RESEARCH ENGAGEMENT IN AND BEYOND PRE-SERVICE TEACHER EDUCATION: A CASE STUDY OF AN ENGLISH LANGUAGE TEACHER EDUCATION PROGRAM IN TURKEY

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

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ABSTRACT

RESEARCH ENGAGEMENT IN AND BEYOND PRE-SERVICE TEACHER EDUCATION: A CASE STUDY OF AN ENGLISH LANGUAGE TEACHER EDUCATION PROGRAM IN TURKEY

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This case study aims to explore how pre-service EFL teachers and teacher educators conceive research engagement in pre-service teachers' professional development in an English language teacher education program in Turkey. The data in this case study were collected through questionnaire administered to pre-service teachers, focus group interviews with pre-service teachers, and individual interviews with teacher educators. Also, document review of syllabi and course descriptions of the formal research course provided by Higher Education Council (HEC) and the English language teacher education program was conducted in order to explore to what extent perceived outcomes and program's goals are congruent. The results revealed that the English language teacher education program makes significant contribution to pre-service teachers' academic research skills, conceptions of academic research, and researcher identities in terms of encouragement for postgraduate studies. However, the findings suggested research engagement in the professional development is mostly

conceptualized over academic research due to the perceived irrelevancy of research to practice by the participants. Although senior pre-service teachers and teacher educators value research engagement in the professional development of pre-service teachers, pre-service teachers might not have a comprehensive understanding of teacher research. Drawing on the findings, the present study has some implications for the English language teacher education program and stakeholders such vamping the formal research course and highlightling overt relationship between practice and teaching through a more inclusive curriculum mapping.

Keywords: Research Engagement, Professional Development, Research Education, English Language Teacher Education Program, Pre-service EFL Teachers

ÖZ

ÖĞRETMEN EĞİTİMİNDE VE SONRASINDA ARAŞTIRMA ANLAYIŞI:
TÜRKİYE'NİN İNGİLİZCE DİLİ EĞİTİMİ PROGRAMI ÜZERİNE
BİR DURUM ÇALIŞMASI

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Bu vak'a çalışması, bir İngilizce öğretmeni yetiştirme programındaki aday İngilizce öğretmenlerinin ve öğretmen eğitmenlerinin, aday öğretmenlerin araştırmaya katılımı mesleki gelişimlerinde nasıl algıladıklarını incelemeyi amaçlamaktadır. Vak'a çalışması olarak tasarlanan bu çalışmada veriler, aday İngilizce öğretmenlerinden anket ve odak grup görüşmesiyle, öğretmen eğitmenlerinden ise bireysel görüşmeler ile toplanmıştır. Ayrıca, araştırma dersinin algılanan çıktıları ve program amaçlarının arasındaki tutarlılığını incelemek amacıyla, Yükseköğretim Kurumu (YÖK) ve çalışma katılımcılarının bağlı bulunduğu İngilizce öğretmeni yetiştirme programı tarafından hazırlanan ders izlencesi ve içeriğinin doküman analizi gerçekleştirilmiştir. Sonuçlar, İngilizce öğretmen yetiştirme programının, aday İngilizce öğretmenlerinin akademik araştırma becerilerine, algılarına ve lisans üstü programlara teşvik açısından araştırmacı kimliklerine büyük katkıda bulunduğunu ortaya koymuştur. Öte yandan sonuçlar, İngilizce öğretmeni adaylarının, araştırmanın pratiğe karşı bağlantısız

algılanması sebebiyle mesleki gelişimlerinde araştırmaya katılımı akademik araştırma üzerinden algıladıklarını ortaya koymuştur. Son sınıf İngilizce öğretmeni adayları ve öğretmen eğitmenleri, aday öğretmenlerin araştırmaya katılımı mesleki gelişimlerinde değerli bulmalarına rağmen, aday İngilizce öğretmenleri, öğretmenler tarafından yapılan araştırmayla ilgili bütünsel bilgiye sahip olmayabilirler. Bulgular ışığında, araştırma dersinin içeriğinin güncellenmesi ve pratik ile araştırma arasındaki ilişkinin daha açıkça belirtilmesi için daha kapsamlı müfredat planlanması gibi İngilizce öğretmeni yetiştirme programına ve paydaşlara çeşitli önerilerde bulunulmuştur.

Anahtar Kelimeler: Araştırmaya Katılım, Mesleki Gelişim, Araştırma Eğitimi, İngilizce Öğretmeni Yetiştirme Programı, Aday İngilizce Öğretmeni

To my beloved parents: my mother and to the memory of my father

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LIST OF ABBREVIATIONS

ANOVA	One-Way Analysis of Variance
EFL	English as a Foreign Language
ELT	English Language Teaching
EPE	English Proficiency Exam
ESL	English as a Second Language
FLE	Foreign Language Education
HEC	Higher Education Council
METU	Middle East Technical University
SPSS	Statistical Program for the Social Sciences
TEFL	Teaching English as a Foreign Language
TR	Teacher Research

CHAPTER 1

INTRODUCTION

The effectiveness of teaching-learning process is dependent on many constituents and stakeholders. Irrespective of the context-sensitive nature of teaching and learning process, one of the conducive factors that increases the success of teaching-learning process is teacher quality. Highlighting the core role played by teachers on the accomplishment of students, teacher quality is directly linked with the academic growth of students (Akcan et al., 2016; Darling- Hammond, 2000; Sanders & Horn, 1998).

There has been a growing interest in teacher professional development as a means of improving and sustaining the quality of teaching and learning. Therefore, enabling teachers to take part in appropriate development programs and enhance their capacities are of utmost importance in professional development interventions (Borg, 2018). As suggested by Vrasidas and Zembylas (2004), professional development activities vary to a great extent and they encapsulate but are not limited to the following: "collective or individual development; continuing education; pre- and in-service education; group work; team curriculum development; peer collaboration; and peer support" (as cited in Karakaya, 2015, p. 2).

Although there is no single best form of professional development when the local dynamics of teaching context and teachers' needs are taken into consideration, research engagement as a form of teacher self-development in the field of English Language Teaching (ELT) received a lot of attention in academic milieu as a way to overcome the limitations of short-term in-service programs. Cullen (1997) states short term and one-shot in-service programs provided by the outside "experts" constitute the majority of traditional professional development for in-service teachers. However, as

stated by Atay (2008), they might turn out to be insufficient in increasing teachers' professional development, since the knowledge provided by "experts" may not be conceptually and practically relevant to the context of teachers. Therefore, it is suggested that professional development of teachers should be self-initiated in order to meet their diverse needs in line with their teaching context (Lieberman, 2000; Yeşilçınar & Çakır, 2018).

Teacher research engagement in ELT is defined as having two aspects which are engaging in (i.e. doing) research and engaging with (i.e. reading) research (Borg, 2013). Both dimensions of research engagement have been long under investigation as a means of professional development, as it might contribute to evidence-informed practice. This kind of practice requires research involvement through critical research literacy, and creating an immediate relationship between research and teaching in order to minimize the perceived gap between theory and practice (Reis-Jorge, 2005). The teacher education programs (both at in-service and pre-service levels) become an agent in bridging the perceived gap, since they provide prospective and practicing teachers with an opportunity that harbors research culture and accessibility to research (Borg, 2006). A good number of initiatives have been launched to increase English language teachers' research engagement as a mean of professional development in various contexts. Chartered Teacher Program, Teacher Research Grant Scheme and The Innovative Grants Project could be enlisted as the examples of initiatives to foster research engagement of teachers in the UK and Australia (Borg, 2013; Kirkwood & Christie, 2006; Zeichner & Noffke, 2001).

Regarding Turkish context, the system of Turkish National Education values professional development interventions as well. Ministry of National Education (MEB, 2017) listed continuing professional development as one of the general competencies for teaching profession that should be included in the processes of teacher training and development. In line with this, the Turkish Ministry of National Education (MEB, 2018) organized short term in-service development courses in 2018 for practitioners including English language teachers. Foreign language departments

including preparatory schools in Turkey organize short seminars and/or courses for in-service teachers working at the tertiary level. Also, the recent initiatives highlight the research engagement of ELT teachers in the context of Turkey such as accreditation studies of private K-12 schools and universities especially in the field of Foreign Language Education (FLE). Moreover, the foreign language instructors working at institutions of higher education are required to have at least a master's degree according to a new regulation went into effect by Higher Education Council (HEC) (Resmi Gazete, 2018). At the pre-service level, research engagement of teacher candidates is aimed to be cultivated through a dedicated research course offered by pre-service teacher education programs.

There are a few studies conducted on the research engagement of in-service English teachers in Turkish EFL context revealing that teachers may not have adequate knowledge, skills, conducive conditions, and have limited conceptions of research, which affects their research engagement (Akşit, 2010; Atay, 2008; Bulut, 2011; Karakaya, 2015; Yeşilçınar & Çakır, 2018). Given the significance attributed to research engagement, there is a great paucity of studies focusing on research engagement of pre-service EFL teachers in Turkish context from professional development perspective, though. Drawing on the gaps in the literature, the present study explores the extent to which pre-service EFL teachers and teacher educators in an English language teaching education program in Ankara, Turkey conceive research engagement as a professional development tool. The aim of the current study is to provide an in-depth understanding of conceptions and beliefs about research engagement in a pre-service teacher education program and inform the redesign of the formal research course during the curriculum renewal.

1.1 Background of the Study

All pre-service programs including FLE programs in Turkey have been operating under the control of HEC since 1981. HEC prepares two nation-wide standardized exams, which are Basic Competencies Exam (*Temel Yeterlilik Testi*) and Foreign

Language Exam (*Yabancı Dil Testi*) for the admission to FLE programs as of 2018. After taking these exams, prospective pre-service English teachers are placed to FLE programs according to their scores and study at FLE for four years in line with the curriculum offered by HEC.

HEC prepares its own curricula for each initial university-based teacher education program and forwards them to the faculties of education in Turkey. For FLE programs, HEC designs a fixed curriculum consisting of compulsory courses in three different categories namely; Subject Matter (*Alan Eğitimi*), Pedagogical Formation (*Meslek Bilgisi*) and General Culture (*Genel Kültür*). According to the recent regulation by HEC pertaining to the pre-service teacher education programs which went into effect in 2018 and applicable to the current first-year pre-service service teachers in FLE programs, Subject Matter courses take up the most place in the pre-service education program with a rate of 48%, whereas Pedagogical Formation and General Culture courses make up 34% and 18% on average, respectively (YÖK, 2018a). Besides compulsory courses, HEC provides a range of pre-set elective courses from which programs can choose to tailor their pre-service teacher education programs according to the FLE teacher candidates' needs and interests. Out of 155 hours of initial teacher education, 141 hours are dedicated to theory whereas 14 hours are devoted to practice.

There is also a compulsory course dedicated to research education in pre-service teacher education. This course, which is in the scope of the present study, was exposed to some changes with the newest regulation provided by HEC (YÖK, 2018b). First, the name of the course has been changed from *Bilimsel Araştırma Yöntemleri* [Scientific Research Methods] to *Eğitimde Araştırma Yöntemleri* [Research Methods in Education]. Second, it used to be a third-year course and a three-credit course; however, it has become a second-year course with two credits with the new regulation, which means a decrease in the contact hours. Third, this course was categorized as one of the General Culture courses in 2007 (YÖK, 2007), but it has been grouped as one of the Pedagogical Formation courses in the 2018 curriculum renewal. Finally, the

course description was exposed to some changes in terms integrating action research. The new course description is as the following:

> The basic concepts and principles about research methods in education; research process (realizing a potential problem, identifying the sampling and problem, data collection and analysis, interpretation of results); general characteristics of data collection tools; data analysis and evaluation; accessing the databases for searching articles and theses; research designs and types of designs; basic paradigms in scientific research; quantitative and qualitative research designs; sampling, data collection and analysis in qualitative research; validity and reliability in qualitative research; analyzing, evaluating and presenting articles and theses; preparing research report compatible with research ethics and principles; action research in education (YÖK, 2018a).

As noted by HEC, the new pre-service teacher education program including FLE underlines that the graduates of these programs should become intellectuals who have a research-oriented mindset and have teacher-researcher identity (YÖK, 2018b). It becomes evident that pre-service teacher education programs have a great role in pre-service teachers' research engagement in and beyond pre-service teacher education. Pre-service teachers' conceptions of research are (re)defined with the gained knowledge and skills to engage with and in research. This affects their attitude toward research engagement as a professional development tool in their future professional practice with an understanding of extended professional behavior (Reis-Jorge, 2007).

Following this course description, Department of FLE in Middle East Technical University (METU), the context of the present study, describes the course objectives in the syllabi for "*Advanced Writing and Research Skills*" for the two subsequent fall terms and university catalog as the following (METU, 2013; METU, 2017a; METU, 2018):

> This course is designed to introduce students to the essential basics of conducting original research in education. Students are expected to engage in data collection and conduct small-scale data analysis which will lead to the production of a full-length research paper at the end of term. More specifically, the course will involve choosing and narrowing down a topic for investigation, finding and reviewing credible sources in existing literature, developing

> original research questions and/ or hypotheses and a suitable research design (qualitative, quantitative or mixed methods) that takes into account factors such as reliability and validity. The rest of the course will focus on hands-on practice in developing/adapting data collection tools, collecting and analyzing the data (using specialized statistical software and procedures), and synthesizing the results and formulating sound conclusions. Emphasis in the class will also be placed on the know-how of writing a good research paper. With this aim, students will be instructed on and given opportunities to practice their summarizing, paraphrasing, quoting, citing and referencing skills. They will be introduced to the "APA style manual" to ensure their conformity to widely accepted academic standards when writing up their research.

As can be seen in the course descriptions, explicit references are made to the engagement with and in research; however, how they are conceived by the stakeholders in FLE program is missing in the big picture. Therefore, it is crucial to investigate (i) the conceptions of research and research engagement held by pre-service EFL teachers, and (ii) the views about pre-service EFL teachers' research engagement held by teacher educators in the teacher education program in order to (iii) reveal the inherent (in)congruencies between their experiences and formal course descriptions.

1.2 Statement of the Problem

Studies regarding teachers' research engagement in ELT literature are investigated from different dimensions such as in-service teachers' views about and conceptions of research, in-service teachers' research experience as a means of professional development, and pre-service teachers' research engagement. Among these, a good number of studies have been conducted in various contexts such as the UK (Tavakoli & Howard, 2012), EFL (Borg, 2009; Moore, 2011; Sadeghi & Abutorabi; 2017) and Turkish context (Beycioğlu, Özer & Uğurlu, 2010; Yeşilçınar & Çakır, 2018) focusing on how in-service ELT teachers conceive research. These studies also scrutinized in-service ELT teachers' beliefs and views about research engagement. Furthermore, in-service teachers' research engagement with regard to professional development aspect has been studied extensively in EFL context (Shehadeh, Levis, & Barkhuizen, 2009) and particularly in Turkey (Atay, 2008; Çelik & Dikilitaş, 2015; Wyatt & Dikilitaş,

2016). In spite of the abundance of the studies conducted with in-service ELT teachers in EFL context, the literature on pre-service teachers' research engagement as a means of professional development tool in the field of ELT is rather limited.

Research investigating research engagement of pre-service teachers offers an analysis on different perspectives such as (i) the experience of research engagement in research courses, (ii) the experience of research engagement in practicum courses, and (iii) the conceptions of and views about research held by pre-service teachers; however, some studies are conducted at postgraduate level teacher education programs. For example, Reis-Jorge (2007) examined the process by which ELT teachers construct teacher-researcher identities in a B.Ed. Teaching English as a Foreign Language (TEFL) program. Also, Guilbert, Lane and Van Bergen (2016) studied the research literacy, perceptions, experience of education students in general without a specific reference to pre-service English teachers. In a similar vein, Medwell and Wray (2014) analyzed the way pre-service teachers involved in classroom research as a means of developing reflection and inquiry skills. Moreover, teacher educators' beliefs are also integrated in addition to that of pre-service teachers majoring in different teacher education programs than ELT. To give a more concrete example, Joram (2007) focused on the beliefs about knowledge and research in education in a teacher education program while Pendry and Husbands (2000) analyzed pre-service teachers and teacher educators' views about the value of research in relation to professional development in a postgraduate history teacher education program. All previously stated studies are conducted in various settings but there is a paucity of related studies performed at the undergraduate ELT programs in EFL context. The studies conducted in EFL context scrutinize research engagement on the following dimensions: pre-service teachers' research literacy skills (Banegas, 2018), their conceptions of research (Reyes-Cruz, Rueda de León-Barbosa, & Murrieta-Loyo, 2017) and the role of research engagement on identity construction of pre-service EFL teachers (Trent, 2012).

As for the related literature in Turkish context, there are studies conducted on pre-service EFL teachers' professional development needs in practicum (Genç, 2016), and

their opinions about the ways of professional development (İnal & Büyükyavuz, 2013). Drawing on these studies, research engagement is valued highly by pre-service EFL teachers; however, to the best knowledge of the researcher, there is a limited number of studies particularly focusing on pre-service EFL teachers' research engagement in undergraduate FLE programs in Turkish context. Even though the majority of studies widely discussed in-service EFL teacher' research engagement (Akşit, 2010; Atay, 2008; Bulut, 2011; Karakaya, 2015; Wyatt & Dikilitaş, 2016) in Turkey, there are some studies that scrutinize the research engagement of pre-service EFL teachers through various perspectives such as pre-service teachers' conceptions of research and experience of research engagement (Akyel, 2015; Elmas & Aydın, 2017) and engagement with research and its relation to professional growth in pre-service teacher education (Altıner, 2016). However, these studies problematize research engagement without explicit references to formal learning outcomes and teacher educators' views on pre-service teachers' research engagement. On the other hand, Şener (2017) examined research engagement through the perspective of teacher educators and provided reflections as a research course mentor while Öztabay (2015) focused on the congruencies between perceptions and realities of research engagement in pre-service FLE programs referring to formal documents. Due to the fragmented dimensions and limited research on pre-service teachers' research engagement, an in-depth understanding of the role of undergraduate FLE programs as well as teacher educators is understudied. Therefore, there is a need to explore the role of FLE programs in developing the knowledge base of conceptions and beliefs about research as a professional development tool held by pre-service EFL teachers. Taking the significant role played by pre-service teacher education and its stakeholders (i.e. teacher educators) in the professional development of pre-service teachers into consideration, the present study aims to address and build the contextual gap in ELT literature through offering an analysis of (i) prior and (re)constructed conceptions of research held by pre-service EFL teachers in professional development, (ii) the (in)congruencies between self-reported learning outcomes by stakeholders (i.e. pre-service teachers and teacher educators) and formally stated learning outcomes provided by HEC and METU FLE, and (iii) teacher educators' voices of pre-service

teachers' research engagement in terms of professional development in and beyond the pre-service teacher education program.

1.3 Research Questions

The purposes of the current study are to explore (i) pre-service teachers' and teacher educators' conceptions of and views about research in professional development, and (ii) the (in)congruency between perceived and formal learning outcomes of research engagement. In line with the stated aims, the following questions were addressed:

1. How do pre-service EFL teachers conceive research engagement in their professional development?
    a. What prior cognitions do pre-service EFL teachers bring to the research course?
2. What are the perceived needs and reasons for, and challenges and benefits of being engaged with and in research as a professional development tool for pre-service EFL teachers?
    a. To what extent are pre-service EFL teachers' conceptions of research congruent with the program's goal?
3. How do teacher educators conceive research engagement in the professional development of pre-service EFL teachers?

1.4 Significance of the Study

It is asserted that to have an in-depth insight into teachers' research engagement it is necessary to investigate their "attitudinal, conceptual, procedural, and institutional barriers to research engagement" (Borg, 2009, p. 358). In Turkish context, the studies have been conducted on attitudinal and institutional levels (Akşit, 2010), procedural (Atay, 2008; Wyatt & Dikilitaş, 2016), and conceptual (Bulut, 2011; Karakaya, 2015) components of research engagement with in-service EFL teachers. Nonetheless, the studies have been conducted on pre-service teachers' research engagement in these

perspectives is rather limited to have a deeper understanding of pre-service teachers' perceived needs and reasons for research engagement besides challenges and benefits of research engagement as a professional development tool in and beyond pre-service teacher education program. Arguing for the need for the holistic nature in teacher cognition studies, Borg (2006) suggested studies scrutinizing teacher cognition should have a bearing on the perceived learning outcomes by students. This study attempts to add to the limited literature in Turkish context by revealing a holistic nature of research engagement of pre-service EFL teachers through offering (i) an analysis on how not only pre-service teachers but also teacher educators conceive pre-service teachers' research engagement, and (ii) a comparative analysis on perceived and stated learning outcomes of research engagement by stakeholders in a pre-service teacher education program.

As suggested by Alptekin and Tatar (2011), there are many teacher cognition studies conducted with pre-service teachers in Turkey, nevertheless, there are not ample research studies concerning pre-service EFL teachers' cognitions on research engagement. Borg (2007) addressed the need to problematize research engagement in ELT and offer empirical findings as the following:

> If as a field ELT values and wants to promote and support research engagement by teachers more widely, it is necessary for it to begin to generate the empirical evidence which is required to inform initiatives of this kind (p. 745).

The holistic nature of the present study offers an analysis of the pre-service EFL teachers' prior and existing cognitions of research, so it reveals what cognitions they bring to the research course. Making these cognitions explicit has the potential not only to inform teacher educators about pre-service teachers' needs and expectations regarding research engagement but also the design of the research course. HEC (YÖK, 2018a) states that the research course in line with the curriculum renewal, pre-service EFL teachers need to be familiar with different kinds of research such as teacher research (TR) and action research. Therefore, establishing a baseline of conceptions and views about research informs the prospective design of the research courses,

curriculum, and stakeholders in an undergraduate FLE program in Turkey in the light of the prospective implications this study might have.

Moreover, this study investigates pre-service teachers' and teacher educators' perspectives on the nature of the posited relationship between research engagement and professional development as well as practice. Therefore, the study has implications for pre-service teachers and teacher educators in terms of the empowering pre-service teachers' teacher-researcher identities. Revealing the perceived challenges and benefits of research engagement as well as reasons and needs for research engagement might help stakeholders in terms of how to respond to these perceived views. In a similar vein, the current study has the potential to inform stakeholders (i.e. HEC and FLE program) to design interventions to help pre-service teachers to become more cognizant on the process of TR. Learning about TR enables them to learn about themselves as professionals, their classrooms, learners, and instruction, which greatly contributes to their professional development and becoming inquiring practitioners themselves.

The comparison of self-reported and formal learning outcomes might show how congruent the latter is interpreted by pre-service teachers and teacher educators in terms of professional development. Therefore, this study has the potential to inform the research course design, teacher educators and policymakers about the areas to take action to help pre-service teachers progress through the research engagement continuum in and beyond the pre-service teacher education in order to become research-engaged professionals. Also, this research study establishes a niche and background for other prospective studies on pre-service EFL teachers' research engagement in undergraduate or graduate FLE programs.

1.5 Definition of Key Terms

In the section to follow, operationalized definitions of the terms adopted throughout the present study are presented.

Professional Development: Professional development is referred as systematic activities geared towards long-term professional growth (Richards & Farrell, 2005) and a positive "change in the classroom, in the practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students" (Guskey, 2002, p. 381).

Teacher Research: "Systematic inquiry and qualitative and/or quantitative, conducted by teachers in their own professional contexts, individually or collaboratively (with other teachers and/or external collaborators), and which aims to enhance teachers' understanding of some aspect of their work, is made public, has potential to contribute to better quality teaching and learning in individual classrooms and which may also inform institutional improvement and educational policy more broadly" (Borg, 2010, p. 395).

Teacher Research Engagement: "Teacher research engagement has two dimensions: using research, mainly from reading publications, and doing research" (Borg, 2013, p. 3).

Teacher Cognition: "The beliefs, knowledge, theories, assumptions and attitudes that teachers hold about all aspects of their work" (Borg, 1999 as cited in Borg 2006, p. 49).

Beliefs: "Statements teachers make about their ideas, thoughts and knowledge that are expressed as evaluations of what should be done, should be the cased and is preferable" (Basturkmen, Loewen & Ellis, 2004, p. 244).

CHAPTER 2

LITERATURE REVIEW

This chapter offers relevant literature on research engagement in three sections. First, the concept of teacher cognition, the framework employed in the study derives from, is introduced so as to form a basis for the role of conceptions in the mental lives of pre-service teachers. In the section to follow, the concept of research engagement from a professional development perspective is presented along with the related terminology and former empirical studies conducted in pre-service and in-service teacher education programs in various contexts. The last section includes a review of literature and related empirical studies focusing on (i) pre-service teachers' research engagement experiences, (ii) reflections of teacher educators on pre-service teachers' research engagement and (iii) practicum courses with regards to research engagement at the pre-service teacher education level.

2.1 Conceptual Framework: Teacher Cognition

Research on teacher cognition emerged as a line of inquiry in the late 1960s as an alternative to studying merely observable teaching behaviors. The underlying reasons for teacher cognition research to be given an increasing prominence are twofold. First, there was a growing awareness on the notion that teachers have a substantial potential to transform the educational processes due to the shift from being passive transmitters of knowledge to the more proactive agents (Borg, 2006). Second, there has been a growing awareness on the need to study “mental lives” of teachers as well instead of relying solely on the observable part of teaching behaviors to have a complete understanding of teaching and learning process (Borg, 2006, p. 6). Therefore, investigating teachers' cognitive processes sheds further light on the interplay between the unobservable dimensions shaping teaching-learning process (i.e. judgments,

expectations, hypothesis and decisions of teachers) and the observable practice of these dimensions (i.e. actions of teachers) (Shavelson & Stern, 1981). Building on this notion, Clark and Peterson (1986) further suggest that there is a bidirectional relationship between teachers' cognitions and their actions. This means that the conceptions held by teachers are not affected only by their practice but also have the potential to influence their actions. Therefore, teacher cognition is considered to be the utmost importance in terms of obtaining an in-depth understanding of teachers' implicit theories about teaching as well as the effects of these tacit theories on teachers' praxis and vice versa. Moreover, studying teacher cognition is also closely linked to having a deeper understanding of the processes of decision-making and planning besides teachers' implicit theories (Clark & Yinger, 1977).

In the field of teacher education, teacher cognition has traditionally attracted considerable attention. Studying cognition with an emphasis on teacher reflection and its effects on learning to teach provides an insight about how teacher knowledge informs praxis in line with the growing interest in reflection as a means of professional development (Fenstermacher, 1994). For example, Shulman (1987) examines how teacher knowledge is acquired and employed in teaching practice. In a similar vein, the researcher explores how teacher knowledge could be represented. According to Shulman (1987), what teachers know might be classified under seven types of knowledge some of which were "subject-matter content knowledge, pedagogical content knowledge, curricular knowledge, knowledge of learners and their characteristics, knowledge of educational contexts and knowledge of educational ends" (Shulman, 1987 as cited in Borg, 2006, p. 19). Similarly, Carter (1990) suggests three categories under which teacher knowledge could be categorized: (i) processing of information (ii) practical knowledge and (iii) pedagogical content knowledge. Different from the previously offered classification, information processing category contains the knowledge teachers employ for decision making. Also, practical knowledge category contains the knowledge derived from individual and classroom knowledge. Convergently, pedagogical content knowledge emerges as a significant concept which is widely used today in teacher cognition studies. Pedagogical content

knowledge means that knowledge of pedagogy and content is transformed in a way that enables teachers to arrange, deliver and adjust their instruction in line with the learners' needs and the context of teaching. In the 1990s, Thompson (1992) problematized the teacher cognition in the dimensions of beliefs and conceptions rather than what teachers know. More specifically, she investigated the interplay among beliefs, conceptions and teachers' actions and offered an operationalized definition of conception as the following:

> Mental structures encompassing both beliefs and any aspect of the teachers' knowledge that bears on their experiences, meanings, concepts, propositions, rules, mental images and the like- instead of just beliefs (Thompson, 1992, p. 141 as cited in Borg, 2006, p. 27).

This body of knowledge in teacher cognition is also reflected in teacher education. Newer models of explaining teacher cognition that take teacher education into account have emerged. Drawing on the understanding that learning to teach is a multifaceted process comprising of changes in cognitive, affective and behavioral domains, Richardson (1996) highlights the importance of beliefs and attitudes in the process of *learning to teach*. This concept is defined by Freeman (2002, p. 4) "…as a matter of mastering content on the linguistic and meta-linguistic levels, practicing classroom methodologies and technique, and learning theoretical rationales for them". It is suggested that pre-service teachers bring prior beliefs to teacher education programs, which affects what and how pre-service teachers learn. Richardson (1996, p. 106) further discerns three sources of experience that are powerful in shaping pre-service teachers' beliefs and knowledge pertaining to teaching as the following: (i) "personal experience, (ii) the experience of schooling and instruction, and (iii) experience with formal knowledge" (as cited in Borg, 2006, p. 30). The emphasis on former school experience also resonates with the concept "the apprenticeship of observation" coined by Lortie (1975). This defines the phenomenon in which pre-service teachers' preconceptions about teaching are formed due to a large amount of time they spend as students observing and assessing teachers' behaviors. For example, Johnson (1994) argues that pre-service teachers' prior conceptions about teaching, teachers,

instructional activities and materials constructed in their second language learning experiences are heavily reflected on the instructional decisions that pre-service teachers make during their practice teaching.

The recent focus of the studies on pre-service teachers' cognitions, which examined the cognitions during and beyond pre-service teacher education by making references to the influence of initial teacher education on practice, were on: (i) how former language learning experience affects the cognitions of pre-service teachers, (ii) the beliefs held by pre-service teachers pertaining the nature of language teaching, (iii) the cognitions with regards to practicum experience and (vi) the instructional decision-making process and practical knowledge of pre-service teachers.

In the light of the former empirical findings on teacher cognition, Borg (2006, p. 283) provided a framework of the constituents which shape language teacher cognition as illustrated in Figure 2.1.

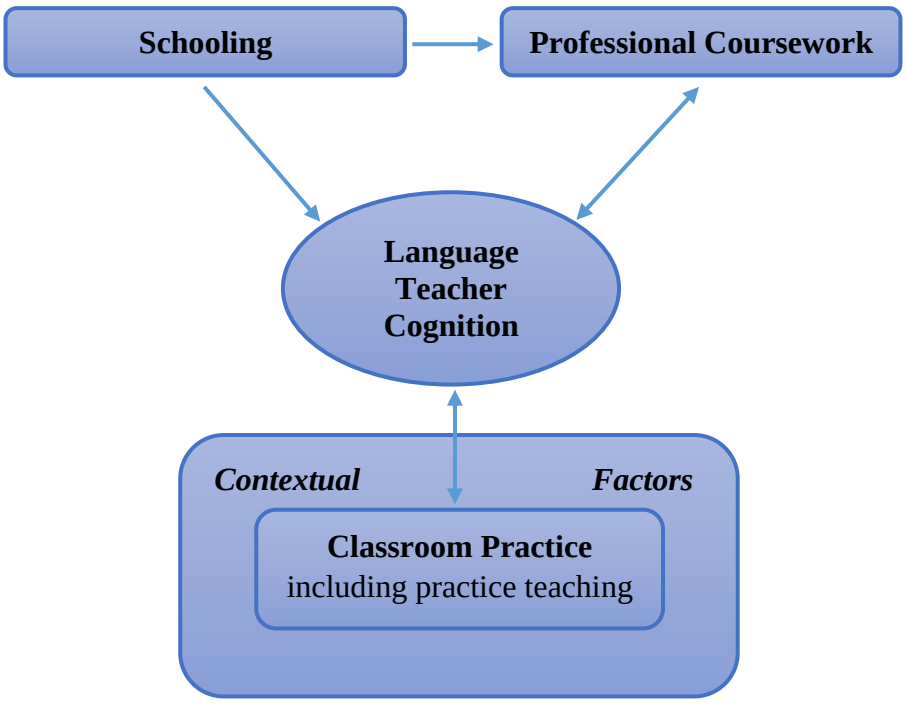


Figure 2.1 Constituents of language teacher cognition.

In this framework, language teacher cognition is employed as an umbrella term covering the constructs such as conceptions, perceptions, knowledge, and beliefs that language teachers have about the profession. Acknowledging the impact of learning to teach on language teacher cognitions, the framework recognizes the categories of schooling and professional coursework. In this model, *schooling* refers to the prior experiences and preconceptions about education and teaching-learning that pre-service language teachers bring to pre-service teacher education programs and these might affect pre-service teachers' cognitions at the pre-service teacher education level unless these are made explicit to them. *Professional coursework* defines the role of professional preparation through pre-service teacher education programs on the development of language teachers' existing cognition. The bidirectional relationship between language teacher cognition and pre-service teacher education implies that pre-service teachers' prior cognitions also affect (thereof are affected) what and how they learn to teach with regards to professional preparation. The factors of *context* in which teaching practice takes place also contribute to the development of teacher cognition as contextual factors act as mediators between teacher cognitions and teaching behaviors. In a similar vein, *classroom practice* not only affects language teacher cognition and but is also affected by that. Therefore, pre-service teachers' *teaching experience* in practicum informs their cognitions about language teaching and education in general "consciously through reflection or unconsciously" (Borg, 2006, p. 283).

2.2 Professional Development and Teachers' Research Engagement

Teachers hold a substantial influence on the development and academic achievements of the learners they work with, achieving the learning outcomes of the programs they work in, and the overall success of the education systems they are part of. Besides the accomplishment of students in the cognitive domain, teachers also affect students' affective outcomes, including their motivation and confidence (Borg, 2018). Considering the fundamental role of teachers on teaching quality, it is crucial that teachers need to engage in professional development for improving and updating

themselves as practitioners who continuously seek professional and individual growth. In that sense, teacher professional development becomes a significant component that merits as much attention as the teachers themselves.

Although there is no consensus on the definition of professional development, three of the most cited elements to define professional development are about the length, systematicity, and impacts of it. Professional development is referred as systematic activities geared towards long-term professional growth (Richards & Farrell, 2005) and a positive "change in the classroom, in the practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students" (Guskey, 2002, p. 381). Therefore, professional development underscores the progress and transformation in teachers' professional activities and knowledge. Resonating with this idea, professional development is perceived as a process that starts in and transcends beyond pre-service teacher education through continuous efforts, activities, interventions known as in-service teacher education. In other words, these continuous efforts are employed throughout teachers' professional careers. The recent paradigm shift from traditional to non-traditional professional development has placed emphasis on constructivist views regarding the nature and types of activities in professional development (Villegas-Reimers, 2003). To be more specific, the transition from teacher "training" to teacher "development" underscores the proactive role teachers undertake to promote their professional growth in a bottom-up approach (Villegas-Reimers, 2003). In that sense, the types of professional development activities and practices teachers could engage cover but not limited to the collective development such as peer collaboration (e.g., team teaching) and individual development through self-directed study (e.g., action research) (Vrasidas & Glass, 2004 as cited in Vrasidas & Zembylas, 2004). Engagement in these professional development activities empowers language teachers to develop an awareness on their implicit theories and beliefs about language teaching, their decision-making process in practice and "learners' perceptions of classroom activities" (Richards & Farrell, 2005, p. 4). It also enables English language teachers to update their professional knowledge by learning about developments such as new methods in the field of ELT (Turhan & Arıkan, 2009).

Given the potential of professional development has in promoting professional knowledge and practice, pre-service education programs are perceived as the key agents to cultivate a culture for pre-service teachers to show extended professional behaviors (i.e. engagement with and in research as well as enthusiasm to participate in-service work) after they graduate (Willegems et al., 2018). More specifically, pre-service teachers' prior and existing cognitions about professional development could be screened and redefined by pre-service teacher education programs. As these programs have the potential to provide opportunities for pre-service teachers to become cognizant on their cognitions about professional development through the reflection of prior and existing experiences, pre-service teachers are more likely to show extended professional behaviors (Willegems et al., 2018).

Echoing the same aim, empirical studies are also conducted on pre-service teachers' cognitions about professional development in the teacher education contexts in Turkey. For example, İnal and Büyükyavuz (2013) conducted a qualitative study with 234 pre-service EFL teachers about their beliefs on the ways in which they would engage in professional development after graduation in an ELT program in Turkey. They argued that pre-service EFL teachers valued engaging with research through academic books and journals as well as pursuing postgraduate degrees as they believed it would contribute to their professional development. Contrarily, pre-service teachers valued in-service seminars as a kind of professional development relatively less than reading research and pursuing postgraduate degrees. The researchers underscored that pre-service teachers' beliefs about the lack of professional development value of in-service seminars were related to their preconceptions and experiences about these professional development interventions as language learners. The researchers stated further need analysis about in-service seminars was needed to adapt these interventions in line with the pre-service teachers' needs. Moreover, pre-service teachers' motivation to engage with and in research should be promoted and sustained at the in-service level as well by incentives (e.g., the title of expert teacher assigned to ELT teachers who had MA degrees) provided by Ministry of National Education.

Genç (2016) investigated pre-service EFL teachers' professional development needs in a practicum course. The qualitative study was conducted with twelve pre-service EFL teachers in an ELT program. The findings underscored that one of the challenges pre-service EFL teachers face was that they did not perceive the link between theory and practice during their practicum experience. It is also suggested that pre-service teachers need more practical opportunities where they could gain hands-on teaching experience to develop practitioner knowledge since pre-service teachers theorize their practice. As stated by Burns and Richards (2009), demonstrating practitioner knowledge explicitly and providing instances by which pre-service teachers could discern, reflect and revisit this type of knowledge are among professional development needs in practicum.

Ölçü Dinçer and Seferoğlu (2018) examined professional development plans as part of career development of pre-service EFL teachers. A mixed method study (with questionnaires and interviews) was conducted with 672 fourth-year pre-service EFL students in various ELT programs in Turkey. Pre-service teachers were reported to have a high level of motivation; however, their understanding about the professional development activities was restricted only to traditional professional development interventions that took place at an institutional level such as "in-service training, graduate studies, attending conferences/workshops/ trainings" (p. 2049). The researchers noted that non-traditional professional development activities such as "reflective practices" (e.g., action research) and "cooperative" practices (e.g., peer observation) were not stated as professional development activities since they did not have knowledge about them (p. 2041). Therefore, it was argued that restricted understanding pertaining professional development activities stemmed from the preconceptions and prior experiences held by pre-service teachers about professional development activities as well as insufficient training on professional development activities at pre-service teacher education.

Taking the context responsive nature of professional development into consideration, it is plausible to suggest the types of professional development activities employed by

teachers differ to a great extent. According to the report by OECD (2009), research engagement was stated to be the most powerful activity as a means of professional development in a large-scale study conducted with secondary school teachers in 23 countries. Therefore, it can be said that research engagement merits as much attention as professional development *per se*.

2.3 Teachers' Research Engagement

Research engagement as a tool to promote professional development has gained popularity since it allows teachers to involve in professional development through a bottom-up approach, which emphasizes teachers' needs and interest regarding professional development. Among the various conceptualizations and related aims of research engagement, professional development perspective is emphasized in the academic milieu as well. Cochran-Smith and Lytle (1999), and Hammersley (2004) offer engagement in TR and action research, respectively, serve to (i) break and promote social inequities by taking a critical stance, (ii) contribute to development of teachers and schools in a more collaborative and communal sense, and (iii) promote teachers' practically-oriented knowledge focusing on individual professionals. Although the types and aims of activities through which teachers engage in research (i.e. "taking action for change" through action research and "taking action for understanding" through exploratory practice) vary, the impact of research on teachers' professional development is highlighted (Allwright & Hanks, 2009, p. 172) Drawing on these views, research engagement as a professional development tool enables teachers to unfold their practical knowledge and reflect on them as well as to help them solve the problems they encountered in teaching.

Engagement *in* and *with* research of teachers have received a lot of attention in the field of ELT since the conceptualization of "research" is controversial. *Teacher as researcher* movement (Stenhouse, 1975) is among the pioneering studies to promote teachers' involvement in and with research. Stenhouse (1975) stresses the importance of collaboration of researchers with "teachers as researchers" in the curriculum

development as they are the key agents to promote teaching-learning quality. In that sense, this movement contributes to the empowerment of teachers in the efforts to minimize the theory and practice dichotomy. Nunan (1992) describes research in second language education as “a systematic process of inquiry involving formulating a question or questions, the collecting of data that have relevant bearing on the question(s), the analysis and interpretation of the data, and the publication of the outcome” (as cited in Nunan, 2018, p. 7). This definition of research might be associated more with academic rigor in a more traditional sense and language teachers might not perceive research as a relevant activity to their practice in this sense (Borg, 2009). On the other hand, with the emergence of TR in the form of action research in the 1940s by Kurt Lewin, the emphasis has been placed on the proactive role of teachers in taking the ownership of generating knowledge for their professional development. Cochran-Smith and Lytle (1993) define TR as, “systematic and intentional inquiry about teaching, learning, and schooling carried out by teachers in their own school and classroom settings” (p. 27). Therefore, it is important to note that TR has a set of fundamental characteristics; and therefore, not all inquiries performed by teachers could be regarded as research. The most cited characteristics of TR in the definitions provided by various researchers are systematicity, self-initiation, reflection, clear purpose about enriching their understanding about profession and dissemination of knowledge (Borg, 2013, p. 8). Thus, how research is conceived as a concept by teachers has bearings on the elements and characteristics associated with research as a professional development activity. To give a more specific example, Borg (2013) examined the ELT teachers' beliefs about characteristics of good research and enlisted these beliefs as the following: (1) objectivity, (2) contribution to the body of knowledge, (3) linguistic and conceptual accessibility to research material, (4) replicability, (5) ethics, (6) being built on existing literature, and (7) potential to contribute teachers' practical knowledge. As revealed by teachers' beliefs, the perceived overlap between the characteristics of conventional scientific research and TR such as objectivity might occur since teachers lack conceptions or have misconceptions not only about nature and types of research but also the criteria against which scientific research and TR is evaluated *per se*.

In a similar vein, how ELT teachers conceive research and what it entails affect the way of their research engagement. Also, how research is conceived has bearings on to what extent teachers are research-engaged professionals and engage in the evidence-informed practice (Borg, 2009). Prior to the development of evidence-*informed* practice, evidence-*based* practice has been given prominence with the aim of increasing teachers' research engagement. Evidence-based practice is defined as the process by which "teachers engage with and in research to make pedagogical decisions based on or informed by sound research evidence" (Davies, 1999 as cited in Borg, 2013, p. 14). Nonetheless, the shift from evidence-based practice to evidence-informed practice puts emphasis on the proactive role played by teachers in generating knowledge. As one of the premises of evidence-informed practice, teachers need to use available evidence in their teaching context and they need be generator of their own knowledge rather than passive consumers of generalized findings which overlooks the contextual factors and are provided by experts in evidence-based practice (Hammersley, 2007). This shift is also significant in promoting the perceived relevancy of research to teaching practice. In the light of evidence-informed practice, teachers are expected to engage with research, filter and evaluate the outcomes according to their teaching context, students' needs, and interests in order to increase teaching quality and students' learning outcomes. Also, an increase in the perceived relevancy of research to practice is associated with the enrichment in professional identities assumed by teachers. For example, Gewirtz et al. (2009) stated researcher identity is integrated into teacher identity when teachers take the ownership of their knowledge, assume new roles for professional commitment and develop an understanding of research which a feasible activity they could engage with and in. Although the types of research might differ, each is a rigorous process that needs careful planning and implementation. Also, teachers including ELT teachers need to have the basic set of skills, knowledge, and understanding about research to engage research as a professional development tool. Therefore, research becomes an umbrella term covering both "standard scientific research" (Robson, 2002, p. 19) and TR in different forms (e.g., action research and exploratory research) so as to avoid polarization between researcher and teacher tension and is motivated with the notion

that they are complementary endeavors to enhance teachers professionally (Bailey & Nunan, 1996; Freeman, 2018).

2.4 Research Engagement in Pre-service Teacher Education

In order to promote a long-term research engagement, teacher education programs, especially at pre-service levels, deserve specific attention since they are perceived as the initial stage of professional development (Feryok, 2010; Freeman, 1993; Stuart, Akyeampong & Croft, 2009). Pre-service foreign language teacher education programs often act as mediators in shaping prospective EFL teachers' dynamic and complex cognitions about any aspect of future teaching including conceptions about research engagement (Borg, 2006).

Motivated with the notion of professional development, inquiry-oriented approach to education has gained attention as one of its premises is "to look at evidence as a means of improving practice and enhancing learning" (Cordingley, 2004, p. 83 as cited in Öztabay, 2017, p. 98). Given the significance of "inquiry-oriented" approach to teacher education, the need to include a dedicated research course to foster pre-service teachers' research skills and educate "research-capable" pre-service teachers have received attention (Öztabay, 2015). Moreover, as stated by Reis-Jorge (2007), the purpose of the inclusion of research course in teacher education are twofold: (i) "an academic perspective which focuses mainly on the development of teacher's academic skills and abilities to deal with theoretical discourse", and (ii) "a professional development perspective which draws on the reflective practitioner model to encourage teachers to adopt a reflective stance to practice as a means of on-going professional development" (p. 402). Both purposes serve pre-service teachers to move along the research engagement continuum (i.e. ranging from engagement *with* to *in* research). To put it differently, the former (i.e. academic perspective) might help pre-service teachers gain the necessary skills and knowledge to be capable consumers of research by improving their academic skills and it could be regarded as the initial step of research engagement in that sense. The latter (i.e. professional development

perspective) might have direct links to help them to demonstrate extended professional behaviors by gaining initial research competence in pre-service teacher education and engage in TR in their own professional in-service context (Banegas, 2018; Willegems et al., 2018).

From both the academic and professional development perspectives of research engagement underlined by Reis-Jorge (2007), pre-service teachers need to have basic skills, knowledge, and experience in order to engage *with* and *in* research. In this picture, pre-service teacher education programs serve as key agents in the provision and establishment of these skills, knowledge, and experience. In the process of educating research-capable teachers, research literacy is one of the key competencies valued by pre-service teacher education programs. Research literacy is defined as the following by Kostoulas (2018, p. 14):

> …teachers' ability to use the scholarly record in sensible ways. It involves the ability to locate relevant information, the ability to subject this evidence to critical scrutiny, and the ability to synthesize it into a useful working theory.

Research literacy requires higher-order thinking skills such as critical thinking, interpreting and synthesizing, and the integration of this information gained through reading into teachers' professional activities. In this sense, engagement *with* research has the potential to help pre-service teachers to link the theory to their practical knowledge and minimizes the perceived dichotomy between practice and teaching (Lambe, 2011). In a study exploring the perceptions of pre-service EFL teachers and a teacher educator on the benefits and challenges of engagement with research in a research course, Banegas (2018) found out that the course made positive contributions to the course participants' teacher-researcher identities as language teacher professionals. While pre-service teachers familiarized themselves with the stylistic and rhetorical conventions of the language used in research reports and experienced a growth in their professional knowledge base, they also had difficulties in putting this into action in the form of academic writing and meeting assignment deadlines. In the same study, the teacher educator believed that the pre-service teachers gained content

knowledge while they struggled in such domains as critical thinking skills and academic writing. Collectively, these results encouraged Banegas (2018) to conclude that pre-service teachers are to be further scaffolded in areas such as critical thinking and academic writing.

In a similar vein, research course and pre-service teacher education programs are also perceived as fundamental in the development of pre-service teachers' research skills. For example, Reis-Jorge (2007) examined the impact research course and B.Ed. (Honors) TEFL program on ELT teachers' perceptions of TR and their future professional stance as "inquiring practitioners" (p. 405). The findings showcased that teachers gained necessary research skills to fulfill the requirements of writing a dissertation at the end of the program such as critical and analytical reading as well as academic writing skills. Nonetheless, the rigor to complete a research project, the need for extended timelines, and the expertise for conducting a research study were all stated as major impediments for research engagement. Regarding their views on TR, teachers were reported to regard TR as an activity to solve problems in teaching based on teachers' own occasional reflection without systematicity (p. 414). The researcher concluded that perceptions and experience of standard conventional research done for the fulfillment of academic requirements might have bearings on how TR is conceived.

Besides the development of skills, how the concept of research is perceived and experienced by pre-service teachers influence and are influenced by the formation of their language teacher identities. In other words, whether perceiving research as a relevant activity to practice or an academic endeavor that is performed for academic purposes has bearings on constructing a variety of identities such as teacher, researcher or teacher-researcher identities. Shaw et al. (2008) conducted a study with 159 fourth-year pre-service education students and revealed pre-service teachers who had higher levels of motivation and self-efficacy in research engagement felt a sense of commitment to "researcher community" (p. 89). On the other hand, the majority of pre-service teachers in the study perceived themselves as "unconnected" to a "research

and learning community" and preferred not to pursue postgraduate studies in their teaching careers (p. 89).

It is also noted the perceived values of research engagement attributed by stakeholders (i.e. in-service teachers, schools, and administrations) in the context of teaching are influential in the conceptualization of research and construction of teacher-researcher identities of pre-service teachers. To be more specific, Trent (2012) investigated the impact of research engagement of six pre-service EFL teachers on their identity construction in their practicum experience. The results illustrated that pre-service EFL teachers conceived engagement with research as a facilitator to solve classroom problem and to improve their teaching. In this sense, their researcher identities contributed to the construction of teacher identities. However, construction of teacher-researcher identity was found to be challenging for pre-service teachers since engagement in research as a professional development tool was not supported by the context of teaching and it was not among the job description of an English Language teacher. Therefore, the perceived images of in-service teachers' attitude towards research and their research engagement are reflected in pre-service teachers' conceptions of research and language teacher identity construction, which influences pre-service teachers' research engagement beyond teacher education.

In a similar vein, practicum experience in shaping pre-service teachers' conceptions of research is given prominence since pre-service teachers observe and draw broader conclusions about research engagement performed in their prospective teaching context, which could affect their teacher-researcher identities. In this sense, Gitlin et al. (1999) investigated to what extent pre-service teachers' cognitions about research were influential to shape practicum experience in inquiry-oriented pre-service teacher education. The data from pre-service teachers who were studying at elementary and secondary education undergraduate programs showcased that school placement played a major role in developing pre-service teachers' conceptions about research. In other words, the schools which provided conducive conditions for research engagement and cooperating teachers who used research findings to inform their practice aided pre-

service teachers to link theory to practice. Also, pre-service teachers who had practicum experience in these schools conceived research as an activity that had practical and potential professional development value in their teaching careers. Therefore, providing pre-service teachers with the opportunities where they link theory to practice enhances their conceptions about research as an activity not only exclusive to academia but also practitioners as a professional development tool.

There has been an emphasis on teacher educators' conceptions of research. It is noticed that teacher educators in pre-service teacher education programs need to understand how research is conceived by pre-service teachers in order to address their needs and problems that might avoid research engagement in professional development. Therefore, teacher educators' beliefs about research engagement are also integrated in addition to that of pre-service teachers while scrutinizing research engagement. For example, Pendry and Husbands (2000) analyzed the impact of pre-service teacher education on educating teachers who engaged with research as a professional development tool when they started their teaching careers. Quantitative data was collected from teacher educators and students at 13 postgraduate history teacher education programs. The results indicated students, who were also novice teachers, gave prominence to reading research as it contributed to their professional development by "making sense of teaching and learning" but fell short to solve "practical challenges" (p. 333). In contrast, the researchers argued that teacher educators perceived students' engagement with research was limited to a few books used in the course and needed to be enriched by reading more research materials. Hence, the roles of pre-service teacher education programs and teacher educators are not only influential in the development of pre-service teachers' research skills and knowledge about research but also fundamental in helping pre-service teachers to become both producer and consumer of research beyond pre-service teacher education. Therefore, it is noted stakeholders need to include elements in pre-service teacher education to sustain and meet pre-service teachers' professional development needs through equipping them with means to engage with the findings of both practice-

oriented research and theory-based research materials as well as engage in TR (Burns & Richards, 2009; Pendry & Husbands, 2000).

As for Turkish EFL context, pre-service EFL teachers' research engagement has been under scrutiny from different dimensions as well. Although limited in number, studies investigated pre-service teachers' experience of research engagement as a professional development tool in practicum (Akyel, 2015) and their conceptions of research engagement in a research course (Elmas & Aydın, 2017). Also, pre-service teachers' engagement in a TR project was examined with regards to pre-service teachers' development of classroom research skills and a teacher educator's overall experience as a mentor (Şener, 2017).

Akyel (2015) problematized pre-service EFL teachers' perceptions of research engagement as a professional development tool in the practicum experience. The mixed method study was conducted with 24 fourth-year pre-service EFL teachers who took a course dedicated to TR in an ELT program. The findings showcased that pre-service teachers recognized the impact of TR on their teaching practice as it enabled them not only to reflect more "analytically" and "objectively" on their teachings as a problem-solving activity but also to become cognizant on the ways to sustain professional development. On the other hand, the challenges of research engagement reported by the pre-service teachers were about not having complete control of the class, limited time spent at practicum, and the difficulty of collecting data. As one of the highlights of the study, the majority of pre-service EFL teachers stated that they would engage in research on the condition that school administration advocated their engagement. More preferably, they stated they would engage with research when they start their teaching career as they believed research engagement would help them to keep themselves updated about new developments, enhance teaching-learning, and avoid burnout. It was argued that pre-service teachers examined, problematized and restructured their understanding of teaching-learning in which research engagement was perceived as a fundamental need for professional development.

Elmas and Aydın (2017) investigated pre-service EFL teachers' conceptions of research skills and experience in a research course offered by an undergraduate ELT program. The course was designed within the scope of the course descriptions provided by HEC. The qualitative study was conducted with 44 pre-service EFL teachers and data were collected through diaries, reflections, and interviews. The highlights of the study were about the benefits and challenges pre-service teachers face in their overall research course experience. Pre-service teachers were found to have developed their research skills, as they (i) obtained content knowledge within the scope of their research topics, (ii) gained knowledge of methodological issues to conduct research, (iii) developed their language skills in English (i.e. writing and reading), and (iv) improved higher-order thinking skills such as critical thinking, problem-solving, and synthesizing. The challenges they had in research engagement was about accessing research materials, understanding the language of academic texts, and heavy workload to meet deadlines. The researchers suggested that pre-service EFL teachers' professional growth could be fostered at the pre-service level through extra support provided by teacher educators since close collaboration with teacher educators could enable pre-service teachers to overcome difficulties they faced. In a similar vein, Öztabay (2015) scrutinized the (in)congruencies between perceptions and realities of research engagement stated by formal documents in undergraduate ELT programs. The researcher argued the need to integrate elements of TR into the compulsory research course designed by HEC in order to assist pre-service teachers (i) to transfer their research-based knowledge to practice and (ii) to perceive research as a practical inquiry having professional development value.

Şener (2017) examined the experience of pre-service EFL teachers' involvement in classroom research and a teacher educator's overall experience as a mentor in an ELT program through an exploratory case study. 66 pre-service EFL teachers, who had taken the compulsory research course designed by HEC, completed research projects in the form of classroom research on ELT topics such as speaking anxiety and teacher competency. The findings uncovered that pre-service teachers benefited from engagement in classroom research as they developed conceptions of research that had

practical value. Also, the participants perceived the potential to contribute to their professional development since it served as a "feedback to improve" (p. 61) although some pre-service teachers held the conception that research was an activity exclusive to academics. They were also reported to develop their academic reading and writing skills as well as self-confidence. The difficulties they had were related to the research literacy skills such as locating relevant sources besides referencing and paraphrasing skills. The teacher educator pointed out her experience was rewarding and motivating as a mentor due to creating an opportunity for pre-service teachers to engage in classroom research, helping them disseminate their research outputs, and raising other teacher educators' awareness about how pre-service teachers could engage in classroom research.

Overall, the concepts, terminologies and the framework for studying pre-service teachers' conceptions of research engagement were represented in this chapter with the following order: (i) the concept of and conceptual framework for language teacher cognition, (ii) the relationship between professional development and research engagement, (iii) conceptualization of teachers' research engagement, and (iv) research engagement at the pre-service teacher education from professional development perspective. The critical presentation of related empirical studies was also presented to form a basis to understand pre-service teachers' research engagement with regards to professional development.

CHAPTER 3

METHODOLOGY

The following chapter gives a detailed account of the methodology employed in the current study in five subsequent sections: research design, setting, participants, data collection instruments and procedures, and data analysis.

3.1 Research Design

The overall aim of the present study was to explore pre-service EFL teachers' and teacher educators' conceptions of research engagement. This study was also aimed to uncover pre-service EFL teachers' self-reported views about research engagement as a means of professional development tool. In order to achieve these goals, a mixed method embedded single case design was adopted. With these attempts in mind, the following research questions were formulated:

1. How do pre-service EFL teachers conceive research engagement in their professional development?
   1.1. What prior cognitions do pre-service EFL teachers bring to the research course?
2. What are the perceived needs and reasons for, and challenges and benefits of being engaged with and in research as a professional development tool for pre-service EFL teachers?
   2.1. To what extent are pre-service EFL teachers' conceptions of research congruent with the program's goal?
3. How do teacher educators conceive research engagement in the professional development of pre-service EFL teachers?

The present study was designed as a case study. A case study research design, also referred to as a comprehensive research strategy, aims to provide in-depth insights into a phenomenon, process, theme or a case bounded by a specific time and place (Creswell, 2012; Stake, 1995). The case might be about real-life entities such as a single individual, family, organization, group(s) of people, process or a relationship. Moreover, case studies are conceived as appropriate research designs under several circumstances such as: (i) for answering how and why inquires, (ii) when the case under investigation do not require control over behavioral events within a bounded system, and (iii) when the distinction between the case and the context is not obvious (Yin, 2003). To uncover how pre-service teachers and teacher educators conceive research engagement in terms of professional development and to further reveal the underlying factors shaping these conceptions, a case study research design was employed.

More specifically, this study could be considered as an intrinsic case study, since it is conducted with an aim of exploring a particular issue, phenomena or theme bounded by a particular time and place, which is the focus of the study itself (Creswell, 2013). In the present study, the aim is to explore the unique case itself (the pre-service EFL teachers' research engagement in METU FLE) rather than providing an understanding of the other pre-service EFL teachers' studying at other universities and/or FLE programs.

This case study requires sub-units and analysis of these sub-units within the same context because each sub-unit is considered important for the best exploration of the case, which is called an embedded single case study design (Yin, 2003). Yin explains embedded case studies with a specific example as follow:

> For instance, even though a case might be about a single organization, such as a hospital, the analysis might include outcomes about the clinical services and staff employed by the hospital (and possibly even some quantitative analyses based on the employee records of the staff) (2003, p. 42).

Moreover, as stated by Yin (2003), the shift or orientation might occur during the course of the research study due to the holistic and global approach in single case studies. Therefore, it is an appropriate choice to divide the case into logical sub-units to stay on track. The units of analysis are defined by the research questions for the present study.

In order to forestall exploring the case (the pre-service EFL teachers' research engagement in METU FLE) without any reference to operational definitions about factors influencing teacher cognition (i.e., schooling, professional coursework, classroom practice), sub-units of analysis were formed as illustrated in Figure 3.1. In the context (METU FLE) of the study, sub-units of analysis consisted of pre-service EFL teachers and teacher educators. Sub-units might be developed through various sampling techniques being convenience and criterion sampling which are discussed in detail in Section 3.3 (Yin, 2003). In addition, various data collection tools are used to investigate each sub-unit, ranging from questionnaires to document analysis.

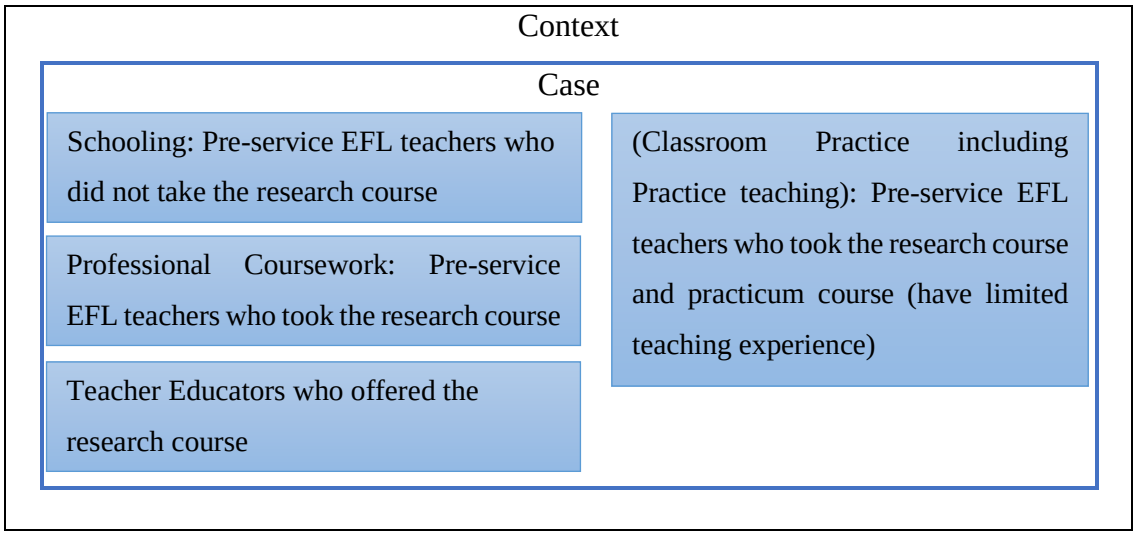


Figure 3.1 Sub-units of analysis in the context.

A mixed method research design was employed in the study. In the context of the present study, quantitative design was utilized to investigate only "what" perceptions pre-service EFL teachers held about research engagement, whereas qualitative design served to investigate "how and why" questions about pre-service EFL teachers' and teacher educators' views on research engagement with regards to professional development. In other words, rather than providing a general view of conceptions of pre-service teachers' research engagement, this study aims to explore the underlying reasons and/or factors building these conceptions. Taking this into consideration, the use of mixed method design was more advantageous, since it brings more data to shed light onto the selected case than quantitative or qualitative design *per se* (Creswell & Plano Clark, 2011). First, due to the relatively big sample size of pre-service EFL teachers at METU FLE, quantitative research design via questionnaires was employed. On the other hand, the small sample size was required for the in-depth exploration of the case, which was possible through qualitative data collection tools such as semi-structured interviews and documents. Finally, data triangulation and multiple sources of data collection are important requirements to elicit a comprehensive understanding of the selected case and increase reliability, which renders the mixed method design suitable to the aims of the present study (Creswell & Plano Clark, 2011).

In accordance with the types of mixed method design stated by Creswell (2012), an embedded design was adopted in the present study. The embedded design aims to collect both quantitative and qualitative data sequentially (before, during or after one another) to address different research questions, but the former (i.e. quantitative) augments and informs the latter (i.e. qualitative) form of collected data. As underlined by Creswell (2012), quantitative design might be used before the qualitative part to determine the sampling strategies for qualitative section. The embedded phases of quantitative and qualitative data are sequenced as in Figure 3.2:

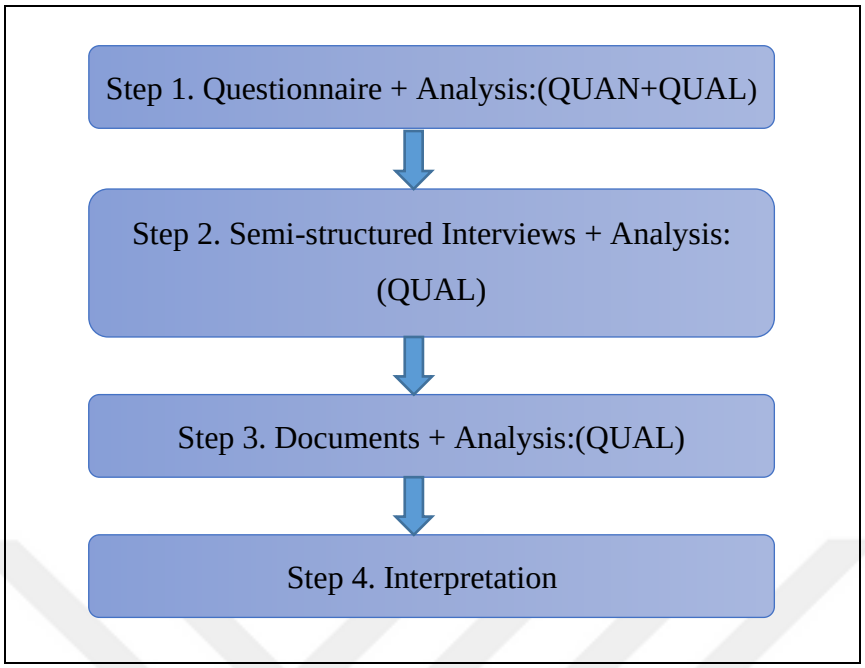


Figure 3.2 Mixed method embedded design.

Within the context of this study, the phases of the embedded design were connected to each other. The first step of research design being quantitative paradigm informed the second step, which was the qualitative interviews. Based on the quantitative results, the recruitment of participants for semi-structured interviews with pre-service EFL teachers (the third- and fourth-year pre-service teachers) was conducted through criterion sampling to shed light onto the pre-service teachers' research engagement. Last but not least, qualitative design steps informed each other since the findings of semi-structured interviews were compared to the results of the document analysis to provide an in-depth exploration of how congruent pre-service teachers' and teacher educators' views about research engagement was to the formal documents pertaining to their research engagement.

3.2 Setting

The setting of the present study is the Department of Foreign Language Education (FLE) at Middle East Technical University (METU). Since HEC took the

responsibility of education institutes and gave the control to the Faculties of Education in 1981, FLE was founded as one of the departments of the Faculty of Education at METU in 1982. Located in Ankara, METU is known to be one of the research universities in Turkey, and METU FLE contributed to the accreditation studies about the former pre-service teacher education programs as a piloting university in the previous years (YÖK, 2018b).

For the admission to FLE programs in Turkey, students are required to take two nation-wide standardized exams which are Basic Competencies Exam (*Temel Yeterlilik Testi*) and Foreign Language Exam (*Yabancı Dil Testi*) as of 2018. Students are placed to FLE according to their scores obtained from these two exams. In addition to this, prospective pre-service teachers who are placed at METU FLE need to take the METU EPE (English Proficiency Exam - the passing grade is 70 out of 100 for FLE students) or declare a TOEFL IBT or IELTS Academic score before starting the first-year undergraduate education. Pre-service EFL teachers study at FLE programs for four years in line with the curriculum provided by HEC.

Following the framework provided by HEC, METU FLE offers the compulsory courses in three different categories namely; Subject Matter (*Alan Eğitimi*), Pedagogical Formation (*Meslek Bilgisi*) and General Culture (*Genel Kültür*). In addition to these must courses, elective courses are offered with an emphasis in the areas of literature and linguistics (METU, 2017b). The curriculum includes but not limited to the courses such as ELT methodology, language acquisition, teaching language skills, English language testing, and evaluation. Also, there are courses, such as Introduction to Education and Information Technology in Education, offered by departments like Educational Sciences (EDS) or Computer Education and Information Technologies (CEIT).

At METU FLE, pre-service teachers take the compulsory *FLE 311 Advanced Writing and Research Skills* with regards to research education. The course provides a theoretical dimension to research as well as hands-on experience with research. First,

teacher candidates are presented with the fundamental concepts for carrying out research in the field of education. Second, pre-service teachers engage in the phases for conducting original research such as deciding on the topic, forming research questions, reviewing literature, collecting data, drawing conclusions, and generate a research report in the form of a research paper (METU, 2013). The course description has been stated in METU Catalogue as the following:

> This course is designed to introduce students to the *essential basics of conducting original research* in *education*. Students are expected to engage in data collection and conduct small-scale data analysis which will lead to the production of a full-length research paper at the end of term.
>
> More specifically, the course will involve choosing and narrowing down a topic for investigation, finding and reviewing credible sources in existing literature, developing original research questions and/ or hypotheses and a suitable research design (qualitative, quantitative or mixed methods) that takes into account factors such as reliability and validity. The rest of the course will focus on hands-on practice in developing/adapting data collection tools, collecting and analyzing the data (using specialized statistical software and procedures) and synthesizing the results and formulating sound conclusions. Emphasis in the class will also be placed on the know-how *of writing a good research paper*. With this aim, students will be instructed on and given opportunities to practice their summarizing, paraphrasing, quoting, citing and referencing skills. They will be introduced to the "APA style manual" to ensure their conformity to widely accepted academic standards when writing up their research (METU, 2013).

Moreover, pre-service teachers are required to complete practicum courses in their last two semesters before graduation. At METU FLE, these courses are offered as FLE 425 School Experience and FLE 404 Practice Teaching. Senior pre-service teachers engage in teaching in a primary or secondary school under the supervision of a cooperating teacher at practicum and teacher educators at METU FLE. Moreover, pre-service teachers are required to observe and complete pre-determined tasks in the form of a reflection journal on such topics as classroom management and teaching skills, etc. They also have in-class discussions about their teaching experience at METU FLE. Upon the successful completion of all courses and credits offered at METU FLE, pre-service teachers graduate and teach at various levels ranging from primary to tertiary level.

Considering the inherent characteristics of the site of the study, the rationale behind selecting METU FLE was twofold. First, "A case may be chosen deliberately because of its unique character, thus presenting itself as a rich opportunity and exemplar for focused study — for example, a highly successful secondary school for adolescents of color in a lower-income neighborhood" (Saldaña, 2011, p. 9). This university was chosen specifically, since pre-service teachers are required to engage with and in research and produce a research paper at the end of the semester, which enabled the researcher for the exploration of the case that is information-rich. The other reason was the convenience of accessing the site of the study.

3.3 Participants

The participants in the present study are mainly two groups which are the pre-service EFL teachers and the teacher educators at METU FLE.

The sub-groups of pre-service teachers consisted of the first- and second-year students, third-year students, and fourth-year students in the light of the teacher cognition framework suggested by Borg (2006) as illustrated in Figure 3.3.

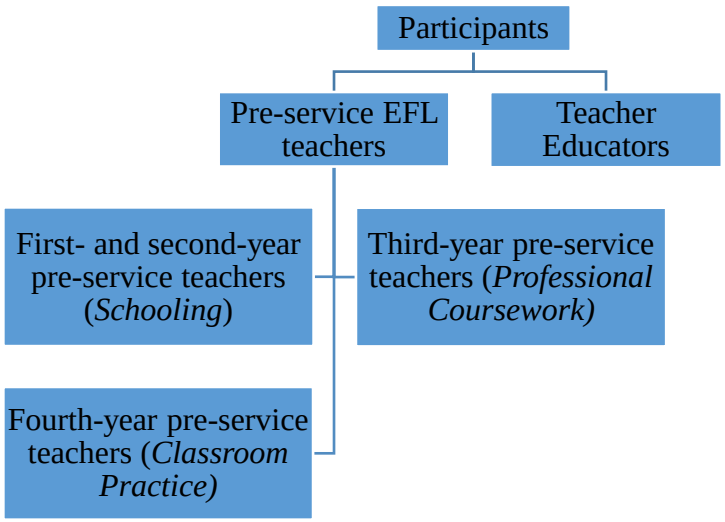


Figure 3.3 Participants in the study.

The rationale behind the formation of these sub-groups was related to related profiles which correspond to the factors shaping teacher cognition such as schooling, professional coursework, and classroom practice including practice teaching. The first- and second-year participants have not taken the research course yet. The first-year students will take the research course in line with the new course description (i.e. provided by HEC in 2018 curriculum renewal) in the second year of their FLE program (see Section 1.1 for full course description). On the other hand, the second-year students will take FLE 311 Advanced Writing and Research Skills in the third year of their FLE program. The integration of these groups into the study was important to reveal what prior cognitions of research pre-service teachers bring to the research course. The third-year participants took FLE 311 Advanced Writing and Research Skills. The inclusion of this group into the study provided the views about research as a means of professional development tool by pre-service teachers having received research education. Besides having studied the research course, the fourth-year participants had teaching practice experience through practicum courses. The inclusion of this group, who have limited teaching experience though, was intended to reflect the impact of research education on pre-service teachers' views about research engagement as a means of professional development. In addition, teacher educators (N=3) who offered FLE 311 Advanced Writing and Research Skills at METU FLE in Fall 2017 and 2018 academic terms took part in the study. Each teacher educator had different fields of study which are namely; English literature, linguistics, and ELT. Three teacher educators also participated in semi-structured interviews in order to provide reflections on pre-service teachers' research engagement. Therefore, pre-service EFL teachers and teacher educators provided rich data for the exploration of the pre-service teachers' research engagement at METU FLE from different perspectives (Creswell, 2013).

The total number of pre-service teachers took part in the study was 134, while three teacher educators participated in the study. The number of pre-service teachers represented in three groups is shown in Table 3.1.

Table 3.1 Pre-service teachers represented in the study.

	Participants				
	1st and 2nd year Pre-service Teachers			3rd year Pre-service Teachers	4th year Pre-service Teachers
	1st year	2nd year	Total		
Students at METU FLE	109	87	196	126	110
Participants in the study	22	27	49	40	45
%	20.1	31.3	25	31.7	40.9

For the quantitative phase of the study, pre-service teachers in all three groups were chosen through convenience sampling, since it allowed the data to be collected quickly and easily considering the geographical distribution of the sample, in this case, a single institution (Creswell, 2013). All pre-service teachers at METU FLE were chosen as participants, since they were readily accessible to the researcher. They were invited to the study via e-mail and sent the link to the questionnaire or given the hard copy of the questionnaire.

Due to one of the shortcomings of convivence sampling as being not representing the participants who are not accessible to the researcher, criterion sampling was employed to overcome this limitation for the qualitative phase of the study. Criterion sampling refers to "selecting cases that meet some determined criterion of importance" (Patton, 2001, p. 238). Adopting this sampling strategy was appropriate for two reasons. First, it contributed to the understanding of the case through informants who were information-rich. Second, it helped to verify quantitative data with qualitative data by selecting participants from questionnaires for the follow up (Cohen & Crabtree, 2006). Having analyzed the answers of respondents in the quantitative phase (questionnaire), criterion sampling strategy was employed for contacting the third- and fourth-year pre-service teachers to have semi-structured interviews as the follow-up. The pre-determined criterion was the selection of the first three and the last three respondents

who had the highest and lowest mean scores in the questionnaire, respectively. The pre-service teachers who had the highest mean scores might represent relatively more inclusive and broader conceptions of research inquires (e.g., ranging from TR to academic research) described in the questionnaire. Conversely, the participants who had the lowest mean scores might represent the relatively narrower conceptions of research provided in the questionnaire. This meant the representation of the diverse samples to achieve further in-depth exploration of the case (Miles & Huberman, 1994).

In the same vein, criterion sampling was used for the qualitative phase of the study to select teacher educators. The pre-determined criteria were (i) to offer FLE 311 Advanced Writing and Research Skills at METU FLE in Fall 2018 or Fall 2017 academic term and (ii) to specialize either in ELT, English literature, or linguistics. Teacher educators meeting this criterion were contacted via e-mail. Three teacher educators (whose fields of study were ELT, English literature, and linguistics, respectively) responded to the e-mail and accepted the invitation to conduct semi-structured interviews. The rationale behind these choices resonates with the idea that representing the diverse samples within the case to shed further light onto the case and to provide more insights of the case under scrutiny (Miles & Huberman, 1994).

3.4 Data Collection Instruments and Procedures

For finding answers to the research questions, multiple instruments to collect data were used in the study. Yin (2009) underscores that data from multiple resources and an extensive database are important features in case studies. More specifically, six frequently used data collection tools are enumerated in a case study: “documentation, archival records, interviews, direct observation, participant observation, and physical artifacts” (Yin, 2009, p. 83). In the same vein, data triangulation is utmost significance for increasing construct validity and reliability (Yin, 2009). For the present study, data were collected through a questionnaire, semi-structured interviews, and documents to answer the research questions. Three groups of pre-service teachers took part in the questionnaire, while only the third- and fourth-year pre-service teachers, as well as

teacher educators, participated in semi-structured interviews. Prior to any data collection procedures, it is important to note that the recognition for the autonomy of participants in social science studies is ensured (Hammersley & Traianou, 2012). Therefore, the necessary permission to conduct the study was requested and obtained from the Human Subjects Ethics Committee (see Appendix H for approval form) at METU. Also, the informed consent form (see Appendix E) was collected from the participants and they were informed about their right to withdraw from the study at any time for any reasons before data collection procedure started.

3.4.1 Questionnaire

The use of questionnaires enables the collection of data from a large sample in economical and standardized manners since they are easier and quicker to administer (Aldridge & Levine, 2001). The relatively big sample in the present study, which is 134, necessitated the use of a questionnaire (see Appendix A) to collect data to answer the first research question. In other words, in order to understand the pre-service teachers' research engagement, first how they conceive research or what research exactly mean to them was explored via using the first part of the questionnaire developed by Borg (2009). The original questionnaire was comprised of six parts such as "research" scenarios, characteristics of good quality research, institutional research culture, engagement in and with research and demographic information. Only the first part was comprised of "attitudinal questions" aimed at disclosing what people think while other sections in the original questionnaire except demographic information were made up of behavioral questions for revealing participants' present or past actions (Dörnyei, 2007). Since only the first part containing ten scenarios of "research" was directly related to the conceptions, this part of the questionnaire developed by Borg (2009) administered in the present study. Each scenario includes a different type of research inquiry. Borg (2013) defines and describes each scenario according to the nature, methodology, and aim of inquiries (see Appendix A for full description). To be more specific the scenarios are described as the following: (1) reflective practice and changing instruction, (2) TR, (3) research conducted for master's or doctoral

studies, (4) scientific academic research, (5) TR, (6) TR, (7) surveying teachers and reporting views, (8) evaluative classroom inquiry, (9) research in teacher education settings, and (10) evaluation of new instructional material (Borg, 2013, p. 55). The definitions and aims of each scenario are also employed in the present study.

The use of questionnaires might create the potential risk of superficial answers especially when it is used to uncover respondents' views or beliefs. In order to elicit more in-depth justifications for respondents' answer to the ten scenarios which are numerical in nature, open-ended items were added below each scenario. Integration of open-ended items provided freedom of expression and allowed the in-depth exploration of the respondents' conception of research (Dörnyei, 2007). The demographic information part was designed and added at the end of the questionnaire to obtain relevant information about the participants' year of study in the program. As suggested by Dörnyei (2007), factual questions include personal matters and putting them at the ending prevents the possible resistance in participants. Also, anonymity and voluntary basis were emphasized to collect data on respondents' demographic information. No information for personal identification was required except participants' e-mail addresses; however, it was on a voluntary basis.

Ten items in the original questionnaire were designed using a four-point Likert scale ranging from "definitely not research" to "definitely research". The respondents were asked to indicate to what extent they felt the given scenario was an example of research and write the reason(s) behind their choices. Translation was not needed since the original questionnaire was designed in English. In terms of piloting, the questionnaire was piloted with 50 Turkish EFL teachers practicing at a higher education institution in a former study conducted by Borg (2009). For the present study, further piloting was performed with a pre-service teacher at METU FLE and the respondent stated no change was needed.

Administering web-based questionnaires allow data to be collected quickly and relatively at a low cost by eliminating geographical limitations (Couper & Miller,

2008). In the first place, the questionnaire was designed electronically and e-mailed to the students at METU FLE, since the sample of the present study was geographically in a different location than the researcher at the time of data collection. However, the expected number of participants was not reached via the electronic version of the questionnaire. The hard copies of the questionnaire were given to the students at METU FLE. Administering both versions of the questionnaire increased the response rate and enabled reaching more participants from the target sample (Couper & Miller, 2008). At the end of this procedure, a total of 134 pre-service teachers responded to the questionnaire.

3.4.2 Semi-structured Interviews

Interview is one of the important sources of data collected in case studies in order to reflect the perspectives of participants within the case (Yin, 2009). Semi-structured interview technique enables the researcher to be focused through a pre-set interview protocol while providing flexibility for the in-depth understanding of interviewees' opinions and enriching data (Borg & Gall, 1989). Moreover, using semi-structured interviews is more likely to yield data that are comparable across cases (Bogdan & Biklen, 1992).

The data were collected via semi-structured interviews to answer the research questions two and three. In other words, semi-structured interviews were employed to gain subjective perspectives of participants' (i.e. pre-service teachers and teacher educators) conceptions and views about research engagement as a professional development tool.

3.4.2.1 Pre-service Teachers

The semi-structured interviews were conducted in the form of two separate focus group interviews with third- and fourth-year pre-service teachers. The use of focus group interviews was chosen as an appropriate technique because, as stated by Krueger

and Casey (2009), the interaction among the interviewees who have common characteristics or experience sheds further light onto the case under scrutiny. In addition, the dynamic nature of focus group interviews leads to explicit or implicit elaboration on differences risen during the interview process by enabling interviewees to listen to others, reflect and refine their views and beliefs (Ritchie & Lewis, 2003).

In order to gain a thorough understanding of pre-service teachers' views on engagement with and in research, a focus group interview was conducted with the third-year pre-service teachers who studied *FLE 311 Advanced Writing and Research Skills* and diverse conceptions of research based on quantitative data. In a similar vein, a separate focus group interview was carried out with the fourth-year pre-service teachers having taken *FLE 311 Advanced Writing and Research Skills* and were taking *FLE 425 School Experience* (i.e. the practicum course) at the time of the data collection. The number of participants is suggested to be between four and ten for a focus group interview (Ritchie & Lewis, 2003). Each interview with two groups of pre-service teachers was conducted with six participants. The interview protocols for the third-year pre-service teachers (see Appendix B) and fourth-year pre-service teachers (see Appendix C) were comprised of open-ended questions and was prepared in line with the aim of the study. The open-ended questions were categorized under relevant sections such as experience in research course, views on research as a professional development tool and research engagement in practicum. The open-ended questions were piloted with a pre-service teacher at METU FLE and the respondent did not state the need to change anything. Interview with the third-year pre-service teachers lasted for 33 minutes, while the interview with the fourth-year pre-service teachers took 28 minutes. Both interviews were conducted at METU FLE on April 2, 2019 with the third-year pre-service teachers and on April 3, 2019 with the fourth-year pre-service teachers. The focus group interview with the fourth-year pre-service teachers was deliberately conducted in the middle of the term since interviewees gained some teaching experience at the practicum course. Both interviews were conducted in English and were audio-recorded and later transcribed verbatim.

3.4.2.2 Teacher Educators

Semi-structured interviews were also one of the sources of data in the present study to obtain and reflect the perspectives of teacher educators on pre-service teachers' research engagement. Individual interviews were conducted with three teacher educators who taught *FLE 311 Advanced Writing and Research Skills* at METU FLE. Individual interviews are advantageous when the aim is geared towards portraying an "in-depth understanding of the personal context within which the research phenomena are located, and for very detailed subject coverage" (Ritchie & Lewis, 2003, p. 36).

Each teacher educator had different specialization areas namely; English literature, linguistics, and ELT. The three interviews lasted for 30 minutes, 34 minutes, and 35 minutes, respectively. All interviews were conducted at teacher educators' offices at METU FLE on April 2 and 3, 2019. The open-ended items (see Appendix D) in the interview protocol were designed in parallel to the interview questions prepared for pre-service teachers to be able to reflect teacher educators' point of view and obtain comparable data. Piloting was performed with an expert on ELT. All interviews were audio-recorded and transcribed verbatim.

3.4.3 Documentation

Documents are important sources of data collection since they are used to corroborate or augment information gathered from other sources, which is especially crucial for data triangulation and increasing credibility of the study (Bowen, 2009; Yin, 2009, p. 87). The documents in the present study were used to compare the self-reported views on research as a professional development tool to those of stated in formal documents about the research course. In other words, the data derived from interviews (conducted with pre-service teachers and teacher educators) and documents about pre-service teachers' research engagement are compared. O'Leary (2014) suggested that documents used in qualitative research design can be categorized into three groups: public records, personal documents, and physical evidence. Public records category

includes the official documents to show institutions' events and/or activities. Some examples of public records cover but not limited to mission and vision statements, strategic reports and plans, and syllabi.

The current study employed documents that could be regarded as public records about pre-service teachers' research engagement. Considering the profile of interviewees participated in the interviews, the related documents were as the following:

- the syllabi of *FLE 311 Advanced Writing and Research Skills* in Fall 2017 and 2018 (METU, 2017a; METU, 2018)
- the course description of *FLE 311 Advanced Writing and Research Skills* in Fall 2017 and 2018 retrieved from the University Catalog (METU, 2013)
- the course description of *Eğitimde Araştırma Yöntemleri* [Research Methods in Education] retrieved from the website of HEC (YÖK, 2018a)

The documents employed in the study were not prepared for the study; they were accessed via relevant internet websites. They were utilized to shed further light onto to what extent the self-reported learning outcomes stated by pre-service teachers and teacher educators, which were gathered through interviews, were congruent to those of the stated in the syllabi and course descriptions. Therefore, the aim of using documents was to compare (and contrast) the two sources of data and to portray the (in)congruency between the data gathered from interviews and documents. In order words, the (in)congruency between formal statements and application of these statements in practice was illustrated through the comparison of interviews and documents.

3.5 Data Analysis

For the quantitative strand, the initial phase was to prepare data collected through questionnaires. The preparation consisted of the stages such as storing the data, coding systematically and exploring the data to run further analysis (Dörnyei, 2007, p. 199).

The data were analyzed using Statistical Program for the Social Sciences (SPSS) version 23. The data collected through Likert-scale items in the questionnaires was entered SPSS by assigning numeric values ranging from "1 = definitely not research" to "4 = definitely research". Before running any inferential test, a Kolmogorov-Smirnov test was run to check the assumption of normality and yielded data were normally distributed *(p>.05)* (Field, 2009). The next steps were the analysis of data through descriptive and inferential tests (Dörnyei, 2007). Descriptive statistics were run in order to calculate the mean scores and standard deviations of each scenario in the questionnaire. Also, one-way analysis of variance (ANOVA) was run to compare the mean scores of scenarios based on three pre-service groups (Field, 2009). The final step was to report and interpret the quantitative findings. The open-ended items were analyzed via listing, coding and theming all answers based on thematic or conceptual congruency and reporting the salient themes with their frequency (Creswell, 2012; Saldaña, 2013).

In terms of qualitative strand consisting interviews, thematic analysis was used to examine the underlying views and experience pertaining to the phenomenon about individuals under scrutiny (Saldaña, 2013, p. 176). In line with the aim of the present study, an in-depth understanding of the views on research engagement through pre-service teachers and teacher educators' lenses was explored. Therefore, themes through latent level analysis were employed in order to provide an interpretive analysis that reflects the underlying in-depth meaning of the data (Dörnyei, 2007, p. 246).

Four phases were followed as suggested by Boyatzis (1998): transcribing the data, coding the data, creating themes, and reporting the important themes and examples from the data. First, interview transcripts were transcribed verbatim since it allowed the researcher to have a dataset best-representing interviewees' utterances (Merriam, 1998). Next, the data were coded manually since the data were comprised of relatively small database and also it provided the researcher with the close reading, which gives a sense of control over the data (Basit, 2003). Coding was performed by reading the transcripts multiple times and using color codes to mark the relevant and meaningful

segments provided by the interviewees (Creswell, 2012). Next, descriptive codes were employed which is used to encapsulate "the primary topic of the excerpt", data was re-read, and further refinement of initial codes was ensured by comparing the codes since coding is cyclical in nature (Saldaña, 2013, p. 4). Then, emergent themes overarching the refined codes (instead of pre-set codes or categories before analysis) were listed and compared in order to ensure the codes were organized and united into meaningful entities. Last, the salient themes and codes across interviewee groups were reported.

Regarding the analysis of documents, content analysis was also adopted. When it was performed on public documents, it has the potential to reveal the implicit or explicit statements made by an institution through close reading (Julien, 2008). In this study, the three public documents related to the research course were analyzed through close reading and focusing on the relevant segments to that of emergent themes from interviews and compare two data sources (i.e. documents and interviews). This was done to be able to demonstrate the congruency between self-reported views on research engagement by participants and the formal statements in the documents about research course.

3.6 Conclusion

Overall, the aim of this chapter is to reveal the research design, setting, participants, data collection instruments and procedures, and data analysis. In terms of research design, a mixed method embedded design was employed. A total of 134 pre-service teachers in three groups (first- and second-year pre-service teachers, third-year pre-service teachers, and fourth-year pre-service teachers) and 3 teacher educators participated in the current study. Data were collected through questionnaires (N=134), semi-structured interviews, (focus group interviews, N=12 and individual interviews, N=3) and documents. Both quantitative (descriptive and inferential tests using SPSS) and qualitative data analyses (thematic and content analyses) were run to answer the research questions.

CHAPTER 4

RESULTS

This chapter presents the results of the data analysis in the following order: (i) the questionnaire about pre-service teachers' conceptions of research engagement in three groups (the first- and second-year pre-service teachers, third-year pre-service teachers, and fourth-year pre-service teachers) in line with Borg's (2006) teacher cognition framework, (ii) focus group interviews conducted with third- and fourth-year pre-service teachers on the perceived needs and reasons for being research engaged as well as the challenges and benefits of being research engaged, and (iii) individual interviews with regards to teacher educators' conceptions of research engagement of pre-service teachers.

4.1 Research Question 1: How Do Pre-service EFL Teachers Conceive Research Engagement in Their Professional Development?

In order to explore pre-service EFL teachers' conceptions of research, the participants were asked to complete a questionnaire consisting of ten scenarios presented in 4-points Likert scale format (ranging from 1-4), all of which include some kind of research inquiry and to justify their choices through open-ended short answer questions.

4.1.1 Cognitions Held Prior to the Research Course (*Schooling)*

The first- and second-year pre-service teachers in the study completed neither the research course (*FLE 311 Advanced Writing and Research Skills)* nor the compulsory practicum course sequence (*FLE 425 School Experience* and *FLE 404 Practice Teaching*) since these courses are offered as third- and fourth-year courses,

respectively, in METU FLE curriculum. Therefore, to investigate what prior cognitions pre-service EFL teachers bring to the research course, the first- and second-year pre-service teachers at METU FLE were given the questionnaire. The results for each item are summarized in Table 4.1 below.

Table 4.1 Descriptive statistics for schooling group (N=49 in all cases).

Participants		*Mean*	*SD*
1st & 2nd year pre-service teachers	Scenario 1	2.47	.793
	Scenario 2	3.35	.694
	Scenario 3	2.76	1.051
	Scenario 4	3.49	.711
	Scenario 5	2.84	.773
	Scenario 6	3.10	.872
	Scenario 7	2.80	.866
	Scenario 8	2.18	.833
	Scenario 9	2.55	.867
	Scenario 10	2.98	.750

As can be seen in the table, the most highly-rated scenarios research were Scenarios 4, 2, and 6, respectively. Scenario 4 (see Appendix A for full description) *(M=3.49, SD=.71),* which might be regarded as scientific research conducted for academic purposes, was the most highly-rated scenario out of ten items. The participants referred to the methodological issues such as the steps of research, the generalizability of results, wide sample size, questionnaires as data collection tools to justify their choice. They also cited the dissemination of knowledge through a formal output in the form of a research article. Participants associated the concept of research with the characteristics of scientific research stated above. When asked to justify their responses, participants elaborated on their conceptions of research as in the following answers:

“It seems like how research should be. **Data collection, analyzing data** and **writing an article**.” (P91)

“He/she **collected some data** and wrote **a summarizing article** in order **to share it**.” (P88)

“Because he gave **a questionnaire** and **analyzed the results**.” (P60)

“It is academic research because there are **analysis** and **500 teachers**. And the person **shares the results**.” (P74)

“Because there is **a conclusion that can be generalized**.” (P46)

Scenario 2 *(M=3.35, SD=.694)* and Scenario 6 *(M=3.35, SD=.694),* which may be considered as examples of TR according to the definition adopted in this study (see Chapter 1), were the most highly-rated second and third scenarios. Again, the methodological issues (such as formal steps of research, pre-test, and post-test, purposefulness), dissemination of knowledge, engagement with research (through reading), and rigor were emergent and salient themes for these two scenarios to be considered as research. This finding resonates with the inherent characteristic of academic research as illustrated in the responses given to open-ended items below:

“I would say that this is more of research since there were **controlled variables** and especially due to the fact that data was **recorded and shared**.” (P50 – “Scenario 2)

“**Found new method, experimented, documented results**. Checks all the prerequisites.” (P42- Scenario 2)

“He **systematically collects data** and **presents it**. It should be research.” (P74 - Scenario 2)

“It is definitely research because the teacher **found out about the approach by reading about it**.” (P94 - Scenario 2)

“**Comparison** is essential and increases **credibility**.” (P81 - Scenario 6)

“Since once again **variables were controlled** in search of the best possible outcome for a teaching method, I would consider this research.” (P50 - Scenario 6)

“There is **a successive, formal process**.” (P58 - Scenario 6)

As shown in Table 4.1, the least-rated scenarios as research were 8, 1, and 9, respectively. Scenario 8 *(M=2.184, SD=.833)* could be regarded as an evaluative and practically-oriented inquiry (Borg, 2013). Most of the participants stated the aim of

the inquiry was geared more towards evaluation and feedback. They also emphasized methodological concerns such as small sample size and the lack of representativeness of results to justify the relatively low rating for this scenario. Below, some of the justifications by participants for this scenario are provided:

"This is just feedback and even that was not enough because it is **only 5 people**." (P55)

"Because it is like **an evaluation**." (P60)

"**The sample is too few**. **The result will be biased,** and it cannot be considered as research." (P41)

"The returned forms of **5 students** cannot give sufficient information for 30 students." (P55)

Scenario 1 *(M=2.47, SD=.793)* and Scenario 9 *(M=2.55, SD=.867)* may be forms of reflective practice and research in teacher education settings, respectively (Borg, 2013). The former was stated to lack of methodological concerns (e.g., steps of research), purposefulness, and rigor. For Scenario 9, participants stated the inquiry did not contribute to the body of our knowledge in the field as in the following responses given by the participants:

"Research includes **testing criteria**, a **definite number of participants, predetermined materials, assessing tools, aim, results**. It should be more **concrete** and proven with tests **(such as pre-test and post-test)**." (P87 - Scenario 1)

"**Writing notes** and **finding different approaches** don't look like research." (P86 - Scenario 1)

"I'm not sure but I think to call it research, it should be **more detailed**, **more data** should be collected with a **purpose**." (P91 - Scenario 1)

"The teacher didn't try it **consciously**." (P93 - Scenario 1)

"As far as I understand, the teacher made up/created new activities based on her/his **reflections**. That's why it is probably not research." (P94 - Scenario 1)

"No new interpretation. Just **a collection of ideas** from others." (P42 - Scenario 9)

Overall, the first- and second-year pre-service teachers addressed the inquiries in Scenarios 4, 2 and 6 as examples of research. The methodological concerns such as the completeness of research phases (58%), generalizability of results (62%) (Scenario

4), wide sample size (71% in Scenario 4), the use of questionnaires as data collection tools (88% in Scenario 4), the use of pre-test and post-test as a methodological decision (82% in Scenario 6), the dissemination of knowledge (33% in Scenario 2), overall rigor and purposefulness (56% in Scenario 6), and the engagement with research (42% in Scenario 6) were collectively cited as factors that account for the relatively high ratings. On the other hand, Scenarios 8, 1 and 9 were the scenarios that had the lowest mean scores (*M=2.184*, *M=2.47*, and *M=2.55*, respectively). The justifications for relatively low ratings included methodological issues such as small sample size (80% in Scenario 8), the incompleteness of research phases (61% in Scenario 1), the lack of rigor and purpose (52% in Scenario 1), and the lack of contribution to the body of knowledge (75% in Scenario 9).

4.1.2 Cognitions Held by 3rd Year Students (*Professional Coursework*)

To explore what cognitions pre-service EFL teachers who took the formal research course, entitled *FLE 311 Advanced Writing and Research Skills*, hold about research, the same questionnaire was given to the students in the third year of their FLE program. The findings are displayed in Table 4.2 below.

Table 4.2 Descriptive statistics for professional coursework group (N=40 in all cases).

Participants		*Mean*	*SD*
3rd year pre-service teachers	Scenario 1	2.23	.947
	Scenario 2	3.63	.628
	Scenario 3	2.60	1.057
	Scenario 4	3.72	.554
	Scenario 5	2.90	.810
	Scenario 6	2.97	.974
	Scenario 7	2.38	.979
	Scenario 8	2.00	.847
	Scenario 9	2.58	.813
	Scenario 10	2.85	.949

The most highly-rated scenarios as research were 4, 2, 6, respectively. Scenario 4 (*M=3.72, SD=.554)* had the highest mean score of ten scenarios. This means that, pre-service EFL teachers in the study who completed the formal research course offered in the program perceived the features of formal and academic research as the kind of inquiry that could be addressed as research. When asked to elaborate further, most of the participants referred to the methodological choices (e.g., employment of questionnaires as a data collection tool, use statistics for data analysis, engagement with research through reading and dissemination of knowledge) to explain why they felt the scenario was research as follows:

"**Collecting data**, **analyzing** them via certain tools and **writing an article** about the work seem to parts of research." (P120)

"There is **data (questionnaires)** and it was analyzed in a **formal form**." (P25)

"If the lecturer had **read and searched** about the field/topic, it would be definitely research." (P137)

"There is **statistical data** that we can make comments and discuss." (P100)

Scenarios 2 (*M=3.63, SD=.628)* and 6 (*M=2.97, SD=.974)*, which may be regarded as TR (Borg, 2013), were among the most highly-rated scenarios as research. For Scenarios 2 and 6, the third-year students cited the characteristics that were related to the methodology and formal phases of research. To be more specific, using pre-tests and post-tests was regarded as "scientific" and "experimental" by the students who studied the research course. Also, the participants stated that research was a purposeful and rigorous activity and acknowledged the dissemination potential. For Scenario 6, some participants (36%) perceived observations as a data collection tool and implied that it requires pre-planning and implementation for an extended period of time. The following answers were given to justify why they felt Scenarios 2 and 6 could be addressed as research:

"There is research, **theory**, **application**, and **presentation.** Also, **data collection**." (P97 - Scenario 2)

"The teacher **documented the response** to the new approach." (P98 - Scenario 2)

"This is **experimental research** by looking at the **before and after**." (P35 - Scenario 6)

"She **tries and compares** according to the results. So, there is **evidence** and it's **scientific**." (P44 - Scenario 6)

"There are question and **improvement**. Basic research and development activity." (P28 - Scenario 6)

"It is about an approach and carries **educational purposes**." (P6 - Scenario 2)

"They **try to understand** which method works. Thus, it is research." (P2 - Scenario 6)

"It includes stages and the process continues **in a planned way.**" (P18 – Scenario 2)

"The teacher **searched for** an approach, **collected data** (learners' written work) and **analyzed** them to **present** the results to the colleagues." (P120 - Scenario 2)

"There are observations in a range of time." (P15 - Scenario 6)

However, pedagogically-oriented inquiry in Scenario 6, which could be regarded as TR, was not addressed as "research" by some participants (12%) since it was not carried out for academic and/or scientific purposes. For example, one respondent stated:

"It is not for further academic purposes, similar to the first scenario." (P97)

The scenarios least rated as research were Scenarios 8, 1 and 7, respectively. Scenario 8 (*M=2.00, SD=.847)* was the least rated item as research out of ten scenarios by the third-year pre-service teachers. Participants stated Scenario 8 was particularly aimed at providing feedback and evaluation of the course rather than having any scientific purpose. They also referred to the lack of methodological issues (e.g., the formal and concrete steps in research and representatives of sample size) as the reasons for the relatively low ratings, as in the following responses:

"It's sort of an **evaluation** of the course." (P15 - Scenario 8)

"It does not contain a **hypothesis**, **literature review** and **results** part." (P5 - Scenario 8)

"This is a **part of a lesson** and it is not conducted to search for a **hypothetical question**." (P35 - Scenario 8)

"Classroom **feedback** activity. There is **no scientific method**." (P33 - Scenario 8)

"Although there is an attempt to conduct research, **5 replies** are not enough data for research and **reliable** results." (P40 - Scenario 8)

Scenarios 1 (*M=2.23, SD=.947)* and 7 (*M=2.38, SD=.979)* were among the scenarios rated least as research. Scenario 1 was geared towards self-reflection and/or observation, and Scenario 7 was about surveying teachers (Borg, 2013). For both cases, most of the respondents explained the practical aims of the inquiry rather than their scientific purposes. The lack of methodological phases in formal research processes (e.g., data collection and objectivity) were cited as the reasons for the relatively low ratings. As for Scenario 1, the lack of rigor and complexity, documentation as well as the systematicity of research were raised by participants to explain why they felt this inquiry was not research. With regards to Scenario 7, the practically-oriented inquires such as evaluation and reflection were explicitly not counted as examples of research by the respondents. The responses given to open-ended questions to justify why they felt Scenarios 1 and 7 were not examples of research were illustrated below:

"In this example, there are not some **important steps** in research. It is based on intuitions." (P35 - Scenario 1)

"Because she didn't do research about it. She just **observed**. She did not keep **records**." (P24 - Scenario 1)

"It is more like a **self-reflection**." (P27 - Scenario 1)

"This is more like a **casual observation**." (P45 - Scenario 1)

"It's too **basic** to be research, research is more **complicated**." (P34 - Scenario 1)

"It is **not systematic**, it doesn't involve too much thinking and **planning**." (P44 - Scenario 1)

"It is only an **evaluation** report. There is no aim to draw **conclusions** or produce a **hypothesis**." (P97- Scenario 7)

"There is no clear **data collection**. It is **subjective**." (P14- Scenario 7)

"**Reflection** is not research." (P27 - Scenario 7)

"This sounds to me that the person just did this **for himself** and for **getting information**." (P120 - Scenario 7)

"There is data but the **steps for research** do not appear." (P9 - Scenario 7)
"It is **not for academic purposes**." (P25 - Scenario 7)

All in all, third-year pre-service teachers in the study stated Scenarios 4, 2 and 6 could be regarded as research. Methodological issues such as following the formal phases of research (74%), the use of questionnaires (91%) (Scenario 4) and observations (36% in Scenario 6) as data collection instruments, the employment of pre-test and post-test methodology (81% in Scenario 6) and statistics (56% in Scenario 4), purposefulness and systematicity (38% in Scenarios 2 and 40% in 6), the dissemination of knowledge (%86 in Scenario 4), and the engagement with research (23% in Scenario 4) were cited to justify the reason why they thought these scenarios were examples of research. On the contrary, Scenarios 8, 1 and 7 had relatively low ratings out of ten cases. The low ratings were justified by the participants since these scenarios lack the complete phases of research, academic purpose (76% in Scenarios 7 and 72% in 8), representative sample size (44% in Scenario 8), rigor and systematicity (59% in Scenario 1), and objectivity (25% in Scenario 7).

4.1.3 Cognitions Held by 4th Year Students (*Classroom Practice Including Practice Teaching*)

In order to examine what cognitions pre-service EFL teachers who both studied *FLE 311 Advanced Writing and Research Skills* and had (however limited) teaching experience through practicum courses hold about research, the same questionnaire was administered to the senior students (N=45) at METU FLE. The findings are shown in Table 4.3 below.

Table 4.3 Descriptive statistics for classroom practice group (N=45 in all cases).

Participants		*Mean*	*SD*
4th year pre-service teachers	Scenario 1	2.33	.769
	Scenario 2	3.51	.589
	Scenario 3	2.56	.990
	Scenario 4	3.51	.695
	Scenario 5	2.73	.889
	Scenario 6	3.07	.863
	Scenario 7	2.44	.918
	Scenario 8	2.04	.767
	Scenario 9	2.47	.944
	Scenario 10	3.13	.726

The most highly-rated scenarios as research were 4, 2, 10, and 6, respectively. Scenarios 4 (*M=3.51, SD=.695)* and 2 (*M=3.51, SD=.589)* had the highest (and equal) mean scores of ten scenarios. This revealed that pre-service EFL teachers who studied the research course offered at METU FLE and had practicum experience valued two scenarios that could be representatives of teacher research (Scenario 2) and conventional academic research (Scenario 4) as examples of research. When the respondents were asked to provide a rationale for their choices in Scenarios 2 and 4, they referred to the methodological concerns such as the completeness of research phases, the use of statistics and wide sample (Scenario 4), dissemination of knowledge and contribution to the field (Scenario 4), rigor and systematicity. The respondents provided the following justifications for their responses through open-ended questions as the following:

"The lecturer uses many **stages of research. Collecting** and **analyzing** the data and **writing an article** about it make this activity research." (P134 - Scenario 4)

"There is an **academic conclusion** and it is reliable **(500 people)**." (P107 - Scenario 4)

"**Data collection**, **analyzing data, writing a conclusion** according to the data. All these processes make it research." (P48 - Scenario 4)

“She uses a **questionnaire** and **analyzed** the answers. She summarizes main points in an **article** and **publishes** it.” (P124 - Scenario 4)

“If it is **published**, I can say that it is a research study.” (P129 - Scenario 4)

“The lecturer **collected** data about a field. H/she **analyzed the data** and brought about **new information** to that field.” (P125 - Scenario 4)

“The teacher defined the new approach and **collected** data, **analyzed** and reached a **conclusion**. Therefore, it is suitable for the phases of doing research.” (P111 - Scenario 2)

“I think it is definitely research because she carried out some **investigations**, did **readings** and **tried** it and **shared** the outcomes.” (P109 - Scenario 2)

“Not only s/he **searches for a method**, but also s/he **applies** it and **shares** the results with his colleagues. Those are what research requires.” (P134 - Scenario 2)

Scenarios 10 (*M=3.13, SD=.726)* and 6 (*M=3.07, SD=.863)* were among the most highly-rated scenarios by the fourth-year pre-service teachers. For Scenario 10, which might be seen as an evaluation study of a novel instructional material (Borg, 2013), the participants emphasized the dissemination of knowledge and evaluative aim as the underlying reasons for their choice. For Scenario 6, an example of TR according to Borg (2013), the participants made a reference to the methodological matters such as using pre-test and post-test, rigor and systematicity. The justifications given to the open-ended questionnaire are presented below:

“Again, **data collection**, **analysis** and **reaching conclusions** exist. It doesn't have to be shared in **professional journals**.” (P47 - Scenario 10)

“As there is a **presentation** of the results.” (P131 - Scenario 10)

“She **collected data** and **reached some results** and **presented** them in a platform.” (P110 - Scenario 10)

“The head of the department just wanted to **learn about the new** book as part of a **discussion**.” (P111 - Scenario 10)

“Because the teacher **tried different methods** and **tried to find the best one.** She **conducted some tests** on different groups like an **experiment**.” (P48 - Scenario 6)

“It is because she had a question to search about, which is **finding the best method**. Also, there is an **analysis** and **comparison** of test data to **solve the problem** related to this question.” (P123 - Scenario 6)

"Same context, different applications and some **measurable outputs** in hand." (P136 - Scenario 6)

"It is **systematic** and as **reliable** as possible." (P107 - Scenario 6)

On the other hand, the least-rated scenarios as research were 8, 1 and, 7, respectively. Scenario 8 (*M=2.04, SD=.767)* was described to be a practical inquiry encapsulating feedback and evaluation. Participants cited the characteristics such as not contributing to teachers' knowledge base and lack methodological issues such as the lack of sufficient sample size, a research question, reliability and systematicity as the reasons for relatively low ratings. On the contrary to the salient views (i.e. evaluation and feedback) in Scenario 8, only one respondent implicitly stated that it was done for professional development purposes and that's why it could be regarded as "probably research". In order to justify the relatively low ratings, the following answers by participants were shown below:

"This is not research as **nothing new** is being learned except for one particular class' preference." (P118)

"It's probably research because it is used to **improve teaching style** according to the data." (P102)

"It sounds like a mini-research. However, it is **not very systematic**." (P103)

"**The number** is **not enough** to do a research study. Also, this is **not a scientific analysis** of the results." (P125)

"It is only a **feedback** and **evaluation** process with **no question** to find answers about." (P123)

Scenarios 1 (*M=2.33, SD=.769)* and 7 (*M=2.44, SD=.918)* were other scenarios that were rated the least out of ten scenarios. For Scenario 1, which can be regarded as an example of reflective teaching (Borg, 2013), participants stated the scenario lacked the complete stages of methodology, appropriate data collection instruments, systematicity, dissemination of knowledge potential, and "academic intention" by their terms. In a similar vein, Scenario 7 that is about surveying teachers was not addressed as research since respondent expressed this scenario lacked data analysis, reliability, contribution to the body of knowledge and ethical considerations. The

responses by the participants to explain the relatively low ratings were presented below:

> To say it research, first, there should be a **problem**. Then, this problem should be handled by writing **hypothesis**. Then, **literature review** should be done. Later, basing on these hypotheses, the researcher **collects some data** and does some **analysis**. Then, s/he **interprets** the data and writes her **conclusion** according to her data. In this case, there is no data. The teacher just writes her **observations**. It is not enough to say research. (P48 - Scenario 1)

"**Keeping notes in a diary** does not seem as a data collection method." (P128 - Scenario 1)

"There are data observation and results. But there is **no clear academic intention**." (P112 - Scenario 1)

"**Observation** and **deduction** do not simply count as research." (P47 - Scenario 1)

"She does **not share her findings** and she does it for herself." (P129 - Scenario 1)

"No production like an article was made." (P117 - Scenario 1)

"It does **not include the phases of doing research** such as reaching data and analyzing etc." (P111 - Scenario 7)

"This seems like a survey to find out the opinions of teachers. There is **no statistical data** in this case or any kind of **new information** to the field." (P125 - Scenario 7)

"This does not sound like research. It does **not contribute** that much to **academia**, I think." (P129 - Scenario 7)

"As the **identities aren't hidden**, I don't think it is complete research." (P131 - Scenario 7)

"The collected data is **not reliable** as we don't know whether questions are enough to get the required information." (P125 - Scenario 7)

"It is only to get information about a situation which is **not** performed by **data analysis** or **synthesis.**" (P123 - Scenario 7)

Overall, fourth-year pre-service teachers labeled the inquires described in Scenarios 4, 2, 10 and 6 as "research". When participants were asked to justify the relatively high ratings, they cited methodological issues such as formal and concrete research phases (81% in Scenarios 4 and 62% in 2), employment of wide samples and statistics (75% in Scenario 4), use of pre-test and post-test methodology (84% in Scenario 6); dissemination of knowledge (85% in Scenarios 4, 74% in 2, and 65% in 10);

contribution to the body of scientific knowledge (51% in Scenario 4); rigor and systematicity (41% in Scenarios 4 and 36% in 6); having an evaluative aim (56% in Scenario 10). On the other hand, Scenarios 8, 1 and 7 had the relatively low mean scores out of ten scenarios. Respondents justified their ratings by referring to the lack of complete phases of research and appropriate data collection instruments (63% in Scenarios 1 and 67% in 7), wide sample size (43% in Scenario 1), reliability and systematicity (31% in Scenario 7 and 43% in 8), ethical considerations (18% in Scenario 7), contribution to knowledgebase (46% in Scenarios 8 and 22% in 7), dissemination of knowledge (38% in Scenario 1) and lack of academic purpose (52% in Scenario 1).

Table 4.4 Mean scores based on groups.

	Participants		
	1st & 2nd-year pre-service teachers	3rd-year pre-service teachers	4th-year pre-service teachers
Item No.	*M*	*M*	*M*
Scenario 1	2.47	2.23	2.33
Scenario 2	3.35	3.63	3.51
Scenario 3	2.76	2.60	2.56
Scenario 4	3.49	3.72	3.51
Scenario 5	2.84	2.90	2.73
Scenario 6	3.10	2.97	3.07
Scenario 7	2.80	2.38	2.44
Scenario 8	2.18	2.00	2.04
Scenario 9	2.55	2.58	2.47
Scenario 10	2.98	2.85	3.13

As illustrated in Table 4.4, pre-service teachers in three different years of study at METU FLE had various mean scores for each scenario. In terms of the most highly-rated scenarios across three groups, only the fourth-year pre-service teachers showed

a difference in their preference. The most highly-rated scenarios were 2, 4, 10 and 6 by the fourth-year pre-service teachers whereas the first, second- and third-year pre-service teachers rated Scenarios 4, 2, and 6 the most. Even though pre-service teachers had different mean scores in terms of the most highly-rated scenarios, there were overlaps among the three groups in Scenarios 4, 2, and 6. In a similar vein, the lowest mean scores across three groups also showed some degrees of parallelism and variation. The first- and second-year pre-service teachers rated Scenarios 8, 1 and 9 the least whereas the third- and fourth-year pre-service teachers rated Scenarios 8, 1 and 7 the least. Therefore, there were overlaps among the three groups in Scenarios 8 and 1 in terms of the least-rated scenarios, and Scenario 7 between the third- and fourth year pre-service teachers. On the other hand, the scenario that showed variation across groups was Scenario 9.

To investigate further whether significant differences existed among groups, the average of the mean scores of ten scenarios were calculated. The analysis based on the average of these mean scores for three groups revealed that the first- and second-year pre-service teachers *(N=49, M=2.85, SD=.356)* had the highest mean score and followed by the third-year pre-service teachers *(N=40, M=2.78, SD=.423)* and fourth-year pre-service teachers *(N=45, M=2.78, SD=.455).* In order to examine whether pre-service teachers at three different levels differ significantly in their responses to ten questions, a one-way analysis of variance (ANOVA) was run based on the average of mean scores of ten scenarios. Also, the Levene's test showed that variances, one of the assumptions of ANOVA, are equal *(p>.05)* (Field, 2009). The results revealed that there was no significant difference among the three pre-service teacher groups in their responses *(F (2,131) =.434, p=.649).*

In contrast to the statistical findings, the overall comparison of salient themes derived from open-ended items through thematic analysis yielded some divergences besides convergences across three groups of pre-service teachers. For Scenario 4, pre-service teachers did not show variation in their answers as they cited the characteristics (e.g., following concrete steps, wide sample size, statistics, questionnaires, dissemination of

knowledge) that were associated mostly with research as an academic study. For Scenario 6, three pre-service groups showed similarity in their answers about methodological design (i.e. the use of pre- and post-test methodology, purposefulness, and rigor). However, the third-year pre-service teachers (36%) explicitly referred to observation as a data collection tool. For Scenario 2, the first-, second- (33%) and fourth-year (74%) pre-service teachers cited the dissemination of knowledge to explain why they thought the scenario was an example of research collectively. On the other hand, the fourth-year pre-service teachers (62%) referred to formal and concrete research phases in the scenario while the third-year pre-service teachers (38%) addressed the purposefulness and systematicity to account for their choice. The overall overlap among Scenarios 4, 2 and 6 as the most-highly rated scenarios might show pre-service teachers' conceptions of research that were aligned with the scientific or traditional form of research. Scenarios 6 and 2, which might be considered as examples of TR (Borg, 2013), was conceptualized as research by referring to methodological elements of scientific research. For Scenario 10, only the fourth-year participants referred to this scenario as research by explaining the evaluative aim (56%) and dissemination of knowledge (65%) through a presentation. This means senior participants who had teaching experience (however limited) could perceive the practical value of doing research.

With regards to the overall comparative analysis of the salient themes in the least-rated scenarios, there were also some convergent and divergent themes. For Scenario 8, which could be classified as evaluative classroom inquiry based on students' feedback, all groups of pre-service teachers emphasized the lack of wide sample size. On the other hand, two groups showed variations in their answers to explain why Scenario 8 was not an example of research. Senior pre-service teachers referred to the lack of contribution to teachers' knowledge base (46%), and reliability and systematicity (43%). The third-year pre-service teachers cited the lack of complete phases (75%) and academic purpose (71%). In this sense, pre-service teachers conceptualized research as an academic inquiry that was performed for scholarly publications and with quantitative research designs rather than practical inquiry. In a similar vein, all groups

of pre-service teachers referred to methodological issues such as following formal research phases, lack of rigor and systematicity in Scenario 1. This might show reflective practice and changing instruction were evaluated against the criteria which were set for academic research. Different from two groups, senior pre-service teachers (38%) cited the lack of dissemination of knowledge for explaining the relatively low ratings. This meant, the fourth-year participants acknowledged the findings of reflective practice needed to be disseminated to be counted as TR (Borg, 2013). For Scenario 7, which was about surving teachers and reporting their views, the third- and fourth-year participants referred to the lack of complete phases, reliability, systematicity, and objectivity collectively to justify why they believed this scenario was not an example of research. Different from the senior participants, the third-year pre-service teachers (78%) also addressed evaluative and reflective aim rather than academic aim. The fourth-year students referred to the ethical considerations (18%) and contribution to teachers' knowledge base (22%). This might reveal the third- and fourth year pre-service teachers evaluated this scenario by employing the criteria set for academic research instead of TR because the criteria for judging TR underscores that teachers themselves need to conduct research instead of administration as it was the case in Scenario 7 (Borg, 2013). For Scenario 9, the first- and second- year pre-service teachers (75%) also referred to the lack of contribution to the body of scientific knowledge. This might represent pre-service teachers' conceptions of research that had connotations with the more conventional and scientific inquiry of academic research.

4.2 Research Question 2: What Are the Perceived Needs and Reasons for, and Challenges and Benefits of Being Engaged with and in Research as a Professional Development Tool for Pre-service EFL Teachers?

Two separate semi-structured interviews were conducted with the third- and fourth-year pre-service teachers to shed further light onto their views about research engagement. In this section, pre-service teachers' views on research engagement (or

lack thereof) were analyzed and presented under the salient themes according to the data derived from these semi-structured interviews through thematic analysis.

4.2.1 Overall Experience in the Research Course

When the third- and fourth-year pre-service teachers were asked about their overall experience in the research course (*FLE 311 Advanced Writing and Research Skills)*, they mentioned it was "challenging and stressful" for them since they did not know how to conduct research prior to this course. They also noted that it was "challenging" for them to keep up with the heavy workload and demands of the research course beside other compulsory courses that the third-year pre-service teachers at METU FLE are supposed to take. However, both groups of pre-service teachers stated it was "academically rewarding to learn" how to conduct research and get exposed to what it entailed such as the following the phases in a research project. This course was described as "rewarding" since it served as a means of obtaining physical and conceptual access to academia. First, they recognized the dissemination of knowledge potential through the output in the form of a research article they produced at the end of the course. This recognition was addressed rewarding because they realized they could disseminate their findings at conferences, which provided them with physical access to research communities. Second, constructing notions of academia and conceptions of research were stated to be useful by pre-service teachers since they didn't know "the academic life" and "what academicians do" before this course. Therefore, this experience aided them to construct images of academic life and academics. Finally, gaining improved academic writing skills were also stated to be as one of the rewarding experiences by pre-service teachers. Also, the practical experience gained in this research encouraged pre-service teachers to engage in further postgraduate studies. The rewarding experience described by the pre-service teachers as the following:

> We have taken two writing courses before, but I don't think I learned that much about writing. We also learned about academic life. Actually, we didn't know what academicians do, but we learned that. We submitted to our research to a

> conference so there we were among them. That was a different experience for us. (PST-4-3)[1]
>
> In other universities, this course is offered as a master's course, but we did take this course and did actual research. In other universities, at the undergraduate level, students just do a literature review, but we have conducted actual research. That's why, it's important for us to continue with master's or Ph.D. degrees. (PST-3-2)

They also stated the support they received from experts (either teacher educators or research assistants) throughout the course was important in terms of shaping their experience and conceptions of research. To be more specific, the guidance and feedback on their progress were reported to be one of the factors that were influential in affecting the experience in the research course as the following:

> I actually liked the course. In the beginning, it was stressful because I didn't know how to do research, collect data. And, the most challenging part was deciding on the topic. After deciding on the topic, everything eventually ends up being very good. Our instructor taught us how to use SPSS. We also had extra appointments to elaborate more on the topic and our instructor's assistant was also very helpful. Actually, it was a very good experience for me overall, I learned a lot. (PST-3-4)

When teacher educators were asked about pre-service teachers' experience in the research course, they also talked about the challenges and rewarding aspects students experienced especially at the beginning and end of the course, which is reported in detail in Section 4.3.1.

4.2.2 Perceived Needs for Research Engagement

Uncovering the needs for research engagement by pre-service teachers, the salient themes were contribution to teachers' knowledge base, research literacy, interest in

[1] PST stands for Pre-service Teacher. The second number signals the year of study such as the fourth-year and third-year. The third number represents the participant number within each group assigned by the researcher. So, PST-4-3 is the third pre-service teacher from the fourth-year group.

research topics, assistance through the research process, higher-order thinking skills, technical know-how related to methodology and academic writing skills.

With regards to *reading* research, two groups of pre-service teachers emphasized the importance of the contribution of research course and experience to the development of teachers' knowledge base. They remarked the familiarity with the concepts and terminology in a research material facilitated their comprehension, which led to the higher levels of conceptual and linguistic accessibility (i.e. understanding the language of scientific texts and academic discourse) to the research material. Also, being able to locate and access research materials were stated as one of the needs. Also, only the fourth-year pre-service teachers draw attention to the need to engage with research topics they found interesting. In other words, they stated to prefer reading research materials that covered research topics in which they had interest.

In a similar vein, research literacy was found to be indispensable by participants as it provided pre-service teachers with two essentials: (1) the knowledge to evaluate the relatedness of research material to their immediate concerns, and (2) an awareness about the structure of a research material. They addressed the latter as a need since as they became familiar with parts of a research article (e.g., abstract), they started to develop an understanding to pinpoint the information they would like to gain by reading a specific part. In a similar fashion, the third- and fourth-year pre-service teachers underscored that reading sub-skills such as skimming and scanning were required to read research. A pre-service teacher described in what way research literacy facilitated her engagement with research as follows:

> Also, before this course, whenever I searched for new research on the internet, I was looking at the conclusions part...things that we didn't know before then. But, now, I am just looking at the abstract and I say it works for me or not. It's about knowing where to find what. So, there are some certain parts and you need to know what you expect from that part. (PST-4-4)

In terms of *doing* research, both the third- and fourth-year pre-service teachers indicated the need to obtain academic writing skills. Adopting the conventions used in

academic writing such as the use of passive voice and features of academic discourse when generating the output at the end of the research process were given as the concrete examples by pre-service teachers. Moreover, technical know-how and skills such as developing data collection instruments and having a grasp of data analysis procedures were cited as the needs to conduct research. In addition, pre-service teachers stated they needed the assistance and guidance of experts in different phases of the research process, ranging from planning to finding resources, and to performing data analysis. The instances that they sought the assistance of teacher educators and research assistants were listed as the following: (i) progressing according to the pre-determined timelines, (ii) not being able to find studies in the literature, (iii) reiterative writing process based on constant and detailed feedback, and multiple and revised drafts. In line with this, all pre-service teachers concluded conducting research was a well-organized, planned and rigorous inquiry. Therefore, they had the mentality that the researcher needed to be planned and organized for conducting each step of research in advance. A pre-service teacher expressed his concern for the need to be more planned especially in the data collection phase below:

> We just go to the prep. school and ask teachers to help us, but it should not work like this. You should talk to them beforehand and do some planning even before starting research because it's really hard to collect data. (PST-4-6)

Moreover, the perceived need for critical thinking skills and research literacy in research were twofold. First, pre-service teachers needed critical thinking skills to evaluate the reliability and credibility of the former research materials to inform their output (i.e. research papers and manuscripts for scholarly publications). Second, critical thinking skill was needed to evaluate and being critical of their own output. In line with this idea, the third-year pre-service teachers revealed that the notion of academic integrity was a need for a researcher to conduct research. More specifically, they shared the idea that admitting limitations of their studies and not manipulating their data in the favor of findings were musts in terms of academic integrity.

4.2.3 Perceived Reasons for Research Engagement

Indicating their reasons to become research-engaged, pre-service teachers gave prominence to professional development, career development with regards to promotion, evidence-informed practice, postgraduate studies, and dissemination of knowledge.

Both the third- and fourth-year pre-service teachers revealed that the reason behind *reading* research was mainly related to their professional development. Third-year pre-service teachers stated that they engage with research in order to promote their "content and professional knowledge" (PST-3-5) in ELT. In a similar vein, fourth-year pre-service teachers reported to engage with research to keep their professional knowledge up-to-date in the field of ELT. Additionally, the fourth-year pre-service teachers, who also had practicum experience, explained the reason for reading research in terms of informing their praxis. Evidence-informed practice through integrating knowledge from research articles generated for scholarly publications into practice was described by a fourth-year pre-service teacher as the following:

> I mean, we can get help from those articles to form our lessons as teachers. Maybe, as my friend said, we can learn about the new trends and apply them to our lesson by reading the articles. (PST- 4- 3)

With regards to reasons for *doing* research, both groups of pre-service teachers underscored the significance of disseminating knowledge through their research output and contributing to the body of knowledge in the field of ELT. In line with these notions, the fourth-year pre-service teachers paid attention to the physical accessibility pertaining to the knowledge to be communicated. In order to find answers to their inquiries that were not readily accessible to them, they engaged in research and made their output and findings accessible to other professionals. To be more specific, the third-year pre-service teachers referred to the contribution to the body of knowledge through presenting their research output at conferences as the reason behind to conduct research. Also, getting promotion as a means of career development and meeting the

requirements of postgraduate degree studies such as preparing research papers were among the other reasons given by the third-year pre-service teachers for engaging research. Pre-service teachers defined their reasons for doing research as the following:

> Finding answers to the things that we want, but we can't find answers on the Internet or in other resources. So, we find the answers and put it out for other people. (PST- 4-2)
>
> Actually, I want to present my research at a conference, and we will present it. I got the acceptance and that was the motivation behind it. (PST- 3- 5)

4.2.4 Perceived Challenges of Research Engagement

When asked about the challenges of research engagement, pre-service teachers listed a number of difficulties including a lack of interest, a lack of skills in research literacy, difficulty in accessing reliable resources and academic writing. Furthermore, linguistics inaccessibility and difficulty in participant recruitment were among the other salient themes derived from their views on the challenges of research engagement.

In terms of engagement *with* research, the third- and fourth-year pre-service teachers reported research literacy played a vital role in the overall comprehension of research articles employing quantitative designs. Being able to make sense of quantitative results of research output was found to be quite challenging by pre-service teachers since it required a set of specialized skills necessary to make sense of the numerical values by means of statistical knowledge. A third-year pre-service teacher remarked the difficulty in making sense of quantitative results as the following:

> Actually, I didn't understand the numbers on research, the statistical part. I just tried to skip these and read conclusion part for the verbal understanding (PST- 3- 5)

In addition, the lack of familiarity with the discourse employed in academic writing made reading research difficult for pre-service teachers. Both groups of pre-service teachers stated the linguistic and conceptual inaccessibility stemmed from the use of content-specific terminology, vocabulary, and language in scientific texts. In addition, the lack of interest in the research topic of research material to be read was attributed to cause difficulty. In other words, both pre-service teacher groups remarked the topic should appeal to their interest. In a similar vein, the fourth-year pre-service teachers added the length and density of research material posed a problem for engagement with research when they found the topic unappealing. Finally, both groups of pre-service teachers underlined another difficulty lied in finding reliable research material to engage with research. They stated even if they could access research materials in a way, they had a harder time finding the ones that were reliable. The following excerpts showcase these self-reported difficulties described above:

> I was reading an article by a person. He is a famous linguist. While I was reading his writings, I realized I lacked some of the linguistics terms, so I had to check them out. (PST-3-2)
>
> The words and phrases in articles are very challenging for us. The verbs, phrases, and adverbs were very hard to understand. (PST-4-6)

Regarding the challenges of engagement *in* research, both groups of pre-service teachers underscored the difficulties embedded in the recruitment of participants. The difficulties they encountered to reach the required number of participants made pre-service teachers reconsider their methodological choices and often resulted in the reconceptualization of the research design. Also, the fourth-year pre-service teachers stated they had difficulties in engaging research because of the lack of academic writing skills while they were writing up their research papers. Producing in-depth writings compatible with the internationally accepted conventions of scholarly writing conventions and discourse was regarded as one of the difficulties. A fourth-year pre-service teacher described her experience as the following:

> I have issues with writing both in English and Turkish. It's really hard to write a very detailed paragraph. Even for abstract, we just spend three or four weeks to write the abstract of our research. (PST-4-4)

4.2.5 Perceived Benefits of Research Engagement

The salient themes about the benefits of research engagement included the contributions to teachers' knowledge base and researcher identity, advancement in academic writing, reading and critical thinking skills, increasing self-confidence, and provision of professional development opportunities.

In respect to the benefits of *reading* research, both third- and fourth-year pre-service teachers identified engagement with research contributed to their knowledge base, which was also reflected in the interrelated courses in their teacher education program. Both groups of pre-service teachers who conducted studies in the fields of linguistics and ELT reported that the domain-specific knowledge gained through reading research was beneficial in terms of transferring that knowledge into the related topics in other courses. For example, a third-year pre-service teacher who studied morphological and phonological features of code-switching and a fourth-year pre-service teacher who studied feedback exemplified the growth in their awareness of related linguistics and pedological knowledge, respectively. The fourth-year pre-service described her experience about how she transferred the knowledge gained from reading research to other courses in the program as the following:

> We did our research on feedback. Whenever the topic is about feedback in the classroom management course, I can make comments. For example, we have a part like how to give feedback in the classroom management course and I knew a lot about it. (PST-4-2)

As can be seen from the participant's comment, reading research was perceived to be beneficial by pre-service teachers since it contributed to their pedagogical content knowledge, which they could transfer to other courses in the program.

In addition, both groups of pre-service teachers articulated that they benefited from engagement *with* research since it provided them with professional development opportunities. More specifically, it enabled them to keep up-to-date by reading about "hot topics" (PST-3-4) and "current things in the field" (PST-4-1). Furthermore, reading sub-skills such as skimming and scanning were reported to be developed by the third-year pre-service teachers as read research articles while the fourth-year pre-service teachers cited the improvement in their critical thinking as they engage with research. Taking a critical stance when evaluating the reliability of a research material was also emphasized. A fourth-year pre-service teacher described the benefit of research engagement in terms of criticality as the following:

> I mean, I can say that it was beneficial in terms of what we can trust and rely on when we see an article. Since we are in the internet era, we can see lots of fake articles on the internet. You can identify them and differentiate between them. It's really helpful. (PST-4- 4)

With regards to the benefits of *doing* research, the third-year pre-service teachers put particular emphasis on the increase in their self-confidence. They described being able to (i) conduct research, overcome the challenges encountered while conducting research and (ii) produce an output at the end of this process led to a sense of achievement, which boosted their confidence in their research skills and abilities. Also, they cited the contribution of doing research to their researcher identity as one of the benefits. This contribution was acted as an encouragement for engagement in further postgraduate studies. A third-year pre-service teacher elaborated on how he benefited from engagement in research as the following:

> We have lots of friends that are sending their research to undergraduate conferences. So, doing research showed me that we can do something for our academic purposes for the future. (PST-3-5)

In a similar vein, the fourth-year pre-service teachers highlighted the advancement in their academic writing skills as they engaged in research. As one of the benefits, they referred to learning how to produce an output which had credibility through the

employment of citation and paraphrasing. A fourth-year pre-service teacher expressed the improvement in their academic writing skills and made the following remarks:

> I believe that we also have a chance to increase the reliability of our writings because we learn how to give citations, how to give quotations, and how to paraphrase a sentence. (PST-4-6)

4.2.5.1 Perceived Congruency with the FLE Program's Goals

In order to explore to what extent pre-service teachers' conceptions of research engagement are congruent with the FLE program's goals, pre-service teachers were asked the perceived learning outcomes of the dedicated research course to compare them to that of the learning outcomes stated in formal documents (i.e. course descriptions and syllabi). Various parallelisms were noted between the benefits of research engagement and perceived learning outcomes of research course stated in 4.2.5. In this section, the convergences and divergences between perceived learning outcomes by pre-service teachers and formal learning outcomes are reported in-depth and they are summarized in Table 4.5.

Table 4.5 (In)Congruency between perceived and formal learning outcomes by pre-service teachers.

Convergences	*Divergences*
• Constructing notions of research • Research literacy and reading skills • Academic writing skills • Methodological knowledge and awareness • Academic integrity and honesty • Higher-order thinking skills	• Encouragement for postgraduate studies • Increase in self-confidence • Contribution to researcher identity • Building on the knowledge base • Reading sub-skills • Potential for the dissemination of knowledge

Both the third- and fourth-year pre-service teachers revealed that research was a systematic inquiry that had some certain steps to follow starting with the selection of a topic and coming to an end with production of research output. They also perceived to obtain relevant information about each phase through their practical experience with research. This showed parallelism with the course description provided by the HEC (YÖK, 2018a) and METU (2013). In the documents, it was explicitly stated students needed to learn the research process including choosing a problem and topic to study, formulating research questions, collecting and analyzing data, and presenting results. Reviewing the syllabi revealed that constructing notions of research was achieved through organizing the sections of research paper in the form of assignment submissions. For example, students needed to submit individual papers showcasing the selection of topic, literature review, research proposal, and the final version of their research papers according to the timeline in the syllabi, respectively. In line with constructing notions of research, both third- and fourth-year pre-service teachers reported an increase in their knowledge and awareness pertaining to the methodology of research. They explicitly underscored they gained the skills for data analysis and preparing data collection instruments in research designs such as qualitative, quantitative and mixed methods. More specifically, gaining command of SPSS and content analysis were given as examples by pre-service teachers in terms of developing expertise in data analysis. To exemplify, a fourth-year pre-service teacher described her methodological awareness with a meta understanding as the following:

> My research topic was more suitable for longitudinal research, but I couldn't do it. So, I was not really happy with how my research turned out. I would like to conduct my research once more with a larger group and in a longer time. I think it would be better. (PST-4-1)

Increased expertise in data collection and analysis was congruent with the learning outcomes described in both course descriptions provided by METU (2013) and HEC (YÖK, 2018a). Examining the syllabi of research course, it was noticed that this outcome was achieved through dedicated input sessions on data collection and analysis as well as the hands-on practice with software programs such as SPSS, MaxQDA, and

NVivo. Another congruency was noticed with regards to improved academic writing skills. Both groups of pre-service teachers explained they learned how to write up a research paper following the conventions of academic discourse such as citing and paraphrasing. In the course description offered by METU (2013), it was explicitly stated that "summarizing, paraphrasing, quoting, citing and referencing skills" would be given prominence with regards to "know-how of writing a good research paper". In a similar vein, course description provided by HEC (YÖK, 2018a) underscored it was important for pre-service teachers to prepare a research report compatible with research principles and ethics. Again, this aim was accomplished by means of allocating input sessions on how to write qualitative, quantitative and mixed method research reports, and academic writing skills. In addition, there were assignments stated in the syllabi that provided students with hand-on experience to practice academic writing skills such as modifying their working bibliographies and research paper drafts in line with APA or MLA referencing style prior to final submission. In line with gaining research ethics stated in the course description provided by the HEC (YÖK, 2018a), the third- and fourth-year pre-service teachers conceived they gained academic integrity and honesty to conduct research. This perceived learning outcome was accomplished through the input sessions on quality criteria and research ethics stated in the syllabi. As one of the convergences between pre-services' self-reported and formal learning outcomes, improvements in research literacy and reading skills by being able to "find and review credible sources" as stated in the course descriptions provided by METU (2013) and HEC (YÖK, 2018a) were noticed. A third- and fourth-year pre-service teachers expressed the way these skills were obtained as the following:

> I think mine [biggest achievement] was investigating the different sources from different regions of the world for the literature review. So, it was about reading and synthesizing. I learned how to skim and find information about my topic. Because there are lots of articles, we tried to choose one or two of them. (PST-3-6)

> Also, the course was, as our friends said, not only for preparing research or conducting research. It's not just about that part, but it is also about learning how to read an article and write in an academic form. They are all the additions

> of this course and they are more useful than what the main goal of this course was. (PST-4-3)

The last convergence between self-reported and formal learning outcomes was noted in the development of higher-order thinking skills such as interpreting, synthesizing, and critical thinking. As illustrated in the course descriptions offered by HEC (YÖK, 2018a) and METU (2013), respectively, being able to state the problem of the study, interpret, and synthesize the results of their research papers were listed as the learning outcomes of research course. Similarly, both third- and fourth-year pre-service teachers stated that the research course developed their critical thinking, synthesizing, and interpretation skills as they engaged with and in research. Both groups of pre-service teachers highlighted they developed critical lenses to examine the validity and reliability of research studies, which was also in line with the aims stated course descriptions. In the course description provided by METU (2013), "reviewing credible sources" and developing research designs having validity and reliability were clearly stated. As an example, a fourth-year pre-service teacher gave an account of how she perceived the outcomes of research course as follows:

> Before we take this course, I had no idea about how to read a research article. But after this course, I believe I and we learned a lot about how to analyze and synthesize, critically read an article and the steps of research especially. (PST-4-2)

On the other hand, the divergences between self-reported learning outcomes by pre-service teachers and formal learning outcomes arose in encouragement for postgraduate studies and an increase in self-confidence. These learning outcomes were conceived by pre-service teachers but not stated implicitly or explicitly in course descriptions and syllabi by METU and HEC. As shown in the benefits of doing research section in 4.2.5, both groups of pre-service teachers gained higher levels of confidence in their skills to complete research process and its entailments such as academic writing skills by overcoming the challenges and accomplishing to produce a research output that had the potential for dissemination of knowledge. This contributed to their researcher identity and encouraged them for postgraduate studies. Also,

engagement with research allowed pre-service teachers to build on their existing knowledge base that could be used in other courses at METU FLE. Moreover, the improvement in pre-service teachers' reading sub-skills such as skimming and scanning were stated as one of the learning outcomes; however, they were not listed as outcomes of research course in formal descriptions. A fourth-year pre-service teacher illustrated how the outcomes of research course boosted her self-confidence in her academic writing skills below:

> I realized that writing isn't something to be scared of because I was always afraid of writing a thesis or a research paper. That's the biggest obstacle between me and getting a Ph.D., probably. So, I think I overcame that by writing this research and course. (PST-4-1)

As can be noted in the participant's statement, the research course acted as a facilitator for the encouragement for postgraduate studies and contributed to their researcher identities.

4.2.6 Perceived Relationship Between Research Engagement and Professional Development

When the third- and fourth-year pre-service teachers were asked their views on the relationship between research engagement and professional development, both groups valued engagement *with* and *in* research as professional necessities even though the self-reported aim and way of conducting research varied.

First, *reading* research was attributed significance by both groups of pre-service teachers since it enabled them to keep their professional knowledge up-to-date. Keeping up-to-date with recent topics and materials in ELT and incorporating that knowledge into their professional activities. Therefore, reading research was perceived as a professional advantage and necessity as part of their development as teachers. Also, reading research and gaining cutting-edge knowledge about the field were conceived as prerequisites to develop professionally. Participants specifically

exemplified how reading research contributed to their professional development in terms of keeping up-to-date as the following:

> Actually, reading research also gives us a chance to learn the current hot topics. For example, it was bilingualism 30 years ago. But now, in Turkey at least, it's about refugees and we learn about it by reading (PST-3-4).
>
> Reading research is going to help us all the time because we are going to learn new findings about our area and we are going to find new materials. (PST-3-6)
>
> You need to know about your area to develop in this area and this happens by reading. (PST-4-6)

In addition to these, the fourth-year pre-service teachers described a different way and aim to engage with research as the following:

> As we become in-service teachers, I certainly believe that we might conduct research on our teaching or students, how they feel about the lesson even and if they learn the topic or not by collecting data and reading about other related articles. Maybe, we can use these articles together to change the next session or lesson according to these collected data and articles that we have read. (PST-4-3)

As could be noted in the words of the pre-service teacher, the aims of reading and doing research were more pragmatically-oriented and geared towards informing their praxis. More specifically, engagement *in* research was associated with the aim of exploring the students' feedback and delivery of the instruction. Similarly, the activities described by both groups of pre-service teachers were pragmatically-oriented to find and solve teaching problems or geared towards searching for a change. The way they described to engage in research covered the steps such as realizing a problem, analyzing and finding a solution or conclusion. Also, when pre-service teachers were asked whether they would engage in research as a professional development tool in their teaching careers, conducting research in the form of need analysis and doing research for exploring and solving classroom problems were regarded as professional needs for development by the fourth-year pre-service teachers. They remarked the following:

> When I come across a problem in my class, I have to analyze it. If I saw it again, I would have to apply something different and analyze it again. I have to find a solution, or I have to find a conclusion. (PST-3-3)
>
> I think it's just a need in terms of what we expect from our students or what we want to do with them or what our goals are. (PST-4-4)
>
> By doing research, I think we learn how to analyze different ideas, different content knowledge about our topic and try to find a way to follow in our profession and in our practice. (PST-3-5)

The emphasis was mostly on the practical dimension of teaching whereas conducting academic research was perceived by some pre-service teachers as irrelevant to their future immediate teaching needs. Also, a third-year pre-service teacher stated that doing academic research was not among the job description of an English language teacher. However, some pre-service teachers who were eager to do postgraduate studies highlighted that they would engage in academic research in order to complete the requirements of postgraduate studies.

When the fourth-year pre-service teachers were asked in what ways they benefited from the research course in their current practice at practicum, they reported that they did research to find materials, activities or ideas that would help them for designing their lessons plans and teachings at practicum. They pointed out the challenges that hinder their research engagement at practicum such as the limited amount of time allocated to their teachings and feedback on their teachings. Again, motivated with the idea of changing their instruction with the feedback and reflection, pre-service teachers stated they did not have enough time to engage in reflective practice. Also, the amount of feedback given by their students at practicum did not found satisfactory to allow pre-service teachers to engage in reflection about their practice. A pre-service teacher described the challenges they faced in their research engagement at practicum as the following:

> We don't have much time to observe the effects of our instruction, reflect and re-create something. (PST-4-1)

As can be inferred from the participant's statements, the pre-service teacher perceived reflective practice as the basis to engage in research; however, the limited time allocated to practice teaching at practicum acted as barriers for this possible engagement.

4.3 Research Question 3: How Do Teacher Educators Conceive Research Engagement in the Professional Development of Pre-service EFL Teachers?

Three separate semi-structured interviews were conducted with the teacher educators (N=3) who offered the research course in the FLE program, which has an overarching aim of promoting pre-service teachers' research engagement as future ELT professionals. In this section, teacher educators' views on pre-service teachers' research engagement were analyzed and presented through a set of salient themes. In addition, convergences and divergences between pre-service teachers' and teacher educators' views on research engagement were analyzed in the section to follow.

4.3.1 Teacher Educators' Views on Pre-service Teachers' Overall Experience in the Research Course

When asked their views on pre-service teachers' overall experience in the research course, teacher educators described this experience as "challenging" and "rewarding" at the same time. At the beginning of the course, teacher educators stated pre-service teachers had difficulties due to unfamiliarity with the concept of research, the lack of practical experience with research and the misconceptions held by pre-service teachers about research. Teacher educators stated the misconceptions were about the nature of research such as unsystematic investigation. These perceived misconceptions were happened to be dispelled as the course progressed and participants in the course engaged with and in research. Also, it was noted that the misconceptions held by some pre-service teachers such as irrelevancy of research to practice led to the lower levels of motivation at the beginning of the course. Moreover, teacher educators also reported that pre-service teachers construct notions of academia (i.e. conceptions of research

about systematicity and rigor) and its entailments (i.e. concrete and formal phases of research) during their research engagement. At the end of the course, teacher educators described the experience in the research course for pre-service teachers as rewarding mainly for four reasons. First, they established conceptions of research and gained insights into the responsibilities of researchers such as rigor and perseverance to complete the research papers. Second, teacher educators stated that this course provided pre-service teachers with hands-on practice with research. This practical experience was perceived as rewarding. To be more specific, teacher educators stated pre-service teachers who would want to study postgraduate degrees could refer back to this practical experience in their statement of purpose. Third, teacher educators emphasized that pre-service teachers became more cognizant on the importance of academic writing skills even if they had taken writing skills courses in previous semesters. In a similar vein with the pre-service teachers' comments, teacher educators also explicitly stated that pre-service teachers developed their academic writing skills due to this dedicated course to research. Last, pre-service teachers were reported to recognize the importance of dissemination of knowledge potential through their output at the end of the course. Teacher educators stated that pre-service teachers found it rewarding to present their research papers they produced in the research course at national undergraduate conferences or have their work published. The teacher educator remarked these:

> They [pre-service teachers] are introduced to the new concepts such as what research is, which are quite unknown to them. So, they are scared at first and it continues throughout the term until they complete the paper, in my experience. When I look at the course evaluations and feedback, I see that there are many students who found the course satisfactory and commented they learned a lot and there were even students who wanted to present their papers at conferences. (TE[2] – 3)

[2] TE stands for Teacher Educator. The second number represents the participant number assigned by the researcher. So, TE- 3 is the third teacher educator.

In the teacher educator's remarks, pre-service teachers' experience was described as challenging and rewarding over the conceptualization of research as an academic inquiry performed for scholarly publications or presentations.

Overall, the comparative analysis of the views among three groups (PST 3-4 and TE) on pre-service teachers' overall experience in the research course yielded convergent themes such as challenging and rewarding nature of the research course. However, unlike pre-service teachers, teacher educators did not mention the heavy workload and the importance of support pre-service teachers received from experts in shaping their experience when they described pre-service teachers' experience.

4.3.2 Teacher Educators' Views on Pre-service Teachers' Needs in Research Engagement

Regarding what pre-service teachers' perceived needs were for research engagement, the salient themes were interest and internal motivation, higher-order thinking skills, research literacy skills, reading sub-skills, technical know-how of methodology and, academic integrity in teacher educators' statements.

For *reading* research, interest and internal motivation were stated as prerequisites. Interest in research topic was reported to increase pre-service teachers' internal motivation to engage with research. In other words, if pre-service teachers found research topic interesting, they were more internally motivated to read more research. Second, research literacy skills encapsulating the need to have content knowledge about the related research material and familiarity with the language of a scientific text were underlined by teacher educators as the needs to read research. To put it differently, conceptual and linguistic accessibility to the reading material were cited as essential skills for meaningful and effective engagement with research. Moreover, it was noted that pre-service teachers needed to have knowledge about how to look for information and find related resources effectively. In other words, teacher educators stated that knowing the ways by which they could access research materials physically

(i.e. library or database research) was an important need for them to read research. Third, extensive reading skills and sub-skills such as skimming and scanning in English were one of the essentials to engage with research, which showed similarity with the needs stated by pre-service teachers. Making sense of a research material and its relevance to a selected research topic and questions through critical lenses were among the reported needs. To exemplify this, a teacher educator commented on the way through which reading skills could aid pre-service teachers for effective engagement with research as the following:

> Reading, reading quickly, looking through a large amount of reading material quickly are of great importance. Skimming through it, getting the main ideas and understanding very roughly without reading it all what a book is about and trying to see how that matches with their research question are basically what they need. (TE-3)

As teacher educators reported, the higher levels of engagement with research were linked to more effective engagement in research. The underlying reason behind this notion was related to the development of higher-order thinking skills through reading, and these skills were stated to be needed for doing research as well.

> Of course, you need critical thinking skills to write. Those are also developed through reading and if you're not doing lots of reading, you cannot do anything basically. (TE -1)

For *doing* research, teacher educators underscored that higher-order thinking skills, particularly interpreting and synthesizing, were necessary. Critical thinking was found to be an indispensable skill required in all phases of research, and it was specifically noted to be important for identifying a workable topic and taking a critical stance in writing a literature review. Also, problem-solving skills were among the needs to conduct research since they were one of the musts to overcome various challenges (which is discussed in detail in 4.3.4) pre-service teachers might encounter during the research process. Referencing and documentation skills employed in academic writing such as the appropriate use of APA or MLA reference conventions were also noted as the needs to engage in research among other technical knowledge and needs.

Similar to the pre-service teachers, technical know-how and skills related to methodology were cited by all teacher educators as prerequisites to conduct research. These included but were not limited to the following: a thorough understanding of different phases of research, having enough knowledge about data collection instruments and data analysis procedures, being cognizant of ethical issues and academic integrity. The following statement by a teacher educator underlined the methodological knowledge pre-service teachers should have:

> …so they need to be able to determine the paradigm [qualitative or quantitative] and they know enough of each to get going and what's left is, you know, if they need a statistical procedure or if they are able to figure it out they need to statistical procedure. So, they need to pick a problem and that's difficult. Once they have a problem, they need to know which data will solve that problem, how to collect those data and how to best analyze it in order to obtain results. I think that's what they need to do research. (TE-2)

Overall, the comparison of pre-service teachers and teacher educators on the perceived needs for research engagement yielded some convergences and divergences. Both parties stated that the needs for research engagement covered interest and internal motivation, higher-order thinking skills, research literacy skills, reading sub-skills, academic writing skills, technical know-how of related to methodology, academic integrity and accumulated content knowledge about the field. However, the divergence emerged as pre-service teachers stated they needed assistance through research process.

4.3.3 Teacher Educators' Views on Pre-service Teachers' Reasons for Research Engagement

When teacher educators were asked the reasons for research engagement of pre-service teacher, the salient themes in their comments were professional development purposes and finding solutions to problems faced in teaching. Similar to the reasons given by both groups of pre-service teachers, teacher educators also referred to professional development purposes for research engagement. Teacher educators underlined the fact

that pre-service teachers needed to keep themselves up-to-date about new developments to serve "properly" (TE-3). Unlike all pre-service teachers, all teacher educators stated the reason behind engagement either *in* or *with* research of pre-service teachers was related to the idea of seeking solutions encountered in teaching practice. A teacher educator stated pre-service teachers needed research engagement not necessarily to solve problems existing in their teaching context but to explore and develop an understanding of these problems. In a similar vein, another teacher educator attributed significance to engagement with research since it enabled practitioners to address their problems by finding out the ways how similar problems were dealt with by other professionals, which resonated with the views of pre-service teachers. A teacher educator stated the importance of research engagement in solution finding skills as the following:

> If you think that all information that is around will be outdated quite soon and the idea is not to keep that information memorized but to know how to develop to get new information. That means new solutions and gaining that skill. (TE-3)

The teacher educator's statement placed emphasis on the role of research engagement in the development of solution-finding skills as part of continuous professional development.

Having analyzed both pre-service teachers and teacher educators' views on perceived reasons for research engagement, the comparative analysis showcased the convergent themes were professional development purposes and evidence-informed practice. On the other hand, divergent themes emerged from the analysis were career development, requirements of postgraduate studies, dissemination of knowledge and exploring classroom problems. The first three themes were noticed in pre-service teachers' remarks whereas the last theme (i.e. exploring classroom problems) was salient in teacher educators' comments. This means teacher educators attributed significance merely to the practical reasons for pre-service teachers to engage with and in research as a professional development tool without a reference to the academic

conceptualization of research. Unlike teacher educators, pre-service teachers perceived both academic (i.e. postgraduate studies and dissemination of knowledge) and practical needs for their research engagement.

4.3.4 Teacher Educators' Views on Pre-service Teachers' Challenges of Research Engagement

When teacher educators were asked the challenges that pre-service teachers encountered in research engagement, they stated the misconceptions about research and the lack of technical skills (e.g., higher-order thinking, research literacy, academic writing, and reading), lack of interest and the inability to find related resources.

With regards to the engagement *with* research, all teacher educators indicated that pre-service teachers had great difficulty in the process due to the lack of necessary specialized skills including higher-order thinking skills such as critical thinking, inferencing, and synthesizing. Reading research through interpretive and critical lenses and synthesizing the knowledge obtained from reading research in a meaningful way were stated to be challenging for pre-service teachers. Not only limited to the reading research, the inadequate higher-order thinking skills were also underscored to create difficulties for pre-service teachers' engagement *in* research. Pre-service teachers were found to have difficulty in taking a critical stance to choose a research topic and develop a coherent and comprehensive review of the literature. For example, a teacher educator shared that what some of her pre-service teachers did in the process was to enlist a number of previous studies without taking a critical stance in their reviews. The lack of inferencing skills and being restricted in their reasoning were emphasized as challenges pre-service teachers faced in data analysis, narrowing down their topics and forming sound arguments. Teacher educators exemplified in what ways pre-service teachers had difficulty in terms of inferencing skills (in data analysis), identifying topics and developing arguments as in the following excerpts:

> It's very easy for them to do the leaps of faith. If A is B, so A causes B. So, they always get more from the data it actually offers. It's very difficult for them to figure out when you have two variables that are interrelated, which one is the cause, and which one is the consequence and why. It takes practice but that's the difficulty they have. (TE-2)
>
> …Because sometimes students have great difficulty in differentiating among a very large topic that they're working on and a more specific research question as well as a proper argument that a research question leads to. I think it's very important for them to develop that appreciation of what a proper argument is. (TE-3)

Moreover, teacher educators also expressed the challenges pre-service teachers had in the discussion part due to the fact that they generally lacked the interpretation skills required for discussion of the results. Interpreting the results of their study and integrating their own voices into the research narrative posed a considerable difficulty for pre-service teachers. A teacher educator explicitly linked this matter to the insufficient self-confidence pre-service teachers had in their content-specific knowledge-base and to their underdeveloped negotiation of identity as a researcher. She remarked these below:

> They are developing their researchers' mentality, so they don't have self-confidence in their own knowledge. So, most of them feel that they have difficulty in interpreting the results. (TE1)

As to engagement *with* research, other challenges were related to the insufficient ability for looking for information and not having the knowledge of the ways by which they can access the related research material. Teacher educators stated that superficial search for information without doing comprehensive library or online database research as well as reading limited research materials without reaching a thorough understanding created great challenges. A teacher educator attributed the reason for these challenges to the way pre-service teachers were accustomed to searching for information and it was mainly on the internet environment. Another teacher educator referred to the lack of interest in reading and reading skills in both Turkish and English as the reasons for challenges pre-service teachers faced in their engagement with research. Not only showing uninterest in content-specific knowledge and the results of

a study, but also the lack of research literacy for interpreting the results and understanding academic discourse were among the other challenges of reading research for pre-service teachers. Teacher educators conveyed the ways how pre-service teachers encountered challenges pertaining to reading research as follows:

> In order to read research, they [pre-service teachers] need to have interest and many of our students don't. So, for a lot of our students, reading original research is difficult because of the language. It is also difficult because they don't really care about the outcomes. (TE-2)

> …They [pre-service teachers] are not really very much used to going to the library in the internet environment. Most often, they jump from topic to topic without going into any depth. So, going into depths, concentrating and looking deeply into a certain subject, going to the library and picking up lots of books or searching through a database, and looking through lots of articles and getting what you want and synthesizing them… I think these are the major challenges. (TE-3)

With respect to the challenges of *doing* research, teacher educators referred to the misconceptions held by pre-service teachers. Constructing notions of systematicity embedded in doing research was perceived to be lacking. The pre-service teachers in the study were reported to have misconceptions such as being unsystematic and demonstrated a lack of rigor and perseverance, which was disclosed as the following by a teacher educator:

> Some of them have no notion of research. What they know is just doing the internet search to investigate something. But they don't have the notion of research is a systematic investigation. So, the idea of systematicity is lacking among these people. So that's why, they have great difficulty. (TE1)

Another challenge of doing research reported by teacher educators is the course participants' lack of experience and skills in academic writing. To exemplify, a teacher educator stated that pre-service teachers tended to give more prominence to form rather than clarity while they were writing up their research paper. Obstructing the clarity of meaning, pre-service teachers were found to be more inclined to write in embellished and ornate styles incompatible with the rhetorical and stylistic conventions of academic writing discourse.

Having analyzed both pre-service teachers' and teacher educators' views on challenges of research engagement, comparative analysis revealed the convergent themes were the lack of interest, linguistics inaccessibility, inability to find (reliable) resources, the lack of skills in the areas of research literacy and academic writing. On the other hand, divergent challenges stated by pre-service teachers were conceptual inaccessibility and recruitment of participants whereas teacher educators cited the misconceptions of research, lack of reading and higher-order thinking skills as the challenges pre-service teachers encountered during their research engagement.

4.3.5 Teacher Educators' Views on Pre-service Teachers' Benefits of Research Engagement

Teacher educators revealed the benefits of research engagement for pre-service teachers under the salient themes such as the contribution to FLE teachers' knowledge base, improvements in reading and critical thinking skills, and self-confidence.

All teacher educators stated that pre-service teachers benefited from engagement *with* research in terms of accumulating professional knowledge that could be integrated into their knowledge base. Contributing to their theoretical bases through either building on the pre-existing or newly acquired knowledge was found to be significant in promoting professional knowledge. In line with this notion, pre-service teachers were reported to benefit from engagement with research in terms of professional development as it enabled them to keep up-to-date with the related topics of their research studies. Keeping themselves updated through reading research, teacher educators stated pre-service teachers not only boosted their interest in the profession but also constructed notions of how to become a professional teacher. Also, teacher educators cited the benefit of improving their academic reading skills as they engaged in research. Being exposed to academic discourse in various fields such as ELT, linguistics and English literature by reading academic articles led to improving their L2 skills, especially in reading. A teacher educator stated the improvement in reading skills below:

> Well, the more they read of course, the more practically they can think. And, I think their reading abilities in L2 also develop. Again, this applies to all fields in social science and if they're doing research in ELT or linguistics, for example, they would mainly be reading academic articles, which would, of course, contribute to their own L2 skills. (TE-3)

Pertaining to the benefits of engagement *in* research, all teacher educators explained pre-service teachers gained increased levels of self-confidence. In teacher educators' words, these higher levels of self-confidence stemmed from various accomplishments such as having an output at the end of completing the research process and improved study skills such as systematicity, rigor, and perseverance. The output in the form of a research paper contributed to pre-service teachers' researcher identity and was expressed by a teacher educator as in the following quote:

> …When they accomplish this [research paper], they really feel they are academic, I would say. (TE-1)

Besides an increase in self-confidence, teacher educators also attributed importance to the development of critical thinking skills as a benefit of doing research. A teacher educator, for example, explicitly referred to the notion that doing research required critical thinking skills in terms of questioning and analyzing. As pre-service teachers engage in research, they started to develop this critical lens. In light of these comments, the improvement in criticality was implicitly linked to the teacher quality as the following:

> Of course, doing research is very beneficial in all senses. Increasing interest, motivation, interest in the profession, increasing skills in questioning and critical thinking, analyzing, bringing together what you know and making it a meaningful whole are the benefits, I think. And, these are, of course, the qualities of good teachers should have. (TE-3)

Overall, the comparison of teacher educators and pre-service teachers on their views about the perceived benefits of research engagement, the convergent themes were the contribution to FLE teachers' knowledge base and researcher identity, improvements in reading and critical thinking skills as well as self-confidence. Among the salient

themes, only contribution to FLE teachers' knowledge base was linked explicitly with professional development in terms of keeping professional knowledge up-to-date.

4.3.5.1 Teacher Educators' Views on the Perceived Congruency with the FLE Program's Goal

To investigate to what extent learning outcomes of the research course congruent with the FLE program's goals, teacher educators were asked the perceived learning outcomes for pre-service teachers at the end of the research course to compare them to that of the learning outcomes stated in formal documents (i.e. course descriptions and syllabi). It was noticed that there were parallelisms with the perceived benefits of research engagement for pre-service teachers stated by teacher educators, which was presented in section 4.3.6. Analyzing the learning outcomes of research course for pre-service teachers as perceived by teacher educators and in documents yielded the convergences and divergences of two groups as summarized in Table 4.6 below.

Table 4.6 (In)Congruency between perceived and formal learning outcomes by teacher educators.

Convergences	*Divergences*
• Constructing notions of research • Research literacy and reading skills • Academic writing skills • Methodological knowledge and awareness • Academic integrity and honesty • Higher-order thinking skills	• Encouragement for postgraduate studies • Increase in self-confidence • Improved study skills • Contribution to professional development • Contribution to or refrain from researcher identity • Potential for dissemination of knowledge

The first convergence was noted in the outcome of construction notions of research. In the course descriptions provided by HEC (YÖK, 2018a) and METU (2013), it was explicitly stated that students needed to obtain the basic concepts and principles about research methods and research engagement. Analyzing the syllabi highlighted that this outcome was accomplished through input sessions not only on the "Meaning of Research" (METU, 2018) but also "Key Issues in Research Methodology" (METU, 2017a). All teacher educators emphasized that pre-service teachers came to an understanding that rigor, systematicity, and certain steps to follow were the elements of research. A teacher educator pointed out the way pre-service teachers experienced this outcome as the following:

> They learn the discipline, they learn rigor, they learn how to deal with data, they learn the responsibilities of the researchers and they write a research paper on their own. (TE-2)

Another convergence was underlined in terms of certain improvements in research literacy and reading skills through accessing databases to find sources and reviewing them. The course descriptions offered by METU (2013) specified students would be instructed on the ways to "find and review credible sources in existing literature" while HEC (YÖK, 2018a) highlighted that students would learn how to access the databases for searching articles and theses. Reviewing the syllabi, this learning outcome was accomplished through the submission of working bibliographies and secondary sources in the form of assignments and giving feedback. Moreover, a teacher educator further commented on how pre-service teachers tackled the perceived problem of finding related literature. The multiple roles played by teacher educators such as "co-researcher, facilitator, input provider, and motivator" were addressed to serve to the accomplishment of finding resources. At the beginning of the course, all teacher educators stated pre-service teachers had great difficulty in terms of finding sources; however, they stated that most of the pre-service teachers developed this skill as the course progressed. Teacher educators remarked these:

> Well, there are differences at the beginning and at the end of the course. Here is a specific example: they kept saying they couldn't find enough research material on topics they want to look at and enough second resources, which was totally untrue, but they weren't lying. It was simply a problem. They didn't know how to look for it. (TE-2)
>
> Research is a journey. What you do in the journey and what we do in the research course are pretty much similar. So, we are collaborating. We are co-operators and co-researchers, I would say. Sometimes they come to me and said they couldn't find any related literature. So, I helped them out with this. I lead them to different sources etc. So, I acted as a facilitator, input provider, and as a motivator. In all these ways, giving feedback is the main concern. (TE-1)

Moreover, the development of academic writing skills and the notion of academic integrity were among the convergent learning outcomes. Teacher educators underscored that pre-service teachers learned how to write using academic discourse and documentation skills adopted in academic writing. "Know-how of writing a good research paper" and skills required in academic writing such as "summarizing, paraphrasing, quoting, citing and referencing" were explicitly stated as learning outcomes in the course description provided by METU (2013) and expertise to prepare research reports in line with the research ethics and principles in HEC (YÖK, 2018a). Echoing the learning outcome of research ethics stated by HEC (YÖK, 2018a), teacher educators also identified academic integrity and honesty as the learning outcomes. Again, these specific learning outcomes were achieved through dedicated input sessions, assignment submissions in the form of drafts and detailed feedback given by teacher educators. Besides, it was noticed that what teacher educators gave prominence to as researchers was also significant in terms of the accomplishment of these learning outcomes. In teacher educators' words, the experience as researchers was also reflected in the research course in terms of the values teacher educators gave prominence as researchers. Ethical considerations with an emphasis on plagiarism and the characteristics of academic writing (i.e. encapsulating both objectivity and presenting arguments on convincing and sound basis) were values underpinned in the research course by the teacher educators. These self-reported values as researchers were also priorities given in the course by teacher educators. Teacher educators

described how pre-service teachers improved their academic writing skills and the notion of academic integrity as the following:

> Personally speaking, I have devoted three or four sessions out of 14 sessions in the course only to writing skills such as paraphrasing and referencing. (TE-1)
>
> They learn how to write because they are having trouble in writing and research is the first time they get extensive feedback on a piece of writing that's a term paper. (TE-2)
>
> Students tend to say: "I have a missing piece of data, so it doesn't really matter" but it does matter. So, teaching them that is important and I think they do get most of it. (TE-2)
>
> Ethics is very important, that is presenting your findings in an ethical way, not plagiarizing. That is something we emphasize very much. (TE-3)

The last set of congruent learning outcomes were reported in the developments in higher-order thinking skills and methodological knowledge. Teacher educators recognized that pre-service teachers improved their problem solving, critical thinking, interpreting, synthesizing, and inferencing skills during the research process especially in methodology and results sections—a finding that exhibited parallelisms to the course descriptions by METU (2013) and HEC (YÖK, 2018a). Pre-service teachers were expected to "synthesize the results and formulate sound conclusions" and interpret the results according to the course descriptions provided by METU (2013) and HEC (2018a) through the input sessions and feedback given by the teacher educators stated in syllabi. Resonating with this finding, a teacher educator further stated that this learning outcome of development in pre-service teachers' higher-order thinking skills was also a motivation to offer the research course. Teacher educators summarized the aims of the course in terms of higher-order thinking skills, and methodological knowledge below:

> This course serves to make them familiar with basic research concepts and the steps they need to follow if they would like to do academic research. (TE-1)
>
> They learn how to clean the data. They learn how to generalize. They learn when not to generalize. (TE-3)

> I like to see how at least some students get motivated and how they developed their critical thinking skills, research skills and also synthesis skills. I think those are my motivations. (TE-2)

However, a teacher educator pointed out to her observation that pre-service teachers did not gain the critical thinking required in writing their literature review and it was explained as the following:

> One thing that they could improve better and that's difficult to learn is writing a literature review of that is more than reporting various studies from before. But that is something very difficult to learn. When they write their literature reviews, they are still listing various studies before. So, they don't learn the critical take for literature review in the course. (TE-3)

With regards to the divergences between perceived learning outcomes by teacher educators and formal learning outcomes of the research course, the encouragement (and thereof absence) for postgraduate studies and an increase in self-confidence were noted. These two perceived learning outcomes were not stated formally in documents. Teacher educators conceived that pre-service teachers experienced a boost in their self-confidence since they obtained more systematic study skills and they recognized a sense of achievement due to the research paper they produced at the end of the course. The research output increased their awareness to disseminate professional knowledge and contribute to their researcher identity. A teacher educator exemplified the ways in which pre-service teachers had increased levels of self-confidence at the end of the course:

> The motivated students just present at undergraduate conferences. For instance, we have two students at the moment, they got an acceptance from an international conference in Canada but due to the financial problems, unfortunately, they couldn't make it but, that's a great success. (TE-1)
>
> I think it is a sense of prize in what you do - that you can do research and produce your results in a meaningful way. (TE-3)

All teacher educators further explained that the research course was important in determining whether pre-service teachers would go on with postgraduate studies such

as master's or doctorate degrees. The overall experience with research at the end of the course was important to fortify or debilitate the researcher identities of pre-service teachers. For those pre-service teachers whose researcher identities were strengthened, this course was regarded as an "exit ticket" (TE-1) for further postgraduate studies. Resonating with this notion, a teacher educator further stated that encouraging pre-service teachers to go on with the postgraduate studies was also a motivation to teach the research course and was elaborated by teacher educators as the following:

> …this is the course that is going to turn our students into researchers or not. (TE-2)

> There are students who are very much interested in literature and some of them are very much interested in doing further studies like MA or Ph.D. in literature, but they sometimes have difficulty in understanding how it works in those fields. So, I also think it's a good opportunity for such students. If they're interested, they can see at undergraduate level what this field is like. (TE-3)

Table 4.7 (In)Congruency between perceived and formal learning outcomes by pre-service teachers and teacher educators.

Convergences	*Divergences*
• Constructing notions of research • Research literacy and reading skills • Academic writing skills • Methodological knowledge and awareness • Academic integrity and honesty • Higher-order thinking skills	• Encouragement for postgraduate studies • Increase in self-confidence • Contribution to or refrain from researcher identity • Potential for dissemination of knowledge • Building on knowledge base (PST) • Reading sub-skills (PST) • Improved study skills (TE) • Contribution to professional development (TE)

Having compared both pre-service teachers' and teacher educators' perceived learning outcomes to that of stated in formal documents, the comparative analysis revealed the divergences and convergences among both two pre-service teachers and teacher educators as well as formal documents. It is summarized in Table 4.7 above. Pre-service teachers and teacher educators perceived this course helped students to (1) construct notions of research, (2) develop research literacy, (3) develop reading skills and, (4) develop academic writing skills, (5) gain methodological knowledge and awareness, (6) acquire the notions of academic integrity and honesty, and (7) develop higher-order thinking skills. These perceived learning outcomes showed parallelisms with the learning outcomes stated in the formal documents. On the other hand, the divergent learning outcomes between formal documents and learning outcomes stated by pre-service teachers and teacher educators included but not limited to (1) the encouragement for postgraduate studies, (2) an increase in self-confidence, (3) a contribution to or refrain from teacher as researcher identity, and (4) a potential for dissemination of knowledge. Different from the official documents, pre-service teachers perceived contribution to knowledge-base and the development of reading sub-skills as the learning outcomes whereas improved study skills and contribution to professional development were reported as the learning outcomes by teacher educators.

4.3.6 Teacher Educators' Views on the Relationship Between Research Engagement and Professional Development

In order to reveal a deeper understanding of the relationship between research engagement and professional development of pre-service teachers, teacher educators were asked about the activities designed specifically to inform pre-service teachers' praxis in the research course. Although all teacher educators acknowledged the relationship between research engagement and praxis, the lack of specific activities was reported in the research course. The lack of specifically designed activities to inform pre-service teachers' praxis were reported due to pre-service teachers' inaccessibility to teaching process as well as the limited time allocated to research

course while all teacher educators pointed out the ways in which the relationship between research engagement and praxis came to play for pre-service teachers.

A teacher educator stated that the difficulty lied in the fact that the third-year pre-service teachers who were taking the research course did not have their own classrooms and students, which made it challenging for the third-year pre-service teachers to conduct research on topics that would require teaching and application. That's why, the third-year pre-service teachers had the tendency to overlook the topics that were directly related to teaching practice. Teacher educators underscored that the third-year pre-service teachers related research engagement and practice through the implication section of their research papers indirectly. Another indirect way in which research engagement could be related to pre-service teachers' praxis and future professional development engagement was about learning about data collection tools and techniques which were also applicable in TR. Teacher educators commented on how knowledge about linguistics and data collection came to play to inform praxis as the following:

> They come up with some generalizations and what problems students have in pronouncing of X Y and Z. They have the implication of how they should be addressed in the classroom but none of this is related to classroom practice. (TE-2)
>
> They gain the basic skills of developing data collection instruments like questionnaires and interviews, which are also used in this exploratory action research as well. (TE-1)

In the words of teacher educators, the perceived irrelevancy of academic research to pre-service teachers' current and future professional development needs and practice was noted especially if they were to go on with teaching in K-12 schools. Therefore, a teacher educator suggested how she directly found a way to inform pre-service teachers' praxis. The teacher educator mentioned introducing third-year pre-service teachers with the concept of TR and specifically exploratory action research through having a guest speaker who was an expert on this topic since she perceived this type of research to be more relevant to pre-service teachers' future teaching "puzzles" and

solutions. The reason as to why pre-service teachers were introduced to exploratory action research was remarked by the teacher educator below:

> Apart from the ones who go on this academic path, they [pre-service teachers] will be teachers. They need to actually have a good grasp of how to explore the problems in their teaching.

As can be seen in this comment, teacher educators stated that there was a perceived tension between researcher and teacher identities among pre-service teachers. Based on her observations, a teacher educator reported that the pre-service teachers who had a research-oriented mindset or enjoyed the experience in research course were more likely to pursue an academic path whereas pre-service teachers who found ELT related courses including practicum more gratifying had a tendency to pursue a teaching career. Therefore, it was highlighted by teacher educators that it was not realistic to claim all pre-service teachers would engage in and with research as a professional development tool in their future teaching practice when they graduate. However, teacher educators stated that pre-service teachers who would go on with teaching careers could engage with research as pre-service teachers grasped the importance of keeping up-to-date with recent topics in ELT and incorporating that knowledge into their professional activities. A teacher educator also underscored the role of the research course in pre-service teachers' future research engagement as professional development endeavors. It was reported that pre-service teachers might not have been fully aware of the potential of research engagement as a professional development tool in the undergraduate level. However, pre-service teachers might value the skills gained in the research course as these skills would facilitate their research engagement through a meta understanding in their teaching careers. This meta understanding was expressed by the teacher educator as the following:

> I think some would definitely consider reading and doing research as a part of their professional development. At this level, some of those better students may not be fully aware of what they're doing, but later on, they have a meta understanding where they look back and say: "Maybe, it was due to courses like research course that I was able to develop these skills". (TE-3)

When teacher educators were asked in what ways pre-service teachers benefited from the research course in their current practice at practicum, all teacher educators revealed the perceived irrelevancy of research engagement to pre-service teachers' teaching practice at practicum. In other words, teacher educators stated that pre-service teachers did not conceive a direct relation between the practicum course and research course. However, teacher educators further pointed out pre-service teachers benefited from the research course in terms of the developments in three skills, namely critical thinking, observation and inquiry skills employed at practicum. First, teacher educators highlighted that the observations pre-service teachers made at practicum perceived as data or as a basis for critical analysis. In order to write up the reports on their observation tasks at practicum, pre-service teachers applied to their improved critical thinking skills, which was found to be challenging when writing up the literature review sections in the research course. Similarly, pre-service teachers were reported to make use of their observation skills with the help of these critical thinking and interpretation skills gained in the research course. Lastly, pre-service teachers were reported to use their inquiry skills to search for materials and ideas to prepare lessons for their teachings at practicum. Teacher educators commented on how pre-service teachers employed these critical thinking and observation skills at practicum as the following:

> I don't think that they are aware of this relationship. I think that's one thing good for them that they take these data as a basis for critical analysis that they have problems with in the literature review. Here [practicum] they start doing it naturally. Nobody teaches them. (TE-2)

> I sense that sometimes in two hours sessions that we have about those observations, some of the students are able to make more meaningful comments based on their observations. That means that they have better research skills whereas some others are just looking and relating that happens and that happens. But being able to make some sense of what's going on there and maybe interpreting it on a higher level are what's desired. (TE-3)

Regarding the perceived irrelevancy of research engagement to praxis as well as to professional development by some pre-service teachers, teacher educators provided underlying reasons and suggestions at micro and macro levels. Teacher educators

stated that research course was a packed course covering different types of research other than the type of research (i.e. academic research) studied in the research course. For example, a teacher educator underscored introducing pre-service teachers with classroom research and teacher research in input sessions briefly. However, it was also added that there was not enough time to highlight the overt relationship between research and practice in detail. Therefore, at a macro level, it was recommended that the course hour allocated to the research course could have been increased and the elements from teacher research might have been more systematically integrated into the course in order to foster the relationship among research engagement, praxis, and professional development. In the same vein, a teacher educator stated that showing these relationships could lead pre-service teachers to have a positive outlook to research on attitudinal basis and growth mindset for continuous professional development. Teacher educators made these remarks:

> I think we need more time to show them all these relationships that we don't show them because we have no time to show them. (TE-2)
>
> I think it could be a good idea to emphasize in the research course how actually research could inform their practice. This could also serve them as a very good skill as a professional benefit in their professional lives. (TE-3)

At a micro level, teacher educators put forward some suggestions regarding increasing pre-service teachers' chances for research engagement at METU FLE so that they could internalize the relationship between research and praxis in a more direct manner. Teacher educators stated that research engagement of pre-service teachers should not have been merely limited to the research course, but it could have been supported through the requirements in other interrelated courses in METU FLE, which could create more opportunities to foster their research engagement. More specifically, a teacher educator made these remarks:

> I mean in the program as a whole, they should have more chances and requirements to do more research and should be informed on clearly how research can inform their teaching. (TE-2)

In a similar vein, a teacher educator specifically offered some suggestions for the practicum course. To increase pre-service teachers' research engagement in the practicum course, the teacher educator stated the need to change the content of this course. According to her, pre-service teachers could work on the observation data as a basis to draw conclusions and apply them to their own practice teachings. She described these as the following:

> Maybe, the practicum course could be incorporating more work with the data that they collect in the research format or something of that sort. So, you go, and you observe, and you analyze the data and then you apply your own conclusions in your own practice sessions. Then, write a small report. (TE-2)

Finally, teacher educators revealed some possible ways in which pre-service teachers could engage *with* and *in* research after graduation, and offered some suggestions for pre-service teachers. Based on her observation, a teacher educator underscored the significance of continuing professional development through reading research and doing research if possible (if the organizational culture of the educational organizations they worked at harbored engagement in research) in order to prevent burnout, as in the following remarks:

> People just say "my studentship is finished so I don't want some deal anymore of this. I just want to be a teacher". We know that from experience, after several years pass, they understand that it becomes so boring because the same routine repeating itself year after year. They sometimes feel that they are losing a lot of their acquired skills. Some of them actually regret not having done anything for the past seven or six years. Sometimes, they come back and they want to do further studies. But, the better option would be always trying to improve yourself and that happens mainly through reading and thinking and if possible doing research.

Having analyzed pre-service teachers' and teacher educators' views on the relationship between research engagement and professional development, the comparative analysis yielded convergent themes. Similar to teacher educators' comments, pre-service teachers also valued engagement with research was significant to keep up-to-date with recent topics in ELT and incorporating that knowledge into their professional

development activities. Another convergence emerged on the perceived irrelevancy of academic research to pre-service teachers' immediate teaching concerns. Therefore, both pre-service teachers and teacher educators stated that engaging in activities that promoted practical orientation to inform their praxis such as exploring and solving classroom puzzles was more relevant to pre-service teachers' professional development needs in their teaching careers. The last convergence emerged on the dichotomy of teacher and researcher identity. According to the observations of teacher educators, some pre-service teachers whose researcher identities were more salient were more inclined towards pursuing academic careers whereas the other pre-service teachers were more motivated to pursue teaching careers. In line with this, pre-service teachers with salient research identities stated to engage in academic research for doing further postgraduate studies.

The comparative analysis of the fourth-year pre-service teachers' and teacher educators' views on the relationship between research engagement and practicum also yielded some convergent and divergent themes. Both groups (PST- 4 and TE) did not conceive a direct relation between these two courses; however, they acknowledged in what ways pre-service teachers benefited from research engagement at practicum. Collectively, they perceived pre-service teachers used the inquiry skills to search for materials and ideas to prepare lesson plans for teachings at practicum. On the other hand, these two groups' notions exhibited a difference in terms of the use of inquiry skills in terms of higher-order thinking and observation skills. Different from pre-service teachers, teacher educators also pointed out the employment of improved critical thinking and observation skills at practicum gained from research engagement.

CHAPTER 5

DISCUSSION AND CONCLUSION

This chapter offers the discussion of the findings and implications for the study in three sections: (i) the summary and discussion of the results presented in the previous chapter, (ii) the implications and recommendations for pre-service FLE programs and further research, and (iii) conclusions.

The aim of the present study was to investigate three research questions presented in Sections 1.3 (i.e. Research Questions) and 3.1 (i.e. Research Design). The first research question aimed to shed light on prior and (re)constructed conceptions of research held by pre-service EFL teachers in their professional development. The second research question scrutinized the perceived needs and reasons for, as well as challenges and benefits of research engagement as a professional development tool for pre-service teachers. The last research question investigated teacher educators' conceptions of pre-service teachers' research engagement in terms of professional development.

5.1 Discussion

In this section, the summary of findings (of three research questions) is presented and discussed under the salient themes derived from various data collection tools (i.e. questionnaires including Likert-scale and open-ended items, semi-structured interviews, and official documents).

With regards to the first research question, how pre-service EFL teachers studying in a pre-service teacher education program in Turkey conceive research engagement in their professional development was under scrutiny through the questionnaire and

open-ended items. The questionnaire included ten research scenarios. The participants were asked to indicate to what extent they thought the scenarios could be labelled as research and justify their choice in the open-ended items. Overall findings revealed that although the conceptions of research held by pre-service teachers did not differ significantly, the open-ended items revealed a difference in the fourth-year pre-service teachers' conceptions of research. To be more specific, the first-, second- and third-year pre-service teachers conceived research "standard scientific research" that had connotations with academic research and quantitative research paradigm (Robson, 2002). Along these lines, the participants in the present study cited the characteristics of quantitative research paradigm (e.g., wide sample, questionnaires as data collection tools, pre-test and post-test methodology, dissemination of knowledge through articles, following formal and concrete research phases, contribution to the body of knowledge). In his exploration of in-service ELT teachers' perceptions of research, Borg (2013) found out that in-service ELT teachers were more inclined to conceptualize TR by citing the elements of quantitative research. In line with and extending the findings of Borg (2013), pre-service teachers in the current study also conceptualized TR along the lines of "traditional" scientific research by referring to the mutual characteristics inherent in both TR, and scientific research such as the disseminating knowledge and following research phases. This might be explained by the lack of conceptions or misconceptions held about TR and the criteria against which TR could be evaluated. Besides this scientific conception of research, the fourth-year pre-service teachers also conceived research as a systematic inquiry carrying practical and evaluative values. Also, this particular group perceived the dissemination of knowledge was not only limited to scholarly publications. In a similar vein, the fourth-year participants acknowledged the findings of reflective practice needed to be disseminated to be counted as TR. As stated by Borg (2013), TR needs to be systematic and geared towards providing and enriching teachers' insights into their professional work. Also, formal (i.e. scholarly publications, professional conferences) and less formal (i.e. newsletters, in-house professional development events) venues of disseminating knowledge could be employed as long as it transcends beyond the classroom walls to contribute to the other professionals' knowledge base (Burns,

2010). In that sense, it could be argued that while fourth-year pre-service teachers conceived research as both TR and academic research, the first-, second- and third-year pre-service teachers conceived research merely as academic.

The findings about pre-service teachers' cognitions of research might be best explained in the light of language teacher cognition framework provided by Borg (2006). First, it can be concluded that the first- and second-year pre-service teachers bring scientific conceptions of research to the formal research course, offered in the third year of the program. The reason could be related to their prior experiences and preconceptions about research which are rooted in pre-service teachers' schooling experiences as a language learner before the FLE program, known as "apprenticeship of observation" (Lortie, 1975). In this sense, it is plausible to suggest that the first- and second-year pre-service teachers observed and conceived research as a scientific inquiry prior to FLE program, and these formed preconceptions were brought to FLE program. Second, the third-year pre-service teachers who took the formal research course also conceived research in terms of scientific inquiry defined along the lines of quantitative paradigm. As put forward by Johnson (1994), the extent to which pre-service teachers approve (and thereof disapprove) "the content" of professional coursework is dependent on their "prior formal and informal language learning experiences" (p. 445-446). This might suggest that pre-service teachers' former cognitions of scientific research played a major role to maintain conceptions of scientific research during professional coursework about research (i.e. formal research course). Also, the bidirectional relationship between professional coursework and pre-service teacher cognition suggests that formal research course might harbor the conceptions of scientific research due to academic research paper they produced at the end of the course (Borg, 2006). Third, the fourth-year pre-service teachers conceived research as both "standard" research that has connotations with academic inquiry besides TR (Robson, 2002). Having studied the formal research course and had teaching experience, the fourth-year pre-service teachers were likely to construct practitioner knowledge that places emphasis on practical and evaluative knowledge, which might possibly contribute to the conceptions of TR.

In relation to research as a professional development tool, the conceptions of scientific research held by pre-service ELT teachers in the current study might position them as passive consumers of research produced by research community rather than active producers of TR (Borg, 2013). On the other hand, conceptions of TR held by the fourth-year pre-service teachers can contribute to their teacher-researcher identities. As offered by Gewirtz et al. (2009), researcher identity becomes a part of teacher identity when (i) teachers take the ownership of their knowledge and (ii) construct notions of research that is a feasible activity in which teachers can also engage. Acknowledging the practical and evaluative values in TR, the fourth-year pre-service teachers are relatively more inclined towards perceiving research as a professional development tool than the first-second- and third-year pre-service teachers.

With regards to the second and third research questions, the third- and fourth-year pre-service teachers', and teacher educators' views about research as a professional development tool were scrutinized and discussed under seven emergent themes. The first theme was related to pre-service teachers' overall experience in the research course. Both pre-service teachers and teacher educators who offer the formal research course in the FLE program regarded this experience as academically "rewarding and challenging". First, the experience was perceived academically rewarding, since the practical experience with research helped pre-service teachers to construct notions of academic research (e.g., systematicity and formal phases of research) and the responsibilities (e.g., rigor and perseverance) of research community. Second, pre-service teachers and teacher educators perceived the culminating research papers produced at the end of the course helped pre-service teachers to be a part of research community by presenting their work at formal events such as conferences. Third, pre-service teachers benefited from the research course as it served as an encouragement for postgraduate studies, which might signal pre-service teachers' conceptions of "standard" form of academic research (Robson, 2002). Therefore, the rewarding experience was conceptualized with regards to academic research rather than TR by both teacher educators and pre-service teachers. Different from teacher educators' perspectives, pre-service teachers perceived the lack of guidance and feedback on their

progress were influential in shaping their experience in the formal research course. Also, they perceived the heavy workload of doing research as a challenge in the course, which resonated with the findings of Elmas and Aydın (2017) who revealed pre-service teachers' perceived challenges of research engagement. Therefore, pre-service teachers need constant guidance to develop research expertise as illustrated with the findings of Banegas (2018) as well as Elmas and Aydın (2017). Overall, it can be said that professional development beyond pre-service teacher education was also conceptualized over the scientific research by means of postgraduate academic studies as stated by İnal and Büyükyavuz (2013). This finding might unveil pre-service teachers' perceived irrelevancy of research to practice as opposed to TR. Therefore, it can be said that the research course contributed to pre-service teachers' development and negotiation of identity as a researcher; however, it may not contribute to their teacher-researcher identity because of the perceived irrelevancy of research as a professional development tool. As suggested by Trent (2012), the negotiation of researcher and teacher identity might be challenging for pre-service teachers when they equate research merely to academic research. Perceiving research which is exclusive to scientific community as opposed to practitioners might hinder their research engagement as a professional development tool. Also, the perceived workload engaging in academic research might act as a barrier to constructing teacher-research identity and cognitions of research which is a feasible activity in which teachers can also engage through TR (Gewirtz et al., 2009).

The second emergent theme was related to the perceived needs of pre-service teachers for research engagement. Both teacher educators and pre-service teachers underscored the importance of having research literacy skills such as (i) familiarity with concepts and language used in the research materials, (ii) the ability to locate and access to the research materials, and (iii) higher-order thinking skills to evaluate validity, reliability and relatedness of research materials to research topics of their research papers. In terms of engagement in research, technical know-how related to methodology such as developing data collection instruments and having a grasp of data analysis procedures were found to be essential in conducting research. Furthermore, academic writing

skills, adopting the conventions used in academic writing, and academic integrity were also stated as the needs to conduct research. Different from teacher educators' perspectives, pre-service ELT teachers in the study also voiced the need to have the assistance of experts in various phases of the research experience such as planning, finding resources and performing data analysis. This corroborates the findings of Elmas and Aydın (2017) who showcased pre-service EFL teachers needed the support of teacher educators in their research engagement as they had difficulties in understanding the language of scientific texts and accessing research materials. In a similar vein, the findings of Şener (2017) revealed pre-service teachers needed to be scaffolded in such domains as the conventions of academic writing (i.e. paraphrasing and referencing), and pinpointing and accessing relevant sources. Thus, the findings of the present study comply with the findings of these two studies in terms of the development of expertise in academic research. To be more specific, the focus of the perceived needs for research engagement was about the development of academic research skills. Therefore, pre-service teachers can be said to seek the assistance and guidance of experts in order to develop their academic research skills.

Overall, perceived needs for research engagement were related to meeting academic needs such as the development of research skills, academic writing skills, and research literacy skills with an emphasis on academic perspective. In other words, teacher educators' and pre-service teachers' remarks unveiled that they perceived research literacy, academic writing skills, and research skills as needs to fulfill the requirement of producing a research paper rather than professional development. To be more specific, "research literacy", as defined by Kostoulas (2018), encapsulates accessing scholarly materials, pinpointing the related information, making sense of information through higher-order thinking skills, and integrating this information to teachers' knowledge base in order to inform praxis (p. 14). In that sense, pre-service teachers can be said not to perceive research literacy skills as needs to engage with research as a professional development tool but as needs to meet academic requirements (e.g., research papers, postgraduate studies). Resonating with the findings of Reis-Jorge (2007), pre-service ELT teachers in this study perceived research skills also as needs

to complete academic requirements and this might harbor their conceptions of research that are closely related to scientific inquiry.

The third emergent theme was about perceived reasons for pre-service teachers' research engagement. Third-year pre-service teachers addressed the reasons to read research as it contributed to their content knowledge. In a similar vein, the fourth-year pre-service teachers and teacher educators perceived reading research enabled pre-service teachers to gain up-to-date professional knowledge to inform their praxis. To be more specific, reading research was perceived by senior pre-service teachers to enable them to "learn about new trends and apply them to" their practice (PST-4-3). This means reasons for reading research was related to determining ideas to try in practice or learning "new ways of doing," in Borg's terms (2013, p. 81). As the reasons to engage in research, the third- and fourth-year pre-service teachers put emphasis on the dissemination of knowledge to other professionals through conferences. Unlike senior pre-service teachers, the third-year pre-service teachers stated meeting the requirements of postgraduate studies (e.g., research papers) and getting promotion as a career development as the other reasons to engage in research. Different from pre-service teachers' perspectives, teacher educators related pre-service teachers' research engagement to find solutions or develop an understanding of these problems encountered in teaching. All in all, this comparative analysis revealed that pre-service teachers perceived both academic and practical reasons to be research engaged whereas teacher educators stated practical reasons for pre-service teachers' research engagement, which has bearings on professional development of pre-service teachers beyond their programs.

Acknowledging the professional development value, reading research was perceived as the reason to update professional knowledge through learning about new developments (e.g., new methods in ELT) and enrich their content knowledge (Turhan & Arıkan, 2009). The third-year pre-service teachers who did not have prior formal teaching experience perceived research as a tool to enrich their content knowledge. However, the senior pre-service teachers in the study perceived research as a means of

gaining pedagogical content knowledge to inform their praxis. Resonating with the findings of İnal and Büyükyavuz (2013), pre-service teachers in this study placed emphasis on reading scholarly publications as they perceived it would contribute to their professional development. However, research articles that are produced for scholarly publications may contain more research-oriented knowledge rather than practice-oriented knowledge (Burns & Richards, 2009; Pendry & Husbands, 2000). Also, evidence-informed practice posits that teachers need to be generators of their own knowledge rather than passive consumers of generalized and decontextualized findings by experts in various contexts. These generalized findings might fall short of informing praxis when the contextual factors are taken into consideration (Hammersley, 2007). In this sense, even though pre-service teachers acknowledge professional development potential of research engagement, only reading theory-based research materials may fall short of meeting their practical needs and posit them to be passive consumers of research beyond the teacher education program (Burns & Richards, 2009; Pendry & Husbands, 2000). In line with the findings of İnal and Büyükyavuz (2013), pre-service teachers perceived reasons to engage in research (e.g., postgraduate studies and dissemination of knowledge through conferences) as part of their professional and career development. This might denote their conceptions of research as a scientific inquiry performed by research communities. These conceptions might have bearings on the lack of perceptions of TR. In other words, research was not perceived as a feasible activity that teachers can also engage in (Borg, 2013). When considering their immediate context, research engagement could be related to an entry requirement to teach at institutions of higher education in Turkey. More specifically, with the recent changes in the legislation governing institutions of higher education, English instructors are now required to hold master's degrees in ELT or related fields (linguistics, English and American literature). These perceived images of English instructors might also affect their perceived reasons to engage in postgraduate studies in terms of professional and career development.

The fourth emergent theme was related to the perceived challenges of pre-service teachers' research engagement. Both pre-service teachers and teacher educators stated

the difficulties stemmed from the lack of skills in research literacy (i.e. making sense of quantitative results, understanding the language of scientific text, a lack of interest in the topic of research article, and finding reliable resources). These findings confirmed the findings of Elmas and Aydın's (2017) who also underscored the importance of accessing research materials and understanding the language of academic texts as pre-service teachers had difficulties in such domains. These difficulties were addressed as "physical, conceptual and linguistics barriers" to language teachers' research engagement (Borg, 2009, p. 358) and are often associated with reading scholarly publications. However, teacher educators emphasized the lack of higher-order thinking skills (i.e. critical thinking, interpreting and synthesizing) and the misconceptions about research (e.g., being unsystematic, lacking rigor and perseverance, among others). This finding might reveal the fact that teacher educators attributed the lack of skills and misconceptions to pre-service teachers' underdeveloped negotiation of identity as a researcher. Therefore, it can be argued that pre-service teachers need to assume new roles for researcher identities (Trent, 2012). It can be said that higher-order thinking skills and conceptions of research as an academic inquiry should be scaffolded to construct researcher identities in the research course. In line with the findings of Banegas (2018), both pre-service teachers and teacher educators perceived the lack of academic writing skills caused difficulties in in-depth writing compatible with the internationally accepted conventions of scholarly writing. This finding might be explained when the relationship among the lack of academic writing, higher-order thinking skills, and academic English proficiency are taken into consideration. To be more specific, the low proficiency in academic English might create difficulties to be able to "express their critical views in writing" (Banegas, 2018, p. 102). Overall, the difficulties stemmed from reading research-oriented scholarly publications and doing scientific research rather than TR. These perceived challenges might avoid pre-service teachers' research engagement as a professional development tool in their teaching careers as they need to develop researcher identities as part of teacher-researcher identities.

The fifth emergent theme was about the perceived benefits of research engagement for pre-service teachers. Both groups (pre-service teachers and teacher educators) acknowledged the benefit of reading research since it contributed to the development of professional knowledge (i.e. pedagogical content and subject-matter knowledge) and enabled pre-service teachers to keep up-to-date with the new developments (i.e. new methods) in the field (Elmas & Aydın, 2017). Echoing the findings of Akyel (2015) and Banegas (2018), pre-service teachers can be said to experience a growth in their professional knowledge base, which might have bearings on their professional development. Engagement with research was perceived as a contribution to professional development, since it provided pre-service teachers with an opportunity for "making sense of teaching and learning" (Pendry & Husbands, 2000, p. 333). However, only reading research-oriented scholarly publications might not meet pre-service teachers' practical needs beyond the teacher education program (Pendry & Husbands, 2000).

Regarding the perceived benefits of engagement in research, teacher educators and third-year students perceived doing research increased pre-service teachers' self-confidence in their research skills. More specifically, third-year pre-service teachers conceived it encouraged them to pursue postgraduate studies. Similarly, teacher educators and both groups of pre-service teachers believed doing research improved their language skills (i.e. academic writing and reading), a finding aligned with that of Elmas and Aydın (2017). Doing research can be said to contribute to pre-service teachers' researcher identities but might not teacher-researcher identities since the benefits of research engagement were conceptualized over research as a scientific community. For their future research endeavors, pursuing postgraduate studies is again in the scope of research activities performed for gaining further academic expertise rather than TR as a professional development tool.

The sixth emergent theme was related to perceived congruency of learning outcomes of the research course with the FLE program's goal. The data explored the extent to which major stakeholders in the FLE program (pre-service teachers and teacher

educators) found the formal learning outcomes (in research course descriptions, tasks, and syllabi) congruent with their perceived learning outcomes of the research course. The comparative analysis showcased the learning outcomes concerning the development of academic skills and expertise (e.g., research literacy, academic writing, methodological expertise, academic integrity, higher-order thinking skills) showed parallelism. However, learning outcomes regarding attitudinal gains towards research and professional development showed (e.g., encouragement for postgraduate studies, increase in self-confidence, contribution to researcher identity, dissemination of knowledge through attending conferences) were among the incongruencies between perceived and formal learning outcomes. These (in)congruencies might be explained with taking the aim of inclusion of a dedicated research course in teacher education into consideration. As put forward by Reis-Jorge (2007), research course is included in teacher education mainly for two aims: The first is to promote "teacher's academic skills and abilities to deal with theoretical discourse" with an emphasis on academic development (p. 402). The second is "to encourage teachers to adopt a reflective stance to practice as a means of on-going professional development" (p. 402). Therefore, it can be said that dedicated course in the program was aimed at the academic development of pre-service teachers rather than encouragement for research engagement from a professional development perspective. Moreover, the incongruencies might also stem from the fact that teachers' beliefs about education are multifaceted, encapsulating "self-concept", "self-esteem", and "self-efficacy" (Pajares, 1992, p. 316 as cited in Borg, 2006, p. 25). This means teachers' beliefs about education are reinforced or weakened by to what extent they perceive they can do particular tasks and how they perceive their professional worth as a teacher. In this sense, the development of academic skills might lead to the negotiation of researcher identity by improving their self-esteem and self-efficacy in research skills and thus perceiving their self-concept as a researcher. Hence, pre-service teachers can be said to construct researcher identity but not teacher-researcher identity, as professional development is internalized through academic studies rather than TR (Trent, 2012).

In a similar vein, the last emergent theme was about the perceived relationship between research engagement and professional development. With regards to this relationship, teacher educators and both groups of pre-service teachers acknowledged the importance of reading research as a way to keep their professional knowledge up-to-date and integrate that knowledge to inform their praxis during and beyond pre-service teacher education. Echoing the findings of İnal and Büyükyavuz (2013), engagement with research can be said to be perceived as a professional development tool after graduation. In terms of doing research and professional development, research was further polarized into two categories: practically-oriented activities within the scope of TR and academic research by pre-service teachers and teacher educators. This finding underscores teacher and researcher dichotomy. As highlighted by Clarke (1994), this asymmetrical power relationship might cause teachers to be perceived as having less expertise in the field of ELT. This dichotomy might have bearings on the professional development of pre-service teachers in terms of not taking the ownership for generating practitioner knowledge and positioning themselves as being merely consumers of research.

Highlighting the tension between teacher and researcher identities, both teacher educators and pre-service teachers perceived doing academic research was irrelevant to pre-service teachers' future practice and practical needs. Also, third-year pre-service teachers stated doing research was not among the job descriptions of English language teachers, confirming the findings of Trent (2012). Echoing the findings of Shaw et al. (2008) who also conducted a study with pre-service teachers, some pre-service teachers' researcher identities in the present study were also more salient due to perceived higher self-efficacy and motivation. These pre-service teachers in the present study were reported to engage in postgraduate studies after graduation, and it might be linked to a sense of "commitment to researcher community" (Shaw et al., 2008, p. 89). In a similar vein, teacher educators and pre-service teachers perceived the formal research course and practicum course was not relevant; however, pre-service teachers benefited from research course in terms of gaining inquiry skills, and using these skills to search for ideas and materials to use in practicum. Pre-service

teachers attributed the challenges of research engagement at practicum to limited time to engage in reflective practice. Genç (2016) scrutinized pre-service EFL teachers' professional developmental needs at practicum and offered pre-service teachers need to link theory to practice by gaining more hands-on teaching experience. Similar to this finding, senior pre-service teachers in the present study did not conceive a link between theory-based research course and practice teaching. As suggested by Burns and Richards (2009), the reason could be related to the fact that pre-service teachers may need more time to gain practitioner knowledge to discern, reflect and revisit this knowledge, which might help them to link practice to theory (and vice versa).

These perceived irrelevancies might also be explained with the impact of the context of teaching on teacher-researcher identity construction. As suggested by Trent (2012), pre-service teachers' teacher-research identity construction is influenced by (i) the perceived images of in-service English teachers' research engagement at practicum, (ii) attitudes towards research engagement at their placement schools, and (iii) the job descriptions of English language teachers in the context of teaching. Similarly, participants in this study might perceive research engagement of English language teachers is not supported by Turkish context by drawing on their constructed images of Turkish EFL teachers at practicum. Also, pre-service teachers might construct images about Turkish EFL teachers' job description in which research engagement is not one of them. These self-constructed images are likely to lead to perceived irrelevancy of research to practice. In this sense, pre-service teachers' researcher identity is more likely not to be integrated into their teacher identity.

In a similar vein, the perceived irrelevancy of research engagement to praxis might be harbored in the formal research course. Even though all teacher educators recognized the relationship between research engagement and praxis, the research course did not include specific activities designed to inform praxis. Indirectly, pre-service teachers were reported to be able to link research engagement and praxis through writing implication sections of research papers and learning data collection tools used also in TR. Directing English language teachers to implication part is regarded as one of the

strategies to “make research more accessible to teachers” (Borg, 2013, p. 81). However, reading scholarly publications and concentrating on implication part is likely to render pre-service teachers merely passive consumers. On the other hand, a teacher educator introduced pre-service teachers with TR by having a guest speaker who was an expert on TR to directly inform their praxis. This solution might contribute to pre-service teachers’ teacher-researcher identities; however, it might not be sustainable, since it is an individual solution. In line with the findings of Öztabay (2015), more elements from TR are needed to be integrated into the formal research course to equip pre-service teachers with means to engage research as a professional development tool.

Underscoring the irrelevancy of scientific research to practice and professional development, the practically-oriented activities were found to be linked with future professional development needs and practice. Unlike third-year pre-service teachers, both senior pre-service teachers and teacher educators conceived doing TR might have practical and professional development values beyond pre-service teacher education program. In that sense, research engagement was also perceived as one of the professional development activities that were geared towards informing praxis by the senior pre-service teachers who had (however limited) teaching experience and teacher educators. From the evidence pre-service teachers provided about reading and doing research, it can be concluded that they perceived research engagement as a means of self-evaluation about the delivery of instruction and need analysis (about determining the learning objectives and outcomes) through gaining an in-depth understanding of their professional work and seeking for solutions or change. This finding showed parallelism with the views of teacher educators about the importance of doing TR. Ölçü Dinçer and Seferoğlu (2018) problematized professional development plans of pre-service EFL teachers. The researchers found out non-traditional professional activities such as “reflective practices” (e.g., action research) were not perceived as professional development activities as pre-service teachers did not know about them. In the present study, non-traditional professional development activities (i.e. needs analysis and pedagogical evaluation through reflective practice) were implicitly stated

by the fourth-year pre-service teachers; however, a complete understanding about these activities lacked among pre-service teachers because of inadequate knowledge about them. In this sense, the findings resonated with the findings of Ölçü Dinçer and Seferoğlu (2018). Although these practical activities might serve to improve their practice by taking more reflective and analytical stances to their work as part of professional development (Atay, 2006), the reported steps of research engagement might fall short of defining these endeavors as TR according to the definition offered by Borg (2013). More specifically, realizing a problem, analyzing and finding a solution or conclusion were the phases that they reported to engage in when conducting pedagogical evaluation. Although systematic in nature, the lack of dissemination of solutions or conclusions and making these public are likely to render this endeavor as systematic and individual reflections. Therefore, pre-service teachers can be said not to have a complete understanding of TR and needs to be scaffolded in terms of TR. This underscores the need to include more elements from TR in the formal research course.

5.2 Implications for the FLE Program and Stakeholders

Drawing on the conclusions and discussions in the previous section, this section presents the implications of the present study for major stakeholders involved in pre-service teacher education and policy-making undergirding teacher education programs (e.g., FLE program and HEC).

First of all, cognitions of research should not merely be limited to scientific inquiry and scholarly publications if the aim is to promote research as a professional development tool. In that sense, the FLE program should specifically acknowledge the influence of pre-service teachers' preconceptions and prior experience of research on their research engagement. Realizing the importance of prior cognitions, FLE program should create opportunities to help pre-service EFL teachers concretize their cognitions about research. That way, pre-service teachers would more likely to become more cognizant about the impact of their prior conceptions (i.e. research as an

academic inquiry) on what and how they learn in the formal research course. Acknowledging their existing cognitions, pre-service teachers' might become more eager to learn other types of research that have practical and professional development values in their teaching careers. In a similar vein, being more cognizant about their cognitions might alter their attitudes towards TR. To be more specific, it could provide them with an opportunity to learn not to evaluate TR against the criteria set by academic research. This might lead pre-service teachers to perceive research engagement as a professional development tool in their practice teachings and teaching careers (Burns & Richards, 2009; Pendry & Husband, 2000).

In order to tackle research and practice (and thereby researcher-practitioner) dichotomy and the related asymmetrical power relations, the overt relationship between research and practice should be emphasized in the entire FLE program. In other words, research engagement should not only be limited to the formal research course. Pre-service teachers should be provided with opportunities in the interrelated ELT courses to be able to draw direct links between research and practice. Therefore, it is implied that there is a need for more organic connections to other courses in the program. Other ELT courses might include activities for engaging with and in TR as one of the course requirements. Especially, it is crucial to design specific tasks, activities, assignments, spaces, and experiences in which pre-service teachers could engage *with* and *in* TR in their practicum experience. Therefore, it is implied that there is a need for a more inclusive, expansive, systematic, and streamlined curriculum mapping to foster pre-service teachers' research engagement during and beyond pre-service teacher education. Since pre-service teacher education programs are designed and developed in a top-down fashion by the HEC, the Council should give prominence to provision and maximization of research engagement opportunities within the program when redesigning the curriculum for FLE program (Öztabay, 2015).

The last set of implications are about the design of the formal research course and practicum. Drawing on the professional development model (Reis-Jorge, 2007), the undergraduate FLE program should more systematically include elements from TR in

order to help students to show extended professional behaviors beyond pre-service teacher education. This way, pre-service teachers could have an understanding about how to tackle practical challenges and means of addressing them, which serves as a professional advantage since it could create a simulation of prospective teaching context in which they are going to teach. This could be achieved by vamping the research course through integrating a variety of research materials encapsulating both practical (TR) and theory-based professional knowledge. In this sense, the research course could contribute to pre-service teachers' teacher-researcher identities, as they might become more cognizant about being both consumers and producers of research as English language teachers. Also, pre-service teachers should also engage in TR projects as part of practicum requirements so that they could perceive the relationship between research and practice more overtly. In this way, non-professional development activities, which take reflective practice as the basis, have the potential to be perceived as professional development needs when pre-service teachers start their teaching careers. As concluded by the present study, pre-service teachers need to be instructed about the non-traditional professional development activities besides the traditional ones in the formal research course and practicum. As an example, organizing TR days and student conferences in the FLE program might help pre-service teachers to gain knowledge about non-traditional professional development activities. Therefore, stakeholders and policymakers such as FLE program and HEC should integrate more systematic and sustainable non-traditional professional development interventions when designing research course and practicum. This might contribute and sustain pre-service teachers' teacher-researcher identities beyond pre-service teacher education.

5.3 Limitations and Directions for Further Research

One of the limitations of the present study is in terms of the sample size of first-and second-year pre-service teachers in the quantitative strand. Although the first-and second-year pre-service teachers at METU FLE are represented with a rate of 25% (N=49), the sample size could be increased in further research. Another limitation is

about a short period of time available to collect data to investigate pre-service teachers' conceptions of research. Further research could employ a longitudinal design to investigate to what extent conceptions of research are congruent at the beginning and end of the program. Also, further research might employ a longitudinal design to examine the research engagement of the graduates of FLE program to better understand the perceived learning outcomes especially in the first couple of years of their teaching careers.

5.4 Conclusion

In this section, major conclusions drawn from the discussion of the findings are presented.

First, the FLE program was found to promote pre-service EFL teachers' academic research skills, academic research literacy skills, conceptions of academic research and pursuing postgraduate studies. Research education in the program contributed to pre-service teachers' development and negotiation of identity as a researcher. Nonetheless, the development and negotiation of identity as a teacher-researcher were found to be problematic due to three reasons: (i) perceived irrelevancy of research engagement as a professional development tool, (ii) conceptualization of research engagement over academic and scientific research as opposed to TR (iii), and insufficient knowledge about TR.

Second, even though senior pre-service teachers and teacher educators acknowledged the significance of research engagement in the professional development, pre-service teachers lacked a comprehensive understanding of TR, which might hinder their engagement *with* and *in* TR in and beyond ELT program. Therefore, pre-service teachers need guidance and support that start in the formal research course, continue organically throughout the practicum course and extend beyond the FLE program in order to develop teacher-researcher identity and show extended professional behaviors as inquiring practitioners.

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APPENDICES

Appendix A: QUESTIONNAIRE

SECTION 1: Conceptions of "Research"

The purpose of this section is to elicit your views on the kinds of activities which can be called "research". **There are no right or wrong answers.** Read each description below and choose one answer to say to what extent you feel the activity described is an example of research. Answer the open-ended questions below each scenario to justify your choice.

1. a. A teacher noticed that an activity she used in class did not work well. She thought about this after the lesson and made some notes in her diary. She tried something different in her next lesson. This time the activity was more successful.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

2. a. A teacher read about a new approach to teaching writing and decided to try it out in his class over a period of two weeks. He video recorded some of his lessons and collected samples of learners' written work. He analyzed this information then presented the results to his colleagues at a staff meeting.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

3. a. A teacher was doing an MA course. She read several books and articles about grammar teaching then wrote an essay of 6000 words in which she discussed the main points in those readings.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

4. a. A university lecturer gave a questionnaire about the use of computers in language teaching to 500 teachers. Statistics were used to analyze the questionnaires. The lecturer wrote an article about the work in an academic journal.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

5. a. Two teachers were both interested in discipline. They observed each other's lessons once a week for three months and made notes about how they controlled their classes. They discussed their notes and wrote a short article about what they learned for the newsletter of the national language teachers' association.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

6. a. To find out which of two methods for teaching vocabulary was more effective, a teacher first tested two classes. Then for four weeks she taught vocabulary to each class using a different method. After that she tested both groups again and compared the results to the first test. She decided to use the method which worked best in her own teaching.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

7. a. A school administrator met every teacher individually and asked them about their working conditions. The head made notes about the teachers' answers. He used his notes to write a report which he submitted to the Ministry of Education.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
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……

8. a. Mid-way through a course, a teacher gave a class of 30 students a feedback form. The next day, five students handed in their completed forms. The teacher read these and used the information to decide what to do in the second part of the course.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

9. a. A teacher trainer asked his trainees to write an essay about ways of motivating teenage learners of English. After reading the assignments the trainer decided to write an article on the trainees' ideas about motivation. He submitted his article to a professional journal.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.
……
……
……
……

10. a. The Head of the English department wanted to know what teachers thought of the new course book. She gave all teachers a questionnaire to complete, studied their responses, then presented the results at a staff meeting.

☐ Definitely not research	☐ Probably not research	☐ Probably research	☐ Definitely research

b. Please explain briefly the reason(s) why you choose the answer above.

……
……
……
……

SECTION 2: About Yourself

1. Are you a ... (tick only one)

☐ 1st year student at FLE?

☐ 2nd year student at FLE?

☐ 3rd year student at FLE?

☐ 4th year student at FLE?

2. Have you taken "FLE 311- Advanced Writing and Research Skills" course?

☐ Yes

☐ No

3. a. Do you have any teaching experience?

☐ Yes

☐ No

b. If yes, what kind of a teaching experience? Please explain briefly. (e.g. student teaching, private tutoring, working with small groups etc.)

……
……
……

* The present study will have a follow up interview with the 3rd and 4th year students. Please write your e-mail below if you would participate in the interview.

……
……

This is the end of the questionnaire. Thank you for your participation!

Appendix B: INTERVIEW QUESTIONS FOR 3RD YEAR

PRE-SERVICE TEACHERS

INTERVIEW PROTOCOL

Introduction

I am Selin Tanış. I am currently pursuing my master's degree in English Language Teaching at Middle East Technical University. The purpose of this research study is to explore the perceptions and beliefs related to research engagement of pre-service EFL teachers in their professional development in a teacher education program. I would like to learn your views on this issue, which will provide us valuable information. You will be interviewed and audio-recorded about your experience in "Advanced Writing and Research Skills" course and your views on research as a professional development tool in the teacher education program.

Before we start, I would like to remind you that your answers will be kept strictly confidential and evaluated only by the researcher; the obtained data will be used for scientific purposes. The interview does not contain questions that may cause discomfort. The interview will be audio-recorded; however, during participation, for any reason, if you feel uncomfortable, I can stop recording and/or you are free to quit at any time. In such a case, you may end the interview at any time. I would like to start if you are ready.

Interview Questions for 3rd Year Pre-service Teachers:

a) Experience in Research Course:

1. Can you briefly talk about your experience in "Advanced Writing and Research Skills" course?
    a. What is your overall experience in this course?
    b. What do you think is your biggest achievement in the course? What did you gain the most?
    c. Do you think there are some skills and knowledge that you could improve better in the course? If yes, what are these?
    d. What did you like and did not like about this course? What would you like to see differently?
2. What do you think are the necessary skills and knowledge to read and do research? Do you think you have them?
3. What is the role of "Advanced Writing and Research Skills" course in the development of these knowledge and skills? Can you give some examples from your experience in the course?

b) Views on Research as a Professional Development Tool:

4. What do you think were the challenges of reading and doing research (in your professional development)?
5. What do you think were the benefits of reading and doing research (in your professional development)?
6. What do you think are the reasons for reading research and doing research?
7. Do you consider reading and doing research as a professional development tool when you graduate?
    a. If yes, in what ways will you read and do research? To what extent and in what ways do you think the research course prepare you for future research engagement?
    b. If no, what would discourage you? What are your reasons?

Closure: Would you like add anything or do you have extra comments?

Thank you for your participation, time and interest in the study.

Appendix C: INTERVIEW QUESTIONS FOR 4TH YEAR

PRE-SERVICE TEACHERS

a) Experience in Research Course:

1. Can you briefly talk about your experience in "Advanced Writing and Research Skills" course?
    a. What is your overall experience in this course?
    b. What do you think is your biggest achievement in the course? What did you gain the most?
    c. Do you think there are some skills and knowledge that you could improve better in the course? If yes, what are these?
    d. What did you like and did not like about this course? What would you like to see differently?
2. What do you think are the necessary skills and knowledge to read and do research? Do you think you have them?
3. What is the role of "Advanced Writing and Research Skills" course in the development of these knowledge and skills? Can you give some examples from your experience in the course?

b) Views on Research as a Professional Development Tool:

4. What do you think were the challenges of reading and doing research (in your professional development)?
5. What do you think were the benefits of reading and doing research (in your professional development)?
6. What do you think are the reasons for reading research and doing research?

c) Research Engagement in Practicum Experience:

7. Do you relate research engagement and professional development?
    a. If yes, how and why? In what ways and to what extent did you experience this relation in your practicum experience? Can you provide some instances from your practicum experience?
    b. If no, what are your reasons?
8. In what ways do you benefit from "Advanced Writing and Research Skills" course in your practicum course?

9. Do you consider reading and doing research as a professional development tool when you graduate?
    a. If yes, in what ways? To what extent and in what ways do you think you will read and do research?
    b. If no, what would discourage you?

Closure: Would you like add anything or do you have extra comments?

Thank you for your participation, time and interest in the study.

Appendix D: INTERVIEW QUESTIONS FOR TEACHER EDUCATORS

a) Pre-service Teachers' Experience in Research Course:

1. Why did you choose to teach this course? (What motivated you? Was it your choice or a departmental decision/necessity?)
2. Why do you think there is a dedicated course on research in the undergraduate program in ELT?
3. What do you think about pre-service teachers' experience in "Advanced Writing and Research Skills" course?
    a. What do you think is their biggest achievement/takeaway in the course?
    b. Do you think there are some skills, knowledge or learning objectives that they could improve better in the course? If yes, what are these?
4. What do you think are the necessary skills and knowledge for pre-service teachers to read and do research? Do you think they have the necessary technical knowledge and skills to read and do research?

b) Views on Research as a Professional Development Tool:

5. What is the role of "Advanced Writing and Research Skills" course in the development of these knowledge and skills? Can you give some examples from your observation/experience in the course?
6. As a teacher educator, what do you think pre-service teachers need to read and do research (for their Professional development)?
    a. In what ways do your experience as a researcher influence/contribute to the way you approach this course
7. Do you relate research engagement of pre-service teachers and their professional development?
    a. If yes, how and why? Can you provide some instances from your experience in the course?
    b. If no, what are your reasons?
8. When you reflect on pre-service teachers' experience in the course, what do you think were the challenges of reading and doing research (in their professional development)?
9. When you reflect on pre-service teachers' experience in the course, what do you think were the benefits of reading and doing research (in their professional development)?

a. What do you specifically do to ensure that they benefit from reading and doing research to inform their praxis?

10. As a teacher educator, what do you think are the reasons for reading research and doing research for pre-service teachers? (for professional development, for finding solutions to problems, for only passing the course etc.)

c) Pre-service Teachers' Research Engagement in Practicum:

11. In what ways do pre-service teachers benefit from "Advanced Writing and Research Skills" course in practicum course?

12. Based on your observation and experience in the course, do you think pre-service teachers will consider reading and doing research as a means of professional development when they graduate?

    a. If yes, what would encourage them?

    b. If no, what would discourage them?

13. Do you have any suggestions for pre-service teachers to be involved with and in research (including both academic research and teacher research) when they graduate? (for teacher education program, for the research course etc.)

Closure: Would you like add anything or do you have extra comments?

Thank you for your participation, time and interest in the study.

Appendix E: INFORMED CONSENT FORM

Informed Consent Form

Dear participant,

Your participation in a study about research engagement in teacher education is highly appreciated. The purpose of this research study is to explore the perceptions and beliefs related to research engagement of pre-service EFL teachers in their professional development in a teacher education program. The present study is conducted as my (Selin Tanış) thesis project in English Language Teaching Program (MA) at Middle East Technical University.

Participation in the study must be on a voluntary basis. Your answers and identity will be kept strictly confidential and evaluated only by the researcher; the obtained data will be used for scientific purposes. If you agree to participate in the present study, you will be asked to complete a questionnaire about your perceptions of research. It will take approximately 10 minutes. Later you will be interviewed and audio-recorded about your experience in "Advanced Writing and Research Skills" course and your views on research as a professional development tool in the teacher education program.

Your participation in the study will provide us valuable information about pre-service EFL teachers' and teacher educators' views on pre-service EFL teachers' research engagement in professional development in teacher education. The questionnaire and interview do not contain questions that may cause discomfort in the participants. However, during participation, for any reason, if you feel uncomfortable, you are free to quit at any time. In such a case, it will be sufficient to tell the person (i.e., data collector) conducting the survey that you have not completed the questionnaire and you may end the interview at any time. After all the questionnaires are collected back by the data collector and interviews completed, your questions related to the study will be answered.

I would like to thank you in advance for your participation in this study. For further information about the study, you can contact Selin Tanış from the Department of English Language Teaching (E-mail: selin.tanis@metu.edu.tr).

I am participating in this study totally on my own will and am aware that I can quit participating at any time I want for any reason/ I give my consent for the use of the information I provide for scientific purposes. (Please return this form to the data collector after you have filled it in and signed it).

Name Surname Date Signature

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Appendix F: TURKISH SUMMARY / TÜRKÇE ÖZET

GİRİŞ

Öğretme ve öğrenme sürecinin bağlama duyarlı doğasına bakılmaksızın, öğretme-öğrenme sürecinin başarısını artıran etkili faktörlerden biri de öğretmen kalitesidir (Akcan vd., 2016). Öğretme ve öğrenme kalitesini arttırma ve sürdürme aracı olarak öğretmenlerin mesleki gelişimine artan bir ilgi vardır. Bu nedenle öğretmenlerin uygun gelişim programlarına katılmalarını ve kapasitelerini arttırmalarını sağlamak mesleki gelişim müdahalelerinde büyük önem taşımaktadır (Borg, 2018).

Yerel eğitim bağlam dinamikleri ve öğretmenlerin ihtiyaçları göz önüne alındığında sabit ve tek en iyi mesleki gelişim şekli bulunmamasına rağmen, İngiliz dili öğretimi alanında mesleki gelişim biçimi olarak araştırmaya katılım ilgi çekmiştir. Araştırmaya katılım, öğretmenlerin mesleki gelişimlerinde aktif rol oynayarak genelde uzmanlar tarafından hazırlanan kısa dönemli hizmet içi programların sınırlamalarının üstesinden gelmenin bir yolu olarak görülmüştür (Cullen, 1997).

İngiliz dili öğretimi alanında, öğretmenlerin araştırmaya katılımı araştırma yaparak ve okuyarak iki yönü olarak tanımlanmaktadır (Borg, 2013). Araştırma katılımının her iki boyutu da, araştırma bulgularıyla bilgilendirilmiş öğretmenlik uygulamasına katkıda bulunabileceğinden, mesleki gelişim aracı olarak uzun süredir araştırılmaktadır. Bu tür bir öğretmenlik uygulaması, eleştirel araştırma okuryazarlığı yoluyla araştırmaya katılmayı ve teori ile pratik arasındaki algılanan açığı en aza indirmek için araştırma ve öğretim arasında direkt bir ilişki yaratmayı gerektirir (Reis-Jorge, 2005). Öğretmen eğitimi programlarının (hem hizmet içi hem de hizmet öncesi seviyelerde) algılanan açığı kapatmakta büyük bir rolü vardır çünkü öğretmen adaylarına araştırma kültürünü ve araştırmaya erişimi kolaylaştıran fırsatlar sunabilirler (Borg, 2006).

2018 yılında, hizmet öncesi öğretmen programlarının müfredat güncellemesi ile bu program mezunlarının araştırma odaklı zihniyete ve öğretmen-araştırmacı kimliğine sahip entelektüeller olması beklenmektedir (YÖK, 2018b). Öğretmen adaylarının araştırma anlayışları, araştırma yapmak için kazandıkları bilgi ve beceriler açısından hizmet öncesi İngilizce öğretmenliği programları büyük bir role sahiptir çünkü bu kazanılmış araştırma algıları ve becerileri genişletilmiş mesleki davranış anlayışıyla gelecekteki profesyonel uygulamalarında, profesyonel gelişim aracı olarak araştırma katılımına yönelik tutumlarını etkiler.

Araştırma katılımına atfedilen önem göz önüne alındığında, İngilizce öğretmen adaylarının Türkiye bağlamında mesleki gelişim perspektifinden araştırma katılımına odaklanan az sayıda çalışma bulunmaktadır. Aday İngilizce öğretmenlerinin mesleki gelişim ihtiyaçlarına (Genç, 2016) ve mesleki gelişim yollarına ilişkin görüşlerine yönelik çalışmalar bulunmaktadır (İnal ve Büyükyavuz, 2013). Bu çalışmalardan yola çıkarak araştırma katılımı, hizmet öncesi İngilizce öğretmenleri adayları tarafından oldukça değerli bulunmuştur. Ayrıca, aday İngilizce öğretmenlerinin araştırma algıları incelemiştir (Akyel, 2015; Elmas & Aydın, 2017) fakat bu çalışmalar resmî araştırma dersi belgelerine ve öğretmen eğitmenlerinin görüşlerine yer vermemiştir. Türkiye bağlamında literatürdeki boşlukları ele alan bu çalışma, Türkiye'deki bir İngilizce öğretmenliği lisans programında, aday İngilizce öğretmenlerinin ve öğretmen eğitmenlerinin, bir mesleki gelişim aracı olarak araştırma katılımını nasıl algıladıklarını araştırmaktadır. Bu çalışmanın amacı, hizmet öncesi öğretmen eğitimi programında araştırma katılımına ilişkin algıları ve görüşleri derinlemesine incelemek ve müfredatın yenilenmesi sırasında araştırma dersinin yeniden tasarımına katkı sağlayabilecek bulgular sunmaktır. Başka bir deyişle, bu çalışma, (i) öğretmen adaylarının mesleki gelişimi açısından önceden ve (yeniden) oluşturdukları araştırma kavramlarını (ii) paydaşların (hizmet öncesi öğretmenler ve öğretmen eğitmenleri) kendileri tarafından bildirilen öğrenme çıktıları ile YÖK ve ODTÜ İngilizce öğretmenliği programı tarafından resmî olarak belirtilen öğrenme sonuçları arasında uyumluluğu ve (iii) öğretmen eğitmenlerinin, aday İngilizce öğretmenlerinin programda ve ötesinde mesleki gelişim aracı olarak araştırmaya katılımları hakkındaki

görüşlerini analiz ederek derinlemesine anlayış sunmayı hedeflemektedir. Aday İngilizce öğretmenleri tarafından araştırma katılımının algılanan zorluklarını ve yararlarını, araştırma katılımının sebeplerini ve ihtiyaçlarını ortaya koymak, paydaşlara bu algılanan görüşlerin ve ihtiyaçların karşılanması konusunda nasıl yöntemler geliştirebileceği açısından yardımcı olabilir.

Bu amaçlar doğrultusunda, bu çalışma aşağıda belirtilen araştırma sorularına yanıt aramıştır.

1. İngilizce öğretmeni adayları mesleki gelişimlerinde araştırmaya katılımını nasıl algılamaktadır?
    a. İngilizce öğretmeni adaylarının araştırma dersine önceden oluşturup getirdiği algılar nelerdir?
2. İngilizce öğretmeni adaylarının mesleki gelişim aracı olarak araştırmaya katılmada algılanan zorlukları, faydaları, ihtiyaçları ve nedenleri nelerdir?
    a. İngilizce öğretmeni adaylarının araştırma algıları, programın amacı ile ne ölçüde uyumlu?
3. Öğretmen eğitmenleri, İngilizce öğretmeni adaylarının mesleki gelişiminde araştırmaya katılımlarını nasıl algılamaktadır?

YÖNTEM

Bu çalışma bir vak'a çalışması olarak tasarlanmıştır. Vak'a tasarımı, bir fenomen, süreç, tema ya da belirli bir zaman ve mekânla sınırlandırılmış bir olay hakkında derinlemesine bilgi vermeyi amaçlamaktadır (Creswell, 2012; Stake, 1995). Öğretmen adaylarının ve eğitmenlerinin mesleki gelişim açısından araştırma katılımını nasıl kavradıklarını ortaya çıkarmak ve bu kavramları şekillendiren temel faktörleri anlamak için bu araştırma tasarımı kullanılmıştır. Bu vak'a çalışması, alt birimler ve bu alt birimlerin aynı bağlamda analizini gerektirir çünkü her bir alt birim, gömülü tek vak'a çalışması tasarımı olarak adlandırılan tasarımda vak'anın en iyi araştırılması için önemli sayılır (Yin, 2003).

Öğretmen algısını etkileyen faktörler (okul deneyimi, profesyonel hazırlık, sınıf uygulaması) ile ilgili operasyonel tanımlara atıfta bulunmadan vak'ayı incelemeyi (ODTÜ İngilizce öğretmenliği programındaki aday öğretmenlerin araştırmaya katılımı) engellemek için alt birimler oluşturulmuştur. Okul deneyimi kategorisinde araştırma dersini almamış programdaki birinci ve ikinci sınıf öğrenciler bulunmaktadır. Profesyonel hazırlık kategorisinde ise araştırma dersini almış üçüncü sınıf öğrenciler bulunurken sınıf uygulaması kategorisinde hem araştırma dersini almış hem de öğretmenlik uygulaması (staj) dersini alan dördüncü sınıf öğrenciler vardır.

Araştırmada karma yöntemli bir araştırma tasarımı kullanılmıştır. Karma yöntem tasarımının kullanılması bu vak'a çalışması için daha avantajlıdır çünkü seçilen vak'aya ışık tutabilmek için tek başına niceliksel ya da niteliksel tasarımdan daha fazla veri getirir (Creswell ve Plano Clark, 2011). Ayrıca, veri çeşitlemesi ve çoklu veri toplama kaynakları, seçilen vak'anın kapsamlı bir şekilde anlaşılmasını sağlamak ve güvenilirliği artırmak için önemli gerekliliklerdir (Creswell ve Plano Clark, 2011). Creswell (2012) tarafından belirtilen karma yöntem tasarım türlerine göre, bu çalışmada gömülü bir tasarım benimsenmiştir. Bu çalışma kapsamında gömülü tasarımın aşamaları birbirine bağlanmıştır. Araştırma tasarımının ilk adımı olan nicel paradigma, görüşmeleri kapsayan nitel paradigma olan ikinci adım ile ilişkilidir. Nicel sonuçlara dayanarak, İngilizce öğretmeni adayları (üçüncü ve dördüncü sınıf) yarı yapılandırılmış görüşmeler için seçilmiştir. Son olarak, nitel tasarım adımları, yarı yapılandırılmış görüşmelerin bulguları ve belge analizinin sonuçlarıyla karşılaştırıldığı için birbirleriyle etkileşim içindedir.

VERİ TOPLAMA

Bu çalışma ODTÜ İngilizce Öğretmenliği programında gerçekleştirilmiştir. Katılımcılar programdaki birinci, ikinci, üçüncü ve dördüncü sınıf İngilizce öğretmenleri adaylarından ve öğretmen eğitmenlerinden oluşmaktadır. Bu çalışma için veriler anket, yarı yapılandırılmış görüşmeler ve resmî belgeler aracılığıyla toplanmıştır. Ankete üç grup öğretmen adayı katılmış, yarı zamanlı görüşmelere

yalnızca üçüncü ve dördüncü sınıf öğretmen adayları ile öğretmen eğitmenleri katılmıştır.

Öğretmen adaylarının, araştırmayı nasıl algıladıklarını anlamak için Borg (2009) tarafından geliştirilen anketin ilk kısmı kullanılarak incelenmiştir. Her senaryo, farklı türde bir araştırma içerir. Borg (2013) her senaryoyu araştırmanın niteliğine, metodolojisine ve amacına göre tanımlamıştır (Ek A'ya bakınız). Daha spesifik olmak gerekirse, senaryolar şu şekilde tanımlanmaktadır: (1) yansıtıcı uygulama ve sonucunda öğretimi değiştirme, (2) öğretmen tarafından yapılan araştırma, (3) yüksek lisans veya doktora çalışmaları için yapılan araştırmalar, (4) bilimsel akademik araştırma, (5) öğretmen tarafından yapılan araştırma, (6) öğretmen tarafından yapılan araştırma, (7) öğretmenleri araştırmak ve görüş bildirmek, (8) değerlendirme amaçlı sınıf araştırması, (9) öğretmen eğitimi bağlamında yapılan araştırma ve (10) yeni öğretim materyalinin değerlendirilmesi (Borg, 2013, s. 55). Her bir senaryonun tanımları ve amaçları bu çalışmada da kullanılmıştır. Ankete cevap verenlerin daha ayrıntılı gerekçelerini ortaya çıkarmak için, her senaryonun altına açık uçlu sorular eklenmiştir. Açık uçlu öğelerin entegrasyonu ifade özgürlüğü sağlamış ve katılımcıların araştırma anlayışının derinlemesine araştırılmasına izin vermiştir (Dörnyei, 2007). Orijinal anketteki on madde, “kesinlikle araştırma değil” ile “kesinlikle araştırma” arasında değişen dört noktalı Likert ölçeği kullanılarak tasarlanmıştır. Katılımcılardan, verilen senaryonun ne derece bir araştırma örneği olduğunu belirtmeleri ve seçimlerinin nedenlerini yazmaları istenmiştir. Bu prosedürün sonunda, toplam 134 öğretmen adayı anketi yanıtlamıştır.

Görüşme, vak’a çalışmalarında katılımcıların bakış açılarını yansıtmak amacıyla toplanan önemli veri kaynaklarından biridir (Yin, 2009). Yarı yapılandırılmış görüşme tekniği, araştırmacının katılımcıların görüşlerini derinlemesine anlaması ve verilerin zenginleştirilmesi için esneklik sağlarken, önceden belirlenmiş bir görüşme protokolü aracılığıyla odaklanmasını sağlar (Borg ve Gall, 1989). Katılımcıların (öğretmen adayları ve öğretmen eğitmenlerinin) öznel bakış açıları ve mesleki gelişim aracı olarak araştırma katılımına ilişkin görüşleri hakkında yarı yapılandırılmış görüşmeler

yapılmıştır. Yarı yapılandırılmış görüşmeler, üçüncü ve dördüncü sınıf öğretmen adaylarıyla iki ayrı odak grup görüşmesi şeklinde yapılmıştır. İki grup öğretmen adayıyla yapılan iki görüşme de altı katılımcıyla gerçekleştirilmiştir. Üçüncü sınıf (bakınız Ek B) ve dördüncü sınıf (bakınız Ek C) İngilizce öğretmeni adaylarının görüşme protokolleri açık uçlu sorulardan oluşmakta ve çalışmanın amacı doğrultusunda hazırlanmıştır. ODTÜ İngilizce öğretmenliğinde "FLE 311 İleri Yazma ve Araştırma Becerileri" dersini veren üç öğretmen eğitmeni ile bireysel görüşmeler yapılmıştır. Her öğretmen eğitmeninin farklı uzmanlık alanları vardır; İngiliz edebiyatı, dil bilimi ve İngiliz dili öğretimi. Görüşme protokolündeki açık uçlu maddeler (bakınız Ek D) eğitmenlerin bakış açılarını yansıtabilmeleri ve karşılaştırılabilir veriler elde edebilmek için İngilizce öğretmeni adayları için hazırlanan görüşme sorularına paralel olarak tasarlanmıştır.

Bu çalışmada dokümanlar, mesleki gelişim aracı olarak araştırmaya ilişkin bildirilen görüşleri ve araştırma dersi ile ilgili resmî belgelerde belirtilenlerle karşılaştırmak için kullanılmıştır. Bu çalışmada, öğretmen adaylarının araştırma katılımıyla ilgili kamuya açık olarak kabul edilebilecek belgeler kullanılmıştır. Çalışmadaki katılımcıların profili dikkate alındığında, ilgili belgeler aşağıdaki gibidir:

- FLE 311 İleri Yazma ve Araştırma Becerileri dersinin 2017 ve 2018 yıllarına ait ders izlenceleri (METU, 2017a; METU, 2018)
- FLE 311 İleri Yazma ve Araştırma Becerileri dersinin güz 2017 ve 2018 yıllarındaki üniversite kataloğundan alınan ders içeriği (METU, 2013)
- YÖK web sitesinden alınan Eğitimde Araştırma Yöntemleri dersinin içeriği (YÖK, 2018a)

VERİ ANALİZİ

Nicel veri betimleyici ve çıkarımsal testlerle analiz edilmiştir (Dörnyei, 2007). Anketteki her senaryonun ortalama puanlarını ve standart sapmalarını hesaplamak için betimleyici istatistikler yapılmıştır. Ayrıca, üç grup İngilizce öğretmeni adayının

senaryolara verdiği cevapların ortalama puanlarını karşılaştırmak için tek yönlü varyans analizi (ANOVA) yapılmıştır (Field, 2009). Son adım, niceliksel bulguları raporlamak ve yorumlamaktı. Açık uçlu sorular, tematik ya da kavramsal benzerliklere dayanarak tüm cevapların listelenmesi, kodlanması ve göze çarpan temaların yüzdeliğinin hesaplanması yoluyla analiz edilmiştir (Creswell, 2012; Saldaña, 2013).

Görüşmelerden elde edilen nitel veri, tematik analiz kullanılarak incelenmiştir. Boyatzis (1998) tarafından önerildiği gibi dört aşama izlenmiştir: verilerin deşifre edilmesi, verilerin kodlanması, temaların oluşturulması ve verilerden çıkarılan önemli tema ve örneklerin raporlanması. Belgelerin analizine ilişkin olarak içerik analizi kullanılmıştır. İçerik analizi kamuya açık belgelere uygulandığında, bir kuruma ait açık veya açık olmayan ifadeleri yakın okuma yoluyla ortaya çıkarma potansiyeli vardır (Julien, 2008). Bu çalışmada, araştırma dersine ilişkin üç kamuya açık belge, yakın okuma ve görüşmelerden ortaya çıkan temalarla ilgili bölümlerine odaklanarak iki veri kaynağını (belgeler ve görüşmeler) karşılaştırarak analiz edilmiştir.

BULGULAR VE TARTIŞMA

Bu bölümde, bulguların özeti (üç araştırma sorusundan oluşan), çeşitli veri toplama araçlarından (örn. Likert ölçeği ve açık uçlu soruları içeren anketler, yarı yapılandırılmış görüşmeler ve resmî belgeler) elde edilen belirgin temalar altında sunulmuş ve tartışılmıştır.

İlk araştırma sorusu ile ilgili olarak, Türkiye'de bir hizmet öncesi öğretmen eğitimi programında bulunan İngilizce öğretmeni adaylarının, mesleki gelişimlerine yönelik araştırma katılımlarını anket ve açık uçlu maddeler aracılığıyla nasıl algıladıkları incelenmiştir.

Genel bulgular İngilizce öğretmeni adaylarının araştırma kavramlarının gruplar arası anlamlı bir farklılık göstermemesine rağmen, açık uçlu soruların dördüncü sınıf öğretmen adaylarının araştırma anlayışlarında bir farklılık gösterdiğini ortaya

koymaktadır. Dördüncü sınıf İngilizce öğretmeni adaylarının araştırmayı hem öğretmenler tarafından yapılan araştırma olarak hem de bilimsel araştırma olarak algıladığı ortaya konmuştur. Öte yandan, birinci, ikinci ve üçüncü sınıf öğretmen adaylarının, akademik araştırma ve nicel araştırma paradigması ile çağrışımları bulunan "standart bilimsel araştırma" üzerinden araştırmayı algıladıkları bulunmuştur. (Robson, 2002). Borg'un (2013) bulgularına paralel olarak, bu çalışmadaki öğretmen adayları, öğretmenler tarafından yapılan çalışmayı, "geleneksel" bilimsel araştırma üzerinden kavramsallaştırmıştır. Bu, öğretmenler tarafından yapılan araştırma ile ilgili sahip olunan kavramları ve bu araştırma türünün değerlendirilebileceği kriterlerle ilgili kavram yanılgılarını gösterebilir. Bunun nedeni, öğretmen adaylarının İngilizce öğretmenliği programından önce dil öğrencileri olarak okul deneyimlerinde "gözlem çıraklığı" olarak bilinen araştırma deneyimleri ve önyargılarıyla ilgili olabilir (Lortie, 1975). Bu kavramlar İngilizce öğretmenliği programında araştırma dersinde akademik becerilerin geliştirilmesiyle desteklenmiş olabilir. Mesleki gelişim aracı olarak araştırmaya katılımla ilgili, mevcut araştırmada öğretmen adaylarının sahip olduğu bilimsel araştırma kavramları, onları aktif öğretmen araştırması üreticileri yerine araştırma topluluğu tarafından üretilen araştırmaların pasif tüketicileri olarak konumlandırabilir (Borg, 2013). Öte yandan, dördüncü sınıf öğretmen adaylarının sahip oldukları öğretmen tarafından yapılan araştırma kavramları, onların öğretmen-araştırmacı kimliğine katkıda bulunabilir.

İkinci ve üçüncü araştırma soruları ile ilgili olarak, üçüncü ve dördüncü sınıf öğretmen adaylarının ve öğretmen eğitmenlerinin profesyonel gelişim aracı olarak araştırma hakkındaki görüşleri incelenerek yedi belirgin tema altında ele alınmıştır. İlk tema öğretmen adaylarının araştırma dersindeki genel deneyimleriyle ilgiliydi. Hem öğretmen adayları hem de İngilizce öğretmenliği programında araştırma dersini veren öğretmen eğitmenleri bu deneyimi akademik olarak "ödüllendirici ve zorlu" olarak kabul etmişlerdir. Öğretmen adayları ve eğitmenleri, dersin sonunda ortaya çıkan araştırma makalelerini konferans gibi resmî etkinliklerde sunarak ve lisansüstü programlara teşvik sağlaması açısından öğretmen adaylarının, araştırma topluluğunun bir parçası olmasına yardımcı olmuştur. Bu nedenle, ödüllendirici deneyim hem

öğretmen eğitmenleri hem de öğretmen adayları açısından öğretmenler tarafından mesleki gelişim aracı olarak yapılan araştırma yerine akademik araştırmalarla ilgili olarak kavramsallaştırılmıştır. Genel olarak, İngilizce öğretmenliği programının ötesinde mesleki gelişimin, İnal ve Büyükyavuz'un (2013) bulgularına paralel olarak lisansüstü akademik çalışmalar ile bilimsel araştırma üzerinden kavramsallaştırıldığı söylenebilir. Bu bulgu öğretmen adaylarının, öğretmenler tarafından yapılan araştırmanın aksine, araştırmanın pratiğe olan algılanan uygunsuzluğunu ortaya çıkarabilir.

Ortaya çıkan ikinci tema, öğretmen adaylarının araştırmaya katılmaları için algılanan ihtiyaçları ile ilgiliydi. Hem öğretmen eğitmenleri hem de adayları akademik araştırma okuryazarlığı, akademik yazma ve araştırma becerilerine sahip olmanın önemini vurguladılar. Öğretmen eğitmenlerinin bakış açılarından farklı olarak, araştırmadaki İngilizce öğretmenleri adaylarının planlama, kaynak bulma ve veri analizi yapma gibi araştırma deneyimlerinin çeşitli aşamalarında uzmanların yardımına ihtiyaç duyulduğunu dile getirdi. Genel olarak, araştırmaya katılım için algılanan ihtiyaçlar, akademik bakış açısına önem vererek, araştırma becerilerinin geliştirilmesi, akademik yazma becerileri ve araştırma okuryazarlığı becerileri gibi akademik ihtiyaçların karşılanması ile ilgilidir. Başka bir ifadeyle, öğretmen eğitmenleri ve adayları, profesyonel gelişimden ziyade araştırma makalesi üretme gerekliliğini yerine getirmek için ihtiyaç duydukları araştırma okuryazarlığını, akademik yazma becerilerini ve araştırma becerilerini algıladıklarını ortaya koymaktadır.

Ortaya çıkan üçüncü tema, öğretmen adaylarının araştırma katılımı için algılanan nedenlerle ilgilidir. Öğretmen adayları, araştırmaya katılım için hem akademik hem de pratik sebepler algılarken öğretmen eğitmenleri, öğretmen adaylarının programın ötesinde mesleki gelişiminde etkili olan araştırma katılımları için pratik nedenler belirtti. Bu çalışmada öğretmen adayları, mesleki gelişimlerine katkıda bulunacaklarını düşündükleri için, bilimsel yayınların okunmasına önem vermiştir. Ancak, bilimsel yayınlar için üretilen araştırma makaleleri, pratiğe yönelik bilgiden ziyade daha fazla araştırmaya yönelik bilgi içerebilir (Burns ve Richards, 2009; Pendry

ve Husbands, 2000). Bu bağlamda, öğretmen adaylarının araştırmaya katılımın mesleki gelişim potansiyelini kabul etmelerine rağmen, yalnızca teoriye dayalı araştırma materyallerini okumak, pratik ihtiyaçlarını karşılamada yetersiz kalabilir ve öğretmen eğitimi programının ötesinde araştırmaların pasif tüketicileri olmalarını sağlayabilir. Öğretmen adayları, mesleki ve kariyer gelişimlerinin bir parçası olarak akademik araştırmaya katılmanın (örn. lisansüstü çalışmaları ve konferans yoluyla bilginin yayılması) nedenlerini belirttiler. Bu onların araştırma kavramlarını araştırma toplulukları tarafından gerçekleştirilen bilimsel araştırma olduğunu gösterebilir. Anlık bağlamları göz önüne alındığında, İngilizce öğretmeni adaylarının belirttiği akademik araştırmaya katılım nedenleri, Türkiye'deki yükseköğretim kurumlarında öğretmenlik yapmak için bir giriş şartıyla ilgili olabilir. Daha spesifik olarak, yükseköğretim kurumlarını düzenleyen mevzuattaki son değişikliklerle, İngilizce eğitmenlerinin artık İngiliz dili öğretimi veya ilgili alanlarda (dilbilim, İngiliz ve Amerikan edebiyatı) yüksek lisans derecelerine sahip olmaları gerekmektedir. İngilizce öğretmenlerinin bu algılanan görüntüleri, mesleki ve kariyer gelişimi açısından lisansüstü çalışmalara katılmaları için algılanan sebeplerini etkileyebilir.

Dördüncü ortaya çıkan tema, öğretmen adaylarının araştırmaya katılımda algılanan zorlukları ile ilgiliydi. Hem öğretmen adayları hem de eğitmenleri, araştırma okuryazarlığındaki beceri eksikliğinden (niceliksel sonuçların anlaşılması, bilimsel metnin dilini anlama, araştırma makalesinin konusuna ilgi eksikliği ve güvenilir kaynaklar bulma) ortaya çıkan güçlüklerden kaynaklandığını belirttiler. Bununla birlikte, öğretmen eğitmenleri üst düzey düşünme becerilerinin (eleştirel düşünme, yorumlama ve sentezleme) ve araştırma konusundaki kavram yanılgılarının (örn. sistematik olmama, araştırma projesini tamamlamak için gerekli azimden yoksun olma) aday öğretmenler için zorluğa yol açtığını vurguladılar. Bu bulgu, öğretmen adaylarının az gelişmiş bir araştırmacı kimliğe sahip olduğunu ortaya koymaktadır. Bu nedenle, öğretmen adaylarının araştırmacı kimlikleri için yeni roller üstlenmeleri gerektiği söylenebilir (Trent, 2012).

Ortaya çıkan beşinci tema, öğretmen adayları için araştırma katılımının algılanan yararları ile ilgiliydi. Her iki grup da (öğretmen adayları ve eğitmenleri), mesleki bilginin (pedagojik ve alan bilgisi) gelişimine katkıda bulunduğundan ve alandaki yeni gelişmeleri takip etmelerine olanak sağladığı için araştırma okumanın faydasını kabul etmiştir (Elmas ve Aydın, 2017). Araştırmaya yapmanın algılanan yararları ile ilgili olarak, öğretmen eğitmenleri ve üçüncü sınıf öğrencileri araştırma yapmanın öğretmen adaylarının araştırma becerilerine olan güvenlerini arttırdığını algılamıştır. Daha spesifik olarak, üçüncü sınıf öğretmen adayları, araştırma yapmanın yararlarından biri olarak, lisansüstü eğitime devam etmelerini teşvik ettiğinden bahsetmiştir. Benzer şekilde, öğretmen eğitmenleri ve öğretmen adaylarının araştırma yapmanın akademik yazma ve okuma becerilerini geliştirdiğine inandığı ortaya çıkmıştır. Bu açıdan, araştırma yapmanın öğretmen adaylarının araştırmacı kimliğine katkıda bulunduğu söylenebilir, ancak araştırma katılımının yararları bilimsel araştırma üzerine kavramsallaştırıldığından öğretmen-araştırmacı kimliklerine katkısı bulunmayabilir.

Altıncı tema, araştırma dersinin algılanan öğrenme çıktılarıyla İngilizce programının amacı arasındaki uyumluluk ile ilgiliydi. Veriler, İngilizce öğretmenliği programındaki ana paydaşların (öğretmen adayları ve eğitmenleri) algılanan araştırma dersi öğrenme çıktıları ile resmî öğrenme çıktılarının (araştırma ders içerikleri ve ders izlenceleri) ne ölçüde uyumlu bulduğunu araştırdı. Karşılaştırmalı analiz, akademik beceri ve uzmanlığın (örn. araştırma okuryazarlığı, akademik yazma becerileri, metodoloji bilgisi ve üst düzey düşünme becerileri) algılanan ve resmî öğrenme çıktıları arasında paralel olduğunu gösterdi. Bu nedenle, programdaki araştırma dersinin, mesleki gelişim perspektifinden araştırma katılımını teşvik etmek yerine, öğretmen adaylarının akademik gelişimine yönelik olduğu söylenebilir.

Ortaya çıkan son tema araştırma katılımı ve mesleki gelişim arasındaki algılanan ilişki hakkındaydı. Bu ilişki ile ilgili olarak, öğretmen eğitmenleri ve her iki İngilizce öğretmen aday grubu, okuma yoluyla araştırmaya katılımın, mesleki bilgiyi güncel tutmak ve pratiklerini bilgilendirmek için okumadan elde edilen bilgilerin önemini kabul etmiştir. Öğretmen ve araştırmacı kimlikleri arasındaki gerilimi vurgulayarak

hem öğretmen eğitmenleri hem de İngilizce öğretmeni adayları, akademik araştırma yapmanın, öğretmen adaylarının gelecekteki pratiğe yönelik ihtiyaçları ile ilgisi olmadığını belirtmiştir. Benzer şekilde, öğretmen eğitmenleri ve adayları İngilizce öğretmenliği programında araştırma dersi ve öğretmenlik uygulaması (staj) dersi arasında bir ilişki olmadığını belirtmiştir. Her ne kadar tüm öğretmen eğitmenleri, araştırma katılımı ile öğretmenlik uygulaması arasındaki ilişkiyi kabul etmiş olsalar da araştırma dersinin uygulama pratiğini bilgilendirmek için tasarlanmış özel aktiviteler içermediği saptanmıştır. Üçüncü sınıf öğretmen adaylarının aksine, hem son sınıf öğretmen adaylarının hem de öğretmen eğitmenlerinin, öğretmenler tarafından yapılan araştırmanın İngilizce öğretmenliği programının ötesinde pratik ve mesleki gelişim değerleri olabileceğini belirtmişlerdir. Ancak, son sınıf öğrenciler tarafından tanımlanan uygulamaya yönelik araştırma aktiviteleri, öğretmenler tarafından yapılan araştırmanın sonuçlarını paylaşma adımını içermediği için bireysel yansıtıcı uygulama olarak tasvir edilebilir. Bu nedenle öğretmen adaylarının, öğretmenler tarafından yapılan araştırma hakkında kapsamlı bir anlayışa sahip olmadıkları ve bu açıdan desteklenmeleri gerektiğini ortaya çıkmıştır.

ÖNERİLER

Araştırmanın bir profesyonel gelişim aracı olarak tanıtılması amaçlanıyorsa, araştırma kavramları yalnızca bilimsel araştırma ve bilimsel yayınlarla sınırlı olmamalıdır. Bu bağlamda, İngilizce öğretmenliği programı öğretmen adaylarının önyargılarının ve önceki araştırma deneyimlerinin etkisini özellikle kabul etmelidir. Mevcut kavramlarını kabul ederek, öğretmen adayları öğretmenlik kariyerlerinde pratik ve mesleki gelişim değerleri olan diğer araştırma türlerini öğrenmeye daha istekli hale gelebilirler.

Araştırma ve uygulama (ve araştırmacı-pratisyen) ikilemi ve ilgili asimetrik güç ilişkilerini en aza indirmek için, araştırma ve uygulama arasındaki açık ilişki bütün İngilizce öğretmenliği programında vurgulanmalıdır. Başka bir deyişle, araştırma katılımı sadece araştırma dersi ile sınırlı kalmamalıdır. Bu nedenle, öğretmen

adaylarının, programda ve sonrasında araştırma katılımını teşvik etmek için daha kapsamlı ve sistematik bir müfredat haritalamasına ihtiyaç olduğu düşünülmektedir. Hizmet öncesi öğretmen eğitim programları YÖK tarafından geliştirildiğinden, YÖK İngilizce öğretmenliği programı müfredatını yeniden tasarlarken, programdaki araştırma katılım fırsatlarını sağlamaya ve en üst düzeye çıkarmaya önem vermelidir. Araştırma dersinin içeriği yeniden tasarlanırken hem pratik hem de teoriye dayalı mesleki bilgiyi içine alan çeşitli araştırma materyallerini birleştirerek içerik oluşturulmalıdır. Bu sayede, aday İngilizce öğretmenleri hem tüketiciler hem de araştırma üreticileri olma konusunda daha bilinçli hale gelebilecekleri için öğretmen adaylarının öğretmen-araştırmacı kimliklerini artırabilir.

Bu çalışmanın sınırlamalarından biri, birinci ve ikinci sınıf öğretmen adaylarının nicel analizdeki örneklem büyüklüğüdür. Her ne kadar ODTÜ İngilizce öğretmenliği programındaki birinci sınıf ve ikinci sınıf öğretmen adayları % 25 oranında (S = 49) temsil edilmesine rağmen, ileride yapılacak olan çalışmalarda örneklem büyüklüğü artırılabilir. Diğer bir sınırlama, öğretmen adaylarının araştırma kavramlarını araştırmak için veri toplamak için sahip olunan kısa bir süredir. İlerideki araştırmalar, programın başlangıcında ve sonunda araştırma kavramlarının ne ölçüde birbiri ile tutarlı olduğunu araştırmak için uzunlamasına araştırma tasarımı kullanabilir. Ayrıca, ilerideki araştırmalar, özellikle öğretmenlik kariyerlerinin ilk birkaç yılında araştırmaya katılımın algılanan öğrenme çıktılarını daha iyi anlamak için İngilizce öğretmenliği programı mezunlarının araştırmaya katılımını incelemek için uzunlamasına bir tasarım kullanabilir.

SONUÇ

Bu bölümde, bulguların tartışmasından elde edilen önemli sonuçlar sunulmuştur.

İlk olarak, İngilizce öğretmenliği programı öğretmen adaylarının akademik araştırma becerilerini, akademik araştırma okuryazarlığı becerilerini, akademik araştırma kavramlarını geliştirdiğini ve lisansüstü çalışmalara teşvik sağlamıştır. Programdaki

araştırma eğitimi, öğretmen adaylarının araştırmacı kimliğini geliştirmelerine katkıda bulunmuştur. Fakat öğretmen-araştırmacı olarak kimliğin gelişimi üç nedenden dolayı sorunlu olduğu bulundu: (i) araştırma katılımının profesyonel bir gelişim aracı olarak algılanmaması, (ii) araştırma katılımının öğretmenler tarafından yapılan araştırmanın aksine akademik ve bilimsel araştırmalar üzerine kavramsallaştırılması ve (iii) öğretmenler tarafından yapılan araştırma hakkında yetersiz bilgi.

İkincisi, dördüncü sınıf İngilizce öğretmen adaylarının ve öğretmen eğitmenlerinin mesleki gelişime yönelik araştırmaya katılımın önemini kabul etmelerine rağmen, öğretmen adaylarının öğretmenler tarafından yapılan araştırmayla ilgili kapsamlı bir anlayışa sahip olmadığı bulunmuştur. Bu durum, aday İngilizce öğretmenlerinin, İngilizce öğretmenliği programında ve ötesinde araştırmaya okuma ve yapma yoluyla katılımını etkileyebilir. Bu sebeple, öğretmen adaylarının, öğretmen-araştırmacı kimliğini geliştirmek ve sorgulayıcı öğretmenler olarak genişletilmiş profesyonel davranışlar göstermeleri için resmî araştırma dersinde başlayan, uygulama (staj) pratiği boyunca organik olarak devam eden ve İngilizce öğretmenliği programının ötesine uzanan rehberlik ve desteğe ihtiyaçları vardır.

Appendix G: HUMAN SUBJECTS ETHICS COMMITTEE

APPROVAL FORM

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
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30 OCAK 2019

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Ali Fuad SELVİ

Danışmanlığını yaptığınız Selin TANIŞ'ın **"Öğretmen Yetiştirmede Araştırmaya Katılım: Türkiye'de Öğretmen Yetiştirme Programında Bir Durum Çalışması"** başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve **038-ODTÜ-2019** protokol numarası ile onaylanmıştır.

Saygılarımla bilgilerinize sunarım.

Prof. Dr. Tülin GENÇÖZ
Başkan

Prof. Dr. Ayhan SOL
Üye

Prof. Dr. Ayhan Gürbüz DEMİR (4.)
Üye

Prof. Dr. Yaşar KONDAKÇI
Üye

Doç. Dr. Emre SELÇUK
Üye

Doç. Dr. Pınar KAYGAN
Üye

Dr. Öğr. Üyesi Ali Emre TURGUT
Üye

Appendix H: TEZ İZİN FORMU / THESIS PERMISSION FORM

ENSTİTÜ / INSTITUTE

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

Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences ☒

Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics ☐

Enformatik Enstitüsü / Graduate School of Informatics ☐

Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences ☐

YAZARIN / AUTHOR

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Bölümü / Department : İNGİLİZ DİLİ ÖĞRETİMİ

TEZİN ADI / TITLE OF THE THESIS (**İngilizce** / English) :

RESEARCH ENGAGEMENT IN AND BEYOND PRE-SERVICE TEACHER EDUCATION: A CASE STUDY OF AN ENGLISH LANGUAGE TEACHER EDUCATION PROGRAM IN TURKEY

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

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

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

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

Yazarın imzası / Signature **Tarih** / Date 12.09.2019