and culturally situated individuals, not just machines taking what was offered on an intermental plane, stripped of their prior experiences and beliefs.

In their third proposition, Johnson and Golombek (2020) recommend that teacher educators should make their intentions, goals, and motives explicit. By doing so, they argue, teacher educators can begin to mediate PSTs’ thinking by focusing their attention on concepts and tools that are deemed important. At the beginning of this study, I explained my motives and intentions (i.e., to work with them to support their development of CIC and to explore what insights we can gain about this process) to the PSTs so that I brought both CIC and CAR to their attention. By informing them of my motives, values, and rationales, I also gave them the opportunity to see if their motives and goals aligned with mine.

The fourth proposition is related to the linkage of everyday concepts with academic concepts. Johnson and Golombek (2020) argue that the majority of language teacher education programs introduce academic concepts to teachers, but typically do not link them to everyday teaching and learning activities in the language classroom. Due to this direct teaching of academic concepts, they achieve “nothing but empty verbalism, a parrot like repetition of words” (Vygotsky, 1986, p. 150). In this regard, the authors suggest that teacher educators should create spaces where PSTs can externalize their everyday concepts and make sense of them through academic concepts. The current study provided various opportunities through which PSTs’ everyday concepts related to CIC could be externalized and reconstructed through academic concepts. For example, the PSTs participated in group discussions where

they analyzed videos and extracts from real classrooms, enabling them to express their current understanding of classroom interaction, learn about relevant academic concepts, and reconsider their understanding in light of these concepts.

The other proposition asserts that it is crucial to establish structured mediational spaces that reveal teachers' potential and facilitate collaborative dialogue. The design of this study established multiple structured mediational spaces in which PSTs were provided scaffolding by the members of the community (i.e. the CAR community, which was formed during the study), including peers and the teacher educator, as they tried to "jump ahead of themselves" (Johnson et al. 2020, p. 5). For example, during the group meetings where the PSTs presented segments of their own lessons, their peers and the teacher educator provided support and guidance concerning the difficulties they encountered in their teaching.

Johnson and Golombek (2020) emphasize in their sixth proposition that mediation in structured mediational spaces should address both immediate and future needs. They argue that for mediation to be responsive and effective, it is essential to "focus on the particulars embedded in teachers' current instructional context, including the challenges, tensions, and joys the teachers are experiencing" (p. 124). In the present study, the PSTs were aware of the challenges, tensions, and joys experienced by their peers through observation of their teaching and teaching in similar contexts. The teacher educator also gained insight into their "particulars" through engaging in classroom observation and informal conversations with the PSTs. Thus, it can be stated that the community members had the opportunity to provide mediation that was responsive and sensitive to the needs of others.

As a seventh proposition, Johnson and Golombek (2020) suggest that language teacher education should support teachers in conducting self-inquiry, where they can collaborate with teacher educators to trace their own professional growth as it occurs over time and place. In a similar vein, with the social turn in teacher learning and the post-method era, many researchers have called for the integration of teacher inquiry into language teacher education (Freeman, 2009; Kumaravadivelu, 2001). In this regard, the current study was designed as a CAR study in which the PSTs could work with the teacher educator to trace their own professional development. Lastly, their final proposition, which suggest showing how teacher professional development influences student learning, was not used since the data regarding student learning were not collected.

## CHAPTER III

### METHODOLOGY

#### 3.1. Introduction

The study started with the concern that PSTs have difficulty effectively using classroom language and managing interactions with learners in the constant flow of classroom discourse. To address this, the research process began with a basic question: “How can I help pre-service teachers improve their classroom language use?” From a comprehensive literature review, meetings with the PSTs, and discussions with my supervisor, emerging insights led to the formation of more specific questions:

1. What are the insights into the pre-service EFL teachers’ participation in the CAR project based on classroom interaction-based reflective practice from a sociocultural perspective?
2. In what ways does the CAR project based on classroom interaction-based reflective practice play a role in the pre-service EFL teachers’ CIC?

Concerning the the research questions, this chapter provides an overview of the study, starting with the research design, participants, research context, data collection procedures and methods, and data analysis. It also discusses the researcher’s role and the trustworthiness of the study. Lastly, the chapter explains the ethical considerations that were taken into account during the study.

#### 3.2. Research Design

Collaborative action research (CAR), which is a form of action research, was chosen as the most appropriate research design for this study. Before explaining the reasons for this choice, it is important to explain what CAR is and what the CAR process entails. Because CAR takes different forms for different people in different contexts, it is challenging to fully describe it in a single definition. However, we can identify the key characteristics of CAR by analyzing the definitions of leading researchers to gain a better understanding of what CAR is. Kemmis and McTaggart (1988), in their commonly cited definition, describe CAR as “a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out” (p. 6). This definition

captures the essence of CAR and points out some of its key features: Collaboration, self-reflection, participant empowerment, and focus on improvement.

Collaboration is one of the most important features of CAR, as the name implies. According to Burns (2015b), a key advantage of CAR over individual action research is the dialogic interaction among participants, which, from a socio-cultural perspective, allows them to externalize preconceived conceptions and mediate each other's thoughts. Burns (2015b) further emphasizes that "action research becomes all the richer when teachers have the opportunity to work collaboratively rather than in isolation" (p. 9). It can be said that CAR promotes "collective scaffold" (Eun, 2008, p. 143) so that participants can accomplish more than they can individually.

Another feature of CAR is self-reflection as emphasized in the definition of Kemmis and McTaggart (1988) given above. Costello et al. (2015) state that self-reflection is important for any good research, but certainly crucial for CAR. Similarly, Reason and Bradbury (2008) emphasize the importance of reflection in CAR, arguing "action without reflection and understanding is blind" (p. 4). To conduct a good CAR, however, reflection should go beyond the spontaneous and be "rigorous and systematic and distinct from other, less-structured kinds of thinking" (Rodgers, 2002, p. 863). In other words, researchers should "reflect more carefully, more systematically, and more rigorously than one usually does in everyday life" (Kemmis & McTaggart, 1988, p. 10).

In addition to being a self-reflective inquiry, CAR is an empowering practice since it is conducted by participants rather than on them. This means that unlike traditional research, CAR does not elevate the voice of the researcher over the voices of the participants, and they are not viewed solely as a source of data. In CAR, participants are seen as active agents who create knowledge to improve their practice, rather than as recipients of knowledge (Burns, 2005). As Herr and Anderson (2015) pointed out that "action research is carried out by or with insiders, but never to or on them" (p. 19, emphasis in original).

Another feature highlighted in Kemmis and McTaggart's (1988) definition is the focus on improvement. According to Corey (1954), one of the leading researchers who introduced action research into education, the motivation of action researchers (i.e., to improve practice) is the major difference between action research and traditional educational research designs. That means that unlike other educational research designs that only aim to create knowledge,

CAR seeks to bring immediate improvement to practice in a social situation while also advancing knowledge in the field.

Apart from the features pointed out above, CAR is usually described as a value-driven practice. According to McNiff et al. (2003), conducting action research is related to “identifying what we want to achieve in terms of the values we hold, and offering justification for the actions we take, which is more than problem solving” (p. 59). Whitehead (1993) proposes the idea of “the I as a living contradiction”, which refers to the clash between what we do and what we say, believe or value (p. 94). In other words, if you say one thing and do another, you are a living contradiction. For instance, if you believe learners should be autonomous and in charge of their own learning, but you do not involve them in any decision-making process, you are not living out of your values. Whitehead (1993) argues that this contradiction can be the basis of action research, that is, we should reflect, recognize, and act on it to resolve the tension.

Along with being a value-laden practice, CAR is also seen as a flexible research inquiry. Cohen et al. (2007) define CAR as “a flexible, situationally responsive methodology that offers rigour, authenticity and voice” (p. 312). Unlike traditional research inquiries, which require researchers to follow a restrictive path, CAR is flexible and responsive to the emerging aspects in the research context in which it is conducted. That is why it is not tied to any methods. It allows researchers to select the most pragmatic methods (quantitative, qualitative, or mixed) that best suit their research questions (Guiffreda et al., 2011).

Lastly, CAR is typically characterized as a cyclical process. Tripp (2005) defines it as “an ongoing, repetitive process in which what is achieved in each cycle provides the starting point for further improvement in the next” (p. 452). That is to say, it is an iterative process in which what is learnt in each cycle informs the next one. Given its responsive and dynamic nature, many models have been proposed to illustrate this cyclical process. In fact, Zuber-Skerrit (1990) calculates that there are at least thirty models proposed by researchers (cited as in Burns, 2015a, pp. 188-189). However, Burns (2015a) argues that although a large number of CAR models exist in the literature, broad research stages or phases usually remain the same in studies. These stages are planning, acting/observing, and reflecting. In Kemmis and McTaggart’s (2005) model, one of the best-known models, these stages are illustrated as in Figure 1. In the planning stage, practitioners identify a problem, puzzle, or point to improve in their practice and develop an action plan to make their practice more efficient. This is followed by an action and observation stage in which they apply their plan and systematically

observe the effects of their action. Finally, they reflect on these effects to decide whether it is necessary to take a further step.

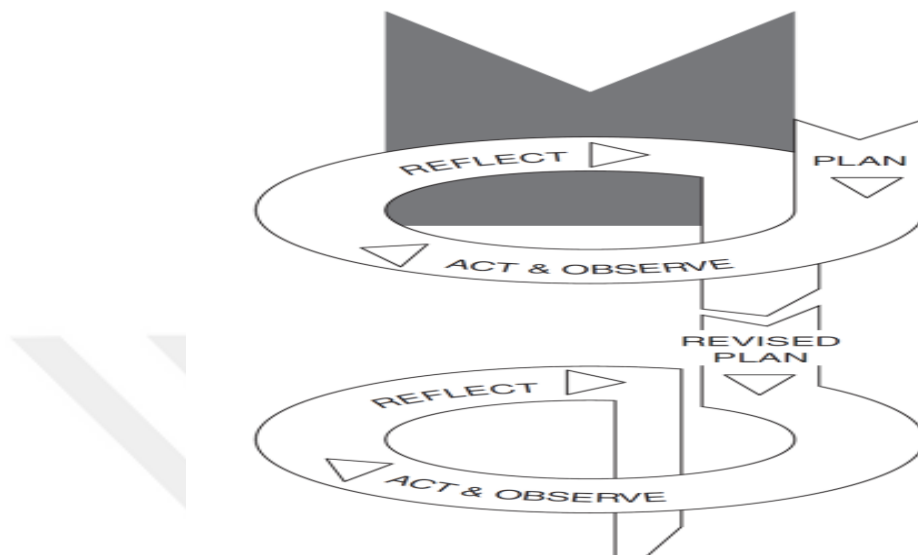


Figure 1. Kemmis and McTaggart's model (2005, p. 564)

Kemmis and McTaggart (2005) point out that the research process might not be as neat as it looks in the model. Actual experiences in the research process can be messy (Burns, 2005). In other words, the stages might overlap, or initial plans can quickly be replaced with new ones in the light of insights gained from experience (Kemmis & McTaggart, 2005). Working with many teachers in different locations, Burns (1999) also points out that CAR process involves a variety of aspects: “exploring, identifying, planning, collecting information, analyzing and reflecting, hypothesizing and speculating, intervening, observing, reporting, writing, presenting” (p.35). In this study, we followed the broad research stages as shown in Kemmis and McTaggart's model, but each broad stage involved various practices (see 3.6. for the details of research process). Additionally, regarding all the characteristics given above, it can be stated that they are also core elements of this study, that is, this study can be described as an empowering, self-reflective, collaborative, value-laden, and flexible inquiry.

Finally, as for why I chose CAR as the research design for this study, there were three factors that influenced this choice: The research purpose, my values, and my philosophical beliefs. As mentioned earlier, this study started with a concern that PSTs have difficulty using classroom language effectively and managing interactions with learners in the constant flow of classroom discourse. This concern, based on my observations of PSTs' teaching over the

past several years, prompted me to act on this situation. First, I talked with my advisor about my concerns, and we discussed possible ways to improve their classroom interactional competence. One of the options was to take a traditional positivist approach to research, through which I could prepare a program or plan and apply on PSTs by trying to control variables. However, this option did not align with my values and beliefs, as I wanted PSTs to have a shared sense of ownership in the research process. I did not want to place my voice above the voices of PSTs, who are typically expected to conform to the norms of a standardized curriculum and remain voiceless in our educational system. Even though I had a predetermined goal when starting the research, I aimed to conduct collaborative research where PSTs were involved in decision-making processes, enabling them to have control over their own learning and development. In other words, I wanted to work with them rather than on them. Furthermore, in traditional research, the researcher typically takes an authoritative stance (Ritchie et al., 2013), i.e., the researcher's mindset is typically “I know, but they do not know”, but my perspective was “I know, and they know”. I believed that by sharing our knowledge and interacting with each other, we could construct our social realities. In this regard, a qualitative CAR study was more in line with my values and beliefs than a traditional positivist research.

### **3.3. Participants**

The participants in this study were seven PSTs studying at an ELT (English Language Teaching) department of a state university in İzmir, Turkey. They were selected using a purposeful sampling (Patton, 2002). In accordance with the purpose of the study, the following participation criteria were established: (1) reporting concerns about or difficulties in effectively using interactional resources for teaching and managing interactions with students, (2) enrolling in the ‘Teaching Practice’ course, (3) being available and willing to participate in the study. The purpose of the first criterion was to ensure that the chosen research topic resonated with the participants' needs and concerns. Thus, they would feel a sense of ownership of the research study in which they are participating and a sense of belonging to a research community with similar goals, needs, and concerns. The second criterion was included since the practicum courses were the only courses in which PSTs could teach English in a real classroom setting and develop their classroom interactional competence. The last criterion (i.e., voluntary participation and availability), which is important for any type of research, was crucial for this study because it was a long-term study of eight months. In order to identify PSTs who met the criteria, I sent an invitation message to the fourth-year PSTs at

the department and invited them to contact me for more information about the study. Twelve PSTs expressed interest, but after the initial meetings, it became apparent that three of them were not sure if they could commit to the study for such a long period of time. Therefore, the study began with nine PSTs after taking their consent (Appendix 3). However, during the first week of the study, one of the participants lost a family member and was unable to attend the sessions for two weeks. In the fifth week of the study, he decided to drop out of the study, stating that he could not consider himself part of the research group. In the same week, another participant informed us that he wanted to withdraw from the study for family reasons. Thus, the study was completed with seven participants and the data of the participants who withdrew from the study were excluded from the data set. An overview of the participants given below in Table 1. As you can see in Table 1, four of the participants were female and three were male. Their ages ranged from 21 to 29. The first language of all participants was Turkish. They had varying levels of teaching experience, ranging from 0 to 1,5 years. The participants who had previous teaching experience (i.e., Mert, Didem, Sevda, and Ecem) reported that they worked as English teachers in private language schools. All participants also had diverse levels of tutoring; however, obtaining precise information regarding the duration of their tutoring experiences was unattainable.

Table 1

*Overview of participants*

| Participants | Gender | Age | First Language | Duration of teaching experience |
|--------------|--------|-----|----------------|---------------------------------|
| Mert         | Male   | 22  | Turkish        | 4 months                        |
| Aycan        | Female | 22  | Turkish        | 0                               |
| Ali          | Male   | 21  | Turkish        | 0                               |
| Didem        | Female | 22  | Turkish        | 2 years                         |
| Murat        | Male   | 29  | Turkish        | 0                               |
| Sevda        | Female | 21  | Turkish        | 3 months                        |
| Ecem         | Female | 22  | Turkish        | 1 year                          |

### 3.4. Research Context

Given that teacher learning is inextricably linked to social, institutional, and cultural context (Edwards, 2017), it is important to provide an in-depth description of the context in which the study was situated. In addition, as Jensen (2008) stated, qualitative researchers must

provide a complete picture of the research context so that readers can apply or transfer the findings to their own context. In this regard, the research context of the present study will be explained in detail in the following sections. Before that, however, it should be noted that this study was conducted during the COVID-19 global pandemic, and this affected almost every aspect of the study, particularly the research context.

### **3.4.1. The English Language Teacher Education (ELTE) Program**

The English Language Teacher Education (ELTE) program in which this study was conducted is part of a public university in İzmir, Turkey. It is a 240-credit program that lasts four years like all other ELTE programs in the country. The goal of the program is to prepare students to become qualified teachers of English as a foreign language (EFL). Those who complete the program are eligible to teach English at all levels of education (i.e., primary, secondary, and tertiary). The program, centrally designed by the Higher Education Council (HEC), offers a variety of courses, including language development courses (e.g., speaking, listening, and reading), theoretical courses (e.g., linguistics, language acquisition), literature courses (e.g., English literature, literature and language teaching), and methodology courses (e.g., teaching English to young learners, special teaching methods, approaches to teaching and learning English). In their fourth year, PSTs also take two practicum courses offered in two consecutive semesters (fall and spring): School Experience and Teaching Practice. For the School Experience course, PSTs are assigned to a mentor teacher in a public school and a teacher educator in the ELT department of at the beginning of the fall semester. The practicum schools are selected by the Ministry of National Education (MONE). During one semester, PSTs are expected to spend six hours per week in their practicum school observing the mentor teacher's lessons and daily school activities. They are also required to write weekly reports of their observations and submit them to the teacher educator. In the spring semester, PSTs continue their practicum experience with Teaching Practice course. They start to prepare lesson plans and teach in the practicum school. In the following section, the more detailed information about this course is given since it constitutes an important part of research context.

Although the program includes a wide range of courses, there is no compulsory or elective course related to CIC. In addition, it does not have any course that creates a space for PSTs to participate in research-based professional development practices (e.g., action research, narrative inquiry, lesson study). There is only one research course offered for one semester, but its content is appropriate for students seeking careers in academics rather than teaching. In other words, it is not tailored to the needs of those who want to become teachers.

In addition, all courses offered by the program are typically delivered in person, but during the COVID -19 crisis the university decided them to be delivered online. While the theory-based courses were converted to synchronous online instruction without much difficulty, practice-based courses (i.e., School Experience and Teaching Practice) experienced serious disruptions because there was no infrastructure in place to allow PSTs to access instruction at the practicum schools. For almost a year, the practicum courses could not be held. When I invited the PSTs for the study toward the end of the fall semester, 2020, the situation was still the same. However, by the beginning of the spring semester, the infrastructure issues were resolved, and the fourth-year PSTs began their e-practicum course.

### **3.4.2. The Teaching Practice Course**

This study was also conducted in the context of the Teaching Practice course, hence detailed information about the elements that constitute the course, including practicum schools are provided in this section. The course is divided into two parts. One part is the 14-week practicum experience in which PSTs are assigned to a mentor teacher and the other part is weekly one-hour classroom meetings with the teacher educator. The aim of the course is to provide PSTs with instructional support and mentoring as they experience teaching in a real classroom. As mentioned before, it is held in the spring semester. Through this practicum course, as noted in the course syllabus, PSTs have the opportunity to create and teach appropriate teaching materials and manage the learning environment. In terms of the placement of PSTs, they are assigned by MONE to a public school in the city where their university is located. The PSTs in this study were placed in public high schools located in the center of Izmir. The schools hosted students in grades nine through 12. During the pandemic, both schools moved to online teaching, and they used the same video conference platform.

### **3.5. Research and Data Collection Process**

The process of collecting data for the study began in December of the 2020-2021 academic year and ended in July of the same academic year. However, the research process had started earlier, with my previous observations of PSTs teaching at practicum schools. During my observations, I realized that they had difficulty in effectively using classroom language and interactions to scaffold their students' learning. I shared my observations with my advisor, and we both agreed to investigate the issue further before taking any action. I spent one year observing the PSTs' lessons at the practicum schools under my advisor's supervision and kept a reflective diary. In the meanwhile, I conducted a literature review on

CIC to gain a better understanding of the issue and learn how other researchers had approached this issue and what they had found in their studies. Following the exploratory stage, it was clear that previous researchers had suggested frameworks centered around evidence-based reflective practices utilizing classroom videos and extracts. Nevertheless, implementing these frameworks without considering the particular socio-cultural setting of the practicum course and the transitional phase for PSTs from student to teacher could potentially be ineffective. Therefore, I made the decision to position PSTs as active agents in their own learning and development by involving them in the decision-making process, as suggested by the literature on action research with PSTs. Thus, we as a CAR community had the chance to make collective decisions on how to proceed rather than relying on predetermined practices that I believed to be effective.

After receiving ethical approval from the university, I sent out an invitation to fourth-year PSTs in the ELT department (see section 3.9 for ethical considerations). Twelve PSTs initially expressed interest, but after the first meetings, it became clear that three of them were uncertain about committing to the project for an extended period of time. As a result, the study began with nine PSTs in December during the 2020-2021 academic year. However, as explained in section 3.3, two of the participants withdrew from the project in the fifth week. Thus, the project was conducted with seven PSTs. At the outset of the study, I conducted an initial interview with the participants to collect data on their personal and historical information. During this interview, I also asked the PSTs about their familiarity with CAR. Six of them stated that they were familiar with it and knew that it proceeds in phases but could not provide further details. To address this, the PSTs were first introduced to CAR and its broad stages, with an emphasis on how multiple stakeholders (e.g., teachers, students, colleagues, and researchers) can work together through CAR. Additionally, I provided the PSTs with CAR studies conducted by teachers to read and become more familiar with the nature of CAR.

After the PSTs gained the basic understanding of CAR, we started to discuss what actions could be taken with regard to the improvement of CIC. We generated several suggestions as a group such as observing the teaching practices of one of the group members, engaging in micro-teaching sessions, and utilizing videos and extracts from actual classroom situations. We then analyzed these suggestions based on their practicality, feasibility, and ethical implications. Since the PSTs did not have a class to teach, observing one of the group members was considered infeasible. One of the PSTs made a further suggestion to create a

class with his former private students and observe it. After discussion, however, we decided that creating a syllabus and materials for this class could be impractical. In addition, we could not be sure about if his previous students would accept it. With regard to the suggestion of engaging in micro-teaching sessions, the group decided not to use it because of concerns about the lack of real classroom interaction and uncertainty about its effectiveness. In the end, the group reached a consensus to use videos and extracts from authentic classroom situations as a means of improving CIC. It was determined that this approach could potentially enhance the PSTs' understanding of classroom interaction before beginning their practicum teaching. It is worth mentioning that the PSTs originally suggested using classroom videos from other teachers, but I expressed my concerns about the feasibility of finding classroom videos that illustrate every aspect of CIC. As a result, we also decided to use classroom extracts provided in previous studies.

Afterwards, the group focused on deciding how to collect data on the influence of using classroom videos and extracts to improve CIC. I proposed several data collection tools (e.g., weekly reflection journals, focus group interviews, and a written reflection report) for the group to consider, and we ultimately decided to use weekly reflection journals and conduct a focus group interview at the end of the acting stage to discuss the entire process. After completing the planning stage, we began to implement the action plan we had agreed upon. Over a period of eight weeks, we engaged in collaborative analysis of classroom videos and extracts. Prior to each analysis session, I selected classroom videos and extracts based on the CIC features proposed by Sert (2015) and Sert and Walsh (2013) (see Appendix 8 for a sample extract). I shared the selected videos and extracts with the PSTs one week prior to each analysis session. At each meeting, we collaboratively analyzed two or three segments of classroom videos and/or extracts. Based on the literature, we conducted a fine-grained analysis while analyzing the videos and extracts. In the fourth week of the analysis sessions, two PSTs reached out to me regarding their weekly reflection journals and expressed their difficulty in finding time to write them. They reported feeling guilty about not being able to complete the task and even considered leaving the project as a result. We explored different ways to address this issue and they stated that they might try recording their reflections to alleviate their time constraints. One week later, another PST informed me that he lost all of his journal entries due to a computer malfunction. He suggested watching previous meetings and rewriting his reflections, but we decided it would be too time-consuming to pursue that option. As a result of the problems experienced with weekly reflection journals, I brought up this issue to the group, and we agreed to write a detailed reflection report at the end of the stage instead of

keeping weekly reflection journals. After eight weeks of collaborative analysis of classroom videos and extract, we had a meeting about how to write the reflection report and conduct the focus group interview. As the PSTs had not previously prepared prompts for written reflections, I provided some examples, such as “What did I learn most in this process?” and “What did I learn and observe about classroom interaction in this process?” Based on these examples, we brainstormed potential prompts and determined the final prompts. Following this, we decided to write the reflection reports first and then follow up with the focus group interview to elaborate on the written responses. The PSTs completed their reflection reports in two weeks, and they sent them to me. I compiled the reports and sent them to the group. Thus, before conducting the focus group interview, everybody in the group could read the data coming from the reflection reports. One week after the focus group interview, we had a meeting to analyze the data. Initially, I gave a brief introduction to coding and explained its similarities to pattern-finding. Subsequently, I demonstrated how to code the data, and then we worked together to generate initial codes from the data. Since the PSTs were about to start their teaching practicum and felt anxious about it, we decided not to spend more time on data analysis. To address this, I suggested that I could complete the data analysis and share the findings with them for reflection. The group found the proposal to be practical and agreed to move forward with it. After completing the data analysis, I shared the findings with the group, and we subsequently held a meeting to discuss and reflect on them.

Upon analyzing and reflecting on the results, we formulated a new action plan. We collectively agreed that co-reflecting on classroom videos and extracts of other teachers appeared to be beneficial for improving CIC in the first cycle, and therefore, we decided to use group members’ classroom videos for co-reflection to further enhance our CIC. As it was not feasible to review and co-reflect on all parts of the PSTs’ lessons, we agreed to select at least two segments from each lesson for analysis. To address the PSTs’ expressed concerns about selecting these segments, we decided to hold post-lesson conferences, in which the PSTs met with me individually to collaboratively reflect and identify the segments for analysis. We determined that post-lesson conferences would be held within a maximum of 48 hours after the lesson in order to ensure timely reflection and analysis of the lesson while it is still fresh in the PSTs’ minds. As we chose the segments for analysis, we were mindful of identifying moments that could provide opportunities for reflection, such as instances of success, challenge, or conflict. Moreover, we took into account the potential benefit to the group, ensuring that the selected segments would offer insights and learning opportunities that other group members could benefit from. Considering the time constraints, we decided that the

duration of the selected segments should not exceed two minutes. During each meeting, we co-analyzed between four to six segments for eight weeks.

It should be noted that the PSTs also expressed their concerns about preparing lesson plans and designing activities. In response, we decided to hold pre-lesson conferences as an optional support mechanism through which the PSTs can receive assistance. In pre-lesson conferences, the PSTs met with me individually to prepare lesson plans collaboratively. As in the first cycle, we decided to collect the data through writing a reflection report and conducting a focus group interview at the end of the acting/observing stage. After eight weeks of co-analyzing classroom videos, we held a meeting to create the prompts for the written reflection report. In this process, we reviewed the reflection prompts used in the first cycle and removed some of the prompts generating similar responses. This allowed us to determine the final set of prompts to be used in the second cycle. As in the first cycle, firstly, reflection reports were written and then the focus group interview was conducted. Since some of the PSTs would take KPSS exam soon, we agreed not to analyze the data together, but I had a final interview with the PSTs to gain their insights into the entire research process and thus the data collection process ended. The research process continued with the data analysis and report writing.

### **3.6. Data Collection Methods**

A variety of data collection methods were used in this study, including an initial semi-structured interview, a researcher journal, written reflection reports, focus group interviews, observations and field notes, video-recordings of group meetings, pre-lesson conferences, and post-lesson conferences, and a final semi-structured interview.

#### **3.6.1. Initial Semi-structured Interview**

Prior to the outset of the initial interview, participants were given verbal information about the study and asked to sign an informed consent form if they wished to participate. Participants were informed that all information would be kept confidential and that, as a participant, they had the right to withdraw from the study at any time. They were also informed that they could ask questions at any time during the study (see Ethical Considerations in 3.10). After gaining their consent, the initial interview was conducted with all participants in order to get to know them (see Table 2 for details on the initial interview). It included general background questions, which include inquiries about whether they have any teaching experience, how they feel about their language proficiency, etc. (see Appendix 4 for all initial interview questions). Additional questions were asked when necessary. This interview allowed

me to build a rapport with the participants. It also helped them feel more comfortable in my presence. In addition, it enabled me to collect data on their personal and historical information, which is essential for responsive mediation. The interview was conducted in Turkish (the native language of the participants) to ensure that lack of appropriate proficiency in English would not hinder the participants from expressing their ideas freely. It was conducted in an online setting, recorded, and transcribed verbatim for analysis. Initial semi-structured interviews are acronymized as ISI.

Table 2

*Details Related to Initial Interview*

| <b>Data Source</b>                   | <b>Method and Purpose</b>                                                                                                                                                   | <b>Time and Length</b>                                                                | <b>Stage-Cycle</b>                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------|
| An initial semi-structured interview | Method: A semi-structured interview with each participant individually.<br><br>Purpose: To collect data on the PSTs' general background and to establish rapport with them. | Time: At the beginning of the study<br><br>Length: Ranging from one hour to two hours | Planning stage-1 <sup>st</sup> cycle |

### 3.6.2. Researcher Journal

Researcher journal is a tool which helps researchers to “document personal reflections, methodological decisions, questions raised, theoretical propositions, and evolving perceptions of study” (Patton & Parker, 2014, p. 67). Keeping a researcher journal is particularly helpful in CAR since events and activities can change so much during the research process that researchers can easily forget their earlier thoughts and feelings (Kuhne & Quigley, 1997). In this study, I kept a researcher journal from the start of the research process (see Table 3 for the details). I mainly kept my journal entries in written format, but sometimes I did not have time to sit and write my insights down, hence, I also kept a digital journal that I audio-recorded my reflections.

Table 3

*Details Related to Researcher Journal*

| <b>Data Source</b> | <b>Method and Purpose</b>                                                                                                                                                                                                     | <b>Time and Length</b>                                                                                                                               | <b>Stage-Cycle</b>                                         |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Researcher Journal | <p>Method: A journal in which I capture my own thoughts, reflections, insights, and concerns related to the research process.</p> <p>Purpose: To keep track of the decisions made, problems encountered, insights gained.</p> | <p>Time: Throughout the study</p> <p>Length: Ranging from one page to three pages in written format. From three minutes to ten in digital format</p> | All the stages - 1 <sup>st</sup> and 2 <sup>nd</sup> cycle |

**3.6.3. Written Reflection Reports**

Another data collection tool utilized in this study was written reflection reports. As opposed to interviews, written reflection reports involve a one-way interaction in which student teachers can freely write down their opinions and thoughts without external interference (Kochem, 2022). That is, they allow participants to be free from the immediate pressure to provide an answer. Additionally, they give participants a chance to think more deeply. In this study, written reflection reports were employed in each cycle to see the participants' reactions to the actions taken (see Table 4 for the details). The prompts for the written reflection reports were created by the CAR community, including the PSTs and myself. As the PSTs had not previously prepared prompts for written reflections, I provided some examples, such as "What did I learn most in this process?" and "What did I learn and observe about classroom interaction in this process?" Based on these examples, we brainstormed potential prompts and determined the final prompts (see Appendix 5 for the written reflection prompts in the first cycle). In the second cycle, we decided to revise the prompts and delete some of them because they generated similar responses (see Appendix 6 for the written reflection prompts in the second cycle). The prompts were shared via a link to Google Doc. Participants had the option to write their reflections in either English or Turkish. All participants chose to write in Turkish. Their reflections were subsequently translated into English. The written reflection reports in the first and second cycle are abbreviated as WR1 and WR2, respectively.

Table 4

*Details Related to Written Reflection Reports*

| <b>Data Source</b>         | <b>Method and Purpose</b>                                                                                                                                      | <b>Time and Length</b>                                                                                       | <b>Stage-Cycle</b>                                              |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Written Reflection Reports | Method: A report where the participants write their reflections<br><br>Purpose: To collect the data regarding the participants' reactions to the actions taken | Time: After applying the action plans<br><br>Length: Ranging from one page to two pages for each participant | Acting/Observing stage –1 <sup>st</sup> & 2 <sup>nd</sup> cycle |

**3.6.4. Focus Group Interviews**

Focus group interview refers to “an interview on a topic with a group of people who have knowledge of the topic” (Merriam & Tisdell, 2016, p. 114). In focus group interviews, “participants share their views, hear the views of others, and perhaps refine their own views in light of what they have heard” (Hennink, 2014, p. 2). This synergetic effect enhances the likelihood of obtaining data unattainable with one-on-one interviews (Ritchie & Lewis, 2003). In this study, two focus group interviews were conducted at the end of the acting/observing stages in each cycle to enrich and triangulate the written reflection data (See Table 5 for the details).

Table 5

*Details Related to Focus Group Interviews*

| <b>Data Source</b>     | <b>Method and Purpose</b>                                                                                                                                                       | <b>Time and Length</b>                                                                                 | <b>Stage-Cycle</b>                                              |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Focus Group Interviews | Method: Two group interviews in a semi-structured format<br><br>Purpose: To gain better insight into the participants' experiences and perspectives regarding the actions taken | Time: After applying the action plans<br><br>Length: Approximately two hours per focus group interview | Acting/Observing stage –1 <sup>st</sup> & 2 <sup>nd</sup> cycle |

The focus group interviews were conducted after the participants completed their written reflection reports. The interviews were conducted in a semi-structured discussion

format, which allowed the participants to interact with one another and share their experiences and perspectives. The prompts from the written reflection reports were utilized during the focus group interviews, with the goal of gaining a more comprehensive and in-depth understanding of the group's experiences and perspectives regarding the actions taken during the acting/observing stages. In this regard, it can be stated that the written data were complemented with verbal data through the use of a multimodal data collection approach (written and verbal). I also asked additional questions if necessary. This flexible format allowed me to respond to the emerging views of the participants. Both focus group interviews lasted approximately two hours. They were conducted in the participants' first language (Turkish) to eliminate language-related hindrances. The focus groups were conducted in an online setting, recorded, and transcribed verbatim for analysis. The focus group interviews in the first and second cycle are abbreviated as FG1 and FG2, respectively.

### **3.6.5. Observation and Field Notes**

Observation is defined as “the conscious noticing and detailed examination of participants' behavior in a naturalistic setting” (Cowie, 2009, p. 166). One of its advantages is that it can “give direct access or insights into complex social interactions and physical settings” (Coleman & Briggs, 2002, p. 174). In other words, it provides researchers with first-hand information of issues under investigation. In this study, I observed and took field notes of the lessons taught by the PSTs, the group meetings, and pre-and post-lesson conferences. All observations were conducted in an online environment. In accordance with the suggestions of Emerson et al. (2011), the field notes were comprised of two sections: (1) Descriptive information, which encompassed factual data that I recorded, including dates, times, settings, actions, behaviors, and conversations, and (2) Reflective information, which encompassed my personal thoughts, insights, and questions that I recorded during the observation process.

In observing the lessons taught by the PSTs, I adopted a role similar to that of an “observer as participant” (Merriam, 1998, p. 101), with the consent of the PSTs, the mentor teachers, and the students involved, all of whom were aware of my research purpose. During the observations, I turned off the camera and microphone so as not to disrupt the natural teaching and learning process. I observed and recorded two to four 40-minute lessons taught by all participants except one. The mentor teacher of Ecem explained that access to their online course system was restricted to only those authorized by the Ministry of National Education; hence, I was unable to observe Ecem's lessons. In order to address this constraint, it was decided that Ecem would record her own lessons and subsequently share them with me. The

goals of the classroom observations were to acquire a better understanding of the context in which the PSTs taught English as a foreign language and to examine their utilization of practical tools pertaining to CIC, as well as to discern the points that they were experiencing difficulties.

During the observation of the group meetings, and pre-and post-lesson conferences, I took on a role similar to that of a “participant as observer” (Merriam & Tisdell, 2016, p. 144) rather than an observer as participant since I actively involved as a group member in the activities of the CAR community. That is, my observer activities, which were known to the group, were secondary to my role as a participant. Due to active participation in the activities, I did not always have the opportunity to take notes during the meetings. Hence, I reviewed the recordings and took notes as soon as possible afterwards. I recorded a total of 23 group meetings, each lasting between one and a half to two hours, 12 pre-lesson conferences, each lasting between half an hour to one hour, and 23 post-lesson conferences, each lasting between one to two hours.

### 3.6.6. Final Semi-structured Interview

At the conclusion of this study, a semi-structured interview was conducted with each participant. The purpose of the interview was to collect data on the participants' experiences and perspectives on the research process from beginning to end (see Table 6 for the details).

Table 6

*Details Related to Final Semi-structured Interview*

| <b>Data Source</b>              | <b>Method and Purpose</b>                                                                                                                                                                                      | <b>Time and Length</b>                                                          | <b>Stage-Cycle</b>                            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------|
| Final Semi-structured Interview | Method: A semi-structured interview with each participant individually<br><br>Purpose: To collect data on the participants' overall experiences and perspectives on the research process from beginning to end | Time: At the end of the study<br><br>Length: Ranging from one hour to two hours | Acting/Observing stage –2 <sup>nd</sup> cycle |

The interview was designed in a semi-structured format as it “allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (Merriam & Tisdell, 2016, p.111). In this regard, the interviews were

guided by a list of questions that were prepared in advance (see Appendix 7 for the final semi-structured interview questions). However, neither the order of the questions nor the exact wording was established beforehand. Additional questions were asked as needed. The interviews lasted between two hours and one hour. They were conducted online, recorded, and transcribed verbatim for analysis. The final semi-structured interviews are acronymized as FSI.

### 3.7. Data Analysis

Data collection and analysis are not separate processes in qualitative studies, i.e., they occur simultaneously (Bogdan and Biklen, 2007; Merriam and Tisdell, 2016). As Merriam and Tisdell (2016) noted, “analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypotheses direct the next phase of data collection, which in turn leads to the refinement or reformulation of questions, and so on” (p. 191). In this study, in line with the CAR process, data analysis began early on. Different data analysis methods, such as reflexive thematic analysis, Vygotsky’s genetic method, and sociocultural discourse analysis (SCDA), were used to analyze the data collected from various sources. See Table 7 for the summary of data collection and analysis for this study.

Table 7

*Summary of data collection and analysis conducted for this study*

| Research questions                                                                                                                                                                      | Data collection methods                                                                                          | Data analysis methods            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 1. What are the insights into the pre-service EFL teachers’ participation in the CAR project based on classroom interaction-based reflective practice from a sociocultural perspective? | Written reflection reports                                                                                       | Reflexive thematic analysis      |
|                                                                                                                                                                                         | Focus group interviews                                                                                           |                                  |
|                                                                                                                                                                                         | Observations & field notes                                                                                       |                                  |
|                                                                                                                                                                                         | Final semi-structured interview                                                                                  |                                  |
| 2. In what ways does the CAR project based on classroom interaction-based reflective practice play a role in the pre-service EFL teachers’ CIC?                                         | Observations & field notes                                                                                       | Genetic method                   |
|                                                                                                                                                                                         | Video-recordings of PSTs’ teaching practice, group meetings, pre-lesson conferences, and post-lesson conferences | Sociocultural discourse analysis |
|                                                                                                                                                                                         | Initial semi-structured interviews                                                                               |                                  |

### 3.7.1. Reflexive Thematic Analysis

The current study utilized an inductive reflexive thematic analysis method (Braun & Clarke, 2006, 2019) in which the analysis was driven by the data, and the researcher's positionality and assumptions regarding the coding processes and outcomes were taken into consideration. Data analysis was conducted in accordance with the six phases of reflective thematic analysis as outlined by Braun and Clarke (2006), which include: 1) data familiarization; 2) systematic data coding; 3) generating initial themes from coded and collated data; 4) developing and reviewing themes; 5) refining, defining, and naming themes; and 6) writing the report. As instructed in the initial step, I familiarized myself with the data by repeatedly listening to the recordings and reading written data. During the immersion process, I made notes on my first impressions and thoughts of the data. Once I felt that I had a thorough understanding of the data, I imported it into the software MAXQDA Plus 2022 to facilitate the data management. In the second phase, I generated initial codes across all the data by utilizing a line-by-line coding technique. The process of identifying and organizing the codes was an iterative one, in which the codes were continually reviewed, renamed, and merged as new understanding emerged. Furthermore, in line with the suggestion of Braun and Clarke (2019), I continually questioned the assumptions I made in interpreting and coding the data, as they noted that “the coding process requires a continual bending back on oneself” (p.594). Following the initial coding phase, I consulted with my advisor, an expert in qualitative data analysis and initial teacher education research, to develop initial themes and compare our interpretations of the data. In this process, as Braun and Clarke (2019) suggested, our aim was to “develop a richer, more nuanced reading of the data, rather than seeking a consensus on meaning” (p.594). Through collaborative discussions with my advisor, the codes were organized and condensed into subthemes and eventually major themes. During this process, the data were revisited to ensure that the perspectives of the participants were projected, rather than any themes that we wanted to identify from the data. After developing the themes, we engaged in refining and naming them. In the process of writing the report, to enhance credibility, I revisited the data six months later to determine if the themes developed projected the voices of the participants and if the scope of each theme required further refinement. Additionally, in this process, we discussed the structure of the report. After I prepared the first draft of the report, my advisor gave some suggestions on it. Thus, the final version of the report was prepared.

### 3.7.2. Vygotsky's Genetic Method

Genetic method is “an approach to scientific research in which the development of individuals, groups and processes is traced over time” (Lantolf, Poehner, & Thorne, 2020, p. 230). According to Vygotsky, “the only appropriate way of understanding and explaining higher, culturally organized, forms of human mental functioning, was by studying the process and not the outcome of development” (Lantolf & Thorne, 2006, p. 28). Vygotsky (1998) contends that exclusively focusing on fully matured functions provides limited insight into how these functions were formed. As he puts it, when functions reach full maturity, “their original appearance, and their outer appearance tells us nothing whatsoever about their internal nature” (Vygotsky, 1978, p. 64). In other words, observing only the end result of a cognitive process cannot explain how that process came to be. Vygotsky posited four genetic domains as a framework for studying higher cognitive processes. These include “the phylogenetic (humans undergoing natural evolution), the cultural historical (social activity of humans), the ontogenetic (individual lifespan), and the microgenetic (immediate events)” (Marginsona & Dang, 2016, p. 116).

This study draws on microgenetic domain, which “focuses on specific, momentary fragments of development” (Cross, 2006, as cited in Marginsona & Dang, 2016). That is, in order to gain a better understanding of how the dialogic interactions and mediations provided by the CAR community influence the PSTs’ CIC, this study examines “moment-by-moment change observed within a short period of time for an elevated number of sessions” (Lavell et al., 2005, p. 42). However, since all domains “overlap and interconnect with each other,” specifically the ontogenetic and microgenetic domains (Lantolf & Thorne, 2006, p. 57), the analysis of the microgenetic domain was combined with data obtained from the PSTs’ background (i.e., sociohistorical) information, particularly gained through initial interviews. For microgenetic analysis, SCDA was chosen as an appropriate method.

### 3.7.3. Sociocultural Discourse Analysis (SCDA)

Based on Vygotskian sociocultural perspective, Mercer (2004) introduced SCDA to examine how language is utilized as a tool for collective thinking in teacher-student and student-student dialogues. More particularly, SCDA focuses on “how language is used as a social mode of thinking—language as a tool for teaching-and-learning, constructing knowledge, creating ideas, sharing understanding and tackling problems collaboratively” (Littleton & Mercer, 2013, p. 13). SCDA also focuses on how interactions contribute to students’ growth and learning (Mercer, 2004). In this regard, Johnson and Golombek (2016)

suggest that SCDA is a suitable tool to conduct micro-genetic analysis (Vygotsky, 1981) to trace teacher development, showing the consequences of implementing educational practices. Littleton and Mercer (2013) argue that SCDA differs from linguistic discourse analysis since it places less emphasis on the organizational structure of language and more emphasis on understanding how language facilitates joint intellectual activity and shared understanding in context over time. Nonetheless, like linguistic analyses, SCDA may analyze the lexical content and cohesive structure of discourse, with a particular focus on how speakers use their language to collaboratively construct knowledge. SCDA, unlike conversation analysis, also utilizes knowledge that is not explicitly invoked by speakers, including historical, social, cultural, and institutional contexts in which interactions occur (Johnson & Golombek, 2016).

Drawing on the works of Mercer (2004) and Johnson and Golombek (2016), the present study employed Sociocultural Discourse Analysis (SCDA) to gain a deeper understanding of how the practices employed in the CAR project mediate PSTs' development of CIC by exploring the nature and quality of interactions among teacher educators and PSTs, as well as among PSTs themselves. To conduct SCDA, I first engaged in a data familiarization process during the data preparation phase by listening to the recorded sessions (i.e., group meetings, pre-lesson conferences, and post-lesson conferences) and taking notes on my reflections and observations. Afterward, I selectively transcribed the data pertaining to CIC, excluding any teaching issues discussed in the sessions that were unrelated to the study. During the transcription process, I also created a dataset for each PST by combining all instances in which they contributed to group sessions and their individual sessions with me. In transcribing the data, I utilized a set of transcription conventions developed by Jefferson (2004) (Appendix 9). These conventions were selected with consideration of the study's aim and research question, and following Mercer's (2004) recommendations, I did not include micro-level details during the transcription process.

After this process, in line with Wells' (1999) approach, each session was treated as an "episode," which is "the most inclusive unit" (Wells & Arauz, 2006, p. 389) of discourse, and then organized into "thematic sequences", which are segments of a dialogue where each participant talks about the same topic (Bjuland & Helgevold, 2018, p. 249). For each sequence, I then followed six criteria determined by Johnson and Golombek (2016):

- a. highlight the linguistic, rhetorical, and pragmatic characteristics of the dialogic interaction;

- b. trace the psychological processes that emerge as teacher educators and teachers engage in interthinking;
- c. identify the emergence of cognitive/emotional dissonance as potential growth points;
- d. follow the emergence and preservation of an intermental development zone (IDZ) over the course of the practice;
- e. describe the quality and character of the responsive mediation that emerges;
- f. explore the consequences of responsive mediation on the ways in which teachers begin to think about and/or attempt to enact their instructional practices (p. 54).

Following this step, I identified key episodes using each participant's own language in order to reveal and maintain a focus on what they were experiencing in each practice they engaged. Additionally, sociohistorical information about the PSTs was provided to offer a more comprehensive understanding of the practices. I analyzed the Turkish datasets using the original data, and then translated them into English for reporting them in the relevant sections of the study. During the translation process, I paid careful attention to selecting words that closely conveyed the original meanings.

### **3.8. Trustworthiness**

In qualitative research, trustworthiness is used as a comprehensive term for judging the rigor of a study rather than the terms 'reliability' and 'validity', which are associated with the positivist paradigm (Lincoln & Guba, 1985). In this regard, to ensure the trustworthiness of the current study I took into account Lincoln and Guba's (1985) four main strategies: Credibility, transferability, dependability and conformability.

Credibility is one of the most important criteria in establishing the trustworthiness of a study (Lincoln & Guba, 1985). It deals with the question "How congruent are the findings with reality?" (Merriam & Tisdell, 2016, p. 213). Credibility can be ensured through triangulation, which is "a method of cross-checking data from multiple sources to search for regularities in the research data" (O'Donoghue & Punch, 2003, p.78). According to Denzin (2009), using different data sources can minimize researcher biases. In this study, multiple research methods such as observations, individual interviews, focus group interviews, written reflection reports, and a researcher journal were used to ensure credibility. Additionally, in the process of data analysis, to enhance credibility, I revisited the data six months later to determine if the themes developed projected the voices of the participants and if the scope of each theme required further refinement.

Transferability is another criterion for ensuring the trustworthiness of a study. According to Lincoln and Guba (1985), the main way to ensure the possibility of transferability is to create a “thick description of the sending context so that someone in a potential receiving context may assess the similarity between them and the study” (p. 125). In the current study, a comprehensive and transparent description of the research context, participants, data collection, and analysis procedures was provided to enhance transferability.

Dependability is defined as the extent to which research findings are consistent with the data collected (Merriam & Tisdell, 2016). It corresponds to the notion of reliability in quantitative research, which refers to the extent to which research findings can be replicated. However, as Tracy (2020) points out, as socially constructed understandings are constantly evolving and inherently incomplete, even if the study were to be replicated (by the same researcher, using the same methods, in the same context, and with the same participants), the context and individuals involved would inevitably have changed over time, through aging, learning, or moving on. Thus, “achieving reliability in the traditional sense is not only fanciful but impossible” in qualitative research (Merriam & Tisdell, 2016, p. 251). To ensure dependability, I consulted with my advisor, an expert in qualitative data analysis and initial teacher education research, to develop initial themes and compare our interpretations of the data. I also continually questioned the assumptions I made in interpreting and coding the data.

Finally, confirmability, which refers to the objectivity of the study, was another criterion to establish trustworthiness. For confirmability, detailed explanation of the methodology of the study and triangulation were the strategies used in this study.

### **3.9. Researcher’s Role**

Researcher’s role is an important aspect in CAR which affects the research process profoundly. Therefore, the issues related to the researcher’s role need to be carefully handled by researchers. One of these issues is the positionality of researcher, that is, whether the researcher is an insider or outsider to the participant group and setting. To decide their position in a study, researchers should examine their backgrounds and perspectives (Johnson, 2017). Therefore, in this part, I initially will give some information about myself, thus the readers of this thesis can gain better insight into who I am in relation to the participants and research setting.

After graduation from an ELT department, I worked as a teacher in a public school for two years. Later, I decided to apply for a research assistant position and now I am a full-time

research assistant at the ELT department where the study was conducted. I have been working here for almost eight years. As a research assistant, I have various responsibilities such as preparing exam and course schedules, invigilating exams, assisting courses, assisting incoming and outgoing Erasmus students and staff, helping students before and after their graduation ceremony, etc. Due to these responsibilities, I am usually in contact with students, thus I can say that almost every student in the department knows my duties and me. They usually see me as a teacher and call me ‘hocam’ (my teacher in English). As for the participants of this study, I taught one of their courses for almost one semester since their foreign teacher had a problem about getting a visa for Turkey. Therefore, we already knew each other. This familiarity helped me to establish a rapport with them easily. However, my positionality was affected by the fact that the participants saw me as their teacher, which accentuated power differences between us. At the beginning of the study, they sought my approval in everything they did since they viewed me as an authority figure. To address this asymmetrical power dynamic, I always highlighted that their ideas and thoughts were just as valuable as my own. As time went on, they became more comfortable expressing their ideas and began to articulate their genuine perspectives, rather than what they believed I wanted to hear. Although they still saw me as a teacher, they described me as a modern and new version of one, who prioritizes students' thoughts, feelings, and concerns.

In the light of the examination of my background given above, in this study I position myself as “an outsider in collaboration with insiders” (Please see Herr and Anderson (2015) for the continuum of research positionality). However, it does not mean that I am a complete outsider, who is totally new to the participants and the setting. That is, it can be said that I am an outsider while simultaneously, in some dimensions, I am an insider. Please see Table 9 for the ways in which I perceived myself to be both an insider and outsider.

Table 8

*My Insider and Outsider Position*

| <b>I am an insider since...</b>                                      | <b>I am an outsider since...</b>                                     |
|----------------------------------------------------------------------|----------------------------------------------------------------------|
| I have been working in the department where the study was conducted. | I was not one of the stakeholders who involved in practicum courses. |
| I was an pre-service EFL teacher.                                    | I am currently a research assistant, not a PST.                      |
| I taught English in a public school before.                          | I have two-years of teaching experience.                             |
| The participants already knew me before the study.                   | I am a doctorate student.                                            |

As Table 9 displays, I have an emic understanding of the research setting (the ELT department and the public school) since I have been working in an ELT department and I taught English in a public school for two years. I also have local knowledge of being a pre-service EFL teacher and taking a practicum course. However, because of my status in the department, my education level, and my teaching experience I cannot say that I am a complete insider. Moreover, I was not one of the stakeholders (e.g., supervisor, cooperating teacher, a PST). Briefly, I was an outsider who had, to some extent, an emic perspective of the research context. This position enabled me to both understand the participants' perspectives and evaluate the circumstances critically. It should be also noted that since I was not a complete insider, but an outsider having more power than the PSTs, it is required to acknowledge that my relations with the PSTs were not entirely symmetrical despite my efforts to establish a symmetrical relationship.

In addition to my insider/outsider position, it is important to provide information about my dual role (i.e., researcher and teacher educator) in the research process. For example, in the group meetings in which we analyzed videos and extracts from real classrooms, I primarily assumed the role of teacher educator and attempted to help the PSTs become aware of practical tools and strategies related to CIC. Because my priority as a teacher educator was to meet the needs of the PSTs in these meetings, I was unable to observe the meetings from a researcher's perspective, although I remained aware of the research. To overcome this limitation, after the meetings I observed and reflected on the recorded data from the researcher's point of view. However, in this research process, oscillating from one role to another was not always clear-cut; hence, I needed to be aware of what decisions or actions had been taken by the teacher educator or researcher. By keeping a researcher journal, I attempted to engage in self-awareness analysis of how my roles affected the research process. I also invited my advisor to observe some of the meetings and evaluate them. For example, after one of her observations, she stated the meeting was long and exhausting. When I reflected on this data, I realized that in an effort to collect more data, I had lost sight of being a teacher educator. That is, conflicts between agendas of these roles emerged during the study, but by keeping a researcher journal and inviting another researcher, who is also teacher educator, to the meetings, I attempted to become cognizant of these conflicts.

Additionally, since qualitative research is a "creative, reflexive and subjective" process in which researcher subjectivity is seen as "a resource rather than a potential threat to knowledge production" (Braun & Clarke, 2019, p. 591), it is important to give information on

the pre-understandings and subjectivity of researchers. In this regard, I need to acknowledge that I can be positioned as a researcher who recognizes the value of SCT and CAR in teacher learning. Similarly, my advisor, who guides and helps me throughout the research process, including data collection and data analysis, shares similar perspectives on teacher learning. Thus, it can be stated that our prior understandings likely permeated the current study.

### **3.10. Ethical Considerations**

Social research, including educational research, is concerned with people's lives and therefore it ineluctably raises ethical issues (Dörnyei, 2007). We, as researchers, have the responsibility for carefully evaluating and dealing with the ethical issues which are likely to arise in our studies. Since action research requires close and open communication with people involved and aims to influence their thinking, researchers must be extra-aware of these issues (McNiff & Whitehead, 2009). To ensure ethical practice, in this study, I first received ethical approval from both the Ethics Committee of the university and Ministry of National Education (see Appendix 2). Later, I sent an invitation to the fourth-year PSTs at the department. I had an initial meeting with those who would like to participate in the study and informed them about some key issues which would allow them to make fully informed decision about taking part in the study, including what the purpose of the study was, what role they and I would play in the study, how the data would be collected and used, with whom I would share them, and how findings would be disseminated to a wider audience. After I explained to them all the specifics, nine of twelve PSTs agreed to take part in the study by signing the informed consent forms promising anonymity and the right to withdraw at any time without any consequences. After starting the study, two of them withdrew from the study.

Protection of participants from harm is an important issue dealt with by the researcher (Fraenkel & Wallen, 2006). Even if most educational studies do not pose the risk of physical harm, researchers must be careful about the risk of emotional harm (Johnson & Christensen, 2019). Since being observed could make people uncomfortable and possibly embarrassed, I assured them that the purpose of these observations was not to judge them or their capacity, but to contribute to their professional development. In order to preserve the participants' confidentiality, PSTs were given pseudonyms in the study. I assured the participants that both video and audio recordings would be stored in a secure manner and be deleted when the research was completed.

## **CHAPTER IV**

### **FINDINGS**

#### **4.1. Introduction**

This chapter begins by presenting the findings with regard to the first research question which aimed to explore the insights gained into the pre-service EFL teachers' participation in the CAR project based on classroom interaction-based reflective practice. Subsequently, the findings of the second research question, which explored how the CAR project based on classroom interaction-based reflective practice mediated the pre-service EFL teachers' CIC, are provided. Based on the thematic analysis of the data from the first and second cycles, it became apparent that similar themes emerged for the first questions. Therefore, the findings were presented in a unified manner, departing from the typical approach of presenting separate findings for each cycle in action research studies.

#### **4.2. The insights into the pre-service EFL teachers' participation in the CAR project based on classroom interaction-based reflective practice**

The findings revealed that the pre-service EFL teachers' participation in the CAR project led to changes in their understanding of professional development and their teacher identities. Their engagement with the project's content and each other was shaped by the nature and characteristics of the CAR community formed during the project. The PSTs also stressed the value of co-reflection through the use of videos and extracts. In this regard, the study identified four prominent themes: (1) (Re)defining teacher professional development through CAR, (2) (Re)constructing teacher identity through CAR, (3) Identifying the elements of CAR community, and (4) Co-reflecting on pedagogical issues through videos and extracts.

##### **4.2.1. (Re)defining teacher professional development through CAR**

The findings revealed that the CAR project functioned as a mediating agent that facilitated the participants to reconstruct their understanding of teacher professional development (PD). They began to look at PD from a different perspective as they engaged in collaborative research, reflection, and teaching activities in the CAR project. Their understanding of PD as a lonely activity transformed into a collaborative activity. The PSTs realized how important it is to take different perspectives and learn from peers. For example, one participant stated:

*In this process, I have seen that I can learn a lot from my other colleagues and how important different perspectives can be, especially in teaching. I think that it is very important to be aware of this, and that is why I am sure that I will get a lot of benefit from it in the future. (WR1)*

Similarly, another participant, Mert, stated that his participation into the project changed his perspective and cleared up his doubts about learning from peers:

*This study has changed my perspective on my colleagues. I realized that I could learn a lot from them. Previously, I was more skeptical and thought what another pre-service teacher could know that I don't already know. I was prejudiced, but now I see that I was wrong. (FG1)*

As can be seen from this reflection, Mert previously was opinionated about learning from peers and undermined the opinions and knowledge of peers. However, the interactions with the group members helped him to review and value the role of peers in his professional development. That is, collaboration in the project mediated Mert's understanding of the peers' role in his learning and facilitated seeing the importance of collective learning. The data analysis also showed that since they shared their lessons with their peers and took their advice in the project meetings, they came to realize the importance of sharing ideas on pedagogical issues. For example, one participant, Didem, stated:

*In this study, I saw that discussing and sharing ideas with others can help you gain a new perspective on the situation at hand. For example, when the group members shared their ideas on my teaching, they helped me realize the points that I need to improve. (Didem, FG2)*

Another participant, Ecem, reported that she wanted to invite her colleagues to observe her teaching and gain different perspectives about it:

*We are all very different people, we all have very different views, we all have different ways of analyzing, different ways of learning and different ways of teaching. Especially when we shared our lessons, it was very valuable for me to listen to different perspectives and to realize things that I had not noticed thanks to them. In fact, I would like to do something similar to this in the future with my fellow teachers, if they are willing. (FG2)*

It seems that by creating a space where PSTs could share insights that emerged from their unique learning and teaching experiences, the CAR project demonstrated the importance of taking different perspectives and supporting each other. The results also indicated that the PSTs began to understand that they do not have to face their teaching problems alone and that they can get help from their peers in finding solutions:

*Although it is not always easy to find solutions to the problems we experience, it is a good feeling to know that they are not unsolvable and that we can get help from our colleagues and work together to find solutions. (Sevda, FG2)*

*During the meetings, I realized that sharing the problems I experienced during my practicum lessons with my friends and listening to their thoughts and suggestions for solutions made the problems seem more manageable. It was eye-opening to see that with the help of my friends, I could solve problems that I couldn't have solved alone. Now, as a teacher, I am aware that I don't have to face problems alone anymore. (Didem, FSI)*

These excerpts show that collective problem-solving and scaffolding which lie at the heart of the CAR project are the activities mediating PSTs' understanding of themselves and PD. During the project meetings, they shared their problems in the practicum school with the group members, analyzed these problems together, and came up with solutions. This gave them the opportunity to realize that they do not have to fight the problems alone. The findings also showed that PSTs came to realize that through collective thinking and reflecting they achieved something beyond what any group member could achieve alone, as the following excerpt indicates:

*Working on something together and talking help us make things better. I say something, and one of my friends adds something or corrects what I said. The result is something like a shaved sculpture or a portrait that we created together. I liked that very much. (Mert, FG1)*

As can be seen from the excerpt, Mert has developed an awareness of the importance of interthinking, that is, "use of language for thinking together, for collectively making sense of experience and solving problems" (Mercer, 2000, p. 1). Another participant, Aycan,

explained how interthinking in the project meetings scaffolded her to produce her own interpretation of the issues at hand.

*For example, during our meetings, one of my friends would suggest one solution, while another friend would suggest a different one. Instead of immediately accepting either suggestion, we could combine and synthesize them in our minds to come up with a more innovative solution. I believe that this process of collaborative idea synthesis was one of the most significant contributions of these meetings. It was a great feeling to be able to create something new and more effective by working together with my peers. (FG1)*

Murat also stated that he used the collective knowledge created through interthinking: *I noticed I use what we talked about in the group a week ago when I analyze videos or extracts the next week, so in a way the knowledge we produce together in the group becomes our knowledge (Murat, FG1).* As can be seen from the excerpts above, through engaging in a series of interactions with the group members in the project meetings, they realized that they could co-construct a richer collaborative knowledge than they could on their own.

#### **4.2.2. (Re)constructing teacher identity through CAR**

The results showed that the CAR project acted as a mediating agent, which helped the PSTs reconstruct their teacher identities in an empowering way. Through participation in the CAR project, the PSTs had the opportunity to reflect on their everyday, simplistic understandings of being a teacher and began to position themselves as researchers, reflective practitioners, lifelong learners, decision makers, and change agents. For instance, one participant, Sevda, stated:

*There is the classical teacher role that we see from our teachers. They just deliver the lesson and leave, without doing any research or taking the students' opinions into account. They always teach in the same way without changing themselves. I believe that we should not become this type of teacher. This study has increased my awareness in this regard and has also shown me more clearly that if I were to become one of those classical teachers, I would be unfair to my students. (FSI)*

As can be seen from the excerpt, her participation in the project led her to reconsider and become dissatisfied with the traditional role of the teacher in the classrooms she had observed as a student. She realized that teachers who conduct research and are open to change

and student opinions can be more effective teachers. Similarly, another participant, Ecem, emphasized how the project helped her realize how useful research is for teachers:

*I found that doing research is more beneficial than trial and error or trying to solve things instinctively because we can be biased about our practices, but this kind of observation, reflection, and seeing things from others' perspectives can help us to look at what we do more objectively. So, I can say that I loved not only the classroom interaction part of this study, but also the researcher perspective it gave us. (FG2)*

Ecem's statement suggests that as she engaged in systematic reflection, observation, and data collection as part of the project, she had the opportunity to reflect on the problem-solving strategies she had previously used in her classrooms (i.e., trial and error, solving things instinctively) and to see how she could address instructional problems more objectively through research. Ayca also expressed how the practices she engaged in during the project, including reading other teachers' action research studies, reconstructed her teacher identity and motivated her to conduct research:

*In fact, I can say that what the study offered from beginning to end improved and changed me. For example, I remember a study we read at the beginning of the study, and when I read it, I got excited and said I want to be a teacher like that. Then during the study, I experienced first-hand what it takes to be a teacher who conducts research and improves themselves for their students. So, I can say that one of the biggest benefits of this study is that it made me realize that research is an important part of teaching and got me excited about it. (FSI)*

This excerpt suggests that participation in CAR studies helps reconstruct PSTs' teacher identities in an empowering way. In addition, reading CAR studies conducted by other teachers can be a mediating activity that can encourage PSTs to conduct research. Based on the above excerpts, it can be stated that PSTs can begin to perceive themselves as teacher-researchers by participating in the CAR project, i.e., they can add a 'research' element to their teacher identities (Burns et al., 2022, p. 24). The data analysis also revealed that the PSTs began to imagine themselves as a change agent who acts as a catalyst to transform their future institutions. For example, one participant, Murat, stated in the focus group interview in the second cycle: *One of the things I definitely want to do in my future school is to form a group similar to the one we formed here, utilizing the research techniques we learned to benefit the*

*school where I will be working.* Similarly, another participant, Mert, expressed his desire to make a change in his future school:

*When I imagine creating a similar group in the teachers' room in the future, it excites me. While I recognize that it won't be an easy task, sharing what we have learned here with fellow teachers and forming a willing group would make me feel good, and it would be beneficial for my colleagues. Naturally, this will also have a positive impact on our students. (FG2)*

These excerpts show that the PSTs' agency was mediated by their participation in the CAR project, and they recognized that they could reuse the research activities in the project in the future and organize their future research groups by adapting the group dynamics in the project in order to improve their schools. Thus, they started to envision themselves as someone who has the capacity to initiate a change in their institutions. The results also showed that the PSTs started to imagine themselves as facilitators in their future research groups. For example, one participant, Murat, stated:

*Thanks to this study, I have learned a lot about how to manage a similar study. I have gained insights into how to direct a group and what problems can arise and how to address them, and I feel fortunate to have had this experience. (FSI)*

As can be seen from the excerpt, through engagement in the research project Murat had the opportunity to observe how to facilitate teacher professional development through a research group, thus his capacity to guide a research group was mediated and improved. Additionally, the findings showed that social and power relations in the project played an important role in reconstructing professional identities of PSTs. For instance, one participant, Mert, reported:

*In our university courses, we feel like we are just subjects of an experiment rather than active participants in the learning process. We have no say, decisions are made outside of us. We feel powerless, and we are expected to simply obey whatever the teacher says. However, in this study, we feel valuable because everyone is a manager and decision-maker. Thanks to this study, we see how useful and important it is to be able to control our own development and to be involved in decision-making processes. (FG1)*

As can be seen from the excerpt, Mert was able to reposition himself as the decision-maker and controller of his own development because the CAR project created a democratic space in which all group members participated in decision-making processes in contrast to the disempowering discourse and asymmetrical power relations in his university courses. In other words, through engaging in the project, his professional self-image changed from being an “experimental subject” who has no power over his learning to being a “decision-maker” who has the power to take control and agency over his learning.

The findings also indicated that PSTs’ engagement in the project enabled them to see how reflection is an essential part of teaching, thus they began to imagine themselves as reflective practitioners. For example, one participant, Didem stated:

*In this study, I realized how important it is to think more deeply when you faced a problem. For example, instead of blaming the student and saying, "Oh, they are reluctant, they don't answer," it is important to question whether there could be other reasons behind it. Also, if they are really reluctant, we need to understand the reasons behind it. (FSI)*

This excerpt demonstrates that since the CAR project created a space for systematic reflection, Didem had the opportunity to observe its effects on teaching, thus she realized how important it is to be a reflective teacher. Another participant, Aycan, also highlighted the need for reflection, as follows:

*As a teacher, I realized the importance of questioning and reflecting on my teaching practices regularly. For instance, I used to try to act like my high school teacher because I admired her, but I learned that it's not right to copy her actions without critical thinking. Especially, the questions you asked me during our meetings had a significant impact on my perspective. Even though we won't be working together anymore, I will continue to ask myself similar questions to ensure that I am constantly improving my teaching practices. (FG2)*

Through the excerpt, it is evident that the co-reflections during the project reshaped Aycan’s understanding of being a teacher. She came to realize that as a teacher she needed to reflect on her teaching practice. The excerpt also shows that the questions used by the teacher educator for responsive mediation were appropriated by Aycan as a tool to regulate her reflective activity. Thus, it can be stated that the dialogic interactions with the teacher educator not only reconstructed her teacher identity in an empowering way, but also enabled her to

become more autonomous about reflecting on her teaching by providing her with types of questions to use for reflection. The PSTs also emphasized the value of using classroom videos for reflection:

*When we don't record our lessons, we may forget what we did, have trouble remembering specific details, or have a lot of distractions during class that prevent us from realizing any mistakes we made. So, I believe that lesson recordings are a valuable tool because they allow teachers to view themselves from a different perspective and identify areas for improvement. (Ali, FG2)*

It is apparent that their engagement in the CAR project raised their awareness of possible tools they could use to support their reflection. The data also indicated that engagement in the CAR project helped PSTs to see themselves as lifelong learners. For example, one of the participants, Ali, stated in the first focus group interview: *With this study, I have seen that learning never ends, how important it is to continue learning even if we are teachers.* In his final interview, Ali also emphasized: *For life-long learning, I realized that research is essential.* Another participant, Aycan, shared her realization about being a lifelong learner as teacher in following words:

*I enjoyed the feeling of being a teacher during this study, but I also learned that being a teacher doesn't mean that our learning journey ends. Therefore, it is important for us to constantly reflect on our practices, exchange ideas with others, and continue learning. (FG1)*

These excerpts also show that research, reflection, and collaboration, which were key components of the CAR project, were recognized by the participants as a tool for lifelong learning. That is, their awareness and capacity to continue their own learning and development was mediated and enhanced by the tools introduced in the project.

#### **4.2.3. Identifying the elements of CAR community**

Another major theme that emerged from the data was how the nature of the CAR community, which was formed by seven PSTs and the researcher, influenced the PSTs' engagement in the project. Most of the PSTs reported that they almost never attended lectures at the university because they were not required to do so due to the pandemic, but they willingly attended the weekly meetings of the CAR project. They emphasized that they felt motivated by some elements of the CAR community such as more symmetrical power

relations, active participation, engagement in decision making processes, validation, freedom of expression, respect, non-judgemental communication, sense of belonging, and emotional support. For example, more symmetrical power relations through which all the community members' opinions were taken into consideration enabled the PSTs to feel valued: *It's really nice to see that my thoughts and ideas are as important as anyone else in the group. (Ali, FSI).* They added that the way the researcher positioned herself and them in the community deeply affected how they positioned themselves. Because the researcher took the position of a co-researcher and a facilitator rather than an authority, they could position themselves as co-researchers and decision-makers instead of students who are passive and have no control or power over their learning:

*Unlike other courses, we do not passively do what is asked of us, we are always active and make decisions together. And we know that we will not be judged if we express our ideas. Honestly, I have gotten so used to these meetings that I find the classes very boring. (Mert, FG1)*

They felt a sense of agency because, unlike other courses, they got involved in the decision-making processes throughout the project. They felt active and empowered through being in control of making changes in the project. Given this democratic environment, they felt that they could express their ideas freely and comfortably:

*I feel comfortable sharing both my right and wrong ideas with friends in the project. Since I am aware of the fact that it is a development- and solution-oriented project, I can easily share my experiences, doubts and mistakes that I see, and easily accept feedback from my friends. (WR1)*

The PSTs emphasized that since they realized that they would not be judged, but supported by the community members, they could show their vulnerabilities and weaknesses: *It never bothered me to share my mistakes with the group because I knew they would try to help me instead of judging me.* This supportive community provided the PSTs with a space in which they felt safe and respected: *The moments when my friends gave their ideas and when I expressed mine were the ones where I felt most at ease. I felt at ease because I was in a respectful discussion setting where I was not judged. (WR1).* The PSTs also felt validated since the community paid attention to their problems and attempted to find solutions to them:

*It was also very comforting to know that if I had a problem or something was bothering me, the group would think about it and try to find a solution if I shared my concerns. This made me feel valued. (Didem, FG2)*

With regard to the nature of the CAR community, the results also showed that although the PSTs are involved in a more symmetrical relationship where they were involved in decision-making processes in the project, power issues still persisted within the CAR community. For example, one participant stated by referring to the suggestions I gave during the pre-lesson conferences:

*When the advice came from my friends, I would take it into consideration, but when it came from you, I felt like I had to accept it. I thought that if Eda teacher says something, it must be true, but then I realized that Eda teacher gives me advice, but I don't necessarily have to do that, I can decide for myself, after all, she gives me ideas to make the process easier, but as I said, it took me a while to realize this. (Mert, FSI)*

The field notes further corroborate this finding, revealing that despite the researcher's efforts to position the PSTs and herself as co-researchers, the process of the PSTs positioning themselves as true collaborators was not a simple and straightforward one.

#### **4.2.4. Co-reflecting on pedagogical issues through videos and extracts**

Another insight into the PSTs' participation in the CAR project concerns the joint reflection on pedagogical issues using videos and extracts. As described in the methodology section, during the acting/observing phase of the first cycle of the study, the PSTs collectively reflected on various concepts and practical tools related to classroom interaction by analyzing videos and extracts from other teachers' lessons. At the end of the acting/observing phase of the same cycle, they discussed the effectiveness of their collective analysis of the videos and extracts. The results indicated that the PSTs found the joint reflection on pedagogical issues using videos and extracts to be effective in helping them reflect on their own beliefs and practices. The group discussions created a space for the PSTs to share their opinions and insights, and to listen to the perspectives of their peers. Through this dialogic mediation, the PSTs were able to review and (re)examine their understanding of pedagogical issues and gain new insights. For example, one participant, Sevda, reported that her understanding of the wait-time was reconstructed as a result of co-analyzing videos and extracts with the group members.

*I realized that I was impatient with my students. I mean for some reason I had this expectation that they had to answer my questions immediately. And when they didn't, I would end up giving the answer myself because the silence made me uncomfortable. Also, I was complaining that the student wasn't answering. But now, my thoughts have really shifted on this. I can see the value in giving students time to process and think through their responses. (FG1)*

As can be seen from the excerpt, through co-reflection using videos and extracts in which she was exposed to alternative views on the issue, Sevda realized that her understanding of wait-time and silence limited students' participation. Similarly, another participant, Ecem, explained how she gained new insights into concept-checking questions through collective analysis of videos and extracts:

*We have learned the scientific terms and names for things we do instinctively as we reviewed these videos and extracts. For instance, one of our friends talked about concept-checking questions. This sparked my curiosity, and I thought it was something I didn't know, but then I realized that I use these questions, but unconsciously. Thanks to my friends, I learned how to use them more effectively. (FG1)*

From this excerpt, it appears that co-reflection through videos and extracts, which created the opportunity for the group members to name scientific concepts or practical tools they knew, could help PSTs focus on their own practices and everyday understandings that had remained implicit and unanalyzed, thus they had the opportunity to compare what they did and what they should do. In other words, by linking scientific concepts to classroom activities, co-reflection using videos and extracts provided a new lens through which they could reevaluate their everyday understandings. The results also showed that co-reflection through videos and extracts not only helped PSTs reconstruct their everyday understandings, but also created a space in which PSTs were exposed to new concepts, practical tools, and strategies of which they were previously unaware. For example, one participant, Mert, stated:

*To be honest, I was confident about myself. Of course, I did not think I was the best teacher, but I thought I already knew a lot. So, when I volunteered to participate in this study, I expected to learn only a few things, but when we started analyzing videos and extracts, I was really surprised. As the group members expressed their opinions, I kept saying things like, 'I did not know that' and 'Yeah, I can do that too. (FG1)*

Similarly, another participant realized that co-reflection through videos and extracts introduced new strategies to her and stated: *While reviewing these videos and extracts together, I learned strategies that I was never aware of before. For example, I learned that we need to shape students' answers according to the purpose of the activity.* The results also showed that collaborative reflection on videos and extracts enabled the participants to see how theory is applied to reality and what kinds of problems they can have while applying theory in their classrooms:

*In fact, our lessons usually go like this. We read a definition and then memorize it for the exam. After a while, we forget everything because we do not see how these concepts or definitions are applied in actual life. Here, in these meetings we see a real event and concepts together through videos and extracts. So, we can understand how the concepts are brought to reality. I think that's why we need to see how they are applied in real life, or see something that models it, so that we can internalize the concepts more easily. You know, seeing an apple and calling it an apple is one thing, but seeing an apple after learning the definition of an apple is another. For example, when the word scaffold was mentioned in meetings, I could not remember what it was and had to ask my friends. However, in these meetings it became more permanent because in videos and extracts we saw how scaffolding is done. (Mert, FG1)*

As can be seen from the excerpt, co-reflection through videos and extracts can be a mediating activity that facilitates internalization of concepts by connecting scientific concepts to classroom activities. This excerpt also suggests that university courses in which PSTs are exposed to scientific concepts in a detached way from classroom activities are not sufficient to help PSTs internalize concepts. The PSTs also stressed that by co-reflecting through videos and extracts, they gained better understanding of how to analyze classroom interaction: *By analyzing classroom extracts and videos together, I learned how to analyze teacher-student interactions in a more precise and deeper manner and to evaluate the behavior of both parties (WR1).* Similarly, another participant emphasized the importance of co-reflection on videos and extracts by stating:

*I realized that I was very superficial when I was analyzing videos and extracts alone, but over time, with the group, I understood better where I should focus. After a while, I started to focus on what should be done to be useful to the students while analyzing. (Sevda, FG1)*

As stated previously, the PSTs participated in co-reflection sessions centered on videos and extracts from other teachers' classroom activities during the first cycle. In the second cycle, they continued with co-reflection, but this time on their own and their peers' classroom videos. Upon analyzing the data, it became clear that as the PSTs taught in practicum schools and engaged in co-reflecting on their own classroom videos, they came to a realization that although joint analysis of videos and extracts from other teachers' lessons, which took place in the first cycle, raised their awareness of classroom interaction, it was not sufficient:

*I learned a lot from reviewing other teachers' classroom videos and extracts in the first cycle but applying them was not always easy. At times, I found myself doing things we had previously criticized, and at other times, I wasn't sure how to handle certain problems. Sometimes I forgot what we had discussed in the first cycle. This made me realize how important it is to reflect on our own lesson videos together as well (Aycan, FG2).*

Another participant stressed that co-reflecting on her own and her peers' lessons was crucial for her to step out of her comfort zone and apply what she had learned in the first cycle:

*During our meeting with you after the first lesson, I realized that I tended to stay in my comfort zone. I remember you mentioned that I often asked questions that I already knew the answers to, which was a way for me to feel more comfortable. After that, I made an effort to change this. However, if it weren't for the discussions we had with you and my peers after the lesson, I might have continued to stay in my comfort zone and not take risks. So, I can say that the process of reflecting together, hearing the perspectives of others in the group, and reviewing our experiences was invaluable in helping me to grow as a teacher (Sevda, FSI).*

The above excerpts reveal that the PSTs faced difficulties in putting into practice what they had learned in the first cycle, and that they required more guidance and mediation through co-reflection on their own and their peers' classroom videos. It was found that co-reflection on these videos was beneficial for the PSTs, as it allowed them to gain new insights and different perspectives on their teaching practices. For instance, one participant reported that:

*Undoubtedly, my favorite part of the process was when we shared our teaching recordings with our peers and received their feedback. Not only did I benefit from the feedback I received on my own teaching, but also from reviewing my peers' lessons*

*and learning from their experiences. Through this process, I was able to gain valuable insights into different teaching approaches and techniques, which I was then able to incorporate into my own lessons. (WR2).*

Similarly, another participant, Ecem, stated that:

*For example, I remember very clearly that when I gave feedback in my first lesson during my practicum, it seemed to me that there was no problem with what I did, but when I shared it with my friends, I saw how I could have given better feedback. I mean what I did wasn't wrong, but you understand how to do it better. (FG2)*

She followed up on this point by saying: *Also, for example, when you watch the video, you see that there is a problem, but you may not know how to solve it. In this sense, I think it is very important to share it with the group and get their opinions.* Mert also stated that:

*Especially in the context of reviewing lesson videos together and sharing ideas, it is very reassuring to see we are not the only ones who make mistakes. Sometimes when we make a mistake, we can question our own values. When we do something right, we may not see it as a big deal, but when we make a mistake, we may feel like we can't do it. However, seeing that our peers have gone through almost the same things as us, faced similar problems, and developed new strategies with different perspectives to address these problems, made me feel relieved. I was able to say to myself that I am not alone. There is a community walking with me. (FG2)*

The provided excerpts indicate that PSTs were able to obtain valuable insights and alternative viewpoints on their teaching practices, along with potential solutions to their problems, through co-reflecting on their own and their peers' classroom videos. This approach provided both cognitive and emotional support, as PSTs recognized that they were not alone in facing teaching difficulties.

#### **4.3. The role of the CAR project on classroom interaction-based reflective practice in the pre-service EFL teachers' CIC**

To observe how the PSTs' participation in the classroom interaction-based practices of the CAR community mediated the CIC of pre-service EFL teachers, four PSTs' development processes with regard to different practical tools of CIC were selected for illustrative purposes. First, background information is given for each PST and then what happened in the practices of the CAR community is shown through SCDA.

#### 4.3.1. Sevda

##### **Background Information**

When Sevda volunteered to participate in this study, she already had three months of teaching experience in a private English language school. Through this experience, she realized that she was becoming one of the teachers who used only the grammar-translation method. In the first interview, she said:

*I do not want to be a boring teacher who uses the grammar-translation method all the time, but I do not know what to do. I find myself using this method whenever I teach English. I feel really bad because I can't use other methods.*

As can be seen from the excerpt above, the discrepancy between what she wanted to do and what she did led to a kind of *cognitive/emotional dissonance* in her that, according to Vygotskian sociocultural theory, acts as a catalyst for professional development. In this way, this study became an opportunity for her to address her inner contradiction. When asked in the first interview why she wanted to participate in this study, she explained:

*I want to be an English teacher, but I am afraid of being one of those traditional, boring teachers who use the grammar-translation method. I believe this study can help me better recognize my flaws and find solutions to them.*

This excerpt shows how Sevda's desire to address the dissonance she was experiencing positioned her to be able to benefit from this study. As Johnson and Golombek (2016) argued, it also enabled her to become more open to dialogic mediation by group members and more inclined to change her teaching practices by using new practical tools or strategies that she had learned during the study. Additionally, she believed that teaching was a sacred profession that needed to be practiced in the best way and not solely for financial reasons. This idealized conception of teaching, which seemed to be grounded in her schooling history, motivated her to work hard to close the gap between her ideal and actual teacher self throughout the study. In addition, she considered her English proficiency insufficient to appropriately use English as a medium of instruction. In the first interview, she mentioned:

*My English is not as good as my classmates. I do not feel competent about my English. Also, I have tried to speak English in class a few times, but I failed. I know I have to solve this problem, or I cannot be an English teacher. It is not fair for the students to have such a teacher.*

As seen from the excerpt, she was not satisfied with her own proficiency in English and was concerned about her ability to use English as a medium of instruction. Given her understanding of teaching as a sacred profession, her dissatisfaction did not seem surprising. Indeed, the inner contradiction she experienced seemed strong enough to lead her to consider a different career path. In the first interview, she stated, *“If I cannot solve this problem, I plan to apply to a master's program which is not related to teaching English.”* It appears that even if she wanted to become an English teacher, her perceived lack of appropriate English proficiency held her back and made her feel professionally insecure. All the background information above is crucial as it provides a more comprehensive understanding of Sevda's practices during the study and a deeper insight into how the prism of her emotional experiences (i.e., her *perezhivanie*) can refract her new experiences related to English language teaching and the mediation provided by the community members.

### ***Using referential questions***

The data showed that although referential questions were introduced and discussed in the first cycle of the study as a practical tool to promote student participation, there was no indication that Sevda was aware of this tool and its pedagogical value prior to the first post-lesson conference. That is, her cognition regarding the use of referential questions did not emerge until the first post-lesson conference. Table 9 shows key episodes that illustrate her development process regarding the use of referential questions to promote student participation during the study.

Table 9

| <i>Key Episodes in Sevda's Development Process Related to Referential Questions</i>                                                                                                 |                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <b>Key Episodes</b>                                                                                                                                                                 | <b>The Practices of the CAR Community and Cycles</b>                       |
| “In the first vocabulary part, I could have asked”<br>(Examination of alternatives)                                                                                                 | 1 <sup>st</sup> post-lesson conference/2 <sup>nd</sup> cycle               |
| “I think the teacher wants to protect herself, because, if the student says something she doesn't expect, she does not know what to say” (Self-examination)                         |                                                                            |
| “So, I think she is asking questions to which she already knows the answers (laughs)” (Dissonance)                                                                                  |                                                                            |
| “This limited student participation” (Conscious awareness)<br>“Yes, you are right they could have been used in different parts of the lesson” (Further examination of alternatives) | Group meeting following the 1 <sup>st</sup> lesson / 2 <sup>nd</sup> cycle |
| “I'm glad I tried because the students gave longer answers to the referential questions” (Integration & Congruence)                                                                 | 2 <sup>nd</sup> post-lesson conference/2 <sup>nd</sup> cycle               |

Following the details of her first lesson, her developmental trajectory is presented below. In her first lesson, the mentor teacher asked Sevda to prepare a lesson in which the students would practice the simple past tense using language skills. She decided to prepare a listening lesson about a video based on a real theft. She started the lesson with a warm-up question (*What did you do this weekend?*). Then she asked the students to guess the topic by showing them several photos. After students figured out the topic, they watched the video and then answered several comprehension questions. Instead of preparing a post-listening activity, she decided to do another listening activity. This time, however, she chose not to do a pre-listening activity. After listening to the text, students answered several comprehension questions, as in the first listening activity. All the questions she asked during the lesson were display questions, which limit student participation to a few words or short utterances, with the exception of the warm-up question she asked at the beginning of the lesson. The lesson lasted for 40 minutes.

In the post-lesson conference, when I (hereafter “teacher educator”) asked her to evaluate her lesson, she reported that she was happy because she was able to stay calm and speak English during the lesson. She was also content about her lesson since she did not use the grammar translation method and the students answered all her questions. From this evaluation it might be inferred that her interpretation of the lesson was influenced by her *perezhivanie*. That is, unlike her previous lessons that evoked negative emotions in her because she had to use the grammar translation method, her first lesson in the practicum school enabled her to experience a sense of cognitive congruence due to the match between her ideal and actual activities. Despite her satisfaction, Sevda’s classroom interaction pattern mainly consisted of asking display questions and evaluating students’ answers. Therefore, student participation was limited, and there were almost no extended student turns during the lesson. During the post-lesson conference, Excerpt 1, the teacher educator attempts to draw Sevda’s attention to this issue by asking, *“I wonder if it was possible to create a space where the students could share their experiences with this topic while planning the lesson.”* The purpose in asking this question is twofold: first, to find out if she knew how and where to use referential questions in her teaching, and second, to lay the groundwork for creating a sense of dissonance by showing the contradiction between what she did and what we had discussed in the action research group. This question starts a joint mental activity, or more precisely, interthinking, thus, in lines 3 and 5, Sevda gives alternative questions that she could have asked in the pre-listening part. Her response indicates that although she was capable of identifying the

appropriate questions for students to share their experiences and the appropriate points where she could have used them, she did not use them in her first lesson.

### Excerpt 1

- |    |       |                                                                             |
|----|-------|-----------------------------------------------------------------------------|
| 1  | TE    | I wonder if it was possible to create a space where the students could      |
| 2  |       | share their experiences with this topic while planning the lesson           |
| 3  | Sevda | hmm actually for example in the part uhh (1) in the first vocabulary part,  |
| 4  |       | I could have asked (.) have you ever experienced such things? or have       |
| 5  |       | you heard anything?                                                         |
| 6  | TE    | exactly has someone ever broken into your house? or have you ever           |
| 7  |       | heard any interesting theft story?                                          |
| 8  | Sevda | yes I think it could have been good at the part where I asked what do       |
| 9  |       | you think our topic is (.) I mean after they predict the topic I could have |
| 10 |       | asked these questions (.) it would have been very good                      |
| 11 | TE    | yes you can get students to talk more by asking them such referential       |
| 12 |       | questions also (.) they use the simple past like in a conversation.         |
| 13 |       | I mean (.) they can use and practice the simple past tense as a means       |
| 14 |       | rather than an end                                                          |
| 15 | Sevda | yes I guess we talked about this in one of the meetings uhh I think the     |
| 16 |       | teacher wants to protect herself because (.) if the student says something  |
| 17 |       | she doesn't expect she doesn't know what to say                             |
| 18 | TE    | uh huh                                                                      |
| 19 | Sevda | so I think she is asking questions to which she already knows the           |
| 20 |       | answers ((laughs))                                                          |
| 21 | TE    | uh huh ((laughs)) \$Did you think like this when you were planning your     |
| 22 |       | lesson?\$                                                                   |
| 23 | Sevda | \$honestly I hadn't thought about it\$ I have thought about it right now    |
| 24 |       | ((laughs))                                                                  |

In lines 6 and 7, the teacher educator confirms her answer and models the questions she could have asked “in a teacherly voice” (Johnson, 2022, p.10). After hearing the teacher educator’s sample questions, the PST builds on her initial response by stating the specific point at which she could have used the questions (lines 8-10). At this point, the teacher educator takes the opportunity to insert the name of the practical tool, *referential questions*, and to emphasize their pedagogical value in terms of student engagement and the goal of the lesson (lines 11-14). This mediation aims to help the PST think beyond the lesson being discussed and better understand the value of referential questions so that she can use them in her future teaching. In other words, as Johnson and Golombek (2016) suggest, the teacher educator tries to develop a future-oriented focus in her thinking, thus she can use the practical tool more consciously when planning and enacting her lessons.

After the teacher educator highlights the value of the practical tool, Sevda reflects on why she did not use the practical tool in her teaching and she does so by referring to a

discussion the group had in the first cycle about why PSTs tend to use display questions instead of referential questions (lines 15-20). Her explanation reveals that she is concerned about how to shape students' responses to referential questions; therefore, she tries to stay in a safe zone by using only display questions, which have predictable answers. This might be inferred that since her previous attempts to use English in her lessons are unsuccessful, she avoids the situations in which she will use English extensively so that she does not feel the way she felt in her previous lessons. In other words, her perceived lack of appropriate English proficiency and her *perezhivanie* regarding the use of English in her lessons possibly explain why she limited her instruction with display questions.

Sevda's laughter at the end of line 20 also signals a moment of discomfort or the emergence of a contradiction. That is to say, it indicates that she recognizes the contradiction between what she did and what we had discussed in the action research group and tries to save face by laughing. Stengel (2014) argues that laughter can provide relief from discomfort and a space for growth if explored further. That is, it signifies a potential growth point toward which responsive mediation can be directed. However, in line 21, instead of directly providing responsive mediation, the teacher educator laughs with her in order to relieve the tension the PST felt and then seeks to understand whether she intentionally designed the lesson that way. In line 23, Sevda explains that she did not think of this when planning her lesson. Her response suggests that the idea of using referential questions as a practical tool to promote student participation does not function as an internalized psychological tool that regulates her thinking and instructional practices. However, the dialogic interaction between her and the teacher educator drew her attention to the use of referential questions and enabled her to detect the appropriate place to use them in her teaching. In Excerpt 1, we can also observe that the interaction between the teacher educator and the PST created an intermental development zone where she could articulate her reflections, thoughts and reasoning beyond what she would be able to express on her own. Thus, she gained better insight into why she failed to use this practical tool in her lesson, or more precisely, she realized how her fear of shaping students' contributions held her back using referential questions in her teaching.

During the weekly group meeting following the post-lesson conference, as we see in Excerpt 2, Sevda shares her insights she has gained about referential questions during her dialogic interaction with the teacher educator. In lines 1-5, she states that she preferred to use display questions rather than referential questions in her lesson and explains how this choice limited student participation. This explanation shows that she is more conscious of how the

choices she makes about using different questions types might influence student engagement. In lines 6-7, Ayca questions the appropriateness of using referential questions in a grammar lesson. Her question suggests that she is aware of the different types of questions, but that she has not yet fully understood their functional use in the context of actual teaching.

### Excerpt 2

- |    |       |                                                                              |
|----|-------|------------------------------------------------------------------------------|
| 1  | Sevda | uhh another point I noticed is that (.) uhh I hardly ever used referential   |
| 2  |       | questions in my lesson (.) I mean that I asked display questions during      |
| 3  |       | the entire lesson except the questions I asked at the beginning of the       |
| 4  |       | lesson how was the weekend? and what did you do? this of course (.)          |
| 5  |       | limited student participation                                                |
| 6  | Ayca  | I want to ask something uhh I mean this is a grammar lesson anyway,          |
| 7  |       | isn't it normal to be like this? (1)                                         |
| 8  | Mert  | yes it is a grammar lesson but we can see that it is integrated into a       |
| 9  |       | listening lesson (.) so there are pre-listening and post listening parts (1) |
| 10 |       | yes I know after listening to the text or watching the video                 |
| 11 |       | comprehension questions can be asked I mean display questions can            |
| 12 |       | be asked but I think (.) referential questions can also be included in       |
| 13 |       | <u>these parts</u> to increase student speaking time                         |
| 14 | Sevda | yes it could have been used in several places in the lesson (.) we also      |
| 15 |       | talked about it with Eda teacher especially in the first part (.) uhh I      |
| 16 |       | mean in the pre-listening part students' participation could have been       |
| 17 |       | increased with questions like uhh did a thief break into your house?         |
| 18 |       | what happened?                                                               |

Ayca's question creates a mediational space, and in lines 8-13 Mert takes the floor to explain why and when the use of referential questions would have been appropriate for Sevda's lesson, emphasizing that it is not a grammar-only lesson, but a listening lesson focused on grammar. His reasoning indicates that the practical tool of referential question functions as an internalized psychological tool that regulates his thinking. It might be inferred that he is likely to use it in his teaching in the future. In lines 14-18, Sevda agrees with Mert and builds on his explanation by noting that she could have used them in the pre-listening stage and by referencing the sample questions that emerged from her dialogic interaction with the teacher educator in the post-lesson conference. She also highlights the pedagogical value of referential questions (*students' participation could have been increased*). Her explanation shows that she has taken up the mediation provided during the post-lesson conference. She is more aware of when and why she should use referential questions in her teaching. According to Johnson and Golombek (2016), this conscious awareness is essential for teachers to "develop voluntary control, or self-regulation, over their instructional decisions and practices" (p.10).

Another point that Sevda's cognition related to the practical tool emerged in the data was the pre-lesson conference of her second lesson. The mentor teacher asked Sevda to prepare a lesson in which students could practice both speaking and listening. She first chose a game called deserted island survival and then built the lesson on it. At the beginning of the lesson, she showed three pictures and wanted the students to describe them. Then she asked them to guess the topic. After students figured out the topic, they watched a video about Robinson Cruise and then answered several comprehension questions. As a post-listening activity, she wanted them to imagine they were Robinson Cruise and asked hypothetical questions (e.g., *what would you do first if you were Robinson Cruise?*). Finally, they played the game in which students select five items from a list to survive on a deserted island and explain why they have chosen them. The lesson lasted for 80 minutes.

In pre-lesson conference, Excerpt 3, the teacher educator asks about her plans for the pre-listening stage (lines 1-2). Sevda explains that she is planning to use some photos as in her first lesson (line 3). Her response prompts the teacher educator to seek clarification regarding whether it is a prediction activity or not. In line 5, Sevda confirms it and then she adds that she is also planning to use referential questions at the pre-listening stage. In line 6, the teacher educator responds with a backchannel to encourage her to elaborate her response and Sevda continues her explanation through providing her reasoning why she wanted to use them in both pre-listening and post-listening stages (lines 7-8). This explanation indicates that the practical tool of referential question began to regulate her thinking, thus she considered it more consciously while planning her lesson.

### Excerpt 3

- |   |       |                                                                    |
|---|-------|--------------------------------------------------------------------|
| 1 | TE    | what are you planning to do before watching the video for the pre- |
| 2 |       | listening part?                                                    |
| 3 | Sevda | I am planning to use the pictures again like in the first lesson   |
| 4 | TE    | hmm okay (.) will it be a prediction activity again?               |
| 5 | Sevda | yes but this time I will add referential questions to this part    |
| 6 | TE    | uh huh                                                             |
| 7 | Sevda | I would like to add them to both the pre-listening part and the    |
| 8 |       | post listening part so that they can speak more                    |

The analysis of Sevda's second lesson indicated that she used referential questions as she planned during the lesson and thus enhanced student participation. Unlike her first lesson, students' participation was not limited to a few words, that is, there were extended learner turns. Her reflection in the second post-lesson conference shows how congruent she is with her using of referential questions:

*You know, I was afraid, I wasn't sure if I could do it, but I'm glad I tried because the students gave longer answers to the referential questions, they were also eager to tell something about themselves. And frankly, it was nice to learn from their lives or know how they think. It wasn't a mechanical lesson.*

The provided excerpts provides a glimpse into Sevda's development process related to the practical tool of referential questions. Through her engagement with the classroom interaction-based reflective practices of the CAR community, Sevda was able to explore alternative instructional practices and engage in critical self-examination. This process helped her to recognize the discrepancies between her actions and the ideal practices, leading to a sense of dissonance. During this process, she also gained a heightened awareness of the practical tool and its potential uses, as well as insights into further alternatives. Ultimately, Sevda used referential questions in her lesson despite her fear of unexpected answers from her students. By doing so, she was able to act like the teacher she aspired to be and ultimately experienced a sense of congruence as a result of the enhanced student participation in her lesson. Throughout this process, through her participation in classroom interaction-based reflective practices within the CAR community, Sevda was provided with responsive mediation and her conscious attention was directed towards the practical tool (i.e. referential questions). Thus, she was able to develop a sense of conscious control and transition from being reliant on external sources such as teacher educators and peers for guidance to developing self-regulation. In other words, cognitive transformation shifted from the external plane to the internal plane. The findings also indicated that the emotional dimensions of learning to teach were critical to Sevda's growth as a teacher. She reacted to the lessons and mediation provided by the CAR community through her *perezhivanie*, which means she refracted those experiences as a teacher who wants to create more engaging and interactive lessons and who is afraid of "being one of those traditional, boring teachers." Thus, when there was a discrepancy between what she did in the classroom and what she envisioned, she perceived it negatively and tried to reduce the gap between the two.

#### **4.3.2. Mert**

##### ***Background Information***

When Mert volunteered to participate in this study, he already had four months of teaching experience in a private English language school. When talking about this experience,

one of the points he emphasized was related to how his students thought that he was a native speaker because he always used English. In the first interview, he stated:

*I don't say this to brag, but compared to my classmates, I don't have the strong Turkish accent they have. Also, I always try to speak English in my classes. So, my previous students thought I was a native speaker. I guess this seemed exotic to them, so they asked about the pronunciation of the words with more enthusiasm, which I think is very nice.*

He also mentioned “when students ask me the meaning of a word, I always try to explain it through body language, visual aids or explain it in accordance with their level”. From these statements, it might be inferred that he was confident about his proficiency of English, and he believed that a teacher should use English as much as possible in her/his lessons. When observing the mentor teacher in the practicum school, her dominant use of Turkish and grammar translation method was one of the points Mert criticized and felt dissatisfied about. Before his first lesson, when I asked him how he was feeling, he stated:

*If I taught like the mentor teacher, I wouldn't worry at all. Because of her teaching style, the students are used to Turkish, and now I am not sure if they will understand if I speak English. I will do my best, but honestly, I don't know if it will work.*

It can be seen that how he perceived the mentor teacher's teaching created an emotional experience (i.e., perezhivanie) and started to feel nervous about students' participation. Additionally, Mert identified himself as an idealist person, who believes in the importance of continued self-improvement. In the first interview he stated that “*I get disappointed when I see my classmates saying that with this diploma, we will not be unemployed, we will find a job somehow, so we do not need to work hard. I think we should always work hard and improve ourselves.*” In accordance with his understanding of professional development, he wanted to participate in this study and actively engaged in the practices of the CAR community. All of the background information above is crucial as it provides a more comprehensive understanding of Mert's practices during the study and a deeper insight into how the emotional prism of his perezhivanie can refract his new experiences related to English language teaching and mediation provided by the CAR community.

### *Using increased wait-time*

The examination of Mert's development process revealed that his insight regarding the use of increased wait-time first emerged during the eighth co-analysis session of videos and extracts in the first cycle. He stated, *"To be honest, I realized that I didn't give the students enough time to think, and I am impatient so I might be preventing the student from participating."* From his reflection, it appears that co-analysis of videos and extracts from real classrooms allowed him to become aware of the pedagogical value of increased wait time and how its lack of use can hinder student participation. However, the analysis of Mert's first lesson showed that he had difficulty in using it appropriately. See Table 10 for key episodes that illustrate his developmental trajectory in terms of using increased wait-time to promote student participation throughout the study.

Table 10

| <i>Key Episodes in Mert's Development Process Related to Increased Wait-Time</i>                                                       |                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <b>Key Episodes</b>                                                                                                                    | <b>The Practices of the CAR Community and Cycles</b> |
| "I realized that I didn't give the students enough time to think" (Conscious awareness)                                                | 8th co-analysis session / 1st cycle                  |
| "I gave them thinking time and waited, too, but" (Dissonance)                                                                          | 2nd post-lesson conference /2nd cycle                |
| I thought if I repeat, maybe they'll understand if there's something they missed. (Self-examination)                                   |                                                      |
| "Then what should I have done? should I have given them time and reformulated the question if necessary? (Examination of alternatives) |                                                      |
| "I did it again, I showered students with my questions" (Continued dissonance & lack of self-regulation)                               | 3rd post-lesson conference /2nd cycle                |
| "I can remind myself of waiting after asking questions" (Further examination of alternatives)                                          |                                                      |
| "This time I succeeded" (Integration & Congruence)                                                                                     | 4th post-lesson conference /2nd cycle                |

In his second lesson, the mentor teacher asked Mert to prepare a grammar lesson on 'wishes' for tenth graders with the English proficiency level of A1 and A2. At the beginning of the lesson, he showed an image of a genie lamp with the word 'wishes' written under it and started an interaction by asking the question *"when we say wish what do you imagine in your head?"*. At this point, instead of giving students time to think, he kept asking different questions as it can be seen in Excerpt 4.

**Excerpt 4**

- 1 Mert today I want to talk about wishes with you when we say wish  
 2 what do you imagine in your head (.) do you know anything about  
 3 wishes (.) do you know the meaning of wish (1.7) so I want you to  
 4 answer this question what is wish to you (.) do you know the  
 5 meaning of the word (.) Like it is on the screen wishes (.) do you have  
 6 any idea (3) I just want you to answer this question briefly like what do  
 7 you think when we say wishes (.) wish deyince aklında ne canlanıyor?  
 8 (tr: when I say wish, what do you  
 imagine?)  
 9 S1 Dilek istek (tr: wish desire)  
 10 Mert Evet çok teşekkürler katılımın için (.) wish istek veya dilek demek  
 11 (tr: yes, thank you very much for your participation (.) it means wish or  
 desire)

Excerpt 4 shows that in lines 1-3, after asking three questions (*When we say wish what do you imagine in your head? Do you know anything about wishes? Do you know the meaning of wish?*) in a row without giving enough time, he pauses for 1.7 seconds, which could be seen as a possible point where students could take the turn by giving an answer, but they do not. Thus, Mert keeps asking questions by reformulating previous questions and then gives learners longer wait-time (3 seconds) this time in line 6, but they do not take the turn again. In line 7, he asks the meaning of the word *wish* in Turkish. The S1 gives an answer in Turkish in line 9 and Mert positively evaluates it in line 10.

During the second post-lesson conference, Excerpt 5a, the teacher educator stops the videotape at this moment and asks Mert for his take on this interaction (*So, what do you think about this interaction?*), to which Mert reported that he did whatever he could, including the use of wait-time, but did not receive an answer, hence he had to use Turkish (lines 2-4, 7) (excerpts were divided into 5a and 5b due to length)

**Excerpt 5a**

- 1 TE so (.) what do you think about this interaction?  
 2 Mert actually when I look at it now I tried a lot I didn't give up (.) I must  
 3 have said wish like ten times ((both laughs)) \$I said wish a lot\$ but  
 4 when I couldn't get an answer anymore I used turkish because there  
 5 was no answer for a long time  
 6 TE uh huh  
 7 Mert I also gave students time to think I mean I waited (.) but it didn't work  
 8 (.) so I had to switch back to Turkish (.) besides time was limited anyway  
 9 I had to complete the activities in the lesson plan and time was running  
 10 out  
 11 TE uh huh

- 12 Mert            also because the students are used to turkish unfortunately I had no  
13                   other choice

In lines 8-10, he gives the reason why he could not have acted differently (*Time was limited anyway, I had to complete the activities in the lesson plan, and time was running out*). His reasoning shows that he had to use Turkish for the progressivity of the lesson even if he did not want to use it. In line 11, the teacher educator responds with a backchannel to encourage him to express his understanding in more detail, and Mert continues his explanation by giving another reason why he had to use Turkish (*because the students are used to Turkish, unfortunately I had no other choice*). His word choices (i.e., *unfortunately, I had no other choice*) suggest that he experiences a cognitive/emotional dissonance because he used Turkish, that is, he is dissatisfied with the use of Turkish, but he does not know what else he could have done. Excerpt 5a shows that his interpretation of the situation is influenced by his observation that “*the students are used to Turkish.*” This means that although he recognized the problem, namely the non-participation of the students, his interpretation was refracted by his *perezhivanie* regarding the dominant use of Turkish by the mentor teacher and the students. He was not aware that he asked multiple questions in a row and did not give the students enough time to think, which might have had a negative effect on their participation. On the contrary, he believed that he did his best to encourage student participation. From the interaction in Excerpt 5a, it might be inferred that Mert’s understanding of the situation signals a need for other regulation, thus he can revisit his teaching activity and reconstruct his insights about it.

As can be seen in Excerpt 5b, by staying attuned to Mert’s emotional state in lines 14-16, the teacher educator first validates his efforts (*First of all, Mert, I can see that you put a lot of effort into it, you’ve tried a few different strategies*) and then orients his attention to using the strategies appropriately (*of course, the way we implement these strategies is also very important*). In lines 18-21, the teacher educator chooses the ‘wait-time’ strategy as an example to draw Mert’s attention to it and explicitly mediates him by explaining how important it is to use it at the right time. Then, the teacher educator shares her observation regarding what he did in the lesson (*As far as I have observed here, you asked several questions in a row and then gave students time to think*) to understand his interpretation about it.

#### **Excerpt 5b**

- 14 TE:            first of all Mert (.) uhh I can see that you put a lot of effort into it  
15                   you’ve tried a few different strategies but uhmm (1) the way we  
16                   implement them is also very important (.)  
17 Mert:            hmm

- 18 TE: for example I see that you gave students time to think which is nice (.)  
 19 but uhmm where we give the time is as important as giving it as far as  
 20 I have observed here (.) you asked several questions in a row and then  
 21 gave time
- 22 Mert: uhh yes ((laughs)) I thought if I repeat maybe they'll understand if there's  
 23 something they missed I mean I felt I had to repeat it a few times  
 24 because they were not used to speaking English
- 25 TE: hmm but what I noticed is (.) that yours are different questions  
 26 rather than repetitions (.) I think this can be confusing for students  
 27 especially considering the level of students
- 28 Mert: Hmm yes so they understood I was asking a question about wish (.)  
 29 but they may not have understood exactly what I was asking so my  
 30 questions may have confused them maybe that's why I didn't get any  
 31 response (.) then what should I have done? should I have asked a  
 32 question given time and then repeated the question if necessary?
- 33 TE: yes if there is no answer after giving time (.) you can repeat it if you  
 34 want or you can reformulate it

In these lines, it is observable that the teacher educator attempts to steer Mert's thinking away from simply acknowledging the idea that he had no choice but to use Turkish. In this way, the teacher educator guides the co-construction of knowledge and attempts to bring Mert into a shared understanding of the appropriate use of strategies or practical tools, particularly the appropriate use of the practical tool *increased wait-time*.

In lines 22 and 24, Mert orients to the teacher educator's mediation and begins to explain why he asked multiple questions in a row, stating that he thought repetition might help the students understand the question because they were not used to the English language. This explanation suggests that his observations of the mentor teacher's lessons, which showed him that both the mentor teacher and the students used Turkish rather than English, led him to believe that the students would have difficulty understanding him and participating in the lesson. Thus, he attempted to promote student participation through repetition. According to Golombek and Doran (2014), 'how a person perceives a previous experience influences how s/he perceives an in-progress experience' (p. 104). Thus, it can be inferred that how Mert perceived the classroom interaction in the mentor teacher's lessons influenced how he perceived the classroom interaction in his own lesson. In other words, his *perezhivanie* created a prism through which Mert saw new experiences, hence it affected his practices.

In lines 25-27, the teacher educator explicitly mediates him by explaining that what he did is not asking the same question more than once, that is, repeating, but rather asking different questions, and she emphasizes that this can be confusing for particularly low-level students. This explicit mediation enables Mert to see his classroom interaction from a new

perspective (lines 28-30). Thus, a shared understanding is achieved through interthinking, that is, joint thinking of the teacher educator and Mert allows them to make sense of the experience together. After Mert realizes that his use of multiple questions in row can be confusing for students, in line 31-32, he explicitly seeks assistance regarding what he could have done. However, without waiting for the teacher educator's respond, Mert provides an alternative instructional action to his own inquiry and asks for confirmation from the teacher educator (*Should I have asked a question, given time, and then repeated the question if necessary?*). The teacher educator confirms his alternative solution in lines 33 and 34.

This dialogic interaction in Excerpt 5a and 5b shows that although Mert was aware of the practical tool *wait time* and used it in his teaching, he still needed to be other regulated in order to use it appropriately. Thus, it might be stated that as Johnson and Golombek (2016) argue, conscious awareness is essential but not sufficient for developing voluntary control or self-regulation over instructional practices. In other words, even when teachers are aware of practical tools, they may have difficulty using them appropriately in their teaching. Therefore, they should engage in dialogue with others (e.g., teacher educators, peers, etc.) around the activities of planning, teaching, and reflecting on instruction. In the case of Mert, the co-reflection with the teacher educator created an intermental development zone where he could articulate his reflections, thoughts and reasoning beyond what he would be able to express on his own. It also revealed how his *perezhivanie*, grounded in his observations of the mentor teacher's lessons, influenced his instructional practices and understanding of classroom interaction in the first lesson. With responsive mediation, the teacher educator attempted to reconstruct his understanding and helped him to use the practical tool *increased wait time* more consciously when enacting his lessons.

The examination of his third lesson showed that despite the mediation provided in the second post-lesson conference, Mert failed to give enough wait-time and kept asking multiple questions in a row, as he did in the second lesson. During the third post-lesson conference, Excerpt 6, Mert asked the teacher educator to stop the video after watching the part where he asked multiple questions in a row and started to discuss his inability to gain a sense of self-regulation over his teaching practice (lines 1, 3-6, 8-9). That is to say, as Golombek (2022) states, he expressed “a common cognitive and emotional dissonance that novice teachers may experience when they know what to do but are not yet able to do it in their activity of teaching” (p.35). He felt dissatisfied because he asked multiple questions in a row again. It should be noted here that although he was experiencing an instability, the fact that he wanted to stop the

video and express his frustration regarding his use of multiple questions in a row is an indication of his agency and conscious awareness into the problem he had, which make him open to responsive mediation.

#### Excerpt 6

- |    |      |                                                                             |
|----|------|-----------------------------------------------------------------------------|
| 1  | Mert | I did it again I showered students with questions again                     |
| 2  | TE   | uh-huh                                                                      |
| 3  | Mert | in this lesson I saw it much more clearly (1) I want to help them but I     |
| 4  |      | am actually forcing them to analyze a much longer message, which is         |
| 5  |      | very exhausting for them also exhausting for me (.) I mean I get tired      |
| 6  |      | when I rephrase the questions                                               |
| 7  | TE   | uh-huh                                                                      |
| 8  | Mert | I also want the students to answer as soon as possible I don't want to      |
| 9  |      | waste time but by doing so I lose even more time.                           |
| 10 | TE   | you're right it's a waste of time, but at least now we're aware of the      |
| 11 |      | problem and we can talk about solutions                                     |
| 12 | Mert | right                                                                       |
| 13 | TE   | hmm let's think about it now for example you asked the question (.) and     |
| 14 |      | then you can say to yourself I should wait here (.) the students need       |
| 15 |      | time (.) even after the question you can count to yourself maybe (.) that   |
| 16 |      | will calm you down a little bit                                             |
| 17 | Mert | hmm okay I can try them I mean I can remind myself of waiting after         |
| 18 |      | asking questions I am sure I'll be more careful this time but if I can't do |
| 19 |      | it again \$I'll write down a reminder or something like don't ask too       |
| 20 |      | many questions\$ ((both laugh)) and give students time to think and I'll    |
| 21 |      | post it to the computer screen ((both laugh))                               |
| 22 | TE   | \$yes of course you can do it\$ ((laughs))                                  |

In lines 10-11 and 13-16, by staying attuned to Mert's cognitive and emotional dissonance, the teacher educator attempts to mediate responsively by providing an emphatic and explicit suggestion as a kind of *other regulation* to support him as he still is not able to self-regulate his instructional practices related to the practical tool *wait-time*. Mert takes up this mediation and offers an alternative solution to his problem (lines 17-21), which is confirmed by the teacher educator in line 22. As can be seen in Excerpt 6, the safe mediational space, which is created during the second post-lesson conference, enables Mert to re-visit his teaching activity through helping him to identify how he could proactively prepare and self-regulate his instructional practices related to the practical tool *wait-time*.

During the weekly group meeting that follows the post-lesson conference, Mert shared the same part of his lesson with the group, and they watched and reflected together. As we see in Excerpt 7, after they watched the video-recording, one of the group members, Murat, began a dialogue concerning Mert's use of multiple questions in a row and emphasized that what Mert did can be confusing for students (lines 1-6). This evaluation provided an opportunity for

Mert to share his reason for asking multiple questions in a row (*Since students are used to Turkish, they have difficulty in understanding me.*) and his positive experience with it (*I tried this before, it worked in my classes*), as well as to explain why it did not work in his first lesson in the practicum school (*It didn't work because I was a little stressed and that is why I spoke fast*) (lines 7-12).

#### Excerpt 7

- |    |        |                                                                          |
|----|--------|--------------------------------------------------------------------------|
| 1  | Murat: | well (.) I want to draw attention to something here (.) actually err (1) |
| 2  |        | Mert (.)maybe you might have thought differently in that moment but (.)  |
| 3  |        | uhh it seemed to me when you didn't get an answer from the student err   |
| 4  |        | you kept asking questions in a short time I mean you don't wait long     |
| 5  |        | enough I think maybe you might confuse students by asking questions      |
| 6  |        | in a row                                                                 |
| 7  | Mert:  | Uhh yes you're right actually I acted this way because I thought the     |
| 8  |        | students might have difficulty understanding me since they are used to   |
| 9  |        | Turkish (.) I mean I thought if they do not understand one question      |
| 10 |        | they will understand the other also uhh I tried this in my previous      |
| 11 |        | lessons and it worked but this time it did not work because I was a      |
| 12 |        | little stressed and that is why I spoke fast                             |
| 13 | Murat: | hmm I see (1) if students have enough time to think between questions    |
| 14 |        | of course, it makes sense to rephrase or simplify the question           |
| 15 | Mert:  | mm-hmm                                                                   |

As can be seen in Excerpt 7, this dialogic interaction provides further information regarding how Mert thinks and feels about asking multiple questions. It can be inferred that since he tried this strategy in his previous lessons and it worked out, he used it in his previous lessons in the practicum school. That is, the prism of his emotional experiences shaped his teaching practices and his interpretation of the new teaching experience.

In his last lesson, Mert developed a voluntary control over his own teaching practice and managed to give students enough time to think after asking a question. After the lesson, Mert stated:

*This time I succeeded, I waited after asking questions and the students answered, it did not turn out as I feared. I did not waste time and did not feel I had to translate it into Turkish, I am happy I was able to achieve this.*

The provided excerpts give us a glimpse into Mert's journey in using increased wait-time as a practical tool. Although he gained an initial understanding of its value through co-reflection on other teachers' classroom videos and extracts, Mert faced challenges in integrating it into his lessons and needed support from others. By engaging in the classroom interaction-based practices of the CAR community during the second cycle, he was able to

express his concerns about students' lack of participation, critically examine his own teaching practices, gain insight into possible reasons for the students' behavior, and explore alternative solutions to this problem. Even when he continued to face challenges in implementing the tool appropriately in his lessons, he shared his struggles with the CAR community and sought further alternative solutions. The community members helped him to regulate himself both cognitively and emotionally. Ultimately, Mert was able to implement the practical tool and saw improved student participation, resulting in a sense of congruence. Through his involvement in classroom interaction-based reflective practices within the CAR community, Mert was provided with responsive mediation and his conscious attention was directed towards the practical tool. Thus, he was able to develop a sense of conscious control and transition from being reliant on external sources such as teacher educators and peers for guidance to developing self-regulation. In other words, cognitive transformation shifted from the external plane to the internal plane. The findings also indicated that the emotional dimensions of learning to teach were critical to Mert's growth as a teacher. Throughout the process, Mert's *perezhivanie*, or emotional experience, constantly shaped and was shaped by his experiences in the external world, from his observations of his mentor teacher's lessons to the enactment of his own lessons, to his engagement in the reflective activities of the community. He perceived contradictions between his ideal practices and the actual ones in a highly negative way as a teacher who values the use of English and active student participation in learning English. Moreover, when Mert realized that his teaching practices negatively influenced student participation, through the responsive mediation provided by the CAR community, it created dissonance within him. This emotional experience also shaped how he interpreted and reflected upon his subsequent teaching and reflective practices.

#### **4.3.3. Didem**

##### ***Background Information***

When Didem volunteered to participate in this study, she had two years of teaching experience in a private English language school. When talking about this experience in the first interview, she stressed how important it was for her to create a safe space for students: *For me it was important to create an environment where students feel comfortable, have fun, and express themselves as they wish, of course without disrespecting anyone.* She was very concerned about how students felt about her teaching since she believed that a teacher could deeply influence learners' perspective and attitude towards a subject:

*For example, one of the reasons I hate math is my math teacher in secondary school. She was a very angry woman. When we made mistakes, she would get very angry and yell at us, so I never liked that subject.*

In accordance with this prism of her emotional experience (i.e., *perezhivanie*), she stated that she always preferred to be a friendly, kind, and emphatic teacher. She also admired her mentor teacher at the practicum school since he was not a strict teacher, who listens to his students and cares about their ideas and feelings. Evidently, she wanted the students to be treated like she wanted to be treated as a student.

She also held the view that every student is valuable, and no student should be left behind. Like Sevda, she believed that teaching was a sacred profession that needed to be practiced in the best way and not solely for financial reasons. This idealized conception of teaching, which seemed to be grounded in her schooling history, also motivated her to work hard to close the gap between her ideal and actual teacher self during the study. All of the background information above is crucial as it provides a more comprehensive understanding of Didem's practices during the study and a deeper insight into how her *perezhivanie* can refract her new experiences related to English language teaching.

### ***Using translation for scaffolding learners***

The data revealed that even though translating learners' L1 contributions into L2 was introduced as a practical tool to scaffold learners in the first cycle of the study, there was no indication that Didem was aware of this practical tool and its pedagogical value prior to her second post-lesson conference. Table 11 shows key episodes that illustrate her development process regarding the use of translation to scaffold learners throughout the study. Her development process is presented below after the details of her second lesson.

Table 11

| <i>Key Episodes in Didem's Development Process Related to Translation</i>                                                         |                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <b>Key Episodes</b>                                                                                                               | <b>The Practices of the CAR Community and Cycles</b> |
| "It is also frustrating to see the student struggling like this and do nothing about it." (Dissonance)                            | 2nd post-lesson conference/2nd Cycle                 |
| "They have a good system and uhh I guess I didn't want to disrupt it by encouraging students to speak Turkish" (Self-examination) |                                                      |
| "What do you think I should have done" (Examination of alternatives)                                                              |                                                      |

“I wish I had said you can speak Turkish at that moment” (Conscious awareness) Group meeting following the 2nd lesson / 2nd Cycle

“To be honest I felt good” (Integration & Congruence) 3rd post-lesson conference/2nd Cycle

In her second lesson, Didem decided to play a game called ‘werewolf’ in which players try to find and kill the werewolves among them. At the beginning of the game, everyone was dealt with a secret role such as villager, seer, priest, doctor, and werewolf. The players engaged in a discussion to determine who among them is a werewolf. At some point in the lesson, one of the students was claimed to be a werewolf and he was supposed to defend himself, but he could not express what he wanted to say in English. Excerpt 8 shows the classroom interaction at this point:

#### Excerpt 8

- |   |       |                                                                        |
|---|-------|------------------------------------------------------------------------|
| 1 | Didem | they think you’re guilty (.) Hamza (4) prove you’re not (6)            |
| 2 | Hamza | demek istediğimi nasıl söyleyeceğimi bilemediğim için şuanda kendimi   |
| 3 |       | savunamıyorum (5)                                                      |
| 4 |       | (tr: because I don’t know how to say what I want to say I can’t defend |
| 5 |       | myself (5)                                                             |
| 6 | S1    | how about your role?                                                   |
| 7 | Hamza | oka:y (2) villager (1)                                                 |
| 8 | Didem | okay he say he is a villager                                           |

As can be seen from the Excerpt 8, in line 1, Didem initiates a sequence by wanting Hamza to defend himself. After six-second silence, he responds in Turkish and states that he cannot defend himself because he does not know how to express himself in English (lines 2-3). Following a five-second silence, another student (S1) self-selects himself as the next speaker and asks what his role is (line 6). Hamza responds in English (Oka:y (2) villager) in line 7 and Didem reformulates his response in line 8. This interaction shows that Hamza could state his role with the help of S1 but had no opportunity to defend himself as he wished and Didem preferred not to intervene in helping him.

During the post-lesson conference, Excerpt 9, the teacher educator pauses the video at this point and asks Didem for her take on this interaction ( *So what do you think about this part?*), to which Didem reports that she was concerned because she ignored the student’s problem but did not know what to do because she thought it was wrong to let the student speak Turkish (lines 2, 4-5). The fact that her reflection is phrased negatively (*I honestly didn’t know what to do* and *I ignored*), suggests that she is experiencing cognitive-emotional dissonance. That is, she is dissatisfied because of the contradiction between what she did and what she

wanted to do. Given her *perezhivanie* about how a teacher should treat students and care about their feelings, her dissatisfaction is understandable. It also signals a potential growth point toward which responsive mediation can be directed.

In line 6, the teacher educator asks why she did not think it was right to let the student speak Turkish in order to get more information about Didem's understanding of the use of the L1 in the classroom. In lines 7, 8, and 9, she gives the reason why she could not act differently (*In that class almost no Turkish is spoken uhh English is spoken all the time and (.) it seemed like it would not be right for me to come out and say okay speak Turkish*). In line 13, the teacher educator, who knows from her previous observations that it is difficult for PST to act as they wish in practicum classrooms, acknowledges the normality of what she is experiencing, given the fact that she is teaching in someone else's classroom where the rules are not set by her. However, in lines 15-17, Didem expresses that the reason why she acted that way is not the mentor teacher (*actually uhh the practicum teacher told us that we can teach the lesson as we want but (.) I think they have a good system and uhh I guess I didn't want to disrupt it by encouraging students to speak Turkish*). Her response suggests that her decision not to address the student's problem is based on her negative understanding of L1 use in EFL classrooms rather than on the rules established by the mentor teacher. This dialogic interaction allows the teacher educator to understand that Didem does not yet see learners' L1 as a resource but as an obstacle and is not aware of how she can use it as a resource to scaffold and facilitate language learning.

By staying attuned to Didem's emotional state, in lines 18-19, the teacher educator acknowledges that she understands her concern and reorients her attention to the necessity to address the problem which the student experienced (i.e., his inability to express himself in English). In line 20, given the discomfort due to the contradiction between her English-only policy, which she believes it is useful for students, and her view of how students should be treated, she directly asks the teacher educator for mediation (*what do you think I should have done?*). As the teacher educator recognizes her need for other regulation, she explicitly mediates Didem by helping her to imagine an alternative scenario to address the problem and explaining how translation can be used as a tool to scaffold language learning (lines 21-25). In line 26, Didem asks for confirmation (*Hmm so you mean we can model, right?*) and get a confirmation from the teacher educator in lines 27-28. This interaction signals that Didem starts to understand the situation from the teacher educator's point of view, that is, the teacher educator and her seem to establish a sense of intersubjectivity.

**Excerpt 9**

- 1 TE so (.) what do you think about this part?
- 2 Didem hmm this part uhmm (1) I honestly didn't know what to do here
- 3 TE uh-hm
- 4 Didem I mean uhh it was like I ignored the problem the student was
- 5 having but at that moment I couldn't say okay you can speak Turkish.
- 6 TE why?
- 7 Didem In that class almost no turkish is spoken uhh english is spoken all the
- 8 time and (.) it seemed like it would not be right for me to come out and
- 9 say okay speak turkish
- 10 TE hmm
- 11 Didem but as I said it is also frustrating to see the student struggling like this
- 12 and do nothing about it
- 13 TE I understand I mean (.) the class is not your class so you can't make
- 14 some decisions the way you want
- 15 Didem actually uhh the practicum teacher told us that we can teach the lesson
- 16 as we want but (.) I think they have a good system and uhh I guess I
- 17 didn't want to disrupt it by encouraging students to speak turkish
- 18 TE hmm I understand your concern but uhh it is not right to ignore the
- 19 student's problem
- 20 Didem yes I realize that (.) what do you think I should have done?
- 21 TE let's do it like this uhh let's think about a different scenario with you
- 22 for example (1) if we allow the student to speak turkish and then
- 23 translate what he says into english I mean if we use turkish as a tool in
- 24 english teaching uhh I mean if we see turkish as a tool that will be
- 25 useful to us not as an obstacle
- 26 Didem hmm so you're saying we should be models
- 27 TE exactly (.) in this way we become a model not only for that student
- 28 but for the whole class

During the weekly group meeting following the post-lesson conference, Didem shared the same part of her lesson with the group, and they watched and reflected together. As we see in Excerpt 10, after they watched the video-recording, Didem started to describe what happened and what she could have done (lines 1, 3-4). This reflection shows that the mediation provided by the teacher educator in the post-lesson conference started to shape her understanding of L1 use (*I wish (.) uhh I said you could speak Turkish*). It also provides a glimpse into her *perezhivanie*, that is, we can see how she refracts the experience as a teacher who cares deeply about how the students in her class feel, which leads her to experience a sense of instability. In line 5, one of the group members (Mert) confirms the alternative instructional practice she offered and then emphasizes the normality of what she was experiencing given the real-time cognitive demands of teaching. Sevda also tries to emotionally support Didem by agreeing with what Mert said (line 8). In this way, they attempt to help her mediate and regulate her emotions.

**Excerpt 10**

- 1 Didem as you can see unfortunately I have not helped the student at all here (.)  
 2 Ecem: hmm  
 3 Didem who knows how bad he felt I wish (.) uhh I said you could speak  
 4 turkish at that moment so he could defend himself  
 5 Mert yes it would have been good but (.) we have other things on our minds  
 6 during the lesson (.) we can't think as clearly in that moment as we can  
 7 now  
 8 Sevda exactly  
 9 Mert so don't beat yourself up too much

In the third lesson, Didem played the same game (werewolf) because the mentor teacher stated that the students wanted to play it again. During the game, the same student was claimed to be a werewolf by his classmate and could not express himself in English again. Excerpt 11 shows the interaction in the class at this point:

**Excerpt 11**

- 1 Didem Hamza do you have anything to defend yourself? he is claiming that  
 2 you are a werewolf  
 3 Hamza umm bunu sanırım ingilizce açıklayabileceğimi düşünmüyorum  
 4 (tr: Umm I don't think I can explain it in English)  
 5 Didem It is okay go on please  
 6 Hamza yani geçen sefer de aynısı oldu ve ne olduğunu gördük ona göre  
 7 düşünün derim (tr: I mean the same thing happened last time and we  
 8 saw what happened so think accordingly)  
 9 Didem hmm (3) I don't know (5) he says it happened uhh it also happened  
 10 last time and he was not a werewolf, and he says maybe it is the same  
 11 what do you think about it?

As can be seen from the Excerpt 11, in line 5, Didem lets the student speak Turkish. After the student expresses himself in Turkish (lines 6-7), Didem gives a response to his statement (Hmm (3) I don't know) and then translates what he said (in lines 9-11). This interaction between the student and her reveals that she took up the mediation provided during the second post-lesson conference.

During the post-lesson conference following the third lesson, she wanted the teacher educator to pause the video at the point where the student could not express himself and explained how she helped him through translating what he wanted to say (lines 1-2, 4, and 6). In line 8, she also expressed how she was content with her teaching (*so I didn't feel the discomfort I felt in the previous lesson and to be honest I felt good*). Her emotionally indexing language (*I felt good, I did not feel the discomfort*) shows that she experiences a sense of cognitive/emotional congruence due to the match between her ideal and actual activities.

**Excerpt 12**

- |   |       |                                                                         |
|---|-------|-------------------------------------------------------------------------|
| 1 | Didem | here again the same student had difficulty expressing himself, but this |
| 2 |       | time luckily I had an idea of what to do ((laughs))                     |
| 3 | TE    | uh-hm ((laughs))                                                        |
| 4 | Didem | I told him it was okay to speak turkish                                 |
| 5 | TE    | yes                                                                     |
| 6 | Didem | then I tried to be a model by translating what he said                  |
| 7 | TE    | uh-hmm                                                                  |
| 8 | Didem | so I didn't feel the discomfort I felt in the previous lesson and to be |
| 9 |       | honest I felt good ((smiles))                                           |

The excerpts above offer a glimpse into Didem's journey of using translation as a practical tool. By participating in the CAR community's reflective practices, which are based on classroom interaction, Didem was able to identify her dissonance with respect to a student's struggles, engage in critical self-examination, and explore alternative instructional practices. Through this process, she developed a heightened awareness of translation as a practical tool and its potential applications. During this process, not only did the community members support Didem in regulating herself cognitively, but also emotionally. Finally, she incorporated translation into her lesson to model for the students, and the alignment between her ideal and actual activities resulted in a sense of congruence. Through her participation in classroom interaction-based reflective practices within the CAR community, Didem was provided with responsive mediation and her conscious attention was directed towards the practical tool. Thus, she was able to develop a sense of conscious control and transition from being reliant on external sources such as teacher educators and peers for guidance to developing self-regulation. In other words, her cognitive transformation shifted from the external to the internal plane. The findings also revealed that the emotional dimensions of learning to teach were critical to Didem's development as a teacher. She reacted to the lessons and mediation provided by the CAR community through her *perezhivanie*, which means she refracted those experiences as a teacher who wants to “*create an environment where students feel comfortable, have fun, and express themselves as they wish.*” When she observed a discrepancy between her teaching practices and her desired vision for the classroom, she perceived it negatively and attempted to close the gap with the support of the community.

### 4.3.3. Aycan

#### *Background information*

When Aycan volunteered to participate in this study, she had no teaching experience. Her understanding of teaching and learning was mainly based on her experiences as a student and the university courses she attended. When the teacher educator asked her about her experiences with university education in the first interview, she mentioned that she did not want to attend a university teacher's class because she was a boring teacher who did not care if students learned anything or enjoyed the class. Given this emotional experience (i.e., her *perezhivanie*), she wanted her students to enjoy and actively participate in her lessons. However, she was also unsure about if she could manage to create a space where actively engage students in language learning. Hence, she considered herself lucky since she had the opportunity to participate in such a project. In this regard, she worked hard to close the gap between her ideal and actual teacher self throughout the project.

In addition, she considered her English proficiency insufficient to appropriately use English as a medium of instruction. In the first interview, she stated: *Sometimes I ask myself, "How are you going to teach your students English when you do not know English yourself?"* Accordingly, unlike other group members (i.e., Mert and Ali) who complained about their mentor teacher's dominant use of Turkish in class, Aycan reported that she felt relieved because she could use Turkish if she needed. She thought that the students in the practicum school would not understand her and would not participate if she used English. In her first pre-lesson conference, she stated: *I know it is important to speak English, but honestly I am not sure if they will understand us if we speak English in these practicum groups, so I think I will speak Turkish if necessary.* In addition, her perceived lack of adequate English proficiency held her back and caused her to feel professionally insecure throughout the project. She did not want to share her lessons with the group members because she used Turkish.

All of the background information provided is crucial as it allows for a more comprehensive understanding of Aycan's practices during the study and provides a deeper insight into how her emotional experiences, or *perezhivanie*, can shape her new experiences related to English language teaching and the mediation provided by community members.

### *Using increased wait-time*

In examining Aycan's developmental trajectory, it became apparent that her insight regarding the use of increased wait-time first appeared during the analyses of extracts and videos in the first cycle. She wrote, “*Here we see that the teacher nominated a student without waiting after asking a question. Even though the student answered, I think it is necessary to give some thinking time after the question. In this way, students can participate comfortably without having any stress.*” From her reflection, it appears that she is aware of the pedagogical value of wait time and how its lack of use can make students feel stressed and hinder student participation. See Table 12 for key episodes that illustrate her development process with regard to using increased wait-time to promote student participation throughout the study.

Table 12

| <i>Key Episodes in Aycan's Development Process Related to Increased Wait-Time</i>                                          |                                                                              |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>Key Episodes</b>                                                                                                        | <b>The Practices of the CAR Community and Cycles</b>                         |
| “I think it is necessary for the teacher to give some thinking time after asking a question” (Conscious awareness)         | 5th co-analysis session / 1st cycle                                          |
| “I wish I had given more time” (Dissonance)<br>“they didn’t answer again” (Continued dissonance & lack of self-regulation) | 1st post-lesson conference/2nd cycle<br>2nd post-lesson conference/2nd cycle |
| “Hmm I see yes it makes more sense to give it a few minutes you’re right” (Examination of alternatives)                    |                                                                              |
| “On this question I think that the time I gave was enough” (More nuanced awareness)                                        | 3rd post-lesson conference/2nd cycle                                         |

The analysis of Aycan's first lesson showed that after she asked an open-ended referential question, she gave students 5 seconds wait-time to think, which is longer than average wait-time (1.91 seconds) in a foreign language classroom (see Shrum, 1985), however she could not receive any response from the students. Excerpt 13 shows how this interaction unfolds:

#### **Excerpt 13**

- |                                 |                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     Aycan<br>2<br>3<br>4<br>5 | As we all know summer is coming (.) so let's talk about your summer plans (1) what are your summer plans (5) I guess nobody has any plans for the summer okay (3) aa bugünkü konumuz be going to biz be going to yu gelecek zamanda kullanıyoruz (tr: uh today's topic is be going to we use be going to in the future tense) |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

As can be seen from Excerpt 13, Aycan takes the turn after 3-second silence and moves on to the next activity without receiving a response from the students. During the post-lesson conference, Excerpt 14, the teacher educator pauses the videotape at this moment and asks Aycan for her take on this interaction (*what do you think about this part?*). As a response, Aycan begins to describe what happened in this part of the class (lines 2 and 4-6). The description reveals her feelings about the interaction and disappointment with the students. The mismatch between Aycan's expectations and the reality of how the interaction had progressed is expressed with an emotionally indexed language (*they left me alone, unfortunately my prayers went unanswered*). In line 7, since the teacher educator, knowing from experience working with novice teachers that they may initially blame students, attempts to draw her attention to the fact that the students did not leave her alone other parts of the lesson by asking a confirmation question (*but I think you only had this problem with this part right?*). That is, the teacher educator tries to mediate her understanding of the interaction through recalling what happened in class. After getting a confirmation from Aycan in line 8, the teacher educator elicits her reasoning in line 9. In other words, the teacher educator aims to orient her to possible reasons behind this contradictory behavior of the students. Aycan explains a possible reason in lines 10-12 and 14 (*the questions they answered were fill-in-the-blank questions of course (.) they are familiar to these questions*). The teacher educator uses this opportunity to emphasize that the students are used to the questions which require a lower level of cognitive processing than the question she asked at the beginning of the lesson (lines 15-16). After getting confirmation from Aycan (line 17), the teacher educator explains that the questions who require a higher level of cognitive processing require increased wait-time (lines 18-21 and 23-24). It is evident that the teacher educator attempts to explicitly mediate her understanding of wait-time, that is, tries to help her gain a more nuanced understanding of wait-time (i.e., wait-time can change according to the question types). Finally, in line 25, Aycan confirms what the teacher educator said and realizes that she could have helped the students to answer the question by giving more wait-time.

#### Excerpt 14

- |   |       |                                                                     |
|---|-------|---------------------------------------------------------------------|
| 1 | TE    | what do you think about this part                                   |
| 2 | Aycan | they left me alone in this part so I got really nervous (.)         |
| 3 | TE    | uh-hm                                                               |
| 4 | Aycan | I waited and waited and no one answered \$I even prayed for someone |
| 5 |       | to speak\$ ((both laughs)) but unfortunately my prayers went        |
| 6 |       | unanswered and no one spoke                                         |
| 7 | TE    | but I think you only had this problem with this part right?         |
| 8 | Aycan | yes actually they answered in other parts                           |
| 9 | TE    | hmm (.) then (.) why do you think that might have happened?         |

- 10 Aycan       hmm I don't know (1) maybe uhh now that I think about it the  
 11               questions they answered were fill-in-the-blank questions of course (.)  
 12               they are familiar to these questions  
 13 TE           uh-hm  
 14 Aycan       I saw the practicum teacher asking these kinds of questions  
 15 TE           hmm (.) actually questions that the students does not produce anything  
 16               from themselves and can give shorter answers  
 17 Aycan       yes  
 18 TE           uhh the type of question you asked in the first part is a question that  
 19               students do not directly get the answer from somewhere and uhh they  
 20               need to produce something from themselves uhh and you say that they  
 21               are not used to such questions  
 22 Aycan       yes  
 23 TE           then uhh we may need to give students much more thinking time than  
 24               a few seconds  
 25 Aycan       yes you're right I wish I had given it more time

In Excerpt 14, we can observe that the dialogic interaction between the teacher educator and Aycan created an intermental development zone where she could articulate her reflections, thoughts, and reasoning beyond what she would be able to express on her own. Thus, she gained better insight into possible reasons why the students did not answer her question. Additionally, by staying attuned to the pre-service teacher's changing state of knowledge, the teacher educator scaffolded Aycan and oriented her to future alternative practices during the first post-lesson conference. However, the analysis of Aycan's second lesson showed that she experienced the same problem, namely the non-participation of the students after asking open-ended referential questions. Excerpt 15 shows how this interaction unfolds:

#### **Excerpt 15**

- Aycan       let's look at the first question (.) what makes a hero or heroine? discuss  
               with your friend ((reads from the textbook)) (2) firstly (.) I wanna say  
               I have a hero (1) I guess all of you know him (.) my hero is Fethi Sekin (1)  
               he saved a lot of lives uhh he is a real hero and what about you? who is  
               your hero or heroine (.) and what makes them hero or heroine (7) you don't  
               have a hero? (3) okay let's look the b part

In the post-lesson conference that followed Aycan's second lesson, Excerpt 16, after watching this part of the lesson, Aycan started to describe what happened and expressed her thoughts about the interaction and her dissatisfaction with the students' non-participation (lines 1,3-4, and 6-7). Her emotionally indexing language (i.e., *they did not respond again, I don't know what to do, I feel very bad*) suggests that she was experiencing cognitive and emotional dissonance due to the contradiction between what she imagined and what actually happened. That is, because she provided the students with a sample response and a wait-time,

she expected them to participate. When the students did not participate, she displayed a strong emotional reaction, which signals the need for more explicit mediation. Staying attuned to her emotional state, the teacher educator validates her feelings (*I understand I totally understand.*) (line 8). In lines 9 and 10, Ayca comes up with an alternative solution to the problem (*I mean I don't know (1) maybe I should ask these questions in Turkish*). Her solution provides a glimpse of her emotional experience through which she refracts the experience as a teacher who, despite her best efforts, has the same problem in both of her classes and believes that the students at the practicum school cannot understand her when she uses English. In lines 11-16, being aware of Ayca's *perezhivanie* and emotional state, the teacher educator tries to be sensitive, hence she first acknowledges her solution and then she reorients Ayca's attention to the fact that the questions she asked require a longer wait-time than a few seconds, especially considering the students' language proficiency level. It appears that the teacher educator attempts to create joint-mental activity through a more explicit form of mediation by explaining that the students might need a few minutes rather than a few seconds. In line 17, Ayca acknowledges what the teacher educator said (*Hmm I understand yes it makes more sense to give a few minutes you're right*). This interaction signals that Ayca starts to understand the situation from the teacher educator's point of view, that is, the teacher educator and her seem to establish a sense of intersubjectivity.

#### Excerpt 16

- |    |      |                                                                                 |
|----|------|---------------------------------------------------------------------------------|
| 1  | Ayca | same again (.) they did not respond again                                       |
| 2  | TE   | uh-hmm                                                                          |
| 3  | Ayca | I gave a sample answer (.) I gave time (.) and there is no answer again I       |
| 4  |      | don't know what to do anymore                                                   |
| 5  | TE   | yes                                                                             |
| 6  | Ayca | when they don't answer like this at the beginning of the lesson (.) I feel      |
| 7  |      | very bad and I can't get rid of this feeling throughout the lesson              |
| 8  | TE   | I understand I totally understand                                               |
| 9  | Ayca | I mean I don't know (1) maybe I should ask these questions in turkish           |
| 10 |      | they don't answer when I speak english I can't think of any other way           |
| 11 | TE   | hmm maybe why not you can ask in turkish uhh there is just one point            |
| 12 |      | I want to draw your attention uhh I mean the question here what                 |
| 13 |      | makes a hero or heroin (.) or your questions (.) are not questions that         |
| 14 |      | they can answer in a few seconds (.) <u>especially</u> considering the level of |
| 15 |      | students (.) it may be necessary to give students a few minutes to think        |
| 16 |      | (.) rather than a few seconds                                                   |
| 17 | Ayca | hmm I understand yes it makes more sense to give a few minutes                  |
| 18 |      | you're right                                                                    |

In her last lesson, Ayca did not ask any open-ended referential question, but a closed-ended referential question. The students did not answer her question once again. Extract 17 shows how she reflected on this issue during the third post-lesson conference.

**Excerpt 17**

- |   |      |                                                                         |
|---|------|-------------------------------------------------------------------------|
| 1 | TE   | here again no answer                                                    |
| 2 | Ayca | yes they did not answer again unfortunately you know the duration of    |
| 3 |      | time I gave to the student last time was not enough yes but (.) in this |
| 4 |      | question (.) I think the time I gave was enough but they did not answer |
| 5 |      | again                                                                   |
| 6 | TE   | yes there was no problem in terms of time this time                     |

It is evident that even if she experienced a cognitive/emotional dissonance due to students' non-participation, she became more conscious of how wait-time changes according to the types of questions. That is, it can be inferred that a more nuanced understanding of wait-time starts to regulate her thinking and teaching.

The excerpts provided above shed light on Ayca's development process related to increased wait-time. Although Ayca initially understood the value of utilizing increased wait-time as a practical tool through co-reflection on other teachers' classroom videos and extracts, she faced difficulties in integrating it into her own lessons and needed to be other-regulated. By engaging in the classroom interaction-based practices of the CAR community during the second cycle, she was able to express her frustration about students' lack of participation, gain insight into possible reasons for the students' behavior, and explore alternative solutions to this problem. Additionally, when she continued to face challenges in using the tool appropriately in her lessons, she had the opportunity to share her struggles and examine further alternative solutions with the teacher educator. That is, in this process, Ayca had the opportunity to engage in multiple structured mediational spaces. Although there is no evidence to show whether or not Ayca was able to successfully integrate the practical tool into her lessons, the data from her last post-lesson conference indicates that she gained a more nuanced understanding of how to use the tool. The findings also indicated that the emotional dimensions of learning to teach were critical to Ayca's growth as a teacher. Throughout the process, Ayca's *perezhivanie*, or emotional experience, constantly shaped and was shaped by her experiences in the external world, from the enactment of her own lessons to her engagement in the reflective activities of the community.

## **CHAPTER V**

### **DISCUSSION, CONCLUSION, AND IMPLICATIONS**

#### **5.1. Introduction**

This chapter first discusses in detail the results of the study with reference to previous research in the field. Then the chapter concludes with a summary of the key contributions of the study and its implications for initial teacher education programs.

#### **5.2. Discussion**

The first question in this study aimed to explore the insights gained into the pre-service EFL teachers' participation in the CAR project based on classroom interaction-based reflective practice. This question sought to uncover the emerging insights from the project, without limiting the focus to a specific aspect. The second question aimed to illustrate what happened in the practices of the CAR community through four PSTs' unfolding development process with regard to the practical tools. In this section, the findings with regard to the first and second question will be discussed in light of the previous studies, respectively.

##### **5.2.1. The insights into the pre-service EFL teachers' participation in the CAR project based on classroom interaction-based reflective practice**

The findings indicated that the PSTs' engagement in the CAR project resulted in transformation in two main areas, namely their understanding of PD and their professional identity. The data analysis also showed the dynamic of the CAR community, which was formed by seven PSTs and the researcher, played a role in shaping the PSTs' engagement in the project. Another insight gained from the research was related to how co-reflection on pedagogical issues through classroom videos and extracts could be effective for the PSTs' professional growth. These findings will now be discussed in further detail and depth below, including an evaluation of the key themes that generated from the data.

One key insight obtained from this project was that the CAR project served as a mediating agent that helped the PSTs reshape their understanding of PD and peers. The PSTs reported a transformation in their understanding of PD, moving away from viewing it as a solitary activity to a collaborative one as reported in other studies (see Arefian, 2022; Amir et al., 2017; Capobianco & Ríordáin, 2015; Comoglu & Dikilitaş, 2020; Levin & Rock, 2003; Yan, 2017). Many times, the PSTs stated that they realized how important it is to collaborate with peers and learn from them. In this regard, it can be argued that the PSTs' engagement in

the CAR project, which provided opportunities for them to co-reflect with their peers on pedagogical issues and engage in “collective scaffold” (Eun, 2008, p. 143), allowed them to see different perspectives and to learn from each other, leading to a new understanding of PD. That is, it can be stated that their participation in the project gave them a new lens through which they could reinterpret their understanding of PD. They came to realize that they could accomplish more than any group member could accomplish alone by “a shared communicative space” (Mercer, 2000, p. 141) in which they exchanged their ideas on pedagogical issues and attempted to solve their teaching problems with their peers. As Moran (2007) noted, through the communicative space created in the CAR project, they observed that “the collective may buoy or scaffold the individual, such that the individual begins to assume a level of competency generated by and situated in the collective” (p. 420). They realized that they did not need someone to transmit or impart the knowledge to them, instead through “interthinking” (Mercer, 2000) with their group members having different experiences and ideas, they could create their own knowledge. Murat’s statement is worth remembering at this point as a reference: *I noticed I use what we talked about in the group a week ago when I analyze videos or extracts the next week, so in a way the knowledge we produce together in the group becomes our knowledge* (FG1). They appreciated the collective support they received and began to envision having this kind of collaboration with their colleagues in their future schools. It should also be noted that their emphasis on the value of collaboration might also be attributed to the fact that this study was their first experience in which they involved in a CAR study, where they voluntarily worked towards a shared goal, rather than simply completing a required group project or assignment. As noted in previous studies, in this study the CAR project was not used as an assessment tool, that is, it did not become a mandatory task to be completed, allowing PSTs to focus on collaboration and their shared goal of professional development (see Darwin & Barahona, 2019; Jakhelln & Pörn, 2019; Ulvik, 2014; Ulvik & Riese, 2016). In this context, they could realize that collaboration can be beneficial for their professional growth.

Another key insight that emerged from the data was that involvement in the CAR project (re)constructed the PSTs’ professional identities and transformed their understanding of what it means to be a teacher. They started to embrace new positive identities such as teacher-researcher, change agent, facilitator, decision maker, reflective teacher, and life-long learner. Their participation in the project challenged their traditional view of being a teacher, which only involved teaching and did not encompass conducting research, based on the “apprenticeship of observation” (Lortie, 1975). By engaging in the project, they were able to

observe how conducting research could foster their professional growth as well as their students' participation, leading them to (re)examine and question their previous understanding. In line with the previous studies, the PSTs came to realize the importance of research and how research is connected to teaching (see Aras, 2021; Banegas & Consoli, 2021; Dikilitaş & Comoglu, 2022; Faikhamta & Clarke, 2015; Trent, 2010; Ulvik et al. 2018; Yan, 2017). As Burns et al. (2022) stated, they added a 'research' element to their teacher identities (p. 24). The core elements of the CAR project such as systematic reflection, observation, and taking others' perspectives appeared to play a crucial role in changing their current views on research. They came to understand that by utilizing these elements, they could address and resolve their problems in a more informed manner, instead of relying on trial and error methods or their intuition. It is essential to note that not all prior studies reported that participation in the CAR project brought about a positive change in their understanding of research. Some studies indicated that PSTs could feel that research was too demanding and did not contribute to their practice (see Darwin & Barahona, 2019; Price, 2001). This can be attributed to the dynamics and nature of CAR in which they participated. For example, the PSTs in the aforementioned studies reported that it was challenging to engage in research in the context of a practicum course in which they were "outsider" (Darwin & Barahona, 2019, p. 712) and had little or no control over the rules and norms of the practicum school. Unlike these studies, in this study, the PSTs did not directly conduct research in practicum classrooms or schools, which did not "act as facilitative sites" for doing research (Darwin & Barahona, 2019, p. 723). Instead, they engaged in a project that they conducted research on an issue (i.e., CIC) which they were concerned with in their transition period from being a student to a teacher. That is to say, they experienced research in a context where their needs in their "transition from self-concern to concern for others" (Delamarter, 2019, p. 171) were taken into account. Thus, they could observe that research might contribute to their practice and professional growth and their understanding of research changed in a positive way.

With the shift in their perspective about research and the acquisition of tools and techniques through their participation in the CAR project, the PSTs not only gained "pedagogical agency" (Pappa et.al, 2019) in the execution of classroom interaction strategies within the classroom domain but also started to envision themselves as "change agents" with the capacity to bring about change in their future workplaces. This result can be explained with "agency" and "imagination", which are "dialectically related as interdependent and mutually reciprocal concepts involved in the process of changing practice" (Grimmett, 2014, p.21). By engaging in the CAR project, the PSTs gained agency, i.e., "socioculturally mediated

awareness of the possibility for changing the current position” (Grimmett, 2014, p.17) and “a socioculturally mediated capacity to act” (Ahearn, 2001, p. 112). Put simply, they learned how to use the tools and techniques utilized in the project, such as different data collection methods and the CAR cyclical framework, through interaction with the group members. This resulted in an increased sense of “relational agency” in a teacher community where they “jointly consider and openly discuss classroom reality and practices, the meaning of their experiences and their conceptualization of pedagogies”, as this creates space for teachers to find a voice together through exploratory talk, articulate their needs, seek and offer help, and validate a sense of being and becoming in a teacher community” (Pappa et.al, 2019, p.595). Additionally, they became more conscious of their own “position, role, and competences” (Wardekker et al. 2012, p. 166) and how they can be transformed through research. Thus, they started to imagine themselves as “change agents” with the potential to initiate a change or make a difference in their future institutions, which relates to “sociocultural agency”, that is, “teachers acting in a reactive or proactive manner, willingly or grudgingly, to educational policies, aims, expectations and demands” (Pappa et.al, 2019, p.595).

In a similar vein, the PSTs started to envision themselves as a facilitator in future research or study groups. They acknowledged that their capacity to guide a research group was influenced and mediated by the CAR project, where they had the opportunity to observe how the facilitator guided the group. In addition, they reported becoming more aware of potential challenges they might face in their future research groups and possible solutions to those challenges. These findings are in line with those of Edwards (2017) who found that engagement in CAR mediated teachers’ agency by providing them with various tools, concepts, and strategies.

The PSTs also (re)positioned themselves as the decision-makers and controllers of their own development through the CAR project, which provided a democratic space for all group members to participate in decision-making processes. Their reflections also showed that they compared their position in the project with their position in the university courses where they perceived themselves as lacking power. Mert’s statement is worth remembering at this point as a reference:

*In our university courses, we often feel like we are simply experimental subjects rather than active participants in the learning process. We have no say, and decisions are made without taking our thoughts or ideas into account. However, in this project, we all felt valued because everyone involved in decision-making and managing the*

*project. This experience showed us the importance of being in control of our own development and being involved in decision-making processes. (FG1)*

It appears that this finding can be attributed to the power dynamics in the project. Since “power and identity are inextricably connected” (Linder, 2018, p. 110) and “identity is socially constructed and negotiated within power relations” (Reisi 2011, 48), participating in a CAR project that prioritizes principles such as equality, collectivism, and reciprocity contributed to the (re)formation of PSTs' teacher identities. In this regard, it is important to pay attention to how researchers or teacher educators position themselves in their interactions with PSTs. In this study, it can be argued that my deliberate positioning of myself and the PSTs as fellow researchers or co-researchers contributed to their (re)positioning themselves as decision makers. In other words, positioning them in an empowering way might lead them to recognize available positions and distance themselves from their current positions (i.e., students with no power or simply experimental subjects) (Kayı-Aydar, 2019).

Consistent with previous research findings, PSTs' participation in the CAR project enhanced their understanding of the importance of reflection and being a reflective teacher (see Aras, 2021; Hagevik et al., 2012; Price & Valli, 2005). Through various activities conducted during the project, such as critically examining and reflecting on their own beliefs, practices, and experiences through video-recordings, the PSTs became more self-aware and recognized the importance of adopting a critical perspective in their practices. They came to realize that they could move beyond their own biases and assumptions and make more informed decisions about their practices by becoming reflective teachers. As the process of action research “cultivates a deep and critical thinking process” (Dikilitaş, 2020, p. 170), the aforementioned findings might be expected. However, the data analysis also revealed that the PSTs intended to leverage the tools employed in the CAR project (i.e., classroom video-recordings and the questions by the researcher to provide responsive mediation) to further their reflection on their practices. That is, their engagement in this study not only helped them realize the value of being a reflective teacher, but it also enhanced their capacity to reflect by providing them with some tools for reflection. In this regard, it can be stated that they gained “a socioculturally mediated capacity to act” (Ahearn, 2001, p. 112). To elaborate further, for example, during their interactions with the researcher and their peers, they came to understand how classroom videos could be used to enhance their reflection and what points they could focus on while using the videos for reflection. This highlights the importance of engaging in

sustained dialogic interactions with knowledgeable others, as argued by Johnson and Golombek (2011).

Apart from the positive identities mentioned above, the PSTs also took on the identity of a “life-long learner” through their participation in the CAR project. They came to the realization that their journey of learning to teach would never end even though they graduated and were no longer officially students. In line with previous studies, the PSTs in this study stressed the importance of life-long learning in the teaching profession (see Arefian, 2022; Guilbert et al., 2016; Katsarou & Tsafos, 2013). The participants’ statements also indicated that they associated lifelong learning with research, reflection, and collaboration, which were fundamental elements of the CAR project. In other words, they began to view these elements as important tools for promoting lifelong learning. These findings highlight that the CAR acted as “a mediating agent, or more specifically, a mediating activity” (Edwards, 2017, p. 273), enabling the participants to view research, reflection, collaboration, teaching, and learning from a fresh perspective.

Another key insight that emerged from the data was that the nature of the CAR community, which was formed by seven PSTs and the researcher, played an important role in the PSTs’ engagement in the project. Their engagement was strengthened by various aspects of the community, including more symmetrical power relations, validation, freedom of expression, respect, non-judgemental communication, and emotional support. Figure 2 shows the elements of the CAR community. As Schwarzer et al. (2006) argued, it was not possible to establish a “true symmetrical power relationship between two parties” (i.e., the researcher and the participants) in this project due to their different levels of power and commitment to the research agenda. However, it can be stated that “more symmetrical power relationship” (Schwarzer et al., 2006, p. 338), where the PSTs’ voices were honored and heard, was achieved during the project.

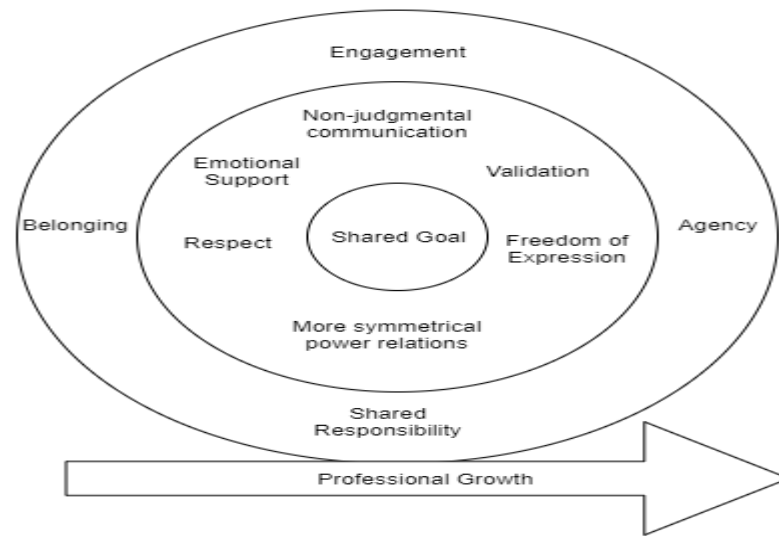


Figure 2. Elements of the CAR community

The findings also indicated that the transition from an asymmetrical power relationship, which the PSTs were accustomed to in their previous courses and in the wider Turkish society in general, to a more symmetrical one was not a simple and direct process. At the beginning of the project, the PSTs tended to obey the researcher or speak directly to her rather than interacting with the group as a whole. The researcher actively attempted to reshape power relations through cultivating co-researcher dynamics and addressing power imbalances, which led to a decrease in power issues. However, the findings revealed that power issues persisted throughout the CAR project even if they were less obvious or visible than at the beginning of the project. This finding could be related to high power distance culture in Turkey (Fikret Pasa, 2000; Hofstede, 1980), where people tend to accept a hierarchical order where everyone has a predetermined place, without requiring further explanation or justification (Hofstede, 1984). This shows that even though researchers attempt to challenge the understanding that “we as researchers are authority figures,” participants in such traditional, authoritarian cultures like Turkey (Lozano & Kızılaslan, 2013) may still perceive them as such.

In spite of the aforementioned challenge, it should be highlighted that the PSTs valued and appreciated the power they gained in the project. They reported that through involving in the decision-making processes during the project, they felt a sense of belonging and ownership, which may have been one of the key elements contributing to their engagement and enthusiasm. Their position as co-researchers in the project facilitated them to engage in a

“collaborative dialogue” in which “speakers engage jointly in problem solving and knowledge building” (Swain, 2000, p. 102). This finding is consistent with earlier studies as well. For example, Levin and Rock (2003) found that when different stakeholders (e.g., PSTs, mentor teachers, and teacher educators) had a less hierarchical relationship, the PSTs valued collaboration and shared dialogue. Similarly, Amir et al. (2017) reported that creating a safe space in which teacher educators were not only lecturers but also members of a research team allowed the PSTs to openly discuss sensitive topics and recognize the significance of collaboration.

The PSTs placed great value on not only more symmetrical power dynamics in the project but also non-judgmental communication, respect, and the freedom to express themselves openly within the group. They felt at ease disclosing their weaknesses and vulnerabilities because they were confident that they would not be criticized or judged. The participants recognized that the group members were all learners with their own weaknesses and concerns, and that they shared a common goal of professional development. This understanding contributed to a non-judgmental and respectful communication environment. Thus, they did not hold themselves back from showing their weaknesses and asking for support from the group members. This finding emphasizes the significance of creating an open dialogic space grounded in shared motives (Johnson & Golombek, 2016), or, more specifically, “a mutuality of purpose” (Vygotsky, 1987, p. 212). As O’Hanlon (2003) argues, “sharing similar concerns builds a feeling of collegiality among members, which supports their professional growth and gives them the freedom of expression and the space to investigate passionately held issues” (p.26).

Additionally, the PSTs highlighted the emotional support they received from the CAR community, which was a driving force for them during the project. They also expressed that they did not experience feelings of isolation during their practicum, which is noteworthy since the literature describes the practicum as an overwhelming and stressful transition period for PSTs (Ceylan et al., 2017; Gray et al., 2017). The PSTs compared their practicum experience to those of their peers who did not have a supportive community and they expressed gratitude for having access to a community with shared concerns and goals where they could seek assistance. In a way, the CAR community provided a sense of safety and support for the PSTs, making them feel less vulnerable knowing they had a community to turn to when needed. This finding aligns with prior research reporting that teachers received emotional support from their team members in dealing with everyday issues and challenges (Oja & Pine, 1987). The PSTs

also felt a sense of validation when the community paid attention to their concerns and worked to find solutions to the issues they faced. By recognizing and addressing the concerns and challenges had by the PSTs, the community conveyed a message that they were highly regarded, and their work held significance. This mutual respect and recognition helped to establish a sense of shared responsibility between the PSTs and the community, leading to increased trust and collaboration.

Another key insight gained from the data was related to the value of co-reflection on videos and extracts from other teachers' classrooms. The findings showed that the videos and extracts functioned as mediational means through which the PSTs' thinking on classroom interaction could be made transparent and transformed. The co-reflection sessions provided PSTs with the opportunity to express their thoughts, opinions, and feelings, while also listening to the perspectives of others. From a Vygotskian sociocultural perspective, it can be stated that through this reflective process, the PSTs remained open to "social influence" and were able to engage in introspection (Johnson & Golombek, 2016, p. 60). In essence, co-reflection on videos and extracts from other teachers' classrooms served as a mediating activity through which the PSTs could engage in critical self-analysis, thus they could reconstruct their thinking.

The results revealed that social influence took place when the community members shared the names of scientific concepts and practical tools they knew with each other while analyzing the videos and extracts from other teachers' classrooms. In this way, as Johnson and Golombek (2016) suggest, scientific concepts and tools were linked to teaching activities in the classroom videos and extracts in a collaborative manner. This process assisted the PSTs in (re)examining their own teaching practices and everyday understandings that had remained implicit and unanalyzed, enabling them to compare what they did and knew to what they should do. Ecem's statement is worth recalling at this point as a reference:

*We have learned the scientific terms and names for things we do instinctively as we reviewed these videos and extracts. For instance, one of our friends talked about concept-checking questions. This sparked my curiosity, and I thought it was something I didn't know, but then I realized that I use these questions, but unconsciously. Thanks to my friends, I learned how to use them more effectively. (FG1)*

As can be seen, this process provided a new lens through which they could reconsider their prior understandings. In other words, it helped them transcend their simplistic and

everyday understandings, which were based on “observations and/or generalizations gleaned from a surface-level understanding of what language learning and teaching is all about” (Johnson & Golombek, 2011, p. 2). The results also showed that co-reflection on videos and extracts from other teachers’ classrooms created a dialogic space in which the PSTs were exposed to new concepts, practical tools, and strategies of which they were previously unaware as their community members linked them with teaching activities in the videos and extracts. In this regard, the PSTs found the videos and extracts, which “portray L2 classroom interaction” (Sert, 2019, p. 222) as effective tools that connect theory and practice, as suggested in literature (see Kang & van Es, 2019; Martin et al., 2023; Santagata & Guarino, 2011).

Although co-reflection sessions centered on other teachers’ lessons created a safe zone for PSTs to gain deeper awareness of classroom interactions and challenge their prior understandings, the analysis of the second cycle data revealed that these sessions were not enough to help the PSTs develop self-regulation over their instructional practices. The PSTs found it challenging to implement the pedagogical concepts and tools learnt in the reflection sessions of the first cycle, and therefore acknowledged the significance of engaging in co-reflection on their own and their peers’ video-recorded lessons as a crucial next step to enhance their teaching practices. The reflective sessions in the second cycle were reported to be effective since they fostered the PSTs’ gradual development in classroom interactional competence. This finding supports Johnson and Golombek’s (2016) argument that “developing L2 teacher/teaching expertise takes prolonged and sustained participation in the social practices of both becoming and being an L2 teacher” (p.4).

In line with the previous research (see Borko et al., 2008), the PSTs in this study reported that co-reflecting on videos from their own classrooms helped them to see their own teaching from others’ perspectives, identify areas for improvement, and explore potential solutions to the problems. Through co-reflection on the videos of their peers’ lessons, they also learned new practical tools and strategies and came to understand that others struggle with similar challenges. Observing peers facing similar challenges provided a new perspective for the PSTs, enabling them to shift from a self-perception of incompetence to a recognition that such difficulties are common and experienced by others. Consequently, they became more motivated to tackle the challenges they encountered during their practicum. These findings highlight that the PSTs’ engagement in joint analysis of videos of their own and their peers’ classrooms seem beneficial in the context of a practicum course.

### **5.2.2. The role of the CAR project on classroom interaction-based reflective practice in the pre-service EFL teachers' CIC**

The second research question aimed to explore in what ways the CAR project based on classroom interaction-based reflective practice mediated the pre-service EFL teachers' CIC. To answer this question, the SCDA was conducted with the intention of observing and understanding the process, rather than focusing on just the final products of the project. This approach was chosen in order to “grasp the process in flight,” as Vygotsky (1978, p. 68) suggests. This way, it was possible to observe how the PSTs' participation in the practices of the CAR community contributed to micro-level changes in their journey of learning and using practical tools related to CIC. The results revealed that as each PST progressed through their distinctive transformation process, the group meetings held during the first and second cycles, as well as pre-lesson and post-lesson conferences with the teacher educator, served as “structured mediational spaces” (Johnson et al., 2020, p. 22). Within these mediational spaces, the community members engaged in “interthinking” (Mercer, 2000, p. 141) and “collective scaffold” (Eun, 2008, p. 143). Thus, the PSTs could articulate their reflections, thoughts, and reasoning beyond what they would be able to express on their own and “jump ahead of themselves” (Johnson et al., 2020, p.5). That is, as Johnson and Golombek (2016) suggest, the PSTs' initial learning to teach experiences were mediated by the more knowledgeable others (i.e., peers and the teacher educator), thus they could “step into being and becoming a teacher” (Johnson & Golombek, 2020, p. 4) in a safe zone in which they were supported. These findings also align with Johnson and Golombek's (2016) claim that merely placing new teachers in classrooms as observers, tutors, or even instructors may not be sufficient to facilitate the development of teacher expertise (p. 90). That is, to aid PSTs in thinking beyond their everyday experiences and being mindful of their pedagogical decisions, it appears essential to establish structured mediational spaces (Amory, 2019).

Upon closer examination of the dialogic interactions within the structured mediational spaces, it was found that the teacher educator, as a more knowledgeable other, actively redirected the attention of the PSTs towards the practical tools by remaining in tune with their evolving emotions, understanding, and knowledge. The teacher educator employed various mediational strategies to support the PSTs' learning, including drawing the PSTs' attention to problematic areas in their lessons, verbalizing potential teacher responses, explicitly naming practical tools, reminding them of what had occurred in class, redirecting the PSTs' attention to solution, providing concrete teaching strategies, and validating the PSTs'

cognitive/emotional dissonance. During her dialogic interactions with the PSTs, the teacher educator considered the idiosyncratic needs and circumstances of each PST and responded accordingly. Her mediation was contingent upon the specific needs of the PSTs in the present moment and was characterized by flexibility. She was attentive to the PSTs' *perezhivanie*, or their lived experiences, as well as their cognitive and emotional needs. Instead of solely providing one-way instructions or advice, she established a dialogic space that allowed the PSTs to co-construct knowledge with her. Thus, as Johnson and Golombek (2016) suggested, mediation became "minimally intrusive" (p. 31).

The results also revealed that the teacher educator was not the only one who played an active role within the structured mediational spaces. The PSTs also actively engaged in co-construction of knowledge with the community members (i.e., their peers and the teacher educator). They expressed their concerns and frustrations, critically reflected on their teaching practices, asked for help, accepted suggestions, and tried to use the practical tools in their lessons. They shaped "the quality and character of the mediation that emerges during interactions" (Johnson & Golombek, 2016, p. 31). Based on the findings, it can be inferred that the mediation process is not a unidirectional process where the more knowledgeable other(s) solely shape the novice teachers' professional development. Rather, it is a two-way process where both parties shape the interaction, as argued by many researchers (Ableeva, 2018; Lantolf & Aljaafreh, 1995; Johnson & Golombek, 2016). This also can be explained by the concept of "co-regulation" proposed by Fogel (1992) emphasizing the mutual influence in mediation. According to Rämä and Kontu (2012), co-regulation is sustained through "mutual responsibility" (p. 427). That means while the mediator should be responsive to learners' emerging needs, the learner should be responsive to the mediation. In this sense, in this study, the "reciprocity" of the PSTs, that is, their "openness to mediation" offered by the community members, their "willingness to cooperate during their interaction" (Ableeva, 2018, p. 266) and "the assumption of 'confianza' (mutual trust), which is reestablished or confirmed with each exchange" (Moll et al., 1992, p.134) appear essential for mediation to be effective. The PSTs' reciprocity in this study can be attributed to their shared value of self-improvement as teachers, as well as their participation in a community where they collaborated towards a common goal.

Upon examining the key episodes that the PSTs experienced in the structured mediational spaces, it was found that although not all PSTs experienced cognitive and emotional congruence, they experienced a number of similar key episodes such as dissonance, exploration and examination of alternatives, self-examination, and conscious awareness. More

specifically, through engaging in a dialogic interaction within the structured mediational spaces created by the CAR community, the PSTs were able to express their dissonance when they realized the contradiction between the ideal and actual practices, critically examine their own teaching practices, explore and examine alternative practices or solutions, and develop a deeper conscious awareness into practical tools. As the previous research emphasized, instances of cognitive/emotional dissonance seemed to function as “growth points” (Johnson & Worden, 2014, p. 130) or “critical junctures” (Johnson & Golombek, 2016, p. 44) which might cause identity to morph and expand (Alsup, 2019). According to Ward, Nolen and Horn (2011), to achieve meaningful transformation in a teacher’s work, it is essential to experience and reconcile conflicts that result in “productive friction” (p. 15). In this regard, the use of classroom video recordings and mediation provided by community members appeared to be crucial in creating a sense of cognitive and emotional dissonance in the PSTs and working on their conflicts. For instance, when the teacher educator paused the video at a particular point and asked the PSTs for their opinions on the interaction at that moment, it created a space in which the PSTs could express their dissonance. That is, this gave them the opportunity to articulate their emotions and thoughts on the discrepancies between their ideal and actual teaching practices, which in turn prompted critical reflection, examination of alternative solutions, and deeper insights into teaching practices. It can be stated that the structured mediational spaces established by the CAR community became “a space where conflicts can be generative” for the PSTs’ learning (Ward et al., 2011, p. 14).

### **5.3. Conclusion and Implications**

This study has provided valuable insights into the participation of pre-service EFL teachers in the CAR project based on classroom interaction-based reflective practices. The findings of the study have revealed that a CAR project, in which a group of PSTs and a teacher educator/researcher come together to work towards a shared goal within the context of a practicum course, can function like a seismic isolator, reducing the impact of an “inevitable shock” (Stokking et al., 2003, p. 331) that occurs during the transition from being a student to a teacher. Given the various challenges faced during this transition period such as “practice shock, identity conflicts, low self-efficacy” (Phan & Pham, 2022, p. 1), engaging in a CAR community where their needs are taken into consideration and they are supported both emotionally and cognitively can create “a sense of security” (Pappa et al., 2019, p. 601) and “collective agency” (Pantić, 2015, p. 769) through which the members find the strength to overcome difficulties. That is, the transition period for PSTs, which is usually referred to as a

“sink or swim,” “trial-by-fire,” or “boot-camp” experience (Ingersoll & Smith, 2004, p. 28), can be eased and cushioned with the support of a CAR community. However, it is important to note that the dynamics and character of the community play a vital role in helping PSTs feel safe enough to disclose their weaknesses and vulnerabilities. Based on the findings, it is recommended that the core characteristics of CAR communities in initial teacher education programs should include freedom of expression, validation, respect, non-judgmental communication, and more symmetrical relations. Teacher educators or researchers play a crucial role in establishing and maintaining such communities. The way in which they position themselves and the PSTs within these communities can influence how the PSTs engage with the community and the project’s content. This study highlights the importance of positioning PSTs as active participants, co-researchers, and co-contributors, which fosters a sense of ownership and investment in the project. Teacher educators can use this approach to create a safe and supportive environment for PSTs, which can ultimately enhance their professional development and readiness for their teaching careers.

Additionally, the findings of this study have implications for the question of “what constitutes a meaningful and worthwhile impact of teacher education” (Kubanyiova & Feryok, 2015, p. 436). While activities like pre- and post-lesson conferences and the use of classroom videos are common in many teacher education programs, the responsive mediation provided to PSTs within these activities in the CAR project seems to play a key role in fostering cognitive transformation. This highlights the importance of teacher educators being responsive to PSTs’ immediate and future needs during these activities. To gain better insights into PSTs’ needs, teacher educators should learn who the PST is and who they aspire to become as a teacher. Specifically, they should create opportunities to “learn more about who the teacher, pre-service or in-service, is as a whole person historically and culturally situated with a particular knowledge base, identity, emotionally and cognitively constructed way of perceiving themselves and their teaching activities” (Johnson & Golombek, 2020, p. 120). Moreover, to ensure that teacher education has a meaningful impact, it is crucial for teacher educators to have a theoretical understanding and foundation in SCT. They should also recognize that the mediation process is not unidirectional, where only the more knowledgeable other(s) shape the novice teachers’ professional development. Instead, it is a two-way process where both parties contribute to shaping the interaction.

Lastly, it is important to note that while CAR can be an effective tool for supporting PSTs’ professional growth in teacher education programs, teacher educators should approach

it with realistic expectations and a deep understanding of the complex processes and challenges involved. When integrating CAR into teacher education programs, it is crucial to carefully consider the needs and demands of PSTs. For example, in this CAR project that was conducted as part of a practicum course in an initial teacher education program, I was mindful of the potential demands and time constraints on the PSTs, who had to fulfill the responsibilities of their roles as both students and teachers. Furthermore, some participants were preparing for a national exam called KPSS to be appointed as a teacher, which added an extra burden on them. Therefore, it was essential to take into account the realities of the PSTs and design and manage the project accordingly to ensure that the CAR project was both feasible and beneficial for all participants.



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## APPENDICES

### Appendix 1.

#### STUDENT'S CURRICULUM VITAE

| Personal Information                                                                                                                                                                                                        |                                                                                                                           |                           |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------|------|
| Name-Surname                                                                                                                                                                                                                | Eda Ceylan                                                                                                                |                           |      |
| Email Address/Web Page                                                                                                                                                                                                      |                                                                                                                           |                           |      |
| Languages                                                                                                                                                                                                                   | English                                                                                                                   |                           |      |
| Specialization                                                                                                                                                                                                              | English Language Teaching                                                                                                 |                           |      |
| Education                                                                                                                                                                                                                   |                                                                                                                           |                           |      |
|                                                                                                                                                                                                                             | University                                                                                                                | Department                | Year |
| Bachelor's Degree                                                                                                                                                                                                           | Hacettepe University                                                                                                      | English Language Teaching | 2010 |
| Master's Degree                                                                                                                                                                                                             | Dokuz Eylul University                                                                                                    | English Language Teaching | 2016 |
| M.A. Thesis Title                                                                                                                                                                                                           | An exploratory study on the relationship between motivation types, metacognitive awareness, and EFL listening proficiency |                           |      |
| M.A. Thesis Supervisor                                                                                                                                                                                                      | Prof. Dr. Leyla Harputlu                                                                                                  |                           |      |
| ARTICLES                                                                                                                                                                                                                    |                                                                                                                           |                           |      |
| Ceylan, E., Uştuk, O., & Comoglu, İ. (2017). The ELT practicum in Turkey: A meta-synthesis of 2008-2017 qualitative research. <i>The Literacy Trek</i> , 3(2), 102-113.                                                     |                                                                                                                           |                           |      |
| *Ceylan, E., & Çomoğlu, İ. (2022). A Thematic Analysis of Action Research in Initial Teacher Education: Reflections and Future Directions. <i>Buca Faculty of Education Journal</i> , (54). 1314-1328.                      |                                                                                                                           |                           |      |
| *Ceylan, E., & Comoglu, I. (2023). Action research in initial EFL teacher education: emerging insights from a CAR project. <i>Educational Action Research</i> , 1-16.                                                       |                                                                                                                           |                           |      |
| PROCEEDINGS                                                                                                                                                                                                                 |                                                                                                                           |                           |      |
| *Ceylan, E. & Çomoğlu, H. İ. "Pre-service EFL Teachers as Participatory Action Researchers: Emerging Insights and Implications.", 5th International Conference on Research in Applied Linguistics, 23.10.2021, Bolu, Turkey |                                                                                                                           |                           |      |
| Membership to Scientific Societies                                                                                                                                                                                          |                                                                                                                           |                           |      |
| N/A                                                                                                                                                                                                                         |                                                                                                                           |                           |      |
| Awards                                                                                                                                                                                                                      |                                                                                                                           |                           |      |
| N/A                                                                                                                                                                                                                         |                                                                                                                           |                           |      |

## Appendix 2.

### Permissions for Research

#### Formal Permission of the Ethics Committee

Çok İvedi



T.C.  
DOKUZ EYLÜL ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Hukuk Müşavirliği

Sayı : E-87347630-640.99-42246  
Konu : Etik Kurul İzni Hk.  
Eda CEYLAN

10/04/2021

#### EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 05.03.2021 tarih ve E-49926767-300.99-24882 sayılı yazınız.

İlgide kayıtlı yazınıza istinaden Sosyal ve Beşeri Bilimler Araştırma ve Yayın Etik Kurulunun 22.03.2021 tarihli toplantısında alınan 22 sayılı karar ile Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngilizce Öğretmenliği Doktora Programı öğrencisi Eda CEYLAN'ın "A Pathway for Improving Classroom Language of Pre-Service English Teachers: An Action Research Study" adlı tez çalışmasında uygulayacağı anketin etik açıdan uygun olduğuna karar verilmiştir.  
Bilgilerinizi ve gereğini rica ederim.

Prof.Dr. Nükhet HOTAR  
Rektör

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Kep Adresi: dokuzeyuluniversitesi@hs01.kep.tr

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## Formal Permission of the University



T.C.  
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Sayı : E-85316909-640.99-46216  
Konu : Tez Uygulaması hakkında.  
Eda CEYLAN

20/04/2021

### HUKUK MÜŞAVİRLİĞİNE

İlgi : 10.04.2021 tarih ve 87347630-640.99-42247 sayılı yazımız.

Üniversitemiz Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngilizce Öğretmenliği Doktora Programı öğrencisi Eda CEYLAN'ın tez çalışması kapsamında Fakültemiz Yabancı Diller Eğitimi Bölümünde uygulama yapma isteği çalışmayı kendisinin takip etmesi koşuluyla uygun görülmüştür.

Bilgilerinizi ve gereğini arz ederim.

Prof.Dr. Esra BUKOVA GÜZEL  
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Elektronik Ağ: <http://buc.edu.tr>  
Kep Adresi: dokuzeyhuniversitesi@hs01.kep.tr

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Konu : Araştırma İzni (Eda CEYLAN)

03/05/2021

### VALİLİK MAKAMINA

İlgi : a) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 21.01.2020 tarihli ve 81576613-10.06.02-E.1563890 sayılı yazısı (Genelge 2020/2).  
b) Dokuz Eylül Üniversitesi Rektörlüğünün 10.04.2021 tarihli ve 42235 sayılı yazısı.

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Söz konusu ölçeklerin uygulanmasının, ekli listede belirtilen okullarda 2020-2021 eğitim öğretim yılında eğitim öğretimi aksatmayacak ve eğitim kurumu yöneticilerinin uygun gördüğü şekilde yapılması Müdürlüğümüzce uygun görülmektedir.

Makamlarınızca da uygun görüldüğü takdirde olurlarınıza arz ederim.

Dr. Ömer YAHŞİ  
Millî Eğitim Müdürü

OLUR  
Erhan GÜNAY  
Vali a.  
Vali Yardımcısı

Ek:  
1-Araştırma Değerlendirme Formu (1 Sayfa)  
2-Anket Formları ( 6 Sayfa)

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### Appendix 3.

#### Consent Form

Tarih:.....

**DOKUZ EYLÜL ÜNİVERSİTESİ  
EĞİTİM BİLİMLERİ ENSTİTÜSÜ  
ETİK KURULU**

#### BİLGİLENDİRİLMİŞ ONAM FORMU

Bu formun amacı katılmanız rica edilen araştırma ile ilgili olarak sizi bilgilendirmek ve katılmanız ile ilgili izin almaktır.

Bu kapsamda "A Pathway for Improving Classroom Language of Pre-Service English Teachers: An Action Research Study " başlıklı araştırma "Eda Ceylan" tarafından **gönüllü katılımcılarla** yürütülmektedir. Araştırma sırasında sizden alınacak bilgiler gizli tutulacak ve sadece araştırma amaçlı kullanılacaktır. Araştırma sürecinde konu ile ilgili her türlü soru ve görüşleriniz için aşağıda iletişim bilgisi bulunan araştırmacıyla görüşebilirsiniz. Bu araştırmaya **katılmama** hakkınız bulunmaktadır. Aynı zamanda çalışmaya katıldıktan sonra çalışmadan **çıkabilirsiniz**. Bu formu onaylamanız, **araştırmaya katılım için onam verdiğiniz** anlamına gelecektir.

##### Araştırmayla İlgili Bilgiler:

Araştırmanın Amacı: Çalışmanın amacı siz öğretmen adaylarının sınıf içi etkileşimsel becerilerinizi artırmak ve mesleki gelişiminize katkı sağlamaktır.

Araştırmanın Nedeni: Hem daha önce yapılan çalışmalar hem de kendi gözlemlerim sonucunda öğretmen adaylarının teoride öğrendiklerini staj dersi kapsamında pratiğe dökmekte sorun yaşamaları ve özellikle de lisans düzeyinde İngilizce öğretmenliği bölümlerinde sınıf içi etkileşime yönelik bir dersin olmaması.

Süresi: 2020 aralık ayında başlayıp staj dersi bitimine kadar devam edecektir.

Araştırmanın Yürütüleceği Yer: Dokuz Eylül Üniversitesi

##### Çalışmaya Katılım Onayı:

Katılmam beklenen çalışmanın amacını, nedenini, katılmam gereken süreyi ve yeri ile ilgili bilgileri okudum ve gönüllü olarak çalışma süresince üzerime düşen sorumlulukları anladım. Çalışma ile ilgili ayrıntılı açıklamalar sözlü olarak araştırmacı tarafından yapıldı. Bu çalışma ile ilgili faydalar ve riskler ile ilgili bilgilendirildim.

Bu araştırmaya kendi isteğimle, hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum.

##### Katılımcının (Islak imzası ile)

Adı-Soyadı:  
İmzası:

##### Araştırmacının

Adı-Soyadı:Eda Ceylan  
e-posta:  
İmzası:

## **Appendix 4.**

### **Initial Semi-structured Interview Questions**

1. Have you ever been to English speaking countries? If yes, how long have you stayed there?
2. Do you have any teaching experince? If yes, details about it?
3. Can you tell me about the English education you received before university?
4. Can you tell me about your plans after graduation?
5. How do you feel about your English proficiency level?
6. How do you see yourself as an English teacher? Your strenghts and weaknesses?
7. Can you tell me how university education have affected your professional development?
8. Do you have any concers or questions about the practicum course?

**Appendix 5.****Written Reflection Report Prompts in the First Cycle**

1. What have I learned the most in this process?
2. What did I like most about this process?
3. What was my least favorite part of this process?
4. How has taking part in this project made me feel so far?
5. What were the most difficult parts of this process?
6. What parts of this process did I feel most comfortable?
7. What have I learned about classroom interaction in this process?
8. As a pre-service teacher, I realized that I am competent in ..... about classroom interaction.
9. As a pre-service teacher, I discovered that I was incompetent in ..... about classroom interaction.
10. How do you think this process could have been managed better?
11. What would you like to change about this process?

## **Appendix 6.**

### **Written Reflection Report Prompts in the Second Cycle**

1. What have I learned the most in this process?
2. What did I like most about this process?
3. What was my least favorite part of this process?
4. What were the most difficult parts of this process?
5. What parts of this process did I feel most comfortable?
6. What have I experienced and observed about classroom interaction in this process?
7. As a pre-service teacher, I realized that I am competent in ..... about classroom interaction.
8. As a pre-service teacher, I discovered that I was incompetent in ..... about classroom interaction.

**Appendix 7.****Final Semi-structured Interview Questions**

1. How do you feel about being a part of this CAR community?
2. How do you evaluate the CAR project in terms of your professional development?
3. Have you experienced any challenges during the project? If yes, what are those?
4. Any other comments you want to add?



## Appendix 8.

### Sample Extract

**Context: The teacher is working with a group of intermediate level learners in a high school. One of the students (Sam) starts reading from the book. The part he reads from the book is as follows: ‘he did not have many friends, he felt lonely and insecure and things got tough for him and his sister when their dad walked out’**

- 1 Sam: He didn’t have many friends, he felt lonely and inse (0.9) ((he has difficulty in pronouncing the word ‘insecure’)) things got
- 2 T: insecure ((raises his head and looks at S1))
- 3 Sam: Insecure ((The teacher looks back at the book))
- 4 T: hmm
- 5 Sam: er: (0.4) things got through for
- 6 T: Tough
- 7 Sam: Tough for Billy and his sister when their dad walked out
- 8 T: Yes er: what does insecure mean? He felt insecure ((S1 and S2 raise their hands)) Sarah?
- 9 Sarah: Onsecher
- 10 T: Ye:s in English, in other words?
- 11 Sam: Unsafe
- 12 Sarah: Unsafe
- 13 T: Unsafe in a way yes: okay (2.0) ((looks at the book)) they don’t feel at ease ok they don’t feel at ease. Err what does tough mean? Things got tough for billy. Chris what does that mean?
- 14 Chris: Err ((looks at the book))
- 15 T: Things got tough for him
- 16 Chris: it’s err hard for him
- 17 T: Yes okay everything became hard and difficult for him.

(Sert, 2015, p. 121-122)

**Appendix 9.****Transcription Conventions Used in the Study**

| <b>Symbol</b>    | <b>Use</b>                                                           |
|------------------|----------------------------------------------------------------------|
| TE               | Teacher educator                                                     |
| S1, S2, etc.     | Identified student                                                   |
| (2.0)            | The number inside the parentheses represents the length of the pause |
| (.)              | Indicates noticeable pause in speech                                 |
| (( ))            | Describes nonverbal conducts                                         |
| \$word\$         | Surrounds talk that is said in a smiley voice                        |
| ?                | Indicates rising pitch                                               |
| <u>underline</u> | Stress/accentuation                                                  |

