A Qualitative Study on Pre-service EFL Teachers' Conceptualization of Critical Thinking and CT-oriented Pedagogies

Mariam Elhadi Mohammed Haghegh

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Approval of the Institute of Graduate Studies and Research

Prof. Dr. Ali Hakan Ulusoy
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts in English Language Teaching.

Prof. Dr. Javanshir Shibliyev
Chair, Department of Foreign Language Education

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Arts in English Language Teaching.

Prof. Dr. Ülker Vancı Osam
Supervisor

Examining Committee

1. Prof. Dr. Mohammad Hossein Keshavarz

2. Prof. Dr. Ülker Vancı Osam

3. Asst. Prof. Dr. Fatoş Erozan

ABSTRACT

This research investigates the critical thinking (CT) experiences of fourth-year English Language Teaching (ELT) students from five different backgrounds studying at the BA program in ELT at EMU. This research explores these pre-service teachers' conceptualization of CT and CT-oriented pedagogy and perception of how the ELT program has contributed to developing their CT abilities. It also highlights some implications on the role of culture, education, and other factors in understanding and developing CT and CT-oriented pedagogies. The research questions focused on examining: 1) the participating pre-service teachers' educational experiences with critical thinking; 2) their current conceptualization of critical thinking and CT-oriented pedagogy; 3) their perception regarding the BA program and its contribution in developing their CT; 4) their plans to incorporate CT in their teaching within their respective contexts. In order to achieve the aim of the study, qualitative data were gathered by conducting semi-structured, in-depth, 90-minute-long interviews with five pre-service teachers. Data obtained from the interviews were thematically analyzed using ATLAS.ti, a qualitative data analysis software. The rich data obtained in this research yielded many findings. In terms of educational background, the pre-service teachers' past education was inadequate to develop their CT. Their parents' involvement also had an impact on their CT development. It was concluded that language proficiency facilitates the expression of CT ability and that culture and education are two factors impacting CT that cannot be separated. In terms of CT conceptualization and the perceived role of CT in ELT, the pre-service teachers displayed a non-operant yet growing understanding of CT. Their approach to CT can be divided into ontological and epistemological approaches. Two of the participants

failed to perceive the role of CT in education. This indicated a lack of understanding and misconceptions related to CT on the part of pre-service teachers. Regarding the teacher education received at the ELT program, the pre-service teachers perceived it to lack explicit instruction on CT and CT-oriented pedagogies. Some teaching practices and conditions were also found unsupportive of CT development at the ELT program. Finally, concerning pre-service teachers' teaching for CT, vague and impractical strategies of incorporating CT in language instruction were observed. CT was reduced to language instruction with an omission of CP in ELT. However, the pre-service teachers displayed comprehensive awareness of factors impacting CT and potential challenges in incorporating it into their future teaching. The research concludes with several pedagogical implications, which highlight introducing pre-service teachers to CT and CP early on in their training and creating a critical space in the teacher education program to allow pre-service teachers to share their understanding of and experience with CT. Finally, the research findings emphasize the need for instructors/teacher educators to employ explicit instruction on CT and CT-oriented pedagogy and for ELT programs to provide ELT-specific CT training as part of their curriculum. The qualitative nature of this study and its focus on pre-service teachers' conceptualization of CT and CT-oriented pedagogy while taking into consideration the cultural and educational factors involved, sets it apart from the dominant number of quantitative studies available in the literature.

Keywords: conceptualization, critical thinking (CT), CT-oriented pedagogy, English language teaching (ELT), Eastern Mediterranean University (EMU), pre-service teachers of English

ÖZ

Bu araştırma, beş farklı kültürel ve eğitimsel geçmişe sahip olan ve DAÜ Yabancı Diller Eğitimi Bölümü lisans programında öğrenim gören dördüncü sınıf öğrencilerinin eleştirel düşünme (ED) deneyimlerini incelemektedir. Araştırmada, bu öğretmen adaylarının ED ve ED odaklı pedagojiyi kavramsallaştırmaları ve İngilizce Öğretmenliği programının ED yeteneklerini geliştirmeye nasıl katkıda bulunduğuna dair algıları ile, ED ve ED odaklı pedagojileri anlama ve geliştirmede kültür, eğitim ve diğer faktörlerin rolüne ilişkin konular araştırılmaktadır. Araştırma soruları şunları incelemeye odaklanmıştır: 1) katılımcı öğretmen adaylarının eleştirel düşünmeyle ilgili eğitim deneyimleri; 2) eleştirel düşünme ve ED odaklı pedagojiyi nasıl kavramsallaştırdıkları; 3) lisans programının eleştirel düşünmelerini geliştirmeye olan katkısına ilişkin algıları; 4) eleştirel düşünmeyi kendi öğretmenliklerine dahil etme planları. Araştırmanın amaçlarına ulaşmak ve sorularına cevap bulmak için beş öğretmen adayı ile yarı yapılandırılmış, derinlemesine, 90 dakikalık görüşmeler yapılarak nitel veriler toplanmıştır. Görüşmelerden elde edilen veriler, nitel bir veri analiz yazılımı olan ATLAS.ti kullanılarak tematik olarak analiz edilmiştir. Elde edilen bulgulara göre, öğretmen adaylarının geçmiş eğitimlerinin ED'lerini geliştirmede yetersiz kaldığı ve ebeveynlerinin de ED becerileri üzerinde etkisi olduğu görülmüştür. Yabancı dil (İngilizce) yeterliliğinin ED yeteneğinin ifade edilmesini kolaylaştırdığı ve kültür ile eğitimin ED'yi etkileyen iki faktör olduğu ve birbirinden ayrılamayacağı sonucuna varılmıştır. Öğretmen adayları, ED'yi kavramsallaştırmalarında ve İngilizce öğretiminde ED'nin rolü açısından, edimsel olmayan ancak artmakta olan bir anlayış sergilemişlerdir. ED''ye olan yaklaşımlar, ontolojik ve epistemolojik yaklaşımlar biçimde olabilir; ancak iki katılımcı eğitimde

ED'nin rolünü algılama konusunda başarısız bir görüntü sergilemişlerdir. Bu da, öğretmen adaylarının ED ile ilgili anlayış eksikliklerini ve kavram yanılgıları olduğunu göstermektedir. Öğretmen adaylarının İngilizce Öğretmenliği programında aldıkları öğretmenlik eğitimine gelince, bölümün, ED ve ED odaklı pedagojiler konusunda açıkça gerçekleştirilen bir öğretimin olmamasından dolayı ED gelişimini desteklemediği algılandı. Son olarak, öğretmen adaylarının ED öğretimi ile ilgili olarak, dil öğretiminde ED'yi birleştirmeye yönelik belirsiz ve pratik olmayan stratejiler olduğu ortaya kondu; İngilizce Öğretmenliği programında ED'nin ihmal edilmesiyle eleştirel pedagojinin dil öğretimine indirgendiği ifade edildi. Bununla birlikte, öğretmen adayları, ED'yi etkileyen faktörler ve ED'yi gelecekteki öğretimlerine dahil etmedeki potansiyel zorluklar hakkında kapsamlı bir farkındalık sergilemişlerdir. Araştırma, öğretmen adaylarına, eğitimlerinin başlarında ED ve eleştirel pedagojiyi tanıtmanın ve öğretmen adaylarının anlayışlarını ve deneyimlerini birbirleriyle paylaşmalarına izin vermenin önemine dikkat çekerek, bir dizi pedagojik çıkarımda bulunmuştur. Son olarak, araştırma bulguları, İngilizce Öğretmenliği programındaki eğitmenlerin de ED ve ED odaklı pedagoji konusunda daha açık bir uygulama yapmalarının yanı sıra, ED'yi müfredatın bir parçası olarak değerlendirip İngilizce öğretmenliği alanına özgü bir ED eğitimi vermelerinin gerekliliğini vurgulamaktadır. Bu çalışmayı literatürde baskın sayıdaki nicel çalışmalardan farklı kılan özellik, çalışmanın nitel doğası ile kültürel ve eğitimsel faktörler çerçevesinde öğretmen adaylarının ED ve ED odaklı pedagojiyi nasıl kavramsallaştırdıklarına odaklanmış olmasıdır.

Anahtar Kelimeler: kavramsallaştırma, eleştirel düşünme (ED), ED-odaklı pedagoji, İngilizce dili öğretimi, Doğu Akdeniz Üniversitesi (DAÜ), İngilizce öğretmen adayları

DEDICATIONS

In loving memory of

Khalee Ghamoudi,

who showed me how to be generous,

Dr. Soad Al Busairi,

who showed me how to be purposeful,

Uncle Rashid,

who showed me how to trust myself,

Uncle Majeed,

who showed me how to enjoy family and life,

Uncle Mohammed,

who showed me how to be a critical thinker,

and

my cousin, Mohammed Ghanaba,

who showed me how to be humble and at *peace with life*.

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LIST OF ABBREVIATIONS

AQAS	Agency for Quality Assurance through Accreditation of Study Programs
BA	Bachelor of Arts
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
CCTDI	California Critical Thinking Disposition Inventory
CCTST	California Critical Thinking Skills Test
CCTT	Cornell Critical Thinking Tests
CT	Critical Thinking
CTT	Critical Thinking Test
CP	Critical Pedagogy
FLE	Foreign Language Education
EFL	English as a Foreign Language
ELT	English Language Teaching
EMU	Eastern Mediterranean University
EWCTET	Ennis-Weir Critical Thinking Essay Test
HCTA	Halpern Critical Thinking Assessment
HEICTA	HEIghten Critical Thinking Assessment
HOTS	Higher Order Thinking Skills
L1	First Language
L2	Second Language
LOTS	Lower Order Thinking Skills
PBL	Project-Based Learning
PGCE	Professional Graduate Certificate in Education

TRNC	Turkish Republic of North Cyprus
UK	United Kingdom
US	United States
WGCTA	Watson and Glaser Critical Thinking Appraisal
WHO	World Health Organization

Chapter 1

INTRODUCTION

This introductory chapter provides a brief overview of the background to the study, followed by the problem statement and the aim of the study. Then, research questions and the significance of the study are presented.

1.1 Background to the Study

The ultimate goal of higher educational institutions today is to equip students with skills that would enable them to make good decisions, be successful in their fields and become conscientious members of society (Facione, 2015). Critical thinking (henceforth CT) has been identified by the World Health Organization (WHO) as one of the core life skills to have in the 21st century, among others such as interpersonal relationship skills, effective communication, creative thinking, empathy, and understanding, as well as problem-solving and coping with stress (Ketabi, Zabihi, & Ghadiri, 2012).

CT has proven to be essential for students' academic success and personal growth in many subject areas (Yuan, Yang, & Lee, 2021). It helps them think critically and be involved in the subject matter of their university courses and allows them, later on, to apply these critical thinking principles in their vocational and everyday lives after they graduate (Ennis, 2013). Being considered one of the most essential ‘graduate competencies’ that students are expected to gain from academic life, CT is now a central learning outcome of higher education. Its advocacy to question authority and

established knowledge are “the very essence of what higher education is meant to inculcate in students,” as well as the emphasis it puts to basing conclusions on strong evidence, considered “a valuable skill in the workplace” (Rear, 2019, p. 665).

There are many discussions among scholars regarding the nature of CT (Ennis, 1962; Facione, 1990; Paul, 1984), and not one single definition is agreed on to encompass critical thinking as a whole. It is commonly considered to be consisting of 1) an ability, i.e., ‘CT skill,’ 2) and an inclination, i.e., ‘CT disposition’ to analyze and evaluate information objectively, to differentiate between facts and opinions, and to form one’s judgment about an issue. Facione (2015) identifies CT as “thinking that has a purpose” (p.4), for example, to solve a problem, prove a point, or interpret the meaning of a text, while Ennis (2013) defines it as “reasonable and reflective thinking focused on deciding what to believe or do” (p.1). Taxonomies, frameworks, categories, and sub-categories have been created and revised over the years to better define and assess critical thinking. These include key skills such as interpretation, analysis, evaluation, inference, and self-regulation and sub-skills such as clarifying meaning, examining ideas, analyzing arguments, drawing conclusions, self-examination, and self-correction (Facione, 1990).

In teaching English as a Foreign Language (EFL), promoting critical thinking in the classroom has a positive impact on students as it improves both their thinking abilities and English language competence and encourages them to become active learners (Alnofaie, 2013; Ilyas, 2018). CT is considered a cognitive skill necessary to negotiate the meaning of a text or discourse, self-reflect on learning, and be aware of language usage within the target culture (Dumteeb, 2009). Furthermore, Pishghadam (2011) has recognized distinctive features of English language classes that make it an excellent

space for promoting and improving learners' life skills, such as critical thinking. These features include the English class being a friendly and safe environment for learning and discussing scientific, social, and political topics, constantly comparing between two languages and cultures, also holding pair and group work in class, and having the freedom to speak and express oneself in another language other than one's own.

However, since 'one cannot give what one does not have,' students cannot learn to develop their CT without teachers who already possess the CT abilities and CT-oriented pedagogies necessary to teach it (Yuan & Stapleton, 2020). The practice of language teaching in itself involves engaging with critical thinking. One can detect striking similarities between the examples of strong critical thinking provided by Facione (2015) and what EFL teachers are required to do in their classrooms, as well as the skills they should possess, such as:

- "clever questioning" of students to elaborate their answers and check their understanding;
- "investigative approaches" to analyze students' needs and preferences;
- "working together to solve a problem" with co-teachers, coordinators, and parents;
- "good listening to all sides of a dispute" in the case of holding debates or managing actual confrontations in class;
- "considering all facts" when approaching teaching holistically;
- "deciding what is relevant and what is not" during class discussions or giving feedback;
- "summarizing complex ideas clearly" for students to comprehend;
- "com[ing] up with the most coherent and justifiable explanation of what a passage of written material means" during reading class;

- "devise sensible alternatives … [without becoming] defensive about abandoning them if they do not work" when planning lesson plans; or
- "explain exactly how a particular conclusion was reached or why certain criteria apply" when explicitly teaching or modeling thinking strategies (p.3).

In addition to CT's role in language teaching, it is also perceived as an important social practice. Burkhalter and Shegebayev (2012) identified four components of teaching critical thinking in class as a social practice. These are (1) active learning, (2) questioning authority, (3) student-centered classroom, (4) and holistic grading. An active learning environment is where students are involved in self-directed learning by formulating questions, identifying problems, and finding solutions based on reasonable justifications. Encouraging students to question authority within their educational, social, and political contexts is essential for practicing critical thinking. A student-centered classroom is where the teacher relinquishes control and facilitates discussions, debates, and group work. Lastly, holistic grading, such as grading essays using rubrics, involves testing critical thinking by considering the "student's understanding of ideas, ability to organize thoughts and skill at weighing and producing arguments in support of a thesis" (Burkhalter & Shegebayev, 2012, p. 60).

However, pre-service teachers from different cultural backgrounds may struggle with implementing this critical thinking as 'a social practice' in their respective contexts. Some educational institutions are still heavily dependent on traditional teaching practices such as memorization and lecturing and are often characterized by the absence of independent thinking, the need to conform, and the fear of failure or underperforming (Atkinson, 1997; Burkhalter & Shegebayev, 2012). The context of the ELT department in many countries involves preparing non-native English-

speaking pre-service EFL teachers from different cultural backgrounds to teach English as a second or foreign language in their respective countries worldwide. Atkinson (1997) argues that since native speakers and non-native speakers of English come from different cultural systems and thus, think differently from each other, they are bound to respond to and benefit from critical thinking instruction differently. He believes that CT is a western concept and a social practice highly valued in western societies. To Atkinson, “Critical thinking is cultural thinking” (1997, p. 89). He bases his argument on how western and non-western cultures regard notions related to CT, such as individualism and self-expression inherently different.

The concept of culture can be defined as the "shared system of meanings, behaviors, values, and beliefs that are passed from generation to generation” within a specific group (Altan, 2018, p. 1). Cultural sensitivity implies “being aware that cultural differences and similarities exist and strongly affect individuals' values, learning, and behavior” (Stafford et al., 1997, as cited in Altan, 2018, p. 2). Pre-service teachers are bound to be encultured in the society they were born in. This is where the intercultural sensitivity of the ELT educator is essential for pre-service teachers to navigate their identities as EFL teachers. The ELT educator is then “[a] culturally competent individual who views all human beings as unique humans and realizes that their experiences, beliefs, values, and language affect their perceptions” (Altan, 2018, p. 2). Educational, familial, professional, and social backgrounds all contribute to the making of our identities. Students’ personal experiences, including their cultures, religions, languages, families, memories, and feelings, are all relevant to their learning process and help give students “a distinctive voice” in class (Giroux, 1992, p. 23).

Few studies have investigated pre-service teachers' conceptualization of critical thinking from a cross-cultural perspective (e.g., Chen & Wen, 2018). These often compare and contrast the cultural differences in engaging with critical thinking between native and non-native English-speaking pre-service teachers. Others (e.g., Motha, Jain, & Tecle, 2012; Ruparelia, 2018) examine in depth how pre-service teachers learn to be critically analytical within their education programs based on their previous lived experiences. They also try to identify values and assumptions that inform their practice as critical teachers. Ruparelia (2018), for example, conducted a phenomenological study looking at ten student teachers' understanding, development of and engagement with criticality at a teacher education program in the UK. Ruparelia (2018) noted that international students from different cultural backgrounds appeared to lack confidence in class when engaging with criticality, assuming their previous experience and education did not matter in their new context. It is important then to acknowledge that student teachers' learning and teaching practices are informed by their life histories, beliefs, identities, and cultures (Motha, Jain & Tecle, 2012).

1.2 Statement of the Problem

Although there is an increase of studies on promoting CT among pre-service EFL teachers in recent years, there is relatively less research on how pre-service teachers conceptualize and engage in critical thinking differently based on their cultural and educational backgrounds.

Also, the literature review reveals that most studies are quantitative. They aimed to measure pre-service teachers' CT skills and dispositions by using standardized CT tests such as Watson and Glaser Critical Thinking Appraisal (WGCTA), Ennis-Weir Critical Thinking Essay Test (EWCTET), and California Critical Thinking Disposition

Inventory (CCTDI). Especially in the studies conducted in Turkish contexts (e.g., Alagözlü & Süzer, 2010; Aybek & Çelik, 2007; Cansoy & Türkoğlu, 2017; Genç, 2017; Tufan, 2008). Researchers followed the quantitative method to identify whether CT ability and disposition correlate with teacher candidates' self-efficacy beliefs, academic achievement, and professional identity (Akdere, 2012; Karagöl & Bekmezci, 2015; Moslemi & Habibi, 2019). One study conducted by Tufan (2008) employed the mixed-method research design. It used open-ended questions to explore students' CT conceptions and their perceptions about CT activities in the Faculty of Education.

As much as these studies are significant in their own right by drawing attention to CT in the field of ELT, it is obvious that there is a need for more qualitative research. It is needed to develop a better understanding and deeper insights into how pre-service teachers coming from different backgrounds conceptualize CT and CT-oriented pedagogies. In addition, to the best knowledge of the researcher, there are no studies conducted to investigate any of these issues in the research context (i.e., EMU), either.

1.3 Aim of the Study

In order to fill the gap in the related literature, this study aims to investigate the critical thinking experiences of five international, fourth-year ELT students coming from five different backgrounds and studying at the ELT program in the FLE department at EMU. This research explores these pre-service teachers' conceptualization of CT and CT-oriented pedagogy and perception of how the ELT program is contributing to developing their CT abilities. It also seeks implications on the role of culture, education, and other factors in understanding and developing CT and CT-oriented pedagogies.

According to the aim as mentioned above, the study addresses the following research questions:

1. What are the participating pre-service teachers' educational experiences with critical thinking?
2. How do the participating pre-service teachers conceptualize critical thinking and CT-oriented pedagogy now?
3. How do the participating pre-service teachers perceive the contribution of the BA program in developing their CT?
4. How do the participating pre-service teachers plan to incorporate CT in their teaching within their respective contexts?

1.4 Significance of the Study

The study is significant in several ways. Firstly, the quantitative nature of earlier studies on pre-service EFL teachers' CT is dominating in number, while fewer qualitative studies are found in the related literature. This study may be a contribution to the qualitative studies on pre-service EFL teachers' critical thinking.

Secondly, considering the need in the related literature for identifying the cultural factors that could impact critical thinking development and conceptualization among pre-service EFL teachers coming from multicultural backgrounds, the findings in this study may add important knowledge to the field. Despite the limited number of participants, which is quite normal due to the study's qualitative nature, what the participants narrated is full of rich information regarding the impact of one's cultural and educational backgrounds on their CT development and conceptualizations. This rich data is expected to add more depth and insight into the matter.

In addition to these more global concerns, more specifically the findings of the study are expected to benefit both the administration and academic staff of the research context, as the reported findings would help them identify the current state of CT in the BA in ELT program as perceived by its students. This may lead to fruitful discussions within the department on how to incorporate CT in the syllabuses and, more importantly, delivery of the courses so that prospective teachers (regardless of the possible limitations due to their cultural and educational backgrounds) benefit more to develop CT-oriented pedagogies in their future teaching.

Last but not least, this study may have contributed to the participants' self-awareness about the importance of CT not only in educational contexts but also in all walks of life. In fact, I, as the researcher, am very well aware of it now, thanks to this study.

1.5 Definition of Key Terms

Critical Thinking (CT): Although the literature review in this research covers the manifold definitions provided by scholars for CT, the term CT, as used in this research, refers to the various cognitive processes that include reflecting on one's own thinking, making informed decisions, developing evidence and arguments to support views, evaluating the logic, validity, and relevance of information, applying knowledge to various contexts and new circumstances, exploring issues from multiple perspectives, and solving problems (Chaffee, 1992, p. 3). It also refers to the ability an individual possesses to do all or some of the following: identify underlying assumptions in an argument, recognize important relationships and patterns, make correct inferences and deduce conclusions from information or data provided (Pascarella & Terezini, 1991, p. 118).

This cognitive dimension of CT also involves dispositions or qualities that a critical thinker possesses, such as inquisitiveness towards different issues, concern for being well-informed, open-mindedness and flexibility towards differences and other options, willingness to understand others' opinions and perspectives, fair-mindedness, and an ability to recognize stereotypes or biases, willingness to reflect on, reconsider, and revise one's views, self-confidence in one's own ability to reason, orderliness of the thinking process, clarity in stating the problem and persistence in the face of difficulties (Cheung et al., 2002; Facione, 1990, p. 13).

Critical Pedagogy: In this research, the term critical pedagogy refers to the "learner-centered approach to education that is focused on problem posing in which the students engage in critical dialogue … [with] the aim of improving social justice with an emphasis on action" (Larson, 2014, p. 123).

CT-oriented Pedagogies: Also known as CT-oriented teaching, CT-oriented instruction, or simply CT teaching or teaching for CT, refers to the "knowledge and strategies [teachers] employ to promote CT" (Yuan et al., 2021, p. 2) through education –or language teaching as in the context of this research– to develop students' CT abilities and facilitate their language learning. Teachers' CT-oriented pedagogies are separate from their individual CT abilities (Yuan & Stapleton, 2019), meaning that one can possess CT cognitive skills and dispositions without necessarily having the ability or practice to teach it.

1.6 Summary

The chapter presented background information on the value of critical thinking in higher education, especially for English language learners, and the importance of including it in ELT teacher education. It also provided an introduction into the nature

of CT and the concept of culture in relation to engaging with CT and outlined the problem statement, aim, and research questions. Finally, the significance of the study was emphasized, and some key terms were defined.

Chapter 2

REVIEW OF LITERATURE

This chapter firstly reviews the literature on the concept of critical thinking, its definition, scope, and assessment, and critical pedagogy and its incorporation in education. It then shifts focus to culture and its impact on developing critical thinking of students from different cultural backgrounds by addressing how other factors can result in differences in understanding critical thinking by individuals from the same or different cultures. In addition, it provides a review of related studies which explore the impact of culture and other factors on pre-service teachers' conceptualization of critical thinking. The chapter is finalized with a brief summary of the literature reviewed.

2.1 Critical Thinking: Its Definition and Scope

The concept of critical thinking (hereafter CT) dates back to the Greek philosophers Socrates and Plato, who are believed to have introduced it 2,500 years ago and is still being employed today (Masduqi, 2006). Often considered the father of modern critical thinking, John Dewey (1933) first termed critical thinking as "reflective thinking":

> a distinction from other operations to which we apply the name of thought, involves (1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring to find material that will resolve the doubt, settle and dispose of perplexity (p.12).

Nowadays, the term critical thinking is so multifaceted and multidimensional. The literature is filled with different and yet overlapping definitions of CT, as scholars have not reached an agreement on one definition or scope of CT. Brigham (1993, as cited

in Indar, 2017) notes there are as many definitions as there are experts. Reid (2000) argues that it is impossible to encompass all of the various aspects of critical thinking in one definition; instead, many definitions are required. Dewey (1933) defined critical thinking as "active, persistent, careful consideration of a belief or supposed form of knowledge in light of the grounds that support it and the further conclusion to which it tends" (p. 9). Paul (1995) defines CT as "the art of thinking about your thinking while you are thinking in order to make your thinking better: more clear, more accurate, or more defensible" (p. 526). Paul and Elder (n.d.) include a definition of critical thinking in their organization's website, *The Foundation for Critical Thinking,* defining it as "that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them."

In an attempt to reach a consensus on what cognitive skills are involved in the critical thinking process, a panel of forty-six experts from different fields participated in a project headed by Facione (1990a) to define the critical thinking skills required at the college level. The study employed the *Delphi Method,* where "a central investigator organizes the group and feeds them an initial question, [then he] receives all responses, summarizes them, and transmits them back to all the panelists for reactions" (2015, p.9). All the while, panelists' names are removed, so no one knows to whom the arguments belong. The study resulted in a consensus on the following critical thinking skills and sub-skills as well as their definitions (Table 2.1):

It was Siegel (1990, 1992) who developed the dual-component theory of CT, which conceptualizes CT as including a 'reason assessment component' which refers to the skills domain, and the 'critical spirit' or 'critical attitude component,' which refers to

Table 2.1: List of Critical Cognitive Skills and Sub-Skills

Skill	Critical Thinking Skills Description	Sub-skills
Interpretation	"To comprehend and express the meaning or significance of a wide variety of experiences, situations, data, events, judgments, conventions, beliefs, rules, procedures, or criteria"	- Categorization - Decoding significance - Clarifying meaning
Analysis	"To identify the intended and actual inferential relationships among statements, questions, concepts, descriptions, or other forms of representation intended to express belief, judgment, experiences, reasons, information, or opinions"	- Examining ideas - Identifying arguments - Analyzing arguments
Inference	"To identify and secure elements needed to draw reasonable conclusions; to form conjectures and hypotheses; to consider relevant information and to reduce the consequences flowing from data, statements, principles, evidence, judgments, beliefs, opinions, concepts, descriptions, questions, or other forms of representation"	- Querying evidence - Conjecturing alternatives - Drawing conclusions
Evaluation	"To assess the credibility of statements or other representations that are accounts or descriptions of a person's perception, experience, situation, judgment, belief, or opinion; and to assess the logical strength of the actual or intended inferential relationships among statements, descriptions, questions, or other forms of representation"	- Assessing claims - Assessing arguments
Explanation	"To state and to justify that reasoning in terms of the evidential, conceptual, methodological, criteriological, and contextual considerations upon which one's results were based; and to present one's reasoning in the form of cogent arguments"	- Stating results - Justifying procedures - Presenting arguments
Self-regulation	"Self-consciously to monitor one's cognitive activities, the elements used in those activities, and the results educed, particularly by applying skills in analysis, and evaluation to one's own inferential judgments to question, confirm, validating, or correcting either one's reasoning or one's results"	- Self-examination - Self-correction

Source: APA Report: Expert Consensus Statement on Critical Thinking

the disposition towards CT. Critical thinking attitude or disposition is the individual differences based on personality, inclination, and mental ability (Tufan, 2008). It is the motivated and willing attitude to apply and actively engage in critical thinking. These dispositions include "open-mindedness, fair-mindedness, the propensity to seek reason, inquisitiveness, the desire to be well informed, flexibility, and respect for and willingness to entertain others' viewpoints" (Lai, 2011, p. 10). Critical thinking skills, on the other hand, are the employment of the attitude and application of knowledge, and they include analysis, interpretation, inference, evaluation, explanation, and self-reflection (Facione, 1990).

Golding (2011) holds the view that "being a critical thinker is a multi-faceted notion: merely knowing the subject matter is insufficient for being a critical thinker, as is being disposed towards critical thinking without possessing strong critical thinking skills" (p. 358). Critical thinking is now often recognized as a composite of skills, attitudes, and knowledge divided into the following by Mark Mason (2008, as cited in Burkhalter & Shegebayev, 2012):

> (1) the skills that help people reason properly and their transferability to other domains, (2) the disposition a learner must have to engage in critical thinking, and (3) the amount of knowledge of a particular field one must have to be able to engage in critical thought (p. 59).

Drewett (1995) recognizes that critical thinking is a holistic activity "which incorporates both theory of arguments and the context in which those arguments occur" (p. 72). This holistic perspective to critical thinking is termed as 'criticality,' which includes critical thinking and 'critical being.' Ruparelia (2018) identified a distinction between the two by noting what they consist of: (1) Critical thinking: Reflections 'in' and 'on' action and questioning; Study Skills – critical reading and

writing; Questioning, and (2) Critical being: Perceptions of self; Relationships with others within contexts; Sense of agency; Culture/tradition. (p. 148)

The term critical being, defined as "someone who is the author of their life" by Dunne (2015, as cited in Ruparelia, 2018, p. 145), could also refer to one who can engage with criticality in different contexts. A critical being is one who can "dialogue with others who are different and have different worldviews, different personal values, and different social and cultural backgrounds" (Mason, 2008, p. 3).

2.2 Critical Thinking in Education

Dewey (1938) asserts that the fundamental objective of education is learning to think. The contemporary view often held is that education should address the issue of teaching students *how to learn* rather than *what to learn* (Partnership for the 21st Century Skills, 2007, p. 46). Halpern (2003), too, identifies the most important intellectual skills for the 21st century to be "the twin abilities of *knowing how to learn* and *knowing how to think* clearly about the rapidly proliferating information that we must select from" (p. 3). Epstein (2006) shares her belief that "thinking critically is a defense against a world of too much information and too many people trying to convince us" (p. 1). According to Tsui (2002):

> We need to teach [students] how to think. Higher order cognitive skills such as the ability to think critically are invaluable to students' futures; they prepare individuals to tackle a multitude of challenges that they are likely to face in their personal lives, careers, and duties as responsible citizens (p. 740).

Although critical thinking is considered vital within the educational setting, there is disagreement on how to teach it. In terms of skills, Benjamin Bloom (1956) developed a taxonomy that was the first to delineate critical thinking skills. The taxonomy or thinking hierarchy that he developed to improve students' critical skills comprises six

cognitive levels where learners are enabled to acquire, retain and use new information. It classifies thinking and learning behaviors from the simplest to the most complex. The first two levels are ‘knowledge’ and ‘comprehension,’ considered convergent thinking or ‘lower-order thinking skills’ (LOTS). Students learn an already established concept given by a text or the teacher relying on understanding and recalling facts mainly. These are followed by ‘application, ‘analysis,’ ‘synthesis,’ and ‘evaluation.’ The last four levels are known as divergent or ‘higher-order thinking skills’ (HOTS); when students’ thinking diverges from the pre-established concept and generates new ideas and opinions. These levels are hierarchal, and each stage requires mastering the skills of the one before.

The skills mentioned above and other taxonomies can be introduced to learners in several ways. For example, Ennis (1989) listed three approaches used to promote critical thinking in class, namely the general approach, the immersion approach, and the mixed approach:

(1) The general approach is where critical thinking abilities and disposition are taught separately from the main subject matter.

(2) The immersion approach is where subject matter instruction is infused with implicit critical thinking skills encouraging students to think critically within their subject matter.

(3) The mixed approach is where general principles of critical thinking are combined with any subject-specific critical thinking instruction.

Some educators debate whether to teach ‘critical thinking’ or a more holistic concept of ‘criticality.’ For example, Ruparelia (2018) identified criticality addressed in the literature as two approaches. The first is the ‘mechanistic’ critical thinking approach

consisting of general 'study skills,' which are often taught as part of academic reading and writing practice. The second is the 'critical being' approach based on Freire's definition of critical pedagogy (p. ii). This approach involves students' reflection and analysis of "their own perceptions of themselves, the relationships they form with others in the contexts they experienced, and cultural or traditional factors" (p. 140).

2.3 Critical Pedagogy

Critical pedagogy (hereafter CP) is a concept introduced by Paulo Freire (1968) in his book *Pedagogy of the Oppressed*. CP attempts to overturn the traditional "banking education" in which learners are treated as a *tabula rasa* to be filled with pre-existing ideologies, "to receive, memorize and repeat" (as cited in Khatib & Miri, 2016, p. 99). Instead, CP aims to empower learners through a shift in student and teacher roles where they all engage in equal dialogue within a student-centered pedagogy in which "students are expected to be critical co-developers of knowledge who work together and with their teacher to question assumptions and prior knowledge in order to effect change" (Kim & Pollard, 2017, p. 61).

CP is a tool to foster development-oriented classrooms where students are involved in dialogues and discussions, decision-making concerning their learning, problem-solving projects, and critical thinking for social activism. CP advocates for social justice inside and outside of class and encourages students to be critical of their culture and target language. It aims to develop citizens that "critically inquire into why the lives of so many human beings … including their own, are materially, psychologically, socially, and spiritually inadequate" (Crookes, 2013, p.8) by means of defining and addressing problems related to society and exploring appropriate and feasible solutions for them.

Akbari (2008) adds that CP in ELT is “an attitude” to language teaching that connects what happens in the classroom to the outside social world, and it “aims at social transformation through education” (p. 276). However, aiming at an international audience, many EFL coursebooks, for instance, avoid provocative topics, and thus the content becomes “bland” and “boring” focusing on topics like holidays and lifestyles (Banegas, 2011, p. 80). Hence, the learners need to learn the language in contexts related to their surroundings, such as human rights and social inequality, for example, to add more realness to the teaching material.

English has become de-nationalized and re-nationalized as it became the world’s lingua franca (Sridhar & Sridhar, 1994, as cited in Akbari, 2008, p. 278). That means studying English in the context of English-speaking countries is unrealistic as the students need to use the target language to communicate their “cultural values and conceptualization” (p. 279) rather than other nations’. Moreover, many EFL students are studying the language to immigrate or study, rather than to plan a holiday in England or Australia.

Being critical and engaged in social change can also be seen in the students’ ‘voice’ in EFL, as highlighted in Shahri (2018). He argues that a student’s identity can have effects on her/his language learning, in that they *invest* in an identity, not only a language. In other words, the language the students learn reflects what they want, and it is shown in the words and sounds they use. For instance, a student looking to studying in academia would read academic articles and start using sophisticated words in an attempt to identify themselves with what they want to become. On the other hand, a student studying English for communicative purposes would use more slang which they have learned from TV shows (Shahri, 2018).

CP entails other themes such as multivocality of student teachers (Khatib & Miri, 2016); glocalization of teaching materials (Kohnke, 2019); variety-plus input of World Englishes (Yang, 2016); and L1 use in class (Miri, Alibakhshi, & Mostafaei-Alaei, 2017). However, CP practitioners often face problems in applying CP in specific contexts due to physical conditions of the teaching environment, linguistic proficiency of students, and cultural aspects. Factors affecting CP implementation include problems related to religion (Hudson, 2019), Western indoctrination, and other risks resulting from disturbing the political and social norms (Jeyaraj & Harland, 2016). This is true, especially in countries that do not necessarily share the same values as the Western culture.

2.3.1 Incorporating CP in the Language Classroom

A study conducted by Kim and Pollard (2017) attempted to introduce CP to a Korean English as a Foreign Language (EFL) classroom. The researcher/teacher Kim wanted to challenge the status quo in the Korean classroom characterized by rote learning and teacher-centeredness. To make her students become critical English users, she introduced the CP paradigm to the course by project-based learning (PBL) approach, where students work in groups to develop a website that deals with a social issue and then present it in a group presentation. However, the study's findings show that this pedagogy was quite stressful and faced extreme resistance by both the teacher and students.

The change in teacher role stressed students as they were not used to student-centered classrooms and the amount of work they were expected to do. As a result, they felt that they were not learning and did not receive enough English language instruction. The teacher also resisted at first, as shifting her role from an authority in class to a facilitator

required accepting students' open criticism of her as a teacher. She was frustrated and exhausted by her students' resistance and complaints. The number of students in the class (47 students) was another factor that contributed to her stress.

To address these factors of resistance and stress, the study suggests using 'modest critical pedagogy' from Tinning (2002, as cited in Kim & Pollard, 2017). This method introduces CP as an explicit part of the curriculum and provides a more local and contextualized take on it, in which it shifts the focus from external social change to internal classroom change; where students examine how and why they learn English and its cultural and social aspects, as well as the impact it could have on their sense of self (Kim & Pollard, 2017).

Yet, it is crucial for any teacher who intends to integrate critical language pedagogy in his/her teaching to be aware that, like any teaching method introduced to a class, students, their contexts, backgrounds, and goals must all be considered. Crookes (2013) emphasizes the importance of "baby steps" (p. 46) and not underestimating the practical demands of classroom management, material, and lesson planning for the success of the CP approach. Needs analysis can be conducted, and teacher training and cultural-orientation sessions can be held to familiarize the teachers with their students and hold CP-informed classes effectively to have the desired positive impact on students, institutions, and even societies.

2.4 Assessment of Critical Thinking

There are many standardized commercial CT tests used in higher education for admissions and organizations for hiring applicants worldwide. Some include multiple-choice questions, such as the California Critical Thinking Skills Test (CCTST) (Facione & Facione, 1992), the California Critical Thinking Disposition Inventory

(CCTDI) (Facione & Facione, 1992), and the Cornell Critical Thinking Tests (CCTT) (Ennis, Millman, & Tomko, 1985). Some tests involve short essay responses with a single acceptable answer, such as the Ennis-Weir Critical Thinking Essay Test (Ennis & Weir, 1985). Others involve a mix of multiple-choice and open-ended questions, such as the Halpern Critical Thinking Assessment (HCTA) (Halpern, 2007). The most recent test is the HEIghten Critical Thinking Assessment (HEICTA), developed by ETS (Liu et al., 2016, as cited in Rear, 2019).

Significant research has employed these tests to identify CT levels, predictors of CT disposition, and possible correlations with other variables. These studies focused on prospective teachers in different education fields (Cansoy & Türkoğlu, 2017), EFL students (Genç, 2017), and pre-service EFL teachers' (Alagözlü & Süzer, 2010; Tufan, 2008). To exemplify, Tufan (2008) used the Watson and Glaser Critical Thinking Appraisal (WGCTA) to examine the CT skills and perceptions of 103 Turkish prospective teachers at a Foreign Language Education Department. Alagözlü and Süzer (2010) used the Ennis-Weir Critical Thinking Essay Test (EWCTET) to assess CT tendencies of Turkish pre-service English language teachers both in their L1 (Turkish) and L2 (English). Cansoy and Türkoğlu (2017) used the California Critical Thinking Disposition Inventory (CCTDI) along with Problem Solving and Teacher Self-Efficacy Scales to find correlations between 519 Turkish pre-service teachers' critical thinking disposition, problem-solving skills and teacher self-efficacy. Finally, Genç (2017) employed the Turkish version of the same test (CCTDI) to measure CT levels of 280 Turkish EFL learners at the school of Foreign Languages and to find out how these levels correlated with gender, academic achievement, subject area and self-reported reading habits.

Yet, whether such standardized tests provide an effective means to measure pre-service EFL teachers' critical thinking abilities and disposition is still questionable. We need to look into one crucial issue regarding the nature of critical thinking and how it is assessed: Is CT subject- (or domain-) specific? Or is it a general skill that can be easily transferred to everyday life or other academic contexts? (Rear, 2019). While the debate is not yet settled in regard to this issue, some researchers such as McPeck (1990), who wrote extensively on the subject-specificity of critical thinking, argue that it does not apply to all disciplines the same. Even creators of general standardized CT tests (Ennis,1985; Facione, 1990) acknowledge that CT has both general and domain-specific aspects.

In the same vein, Rear (2019) warns against using standardized CT tests to measure an academic program's efficacy. He notes that "[b]y definition, a standardized critical thinking test cannot utilize a candidate's specialized knowledge; they have to be entirely generic in nature" (p. 668). CT standardized tests are based mainly on verbal reasoning and comprehension skills and are often translated and administered to university students. These standardized tests are somewhat cheap and easy to administer, and academic institutes often use them to measure CT outcomes. However, studies have revealed that students score better when tested with CT items focusing on content related to their particular discipline (Rear, 2019).

Some researchers were aware of the inappropriateness in applying standardized tests in their respective research contexts and have adapted the format to fit their local context and assess the domain-specific abilities of their participants. For example, Akdere (2012) adopted the Halpern Critical Thinking Assessment (HCTA) (Halpern, 2007) to create her own CT test (CTT) to assess pre-service teachers' critical abilities

in the field of education. She constructed her test based on a CT framework generated after analyzing definitions and frameworks in the related literature. The table below (Table 2.2) specifies the critical thinking skills and dispositions that are being tested by CTT.

Table 2.2: Critical Thinking Test Specification (Akdere, 2012, p. 70)

CTT measures whether test-takers:
reason critically by
basing arguments/explanations/opinions on reliable, sufficient, and relevant information
basing arguments on non-fallacious reasoning
arriving at valid conclusions
critically interpret, analyze and evaluate arguments/information by
inferring implied ideas/information accurately
distinguishing between fact and opinion
recognizing fallacies in reasoning
identifying underlying assumptions, worldview(s), and biases
and while doing so
avoids emotional reasoning
considers alternative viewpoints
questions authority, tradition, and majority opinion
avoids ego-centric and socio-centric tendencies
pays attention to sources of information
suspends judgment when necessary

More recently, Daniel Willingham (2020), a psychologist at the University of Virginia, advises in his article titled *How to Teach Critical Thinking* to identify precisely what critical thinking means in each domain. He stresses setting clear critical thinking goals for students based on the domain-specific knowledge they should know and tasks showing critical thinking that they should be able to do. He adds that these skills should be explicitly taught and practiced.

In brief, in the discussion around measuring and developing cognitive abilities, we can see an emphasis on individualistic, global, and domain-specific aspects. The context

and the role culture plays in the development of CT abilities are often neglected. These approaches and assessment tools do not take into consideration how “the relationship between an individual and the surrounding environment [i]s crucial for the development of cognitive abilities” (Hong, Morris, Chiu, & Martinez, 2000, as cited in Grosser & Lombard, 2008, p. 1364).

2.4.1 Using Western-developed CT Tests to Compare CT Abilities

Some studies sought to empirically investigate the cross-cultural differences in Western and non-Western students' critical thinking abilities and the explanations behind them. To exemplify, Lun, Fischer, and Ward (2010) found that New Zealand European students performed better on the Watson–Glaser Critical Thinking Appraisal (WGCTA) and the Halpern Critical Thinking Assessment (HCTA) than international students coming from China. The study attributed this partially to the English proficiency of the latter group.

Earlier on, Grosser and Lombard (2008) attempted to examine the relationship between culture and the development of critical thinking skills in prospective teachers coming from mixed cultural backgrounds. They employed the WGCTA to assess the critical thinking abilities of 114 first-year student teachers from South Africa. The test results showed that the English-speaking white Afrikaans students (representing the Western culture) performed better than the Sesotho-speaking black students (representing the African culture). Yet, when the test results of both groups were compared with two other norm groups of pre-service teachers and Grade 12 students in the United States, both of the South African groups’ results were lower.

The study concluded that the South African group of pre-service teachers are not yet functioning even on Grade 12 level regarding critical thinking abilities. This finding

indicates that pre-service teachers may have difficulties executing critical thinking if they come from a cultural environment that does not prepare them to utilize it. Grosser and Lombard (2008) attribute this finding to how African culture focuses on collective thought and experiential knowledge and lacks cognitive analytical abilities such as critical thinking. The traditional African philosophy of 'Ubuntu,' which means "I am only a person through others" (p. 1368), reinforces the sense of collective agency that governs thinking in African culture (Ayisi, 1992, as cited in Grosser & Lombard, 2008).

However, in psychometric studies (as the ones reviewed above), where standardized CT tests such as the WGCTA, CCTDI, and HCTA are employed, it is often overlooked that these tests were "developed within the American social and cultural background, so complete elimination of social and cultural bias has not been possible" (Tian & Low, 2011, p. 67). Based on this argument, such studies cannot provide a comprehensive idea of the CT abilities of participants without employing locally-developed CT assessment tools.

Language proficiency is also believed to play a significant role in the differences in CT skills, especially in international students studying abroad at Western institutions. This can be explained by the cognitive load theory. Since working memory can only process limited information at a given time, a decline in L2 learners' thinking abilities can result from overloading the working memory with elements of the foreign language (Campbell et al., 2007; Paas, Renkl, & Sweller, 2003, as cited in Lun et al., 2010).

2.5 Critical Thinking and Culture

Ayisi (1992, as cited in Grosser & Lombard, 2008) identifies culture as that "complex whole which includes knowledge, belief, art, law, morals, cultural tools, customs, and all other capabilities and habits acquired by man as a member of society" (p. 1). The place of culture in cognitive development has been emphasized by Gauvain (2001, as cited in Grosser & Lombard, 2008): "perspectives that only concentrate on internal processes of cognitive development (growth and age-related factors) and ignore external processes (cultural environment) and the interaction of the two, cannot give a complete account of the emergence of human intellect" (p. 1367). Therefore, it is important to recognize that the cultural environment in which a learner grows up and interacts will be a major factor contributing to developing her/his cognitive abilities (Grosser & Lombard, 2008).

There are two views regarding the relationship between culture and cognition (DiMaggio, 1997). The first view puts culture at the center, where its members share a limited number of consistent elements such as the ones mentioned above (e.g., beliefs, attitudes, etc.), relying heavily and uncritically on the existing knowledge and cognitive processes in that culture (DiMaggio, 1997). The second view treats culture as a 'toolkit of strategies' where the cultural elements shared by the group are less identical, and there is less pressure to reject incongruent elements. Here individuals can "over-ride programmed modes of thought to think critically and reflexively … when dissatisfied with the status quo of an issue or when existing schemata fail to account adequately for new stimuli" (p. 272).

According to the second view, it appears that critical thinking, similar to learning, is a tool situated in culture and that it can only be understood and applied within a context

(Lipman, 1991, as cited in Burkhalter & Shegebayev, 2012). This indicates that if an individual is not taught and instructed to use critical thinking, he/she may not be able to do so since it is not part of their internalized culture. It is difficult to ask students "to use the tools of a discipline without being able to adopt its culture" (Burkhalter & Shegebayev, 2012, p. 33).

Another distinction to consider is the concepts of 'large culture' and 'small culture' developed by Holliday (1999, as cited in Tian & Low, 2011). 'Large culture' refers to the overall higher culture applied at a national or regional level (i.e., Chinese culture). In contrast, 'small culture' refers to a smaller scale of events and activities done by a set of people within a specific context (i.e., classroom culture). Tian and Low (2011) posit that "'small culture,' or students' reactions to learning contexts, can play an important role in students' behavior and performance [of CT]" (p. 69).

2.5.1 Critical Thinking: A Western Concept?

Western culture is a term used to refer to North America and Western Europe. It can be traced to Greek and Roman thought and the Christian religion, where cognitive activities are characterized by deductive and inductive reasoning and Socratic questioning, which involve the following:

> …objects are detached from their context, there is a focus on the attributes of an object to assign it to categories, a preference for using rules about the categories to explain and predict the object's behaviour, making inferences that involve the de-contextualizing of structure from content and the use of formal logic and avoidance of contradiction (Grosser & Lombard, 2008, p. 1368).

CT is considered a prerequisite for higher education in Western universities. The term is often regarded as self-explanatory as Western academic staff would usually take it for granted that university students will understand it (Tian & Low, 2011). Despite its constructive meaning in Western educational contexts, the word 'critical' can have

negative connotations in non-Western contexts (e.g., Turkish), showing how cultural differences may result in misinterpretations of the term (Petek & Bedir, 2015, p. 13).

It is believed that the term 'critical thinking' can be misinterpreted by people from non-Western cultures who are unfamiliar with the concept. They may regard it as an unfavorable trait in an individual, suggesting "criticism, negativity, opposition, and/or argumentativeness" (Halpern, 2016, p. 7). However, scholars assure that "being critical does not mean negative about the opinions of others but being able to identify assumptions and evaluate them logically" (Rear, 2019, p. 666).

As for non-Western cultures, they are believed to be characterized by collectivism and holistic cognition. Nisbett et al. (2001, as cited in Grosser & Lombard, 2008) describe societies that value holistic thinking and social obligations as ones which:

> …focus on paying attention to relationships, and rely on experience-based knowledge rather than abstract logic, reconciling, transcending or even accepting contradictions. It reflects similarity and contiguity … there is avoidance as means of dealing with conflict and an absence of participation in discussions and an absence of meeting the requirements of rhetoric … [such as] argumentation, conclusion, making judgments and spotting contradictions. (p. 1369)

Paton (2005, as cited in Tian & Low, 2011), on the other hand, argues that CT is not only a product of Western culture, but in fact, it belongs to all successful cultures; noting that CT elements can be found in Chinese historical culture within the past millennia. In Tian and Low's (2011) review of the current literature on Chinese learners' CT and its relationship to their culture, it was concluded that most studies failed to distinguish between the traditional historical culture and the contemporary modern one that is largely influenced by Western cultures due to globalization. Tian

and Low (2011) also contend that "there is no strong evidence to support the claim that collectivism is necessarily incompatible with CT" (p. 65).

2.5.2 Cultural Differences in Perceiving Critical Thinking

A study (Manalo, Kusumi, Koyasu, Michita & Tanaka, 2015) investigated what students from different cultural backgrounds perceive as 'good' thinking skills and considered necessary in their university studies (e.g., education, engineering, law, and science). Focus group interviews were conducted with twenty-three undergraduate university students from Kyoto and Okinawa in Japan and Auckland in New Zealand. The researchers explained the reason behind using two groups of students from Japan as to "find out the extent to which student views might be similar or different across 'subgroups' [Kyoto and Okinawa] within the same overarching 'cultural group' [Japan]" (p. 302).

Findings showed that students from all groups shared similar and overlapping views regarding the qualities of good thinkers, such as considering different perspectives, following a logical approach in reaching conclusions, and seeing "the big picture" (Manalo et al., 2015, p. 308). Regarding good thinking skills useful in their course studies, students from New Zealand referred to more pragmatic aspects of thinking, such as "being able to generate and organize ideas through … brainstorming and mind mapping" (Manalo et al., 2015, p. 309). One student from New Zealand also referred to metacognition and described it as "[t]o be able to assess the usefulness of thinking . . . being aware of your thinking. . . thinking about thinking" (p. 309). The Kyoto group referred to thinking strategies that involve deeper processing such as 'abstraction' and 'linking of ideas' as important, while the Okinawa group pointed out the importance of "being able to express one's own ideas about the subject matter" and

"considering the cultural meaning of ideas taught in courses, and … appreciating the relevance of that cultural meaning to oneself" (p. 304).

The similarities between the three groups of students indicate how higher education institutions worldwide are becoming more alike (Manalo et al., 2015). On the other hand, the discrepancies between the three groups indicate various educational factors, such as instructors' expectations of their students' thinking skills, where some are "requiring only superficial thinking approaches such as rote memorization" (Manalo et al., 2015, p. 314).

One similarity between the Kyoto and Okinawa student groups from Japan, which Auckland students did not share, is how 'consideration of others' was viewed as one of the qualities of reasonable thinkers. The researchers found that the similarity indicates the collective tradition of Asian cultures that emphasizes the interdependence of people who consider themselves part of a bigger collective. This contrasts with the students from New Zealand who place value on the ability of "getting inside the lecturer's head," but not as part of a genuine desire to understand others; rather "so that they could produce work accordingly (and hence obtain better grades)" (Manalo et al., 2015, p. 313).

2.5.3 Culture is Not the Only Factor

In the previously reviewed study (Manalo et al., 2015), there were differences found in conceptualizing CT between the student groups within the same culture (Japan), which indicate the influence of educational and social factors in contrast to cultural ones. When asked about the meaning of the term 'critical thinking,' all the students from the Kyoto group (one of Japan's most prestigious universities) have heard of it and provided examples of it, such as "not accepting information passively but doing

so critically," "independence in thinking," "being aware of bias," "to distrust," and "to be reflective" (p. 311). As for the Okinawa group of students, some had not heard of the term CT, while others had forgotten what it meant. When pressed, they displayed uncertainty about the nature of CT, citing examples such as "to think more deeply and derive a good direction" and "to judge one idea and generate new ideas" (p. 311). They also mentioned thinking approaches that are not relevant to critical thinking, such as positive thinking and intuition.

Culture may not be the only reason behind the lack of CT abilities. Asian students' reticence and hesitance to ask questions in class do not necessarily mean they are uncritical or that it is due to cultural factors. It could be due to practical reasons, such as a genuine desire not to waste class time, which is believed valuable considering the usual number of students in Asian classes (Mok, Kennedy, Moore, Shan, & Leung, 2008, as cited in Tian & Low, 2011). As for reliance on memorization, Tian (2008, as cited in Tian & Low, 2011) found that since CT skills "were not tested in traditional exams … students were happy to avoid independent thinking unless the system required it" (p. 69). This is due to the institutional culture, in which "lectures were frequently large and heavily teacher-dominant … and there was a marked lack of written assignments" (Tian, 2008, as cited in Tian & Low, 2011, p. 69). Tian and Low (2011) conclude that researchers should stop stereotyping Chinese students:

> …culture cannot be the sole explanation for Chinese students' CT performance … evidence strongly suggests that, while CT elements can indeed be found in ancient Chinese culture, many other factors, especially students' previous learning experiences, are of more immediate relevance and likely to affect performance (p. 61).

2.5.4 The Impact of Culture and Other Factors on Critical Thinking

Not many studies have provided evidence on how the development of students' CT can be affected by cultural or other factors (Indar, 2017). Tsui (2000) argues that some

aspects of students' cultural and religious backgrounds, do in fact, influence the development of CT. Ennis (2013) posits that CT can be affected by the nature of the subject matter and institution-specific factors, such as: "…student backgrounds and interests, teacher style, teacher interest, teacher grasp of critical thinking, class size, cultural and community expectations, student expectations, colleagues' expectations, [and] the amount of time available to teachers..." (p. 4).

This entanglement can extend to political and ideological factors as well. There are cases where teaching critical thinking can be challenging due to authoritative systems or cultural practices that Indar (2017) found that most of the factors that have an impact on the development of CT belong to one of these three categories: 1) Teacher characteristics, 2) Student characteristics, and 3) Institutional characteristics. However, she specifies that "[t]hese characteristics are not mutually exclusive; because of the fact that they are all operating within the educational institution's environment, they are undeniably, inextricably intertwined and the boundaries separating them are quite blurred" (p. 48).

Burkhalter and Shegebayev (2012) examined the case of post-Soviet Kazakhstan by reviewing the literature and interviewing nine teachers regarding the teacher education they received in the light of the Soviet pedagogical legacy. They found that the teacher education Kazakhstani teachers had undergone included elements that complicate the inclusion of critical thinking pedagogy in any culture or educational system and curricula:

1) memorization, where teachers were asked to memorize long passages of novels;

2) lecturing, where materials were written on the board for students to copy without any discussion of the lecture;
3) absence of independent thinking, as students were encouraged to copy and use the same 'correct' answer, especially to ideological questions on socialism and capitalism;
4) learning foreign materials without textbooks, where they often reused older textbooks with answers already written by previous students without any communication practice in the target language;
5) oral testing following a list of questions memorized beforehand;
6) fear-based behavior, as students were afraid of failing, expulsion, and humiliation of not knowing the answer; and
7) punishment and social stigma for non-conformity, designed to keep students in their place and resulting in a hostile and negative atmosphere where students were often being yelled at (Burkhalter & Shegebayev, 2012, pp. 62-67).

Cultural practices such are those above may stand as barriers to implementing student-centered and collaborative learning practices, which are essential for utilizing critical thinking. It is concluded that "[c]ritical thinking, then, is not a practice apart from culture; the two are inextricably bound" (Burkhalter & Shegebayev, 2012, p. 58). Even if educational reform was applied, it might not be enough to develop learners' CT as "education is but one system in a complex network of governmental and cultural systems, and change must be borne by many" (Burkhalter & Shegebayev, 2012, p. 55).

2.6 Related Studies on Pre-service Teachers' Conceptualization of Critical Thinking

A study by Gashan (2015) explored twenty-nine Saudi pre-service teachers' conceptualization of CT, knowledge of its skills, and their perceptions towards its teaching in class and development of learners' CT. The study employed a three-part questionnaire (adapted from Al-degether, 2009, and Elder et al., 2007, as cited in Gashan, 2015) and a perception scale (from Choy & Cheah, 2009, revised by Stedman & Adams, 2012, as cited in Gashan, 2015) that:

1) measured participants' knowledge of CT skills and sub-skills by asking them to choose the one relevant to CT from a list of skills;
2) examined their familiarity with CT concepts by asking them to complete six statements out of four choices;
3) explored their knowledge regarding the nature of CT through nine true/false statements;
4) and the perception scale required participants to agree or disagree with items regarding CT teaching and its effect on learners.

The study of Gashan (2015) found that despite pre-service teachers' positive attitude towards CT and the value of teaching CT, most of them had an uncertain understanding of the nature of CT and poor knowledge of its skills. Although most of them believed that it was their responsibility to promote CT in their classroom, many of them did not think that they would be able to implement CT in their teaching and that they would require additional support to do so.

Moreover, the pre-service teachers agreed that they lacked the necessary skills to promote CT; however, they did not believe there were barriers to learning critical thinking, as many disagreed with the following statement: "I think that students have barriers to critical thinking, regardless of the strategies I use" (Gashan, 2015, p.31). This indicates the pre-service teachers' inadequate knowledge of CT as they could not recognize the factors that may have prevented them from acquiring CT, and which could apply to their students as well.

2.6.1 Cross-cultural Differences in Conceptualizing Critical Thinking

Some studies have sought to identify how the conceptualization of CT differs according to cultural backgrounds by conducting a cross-cultural comparison between Western and non-Western pre-service teachers, such as Chen and Wen (2018). Their study involved interviews with 30 U.S. pre-service language art teachers and 30 Chinese pre-service ESL teachers in their respective countries. The pre-service teachers were asked about: 1) how they define CT; 2) how and if they perceive CT as valuable and relevant to their studies; and 3) how it is applicable in their future job (p. 85). As a result, the researchers found that the U.S. and Chinese pre-service teachers' conceptualization of CT differs in terms of the following:

1. *The Discourse Context of CT*: The U.S. pre-service teachers defined CT with cognitive terms, such as analytical skills, problem-solving, and decision making. In contrast, the Chinese pre-service teachers defined CT in terms of considering both positive and negative aspects of a problem or an opinion (p. 85).
2. *Epistemology vs. Ontology*: U.S. pre-service teachers often regarded CT from an epistemological perspective (concerns the nature of knowledge and how to think), providing examples related to their courses, professors, activities, and internships. However, Chinese pre-service teachers understand CT ontologically, regarding it

as a holistic state of 'being' and 'doing' related to their judgments, life decisions, and what kind of teacher to be, separate from language teaching and learning. They were unable to give specific examples of CT from their teaching or educational experiences, which can be explained by the fact that they were not exposed to explicit discussions of CT during their education (p. 86).

3. *Agency and Autonomy:* The U.S school contexts allow pre-service teachers more agency as they develop their professional identity critically and reflectively, while Chinese pre-service teachers felt restricted by the work environment and often not regarded as capable teachers, resulting in limitations on their freedom in what they are allowed to do with students (p. 86).

Chen and Wen (2018) concluded that the pre-service teachers' conceptualization of CT is "socially, culturally and institutionally contexted … shaped by their cultural understanding of thinking, educational ideals and the development of agency and professional identity in teaching experiences" (p. 87).

2.6.2 International Student Teachers' Intercultural Identity and CT

In her phenomenological study, Ruparelia (2018) explored the individual life stories of ten international student-teachers. She examined their intercultural educational experiences and how these experiences affected their development and engagement with criticality at the Initial Teacher Education program. Ruparelia (2018) found that although the international student teachers had an understanding of criticality and have engaged in it throughout their life without being aware of the actual term, they failed to link criticality in life with criticality in education. They struggled with developing and engaging in criticality within their teacher education programs due to affective factors, such as lack of confidence and fear. These resulted from their previous

educational experiences, cultural norms, moving from one country to another that is unfamiliar, and teacher educators' unclear expectations. These factors have acted as a barrier for these student teachers to express their critical views in class or include them in their written work.

The study concluded that cultural differences impacted international student teachers' understanding of criticality as "[t]heir previous identities as students seemed to include defined roles as passive recipients of knowledge and an expectation that their teachers were fully in control" (Ruparelia, 2018, p. 144). Yet, during the interviews, the student teachers remembered positive incidents from their previous education. Therefore, Ruparelia (2018) recognizes how vital it is to create a 'critical space' in teacher education where student teachers' prior experiences are acknowledged, allowing them to link it with their current learning, saying:

> The critical space offers the students a platform to be heard as individuals with varied experiences who may have an understanding of criticality that perhaps needs to be reflected on and revised … so that they can share their conceptions of criticality, and perhaps increase their confidence in their own ability to be critical (p. 149).

2.7 Summary

A review of the related literature reveals that conclusions drawn by different researchers about the factors (for example, culture) involved in the development and conceptualization of critical thinking have varied immensely. Some studies assert that culture has a huge impact on pre-service teachers' interpretation of CT and their ability to develop it effectively (Burkhalter & Shegebayev, 2012; Grosser & Lombard, 2008), while others contend that non-native English speaking pre-service teachers might possess CT abilities, but are unable to demonstrate their skills in English or on Western-developed CT tests (Lun et al., 2010).

Yet, a closer look into the findings arouses some ambiguity. For instance, student teachers unaware of the term CT can engage in it unknowingly throughout their lives (Ruparelia, 2018), while others who are aware of the term and the value of teaching CT are still unable to incorporate it in their teaching (Gashan, 2015). Additionally, living in today's globalized world indicates that the boundary lines between different cultures may have blurred, and on the other hand, differences in conceptualizing CT can still be found in members of the same culture (Manalo et al., 2015). Furthermore, culture can be outweighed by other factors such as classroom environment, teachers' characteristics, and institutional policies (Tian & Low, 2011); however, these factors are often perceived as intertwined and inextricable from culture (Indar, 2017). Nevertheless, in all cases, it is evident that the different backgrounds and lived experiences of pre-service teachers in terms of their education, culture, self-constructed identities, and their beliefs and values inform their learning and teaching practices, and consequently how they conceive and engage in CT and CT-oriented pedagogies. The last aspect, i.e., the pre-service teachers' attitudes towards incorporating critical thinking pedagogies in their future classrooms, received much attention from the researchers (Alagözlü & Süzer, 2010; Gashan, 2015; Ma & Luo, 2020; Yuan & Stapleton, 2020). To exemplify, Yeşilpınar and Doğanay (2014) investigated the perception of prospective teachers of CT, how they define it, and what their efficacy beliefs are as regards integrating it in class.

Another observation in the related literature review is the tendency to use standardized commercial tests of critical thinking such as Watson and Glaser Critical Thinking Appraisal (WGCTA), Ennis-Weir Critical Thinking Essay Test (EWCTET), and California Critical Thinking Disposition Inventory (CCTDI). Especially in the studies conducted in Turkish contexts (e.g., Akdere, 2012; Alagözlü & Süzer, 2010; Cansoy

& Türkoğlu, 2017; Genç, 2017; Tufan, 2008), researchers administered these tests with a great number of participants and explored the possible correlations between critical thinking disposition and other variables such as gender, academic achievement, study habits, problem-solving skills, and self-efficacy.

Obviously, these studies were quantitative in nature and followed quantitative research principles. In brief, the quantitative nature of earlier studies on pre-service EFL teachers' CT is dominating in number, while fewer qualitative studies are found in the related literature (e.g., Indar, 2017; Ruparelia, 2018).

Based on this information, understanding the nature of CT and some factors (such as cultural backgrounds) involved in its development and conceptualization by pre-service teachers by means of a qualitative study seems to be necessary in order to add to the literature more detailed information rich in depth. In other words, this qualitative study intends to shed some more light on the issue of how pre-service EFL teachers coming from different cultures conceptualize and engage in CT and CT-oriented pedagogy and how their teacher education is contributing to developing their CT abilities. In the following chapter, the methodology of the study is explained.

Chapter 3

METHODOLOGY

This chapter outlines the overall research design of the study by expounding qualitative research design in terms of the nature of data and data collection tools and why it is most suitable for the aims of this research compared to quantitative design. This chapter also elaborates on the context in which the research took place and provides information on the sampling procedure used and a profile description of participants. The data collection tools and procedures are also discussed in detail. The chapter ends with a detailed description of the data analysis process and how this research addressed issues of credibility and validity.

3.1 Research Design

The method adopted in this research is qualitative research design to best attribute the research problem and answer the questions raised. Qualitative research is used for a number of purposes, including "description, explanation, reporting, creation of key concepts, theory generation, and testing" (Cohen, Manion & Morrison, 2018, p. 287). It is known to provide "an in-depth, intricate and detailed understanding of meanings, actions, non-observable as well as observable phenomena, attitudes, intentions and behaviors" (Gonzales et al., 2008, as cited in Cohen et al., 2018, p. 288).

As opposed to quantitative research designs, which deal with quantitative data such as numbers, statistics, and objective facts, qualitative research involves working with word-based qualitative data such as documents, transcripts of recordings, and field

notes presenting subjective facts (Morrison, 1993, as cited in Howitt, 2016). Qualitative research design helps answer open-ended questions such as 'why' and 'how' and explains data that is hard to quantify, such as participants' feelings, ways of thinking, and experiencing a certain situation (Tenny et al., 2020). Qualitative data collection methods include interviewing, focus groups, and ethnography/observations. This research employed the interviewing method over other quantitative tools of data collection, which are often concerned with describing, measuring, comparing, correlating, identifying frequencies and irregularities, and following predetermined structures. It is true that the data collection procedure in qualitative research is less structured, systematic, and standardized, which yields "bulky and messy" data; however, "the messiness of the rich [qualitative] data … is often merely a reflection of the complex real-life situations that the data concerns" (Dörnyei, 2007, p. 125). The qualitative data collection method is more likely to facilitate answering the research questions in this study since it is characterized by informality and individuality; seeking to "portray and catch uniqueness, the quality of a response, the complexity of a situation, to understand why respondents say what they say" (Cohen et al., 2018, p. 511).

The qualitative research design is employed here not only for its verbal approach compared to the statistical one used in quantitative research but also for the way it values "the person as an entirety" (Howitt, 2016, p. 476). Qualitative research is a form of social inquiry which rejects the idea of one reality and explores the 'multiple realities' present in a single phenomenon, emphasizing subjectivity (Hammersley, 2013, as cited in Howitt, 2016) in understanding how humans experience and interpret the social world they live in. This allows the researcher to give "credence to people's subjective perceptions … [and hear] participants' voices and retell their stories" (Indar,

2017, p. 107). As we have seen in the previous chapter, many studies investigating CT of pre-service teachers followed a quantitative approach to determine their CT levels and its correlation with other pre-determined variables; therefore, the qualitative design of this research can help "expand and deepen understanding of data or results obtained from quantitative analysis" (Tenny et al., 2020), and explore and probe "issues that lie beneath the surface of presenting behaviors and actions" (Cohen et al., 2018, p. 288). Qualitative research also includes a 'critical' component which seeks to interpret situations from a wider perspective, including the multiple and intersecting factors influencing them (Hammersley, 2013, as cited in Howitt, 2016). Thus, this research method is the most suitable for this context as it enables the researcher to explore the attitudes of the participants (i.e., pre-service EFL teachers) towards CT in-depth and find how their cultural and educational backgrounds impact the way they perceive CT by collecting detailed information from them (Creswell, 2014) through semi-structured interviews.

The study is also a case study because it is a design of inquiry in which the researcher aims to develop an in-depth analysis of a case. Case studies are employed to "investigate and report the real-life, complex, dynamic and unfolding interactions of events, human relationships and other factors in a unique instance" (Cohen et al., 2018, p. 376). This corresponds with the research aim of identifying the conceptualization of CT in pre-service EFL teachers who come from different cultural backgrounds. Since case studies can be "an individual case study; a set of individual case studies; a social group study; [and] studies of organizations and institutions…" (Robson, 2002, as cited in Cohen et al., 2018, p. 375); this research not only investigates the case of the ELT program at EMU but also the individual cases of its multinational students. In education, case studies can inform decision-making by policymakers, practitioners,

and theorists since they examine the educational activity, program, or institution and provide explanations and interpretation based on the participants' perceptions of and views on the case in question. Cohen et al. (2018) emphasize that "a case study is a study of a case in a context, and it is important to set the case within its context" (p. 375). Below is a detailed description of the context of the study.

3.2 The Context

The research is situated in a four-year BA in English Language Teaching (ELT) program at the Department of Foreign Language Education (FLE), Eastern Mediterranean University (EMU), Famagusta, Turkish Republic of North Cyprus (TRNC). The department has yielded more than 1,000 graduates from 25 different countries since its establishment in 1995. In 2014, it received official accreditation from the Agency for Quality Assurance through Accreditation of Study Programs (AQAS), which is based in Germany. The population of the pre-service English language teachers studying in the undergraduate ELT program is of a multi-ethnical and multi-cultural profile, many of whom are international students coming from countries such as Turkey, Kazakhstan, Iran, Saudi Arabia, Libya, Egypt, and Nigeria. The FLE Department's academic staff consists of three full professors, one associate professor, two assistant professors, and one senior instructor. Most of the instructors are from the TRNC and Turkey, except for one who is from Azerbaijan.

The FLE Department offers four programs in English Language Teaching: Bachelor, Master of Arts (with Thesis), Master of Arts (without Thesis), and a Ph.D. program. As announced on the Department's webpage, the department's mission is to "provide contemporary tertiary education … to maintain quality standards in teaching and research at the undergraduate and postgraduate levels, to keep abreast of the academic

developments and professional innovations, and to meet the educational challenges in the globalizing world … to [train] independent, creative, confident and competent professionals who will play important educational roles in today's globalized world" (https://www.emu.edu.tr/en/academics/faculties/faculty-of-education/department-of-foreign-language-education/1147).

The webpage for the BA in ELT program states the goal to be "to train all-rounded modern language teachers of English … [and] provide a rigorous and comprehensive training for BA students so that they can acquire an adequate competence in English language teaching" (https://www.emu.edu.tr/en/programs/english-language-teaching-undergraduate-program/868). According to the program's webpage, department graduates perform well in state examinations for English language teaching positions at the elementary and secondary levels in both TRNC and Turkey, whether in state schools or private institutions. They could also obtain positions such as translators, interpreters or counselors, or continue their academic studies at EMU or abroad. The table below (Table 3.1) shows the four-year curriculum plan of the Foreign Language Education undergraduate (i.e., BA) program, including course codes, titles, and credits for each:

Table 3.1: Undergraduate Program of Foreign Language Education Department

Course Code	Course Title	Credits
First Year – Fall Semester		
EDUC113	Introduction to Education	(2-0-0)2
EDUC211	Educational Sociology	(2-0-0)2
TARH101	Principles of Ataturk and History of Turkish Reforms-I	(2-0-0)2
SFLN01	Foreign Language-I	(2-0-0)2
TREG113	Turkish Language-I	(3-0-0)3
ITEC102	Information Technology	(2-2-0)3
ELTE113	Reading Skills-I	(2-0-0)2
ELTE15	Writing Skills-I	(2-0-0)2

ELTE117	Listening and Pronunciation-I	(2-0-0)2
ELTE119	Oral Communication Skills-I	(2-0-0)2
First Year –Spring Semester		
EDUC116	Educational Psychology	(2-0-0)2
EDUC108	Philosophy of Education	(2-0-0)2
TARH102	Principles of Ataturk and History of Turkish Reforms-II	(2-0-0)2
SFLN02	Foreign Language-II	(2-0-0)2
TREG114	Turkish Language-II	(3-0-0)3
ELTE114	Reading Skills-II	(2-0-0)2
ELTE116	Writing Skills-II	(2-0-0)2
ELTE118	Listening and Pronunciation-II	(2-0-0)2
ELTE120	Oral Communication Skills-II	(2-0-0)2
ELTE122	Structure of English	(2-0-0)2
Second Year – Fall Semester		
CITE211	Instructional Technology	(2-0-0)2
EDUC219	Principles and Methods of Instruction	(2-0-0)2
EDUC01	Vocational Elective-I	(2-0-0)2
UE01	University Elective-I	(2-0-0)2
AE001	Area Elective-I (ELTE211Teaching Eng. Vocabulary)	(2-0-0)2
ELTE213	Approaches to English Learning and Teaching	(2-0-0)2
ELTE215	English Literature-I	(2-0-0)2
ELTE217	Linguistics-I	(2-0-0)2
ELTE219	Critical Reading and Writing	(2-0-0)2
Second Year – Spring Semester		
EDUC207	History of Turkish Education	(2-0-0)2
EDUC208	Research Methods in Education	(2-0-0)2
EDUC02	Vocational Elective-II (EDUC452/EDUC462)	(2-0-0)2
UE02	University Elective-II	(2-0-0)2
AE002	Area Elective-II (ELTE224 Language and Society)	(2-0-0)2
ELTE222	English Teaching Programs	(2-0-0)2
ELTE216	English Literature-II	(2-0-0)2
ELTE218	Linguistics-II	(2-0-0)2
ELTE220	Language Acquisition	(2-0-0)2
Third Year – Fall Semester		
EDUC311	Classroom Management	(2-0-0)2
EDUC317	Morals and Ethics in Education	(2-0-0)2
EDUC03	Vocational Elective-III	(2-0-0)2
UE03	University Elective-III	(2-0-0)2
AE003	Area Elective-III (ELTE311 World Englishes and Culture)	(2-0-0)2
ELTE313	Teaching Foreign Language to Young Learners-I	(3-0-0)3
ELTE315	Teaching English Language Skills-I	(3-0-0)3
ELTE317	Literature and Language Teaching-I	(2-0-0)2
Third Year – Spring Semester		
EDUC318	Measurement and Evaluation in Education	(2-0-0)2
EDUC307	Turkish Education System and School Administration	(2-0-0)2
EDUC04	Vocational Elective-IV	(2-0-0)2
UE04	University Elective-IV	(2-0-0)2

AE004	Area Elective-IV (ELTE312 Pragmatics & Lg. Teaching)	(2-0-0)2
ELTE314	Teaching Foreign Language to Young Learners-II	(3-0-0)3
ELTE316	Teaching English Language Skills	(3-0-0)3
ELTE318	Literature and Language Teaching-II	(2-0-0)2
Fourth Year – Fall Semester		
ELTE413	Teaching Practice-I	(1-0-2)2
EDUC411	Special Education and Inclusion	(2-0-0)2
EDUC05	Vocational Elective-V	(3-0-0)3
ELTE310	Community Service	(3-0-0)3
AE005	Area Elective-V (ELTE415 New Approaches in ELT)	(2-0-6)5
ELTE417	Course Content Development in ELT	(2-0-0)2
ELTE419	Translation	(2-0-0)2
Fourth Year – Spring Semester		
ELTE414	Teaching Practice-II	(3-0-0)3
EDUC406	Guidance in Schools	(2-0-0)2
EDUC06	Vocational Elective-VI	(2-0-0)2
AE006	Area Elective-VI (ELTE416 Materials Design in ELT)	(2-0-0)2
ELTE418	Testing and Evaluation in English Language Teaching	(2-0-0)2

*Some of these courses are for Turkish Speaking Students only. International students take Turkish Language Courses and Area Elective courses instead.

As stated in the department's webpage and can be seen in Table 3.1, the BA program is commencing with the first year of language work and culminating with school experience and teaching practice at the close. The courses received by students at the ELT BA program can be categorized into 1) Language Improvement Courses, such as Reading Skills-I, Writing Skills-I, and Oral Communication Skills-I; 2) General Education Courses, such as Educational Sociology, Educational Psychology, and Philosophy of Education; 3) Teaching-Related Courses, both Theoretical (e.g., Teaching Foreign Language to Young Learners-I, Teaching English Language Skills-I, and Literature and Language Teaching-I) and Practical (e.g., Teaching Practice, Course Content Development in ELT, and Testing and Evaluation in English Language Teaching); and 4) Field-related Courses, such as English Literature, Linguistics, Language Acquisition, and Translation.

Other courses include Area Electives (such as Teaching English Vocabulary, World Englishes and Culture, and Pragmatics & Language Teaching), University Electives, and Vocational Electives. It is worth mentioning that the curriculum had undergone changes three years ago when the undergraduate teacher education programs were revised by the Council of Higher Education in 2018.

(https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Yeni-Ogretmen-Yetistirme-Lisans-Programlari/Ingilizce_Ogretmenligi_Lisans_Programi.pdf). Some of these changes include the introduction of the course titled Critical Reading and Writing (ELTE219) to the old curriculum (see Appendix D).

3.3 Participants

Five pre-service EFL teachers studying at the Foreign Language Education department at EMU have been chosen for this study based on purposive sampling strategy, as they are ideal for the study in a number of ways: a) they are in their last year of study at an ELT program, b) they all come from different cultural backgrounds, and c) they are willing to participate and provide detailed information about their experiences. Purposive sampling is "[t]he selection of members of a sample with a particular purpose in mind" (Howitt, 2016, p. 534), where the researcher selects "information-rich cases, that is individuals, groups, organizations, or behaviors that provide the greatest insight into the research question" (Frankel & Devers, 2000, p. 264). Four 4th-year and one recently graduated student were chosen in this study because from a cognitive development perspective, they are mature enough to have had the opportunity to develop critical thinking (CT) abilities, whether from their teacher education programs or independent acquirement. The majority of students at the ELT

program are female, which accounts for the 1:4 male to female percentage of participants. Ammar, Irada, Eman, Buse, and Melis are the pseudonyms assigned for the participants, as shown in the table below (Table 3.2), along with other demographic information.

Table 3.2: Demographics and Background of the Participants

Pseudonym	**Ammar**	**Irada**	**Eman**	**Buse**	**Melis**
Gender	Male	Female	Female	Female	Female
Date of Birth	1999	1999	1997	1998	1999
Home Country	Egypt	Turkmenistan	Kuwait	Turkey	Turkey
Countries lived in	Oman / TRNC	TRNC	Egypt/ TRNC	TRNC	TRNC
Academic Year	4th	4th	4th	Graduated	4th
CGPA	3.99	3.78	3.10	2.89	3.22
Diploma Type	IGCSE	High School Diploma	High School Diploma	High School Diploma	High School Diploma
Parental Education	Diploma in Business/ Bachelor in Accounting	High School Diploma	BBA/ BEng	BSc in Banking & Finance x2	Bachelor in Education x2
Parental Occupation	Accountant/ Accountant	Electrician/ Laser Technician	Business person/ Engineer	Homemaker /Retired	Retired/ Teacher

3.4 Data Collection Instruments

As mentioned above, this study is qualitative in nature and employs detailed semi-structured interviews to capture the depth of the participants' lived experiences with critical thinking. The researcher considered using focus groups or group interviewing but soon opted not to after reviewing the advantages and disadvantages of these techniques. Although group interviews with the students at the ELT program would have been useful in determining their collective perception and attitudes toward the department's instruction on CT, the researcher concluded that it is counter-productive

as it “may be of little use in allowing personal matters to emerge, or … [to ask] follow-up questions at one specific member of the group” (Watts & Ebbutt, 1987, as cited in Cohen et al., 2018, p. 527).

To put it differently, the aim of this research, which is to examine the individual experiences of each of these pre-service teachers and explore how 'their' cultures and 'their' education impact the way they think about CT, contradicts the purpose of group interviewing, where “the view of the whole group and not the individual member; a collective group response is being sought” (Cohen et al., 2018, p. 527). Plus, group interviews can make participants self-conscious and under pressure to conform, as it “may produce ‘group think,’ discouraging individuals who hold a different view from speaking out in front of the other group members” (Cohen et al., 2018, p. 527). Hearing others might also influence the participants’ responses, which pollutes data and contradicts the research objective of obtaining the purest conceptualization of CT each individual participant could provide. There is also the risk of not managing the group interview, and that one student might dominate the conversation and overshadow others' responses.

For the above-mentioned reasons, this research utilizes semi-structured interviews as they are more flexible, allowing participants to reflect and respond freely and the researcher to ask for elaboration when needed. Howitt (2016) points out that the semi-structured interview “characterizes qualitative data collection,” where the questions are “designed to encourage the interviewee to talk freely and extensively about the topic(s) defined by the researcher” (p. 60), and the researcher acts as “an active listener, aware of the detail of what is said while steering the research along the pathways demanded by the research question” (p.59).

3.4.1 Semi-structured Interviews

The open-ended questions and sub-questions in the interview have been adapted from previous studies on the issue (Indar, 2017; Ruparelia, 2018) (see Appendix B). The questions aim to investigate the participants' (1) educational backgrounds, (2) their conceptualization of critical thinking, (3) how they experience critical thinking in the ELT program at EMU, and (4) their future use and teaching of critical thinking in their respective contexts.

Before commencing with data collection and contacting potential participants, the interview questions were piloted to test their effectiveness and to obtain feedback on the researcher's interviewing technique. The pilot interview was conducted with a fourth-year Turkish student at the ELT undergraduate program, who represented the sample chosen for this research. Eventually, the pilot went successfully, that the researcher decided to utilize the data obtained from this interview and incorporate it with the others to be analyzed. The volunteer in the pilot interview was consequently included as one of the participants in this research, referred to as Melis.

Although the interview questions proved effective in the piloting stage, there were some issues to be addressed. For instance, the interview exceeded the expected time of 60 minutes set for the interview. Therefore, the possible time of the interview was specified to be 60-90 minutes in the consent form (Appendix A). Another issue was that in the first draft of interview questions, the order of the themes to be covered in the questions followed a chronological order starting with past education received by participants and ending with questions on their future use of CT. The educational background questions, however, proved to be too general and caused the interviewee to focus on L2 learning/acquisition, language skills, and knowledge of grammar, which

was a sort of distraction from the focal point, i.e., their experience with critical thinking in their past education. To address this issue, the researcher modified the questions about educational background by relating them to critical thinking. The question themes were also re-organized into the following order: 1) Participants' conceptualization of critical thinking; 2) Their educational background; 3) Critical thinking in the ELT program at EMU; 4) Future use of critical thinking. By opening the interview with an inquiry into the participants' current CT conceptualization and later asking about their background helped set the focus of the interview on the CT aspect of their experiences and ensure better engagement and reflectivity on the main theme of the research.

After the interview questions were modified according to the input from the pilot interview, the final draft of the semi-structured interview items included six main questions, which are the following:

1. How do you understand critical thinking?
2. What is critical thinking in English Language Teaching (ELT)?
3. Can you tell me about your education back in your (name of country)?
4. What was it like when you started classes at the ELT program at EMU?
5. How did the ELT program enhance your understanding of critical thinking?
6. How will you use what you learned about critical thinking when you start teaching?

The interview outline was followed with the main aim to create a flow in the topics covered, allowing the participant to build their answer to the previous questions discussed. The researcher realized how essential it is to maintain a friendly and inviting atmosphere, where the "interviewee does most of the talking," while the researcher

simultaneously stays “on top of what has gone before in the interview to explore issues further and clarify what is unclear” (Cohen et al., 2018, p. 61). This was done by embracing long pauses in the conversation and allowing time for the interviewee to think before answering, rephrasing questions and checking for understanding, probing the meaning behind the interviewee’s answers, and generating new questions based on them.

3.5 Data Collection Procedures

First, the researcher applied to the Ethics Committee at the Eastern Mediterranean University and the Head of the Foreign Language Education Department (see Appendix F) for obtaining approval to conduct the research on the ELT program students. After receiving approval from the Ethics Committee (Appendix G), a number of international students in their fourth year of study were recommended by an instructor in the department. They were contacted via email accordingly to request their participation in the research. After showing interest in participating, the volunteering ELT students were sent a consent form detailing the purpose of the research and an explanation of the interview process. The participants were informed of the aim of this research and its significance in terms of how it could help raise awareness about the importance of developing pre-service EFL teachers’ critical thinking and identify the current state of CT in the Foreign Language Education Department at EMU. The participants were provided with an explanation of why they were chosen for the research and detailed information on the interview procedures and how transcripts will be sent to them for validation (i.e., member checking). The consent form included assurance of participants’ anonymity and right to withdraw at any stage of the research. The potential participants were invited to ask any questions they may have to the researcher or thesis supervisor –as both of their contact

information was provided– before they were finally requested to sign the consent form and re-send it if they wished to participate. Since not all participants possessed electronic signatures, some of them emailed back their consent form with a message signifying their approval.

Having ensured that the participants were all clear about the aim of the study and the procedures to follow and they had no questions, the dates, time, and video-conferencing platform were agreed upon. The interviews were conducted in the English language on Microsoft Teams and lasted between 60 and 90 minutes. With the participants' permission, the interviews were video-recorded on Teams and voice-recorded and transcribed simultaneously using Otter.ai application, which generates written transcription of speech in real-time. The researcher was also taking notes during the interview to help "internalize what is being said by the participant … [to] identify seemingly contradictory statements and follow up on new, insightful topic areas that may not appear on the interview guide." It was also an "immediate resource for reflection … the interviewer can flip back and forth to consider the participant's earlier comments" (Roller, 2017). At the end of the interview, the participants were offered –as a sign of gratitude by the researcher– to use her one-year Grammarly Premium subscription for their personal use. After reviewing and editing the interview transcripts, they were shared with the participants to verify their responses and ensure their accuracy, a strategy known as member checking to enhance the validity of data (Maxwell, 2005).

3.6 Data Analysis Procedures

The qualitative data in the form of interview transcripts were analyzed using thematic analysis (Howitt, 2016) to gain insight into the lived experiences of each individual

and identify evident patterns and emerging themes. Thematic analysis is "categorizing the data into a number of major themes or descriptive categories" (Howitt, 2016, p. 132) and it involves the following processes: 1) transcribing textual data, 2) analytic effort, and 3) identifying themes and sub-themes (Howitt & Cramer, 2014, as cited in Howitt, 2016). The analysis process in this research was in line with Braun and Clarke's (2006) model of thematic analysis, which includes:

1. Data familiarization
2. Initial coding generation
3. Search for themes based on initial coding
4. Review of themes
5. Theme definition and labeling
6. Report writing.

For this research, the coding and thematic analysis of the qualitative data were undertaken with ATLAS.ti. Prior to the analysis, a folder was created for each participant, containing the video-recording of the interview and a Word document file of the interviews' transcription exported from Otter.ai. The transcripts were checked to ensure their accuracy, as the transcribing application could mistranscribe what is being said when there is any lagging in internet connection, when speakers speak over each other, or when a language other than English is being used. This was the case for the participant Eman, who, in order to express herself better, was prompted to use Arabic by the researcher. Her input in Arabic was translated by the researcher, whose native language is also Arabic and has a BA in Translation Studies. The researcher revised the transcripts word for word while playing the video recording files of the interviews, noting within the transcripts other actions or gestures made by the participants during the interviews. These included instances of (laughter) and (long

pause), which the latter could indicate that "the response was not within the participant's immediate knowledge" (Indar, 2017, p. 113).

In order to be familiarized with the data, the researcher has read and re-read the revised transcripts of interviews in their entirety and inserted personal comments on the Word document while also highlighting participants' responses that could potentially serve as excerpt quotations to support research results. This technique helped the researcher to immerse herself into the stories of the participants and allow herself the opportunity to internalize the data instead of immediately jumping into the mechanical aspect of coding transcripts and reaching conclusions without looking at the whole picture. Figure 3.1 shows the process of making commentary notes on the document's margins of Ammar's interview transcript:

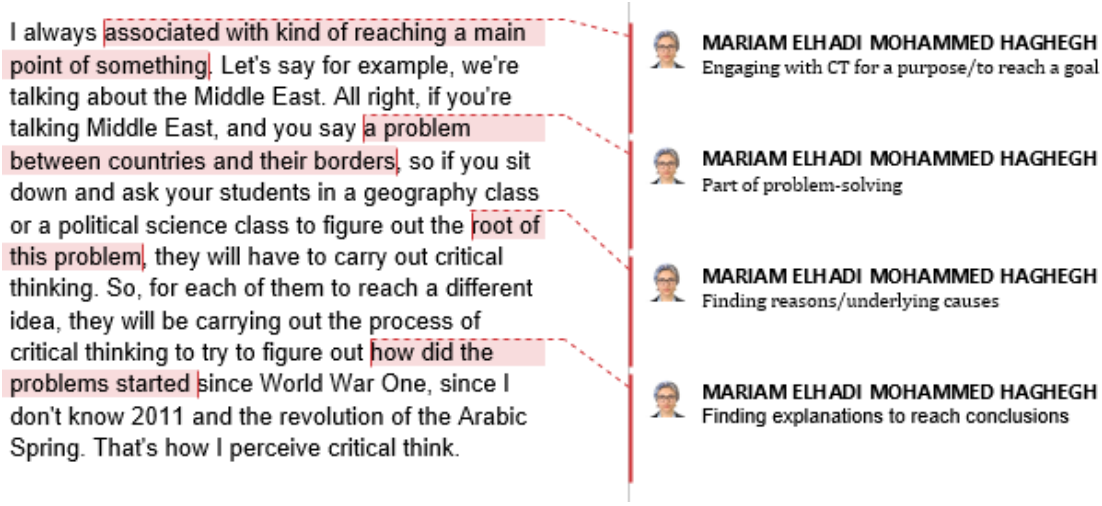

Figure 3.1: Sample of Preliminary Commentary Notes on an Interview Transcript

In the next stage, the highlighted transcripts with preliminary commentary notes were uploaded unto ATLAS.ti to be analyzed and coded with reference to the research questions. ATLAS.ti is a Computer-Assisted Qualitative Data Analysis Software (CAQDAS) and is one of the three widely used software packages in qualitative

processing, along with NVivo and MAXQDA (Cohen et al., 2018). This program offered features that have been employed by the researcher, such as:

1. code text into keycodes (nodes);
2. arrange codes and nodes into hierarchies and clusters;
3. annotate, add memos, comments to data files;
4. search for data, text, terms, codes, and categories separately or combined; and
5. sort material according to codes, code groups, quotations, or documents (Cohen et al., 2018, p. 654).

Uploading the highlighted transcripts in the software helped lead the researcher in navigating and identifying the important parts of the transcript, while the commentary notes facilitated recalling her initial understanding and helped indicate the possible emergent code relevant to that part. The data was analyzed by employing both the deductive and inductive approaches of analysis, in which the first approach utilizes predetermined codes, and the latter identifies new codes within the text. As Fraenkel et al. (2012) explain, "qualitative codes can be descriptive or interpretive and are usually generated a priori (selective coding) or emerge inductively (open coding) from data" (p. 436).

First, deductive analysis was employed by creating code groups –or parent codes– in the program based on the research questions. These parent codes and their corresponding abbreviations included: 1) Educational Background (EB), 2) Conceptualization of CT (CON), 3) CT at the ELT program (ELT), and 4) Future Use of CT-oriented Pedagogy (FUCTP). However, while coding the data, the researcher noticed that additional code groups were required to further organize the data for

analysis; thus, the total and final number of parent codes created were as follows (in alphabetical order):

1) Conceptualization of CT (CON)
2) Conceptualization of CT-Pedagogy in ELT (CTP in ELT)
3) CT at the ELT program (ELT)
4) Current Use of CT (CurrentUse)
5) Educational Background (EB)
6) Future Use of CT-oriented Pedagogy (FUCTP)
7) Factors Impacting CT (F)
8) Introduction to CT (IntroCT)
9) Self-perceived CT Ability (Self-Per.CT)

For example, the following table shows how the sub-codes that belong to *Conceptualization of CT-Pedagogy in ELT* (CTP in ELT) were extrapolated from Ammar's interview transcript:

Table 3.3: Sample of Extrapolating Sub-codes of a Parent Code

Participant	Parent Code	Sub-code	Definition	Exact Quotation
Ammar	CTP in ELT	Identify Ss needs / weaknesses	Identifying students' needs and weaknesses	The most prominent issue in ELT is how to identify the problem a student has in learning English. Students have multiple kinds of difficulties: personal and educational backgrounds, L1…
Ammar	CTP in ELT	Adjusting T.ing to Ss	Adjusting teaching to student's needs and preferences	You figure out a shortcut or an alternative route to take with them while considering their relevant context, not having a standard form to teach all your classes.
Ammar	CTP in ELT	Being aware of developments	Awareness of developments in ELT	The teachers' awareness of ongoing developments in ELT helps to critically think of or compare ideologies.
Ammar	CTP in ELT	Eclectic approach to methodologies	Adopting an eclectic approach to choosing methodologies	A good teacher would be able to figure out the good aspects that are meaningful to teaching without being too focused on one method.

In ATLAS.ti, the parent codes' abbreviations were used as a prefix to the sub-codes that emerged from the data, and they shared the same color of coding to easily identify the sub-codes that belong to the same group. The following screenshot (Figure 3.2) from ATLAS.ti shows the code groups/parent codes created for this research on the left and an example of the sub-codes within the parent code *Conceptualization of CT-Pedagogy in ELT* on the right (see Appendix C for the list of emergent sub-codes):

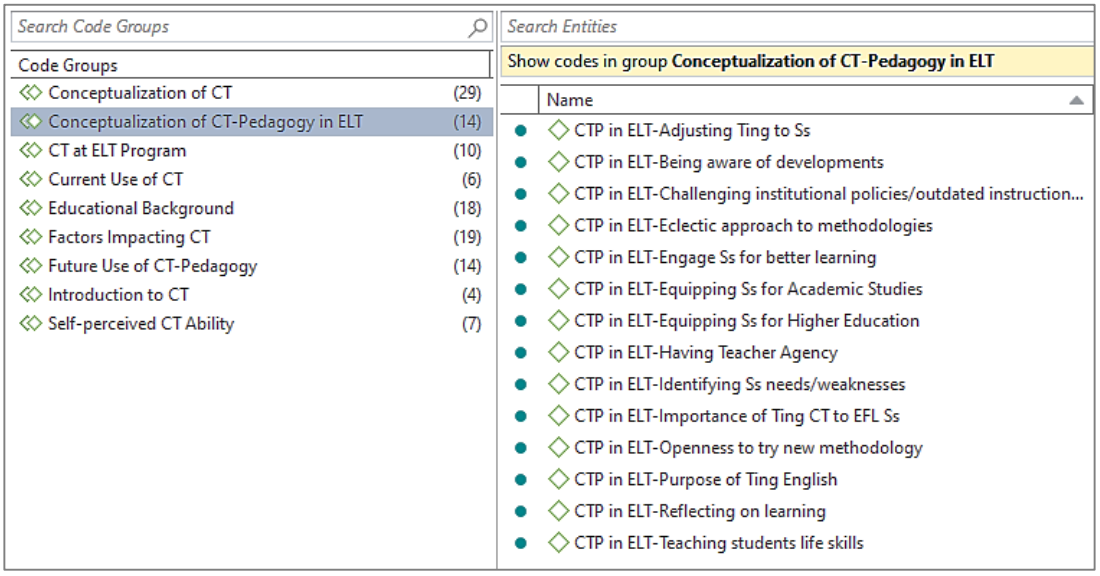

Figure 3.2: Parent Codes and Sub-codes of CTP in ELT in ATLAS.ti

3.7 Issues Related to Credibility and Validity

One way to ensure the credibility and validity of findings in qualitative research is by member checking (i.e., respondent validation or feedback), where participants are invited to validate the accuracy of interview transcripts, comment on tentative themes extracted from data, or express their views on the conclusions of the study (Dörnyei, 2007). This strategy is effective in involving participants in the research and usually indicates that "if there is agreement between the researcher and the participants, the study's validity is indeed reinforced" (Dörnyei, 2007, p. 61). Thus, three out of five participants did not find any corrections or modifications needed in the transcripts in

terms of content and information. Two of them inserted comments in the document expounding on certain points they mentioned in the interview.

In order to further validate the collected data from the pre-service teachers, specifically those which are related to the ELT program's courses, the researcher requested the old and new curricula of the ELT program's BA program along with a document of all course descriptions (see excerpts in Appendix E). Course outlines of the courses mentioned by the participants in the interviews were also requested directly from the relevant instructors for data triangulation purposes and to see if they corroborate what the participants have stated by examining the course objectives, course outcomes, and evaluation provided in the course descriptions and outlines. These documents were also used to see if there is any mention of critical thinking or CT-oriented pedagogies as part of the course aims, content, requirements, learning outcomes, or assessment methods of these courses.

Another issue related to the credibility and validity of a study is its transferability. Bryne (2001) describes transferability as the applicability and fittingness of the findings of the study (Byrne, 2001). Put it differently, it is whether or not the findings can be transferred to other contexts. In order to achieve transferability, the current study included thick descriptions about the context, participants, and their conceptualizations of CT, referring back to their educational background as well as their envisaged future pedagogies.

Finally, as another step of ensuring the credibility and validity of the study, confirmability was achieved. For this, the researcher checked and re-checked the data throughout the study. In addition, another researcher (a Ph.D. student in ELT) was

briefed about the study and asked at the beginning of the data analysis stage to review the data of one participant and determine the codes on his own. After comparing his reviews with the researcher's and seeing 90% agreement, the researcher continued doing the analysis on her own.

3.8 Summary

This chapter presented the research design and the research context and described the participants in detail. It then introduced the data collection tools, procedures, and data analysis procedures. The chapter ended with issues related to credibility and validity. The data analysis is reported in the next chapter.

Chapter 4

RESULTS

This chapter presents the results obtained from the analysis of the collected qualitative data for each case, the case being each participant, according to the order of the research questions. The first research question focused on the pre-service EFL teachers' educational background as regards their classroom environment, their teacher's role, and their parents' involvement. The second research question analyzed the pre-service EFL teachers' conceptualization of critical thinking (CT) and CT-oriented pedagogy with regard to its role in their lives and its importance in ELT. The third question examined their experience at the ELT program at EMU and its perceived contribution to enhancing their CT. Finally, the fourth question explored the pre-service teachers' confidence in developing their students' CT, and how they were planning to incorporate CT-oriented pedagogy in their future classes, and what challenges they expect.

In answering these questions, the overall plan of the analysis follows the analysis strategy described by Patton (1990). This strategy requires writing each participant's case separately in focus. Each of the participants' case analysis was planned to attribute to the research questions of the study. As a result, the analysis is categorized under four main themes as demonstrated in Table 4.1 below:

Table 4.1: Overall Plan of the Analysis

Order	Components
1	Educational background
2	Conceptualization of CT and CT-oriented pedagogy
3	CT at the ELT program
4	Future use of CT-oriented pedagogy

In the following section, each participant is presented as a case (Case #1, Case #2, etc., with their pseudonyms), and the analysis of data they provided is reported in the order indicated above.

4.1 Case #1 - Ammar

Ammar is a 22-year-old, 4th year ELT student from Egypt. He lived and studied in Egypt until the eighth grade, before his family moved to Oman. After finishing 9th grade in Oman at an Egyptian private school, he studied for the International General Certificate of Secondary Education (IGCSE) there for three years. When he first came to TRNC, he was accepted into the Civil Engineering program with a 50% scholarship in the fall semester of 2017-2018. He studied there for one year before transferring to the ELT program in 2018. He is a high honor student and has managed to obtain a CGPA of 3.99 during the time of this study.

4.1.1 Educational Background

In Egypt, Ammar studied in what is called an 'experimental language school'. These are public schools that experiment with foreign curricula (Macmillan books, in his case) and offer subjects such as Science and Mathematics in an English language medium, similar to an immersion program. The experimental curricula, according to Ammar, are aimed to develop students in a "more westernized or foreign way … where you pay about 600 pounds extra fees in exchange for receiving a foreign curriculum."

Ammar noted that his teachers had no training in how to teach these curricula or implement an immersion program. They were 52 students in the class. “We listened to the teacher. We answered when we were asked. And that's about it.” When asked about the classroom environment and if he remembers how he felt as a student, he replied:

> Oh, I definitely remember how I felt. It was a power struggle. They were the authoritarian figures, absolutely no discussions, no arguments, no different opinions allowed, and we were the inferior, dominated ones. There was a hierarchy, like the Pharaoh or the king and we were the peasants, the lower part of the pyramid.

Ammar emphasized that the classroom environment was very hostile in most subjects and that “you can ask for clarification but don't expect much.” He recalls a time when his mathematics teacher got mad because he (Ammar) showed him another way to solve a math problem. Once, he asked his English teacher about the nature of words that have multiple meanings (e.g., the homonym ‘bat’), and the teacher told him to “go and sit down.” Later, when Ammar’s family moved to Oman, he studied ninth grade at an Egyptian private school in Muscat “[it] was the same with better-trained, more proficient teachers in their subjects, and in general as personality-wise.”

Ammar’s parents were both accountants working in the government sector. His father had a Bachelor's degree in accounting and his mother graduated from a Business High School with a diploma in Business. When asked about their involvement in his education, Ammar noted that his father was the one mostly helping him with his studies and that his mother was more relaxed in that aspect, which he attributes to the fact she was busy working full-time and having to take care of the house simultaneously. “My father was the one who was actively engaged in this. He used to help me study mathematics and try to figure out why something is the way it is”.

It was his father who first introduced Ammar to critical thinking in the ninth grade when Ammar expressed his dissatisfaction with how teachers were teaching subjects at the surface level. He questioned the importance of studying the crop production of random countries, stating that, “we were just being tested in numbers, how many tons of I don't know what did Nigeria harvest in 2014 … I couldn't tolerate just memorizing numbers and knowing all of this for no reason.” Ammar’s father replied by encouraging him to reflect and make deductions from the information at hand, saying, “you have to find the meaning for anything you’re studying.” When he did that, he describes it as his first instance of engaging in CT:

> I understood that each of these countries is chosen as a representative for the continent…the whole point of us studying this was to understand the agricultural, economic, and geographical situation of each of the continents through an average representative. This was never mentioned in the book, by the teacher, or in the objectives of the lesson itself.

After graduating from high school, Ammar started preparing for the IGCSEs and studied a variety of subjects: information communication technology (ICT), biology, physics, chemistry, mathematics, English, geography, and accounting. He recognizes that it was completely different from the Egyptian education system he was exposed to:

> …it was a whole different world. It's one of the reasons I managed to further develop my critical thinking ability, because you're presented with information, a lot of it, and you’re never asked about a single piece of this information …[the exam] was always something behind what you’re studying … designed to actually test if a person learned the objectives or the knowledge they intended him to learn.

4.1.2 Conceptualization of CT and CT-oriented Pedagogy

Ammar’s conceptualization of CT lies in its pragmatic use to reach a certain end-result, “it's a mental, cognitive or metacognitive process that you carry out in order to reach a certain idea … I always associated it with kind of reaching a main point of

something." Ammar believes that CT is necessary for problem-solving and finding the underlying causes of such problems. When asked for an example of critical thinking, the first that comes to mind, he provided the following example for CT:

> …let's say you're talking about the Middle East, a problem between countries and their borders, so if you ask your students in a geography a political science class to figure out the root of this problem, they will have to carry out critical thinking, to figure out how did the problem start since World War-I, 2011 and the revolution of the Arabic Spring.

When prompted to give another example, Ammar explains CT as part of critical reading, reading between the lines of what is written and finding multiple interpretations behind the surface meaning. For Ammar, critical thinkers are those who "come up with change or with any kind of meaningful contribution to literally any problem a country or a society or community might have." Ammar believes that a true critical thinker "has the ability to have further sight to see beyond the point that's being discussed." He exemplifies this by the following imagery:

> You have one central point and everything that's around it is connected to it or branches out of it in a certain way. We think critically by finding the central point and everything around it, you try to get a bigger picture of what you're thinking about.

In terms of self-perceived CT ability, at first, Ammar doubted if he had enough practice with CT, saying, "I haven't been tested enough, or I haven't been involved in a situation where I had to be a critical thinker." Later during the interview, he realized that he has been using CT throughout his life without being aware of it. He prides himself on this ability, saying:

> When I sit down with anybody, whatever the topic, I can follow up on it. I can have conversations in literally any topic that comes up. Because I do this kind of self-study on anything, whether I am reading an article, watch a movie, or listen to a song, whatever it is that I'm doing, I try to find a deeper meaning behind it.

Ammar noted how CT has made him very competitive in terms of his education as well. His conceptualization of CT as a means to an end result and finding the purpose behind doing anything helped him with his studies. When writing synthesis papers on a topic, for Ammar, the most important part about the research article is the pedagogical implications, “I read all of it, get some context, and then I try to understand what was the point or what was the application of the research? What did they reach by the end of the day?” We can also see Ammar benefiting from the pragmatic use of CT to help him in preparing for final exams by means of identifying each instructor’s question style:

> I figure out how their minds work. When I'm studying for the finals, the book is objectively the same, but the way I read it changes from the first half of the semester. In the second half, I’m focusing more on how this and that would be asked, and usually I lose no points.

When asked to define the concept of CT in ELT and explain its importance for teachers and students alike within the field, the following approaches and strategies were extrapolated from Ammar’s responses, which reflect his conceptualization of CT-oriented pedagogy in ELT:

1. Adjusting teaching to student’s needs and preferences
2. Being aware of developments in the field
3. Adopting an eclectic approach to choosing methodologies
4. Engaging students for better learning
5. Equipping students for further academic studies
6. Equipping students for higher education
7. Identifying students’ needs and weaknesses
8. Identifying the purpose behind teaching English
9. Reflecting on learning and teaching experience.

Ammar listed a number of factors that could impact students' interpretation and development of CT, which are presented in the table (Table 4.2) below:

Table 4.2: Factors Perceived by Ammar to Impact CT Development

Factor Impacting CT	Quotation
1. Individual's upbringing/environment 2. Personal interests	…each person's background, context, or upbringing could affect what they're interested in, and in turn, whether they engage in CT on a certain issue or not.
3. Education system 4. Culture	…western cultures have an educational system specifically to develop an individual who's able to think critically, that's one of their main objectives. But for us, the main objectives in our educational systems are to have honor and loyalty to the motherland.
5. Language Proficiency	Some of my classmates if you speak in [L1] to them, they have something to offer, something to say in the sense that they can engage in an extended process of thought. Their L2 language proficiency affects/hinders their ability to demonstrate their understanding.
6. Stimulus 7. Instruction 8. Input Level	The kind of stimulus we receive. It could be the material presented to us, the language the teacher uses, the manner the teacher speaks in, the methodology used, the assessment we receive, the type of classroom itself. Teachers often decide to bring the level down in order for students who do not wish to critically think to be able to follow up in the classroom.
9. Need for CT 10. Career path	The need for CT, if your career or job doesn't require you to do any kind of CT, If you're a technician or have a mechanical job where you repeat the same thing every day and it does not require you to change your routine, I would say that CT is not really important for you to engage in.
11. Lack of affordances/opportunities to use/practice/assess CT ability	They have just finished nine years or 12 years of education where they have been tested on the surface-level information, asked surface-level questions. They haven't been engaged in any way that could unleash their CT potential.
12. End-goal of CT 13. Field-specific CT	What is the goal I'm supposed to reach by thinking critically? If the nature/goal of CT in different fields (ELT, geography, political sciences, etc.) differs, then it would impact the process of developing CT.

4.1.3 CT at the ELT Program

Ammar says he was first introduced to the term 'Critical Thinking' in his first semester in the ELT program at EMU, in 2018. It was during the course 'Introduction to Educational Sciences' (EDUC101). He heard the term being used by the instructor along with problem-solving:

> The funny part is, we never actually discussed what the two terms [critical thinking and problem-solving] mean. But we always used to throw them around for cookie points or in need of a buzzword to write in the exam and get marks for it.

This introduction to CT without an explicit explanation or real-life example only helped instill value for CT within Ammar, without knowing what it is exactly or how to apply it. In retrospect, Ammar notes that his CT levels which rose during the IGCSEs, gradually fell again when he joined EMU. Due to his colleagues' lower language proficiency, which hindered their ability to demonstrate their understanding, the instructors often had no option but to bring down the level of the lecture and speak in Turkish for other students to follow. Testing and assessment policy in the department did not encourage the development of students' CT either. Ammar recalls how angry he got at an exam for being asked the following True or False questions: 1) "Literature helps students to understand another culture"; and 2) "Literature is not authentic material." He points out that getting points in such an exam with 30 questions, which weighs 30% of the whole course grade, jeopardizes the program's effectiveness and its graduates' profile. However, the following courses at the ELT program and their relevant projects and assignments helped Ammar engage in CT and learn these subjects effectively.

1) *Materials Development and Adaptation in English (ELTE401):* In this course, students first evaluated how well materials are designed. Based on this

evaluation, they were required to adapt, add, remove, and abridge materials and later design a technology-based task. If a part was not found useful for students and was removed, the students had to design an effective one instead, taking into consideration the students' context, background, nationality, objectives, major, and goals. These had to be explained in order to rationalize the changes made to the materials as part of the assignment.

2) *Teaching English for Specific Purposes (ESP) (ELTE450):* In this course, the first half of the semester was dedicated to theory on how to conduct needs analysis, discourse analysis, design a course, etc. After taking a midterm based on the theoretical aspect, students were given a failed ESP course case and were asked to find the causes behind its failure by relying on the theories they had studied before. Later, students were assigned to design an ESP course, "[t]he instructor asked us specifically to design a course that is applicable and that he can assign to any teacher. He wanted something very authentic out of us." It is worthy to note that these two courses are given by the same instructor who offers the Critical Reading and Writing course (ELTE219) as part of the new curriculum. Ammar describes how effective his methodology is in engaging them and allowing students to understand the subject by implementation.

3) *Testing and Evaluation in ELT (ELTE402):* The last time Ammar was engaged in CT at the ELT program was in this course, where he had to prepare an assessment test for a reading article. The students had to organize the questions following a certain format, allocate grades, prepare an answer key, ensure content validity and determine the objectives to assess the students upon. Ammar emphasizes that this is one of the rare occasions where a project

required such detail and deep thought, which indicates not enough opportunities are offered at the program demanding students to apply CT.

Ammar was asked to offer suggestions to improve the ELT Program in enhancing its students' CT abilities. Below are his views:

1. Maintain the quality of the course by its proper application in order to identify students who are not up to par and proficient enough to pass the course.
2. Remove overly-simplified assessment and questions (e.g., true or false) where students get marks for guessing or knowing a simple piece of information.
3. Focus on applicable and authentic implementation of the subjects, which involves real tasks with critical thinking.

4.1.4 Future Use of CT-oriented Pedagogy

After graduation, Ammar wishes to continue his studies and obtain his MA and Ph.D. in Sociolinguistics. As for the use of CT-oriented pedagogy in his future classes, he heartily replies, "I would give it the utmost value to make students engage in critical thinking. It gets very high on the ranking of my teaching in general." Although he admits it would take some time, "a brief period of two, three weeks, one month at max," he is confident about incorporating CT into his teaching. He draws on his experience of working as a teacher in a private institute during his third semester, where he had to "go into this immersion stage where I put myself in a situation in which my only option would be to learn." The following are the approaches and techniques Ammar is planning to employ to incorporate CT in his teaching in the future:

1. Differentiated/individualized instruction
2. Engaging/activating students' schemata

3. Assigning projects and assignments
4. Problem-based task activity
5. Explicit metacognitive instruction

When asked about the difficulties he expects while incorporating CT in his future classes and the barriers students might have to develop CT, he identified the following challenges:

1. Students' lack of interest/motivation to engage in CT
2. Lack of exposure or opportunities to use CT
3. Parents' disapproval of students learning what they will not be tested on
4. Students' L2 ability/competence.

4.2 Case #2 – Irada

Irada is a 4th year ELT student from Turkmenistan. She is 22 years old and has lived and studied all her life in Turkmenistan before coming to TRNC to study at the ELT program at EMU. Irada is a high honor student with a CGPA of 3.78 and is currently living with her mother, who works as a laser treatment technician here in TRNC. Both of her parents have high school diplomas. Her father is an electrician and lives with her sister in Turkmenistan. She wishes to work in TRNC or abroad as she does not see good opportunities for her in her country.

4.2.1 Educational Background

Irada has attended 11 years of formal schooling. Unlike the Turkish education system, there are no different stages in different schools in Turkmenistan. Students go to one school where they study for 11 years, from primary to high school until they graduate. It is worthy to note that Turkmenistan was part of the Soviet Union until 1991 and that the education system there is still heavily influenced by that period. In Irada's school,

every grade had two groups of classes, one in which subjects were taught in Russian, and the other in Turkmen language. Irada was in the Turkmen group, which consisted of 26 students, with whom Irada studied for 11 years together.

During the four years of primary school, Irada recalls having the same teacher for all subjects except for English language and Russian language. Irada states that during language lessons, the class is divided into two; one half is taught by one teacher, and the other by another teacher. She explains it is easier for the teacher since the average number of students in one class can go up to 30 students. In terms of instruction and class activities, Irada described her classes as teacher-centered, where the teacher lectures, then invites students to either answer the exercises dictated in the coursebook on the board or do it as a whole class. “There wasn't much group work, pair work maybe sometimes, but usually individual work. Even the seating arrangements were in orderly rows.”

When asked if they had discussions in class or if students were allowed or encouraged to ask questions, Irada stated that discussions were rare and often based on what was written in the chapter or in the coursebook. As for asking questions, “I wouldn't go to the teacher and say, ‘Can you explain this topic?’ If I didn't understand something, I would ask my friends … I used to do homework (with them), cheating sometimes. Sometimes I would try to learn by myself, but I didn't have resources except for the book.” Teachers’ questions were also based on the book and “if you don't know the answer, they would ask another student, or they will give the answer themselves and say we should memorize it.”

Irada emphasized that most teachers followed the coursebooks and the curriculum which were prepared and distributed by the Ministry of Education. However, she could not remember teachers ever attending training or being evaluated by supervisors, “I can't say that teachers in my country have special training. They just come and teach. Nobody's controlling what and how they teach, they read coursebooks and that’s all. … I didn't see teachers go to training, attend conferences or seminars or read articles to learn new things about their profession.” Irada described her teachers’ role as authoritative and their duties involve “…teaching their subject and taking care of our discipline.” Their relationship was formal, “We respect the teacher, we listen to the teacher. We weren’t close, talking about our personal things.” Contemplating her experience, Irada spoke about her anxiety in her early education:

> “Until high school, I was trying hard to be a good student, and any mistake or bad mark would affect me so much, I would cry. I was scared to get bad marks. … about uniform also, not being properly dressed, or coming late to school would make me stressful. I wouldn't feel good. I don’t know why I was taking everything seriously.”

When the researcher inquired the reason behind this anxiety, whether teachers reacted strongly to mistakes or were aggressive to her, Irada could not pinpoint the reason why she felt that way. Beyond one incident in middle school, where a teacher told Irada she was a bad student and tugged at her wrist, teachers were not aggressive and did not hit. When asked if teachers yelled or embarrassed students, Irada replied, “it didn’t happen to me, personally, because I'm a student who is always trying to stay away from problems. But sometimes, when the teachers get really crazy or lose their temper, they would shout.”

According to Irada, her parent’s involvement in her studies was limited saying, “they were far from my education. They were both working, my mother was a nurse, and my

father wasn't interested in my educational life." However, after further probing, Irada could finally recognize the cause of her anxiety, stating the following:

> Probably family, because they always expect we get good grades and be good at school. And when you don't, they criticize you. If somebody -my cousins- didn't do well at school, they would criticize them. I was afraid of being criticized by the family.

This shows the impact Irada's parents had on her mindset and how she experienced her education. Her parents' focus on hard work and obtaining good grades caused her anxiety and instilled a misconception which she now seems to be fully aware of:

> I think they gave me the idea that if I do good, I'll get a good job and earn more money. But now I understand that even if I get the best marks, it does not affect what job I get because in real life you need other skills and abilities rather than having only good marks.

This last statement appears to be the transformation point for Irada, which marks her abandonment of her parents' approach to education and claiming her own viewpoint. However, this feat is not easy to achieve as Irada further explains that children in her culture are limited by their parents. She remarks that parents do not listen to their children when they want to explain or express something. Instead, they directly silence them, according to Irada, with the following: "Don't you see grownups are talking here", "Do not talk before me", "How dare you make noise next to your parent, you are disrespectful", "Do not come next to the table when guests are here."

4.2.2 Conceptualization of CT and CT-oriented Pedagogy

Irada defines CT as untraditional thinking, where one looks at an issue from different perspectives and explores different alternatives and solutions unconsidered before. In order to gain further insight into her understanding of CT, the researcher asked Irada how she would explain CT to someone who has never heard of it (her grandmother, for example). Although Irada's reply skewed from what was intended by the question

(i.e., further clarification of what CT is), it revealed Irada's struggle with her family's interference in her decisions:

> …suppose I tell her I want to work abroad; she'll say no don't, it's not good for women to work far from the family. If I want to do my Master's abroad, she will be against it. I will try to explain to her that I can still be successful in my work, family life and in my degree.

When asked to provide a concrete example of CT, she provided one that reflects non-confirming to the norm and not following the herd:

> …seeing all your friends buy some new shoes, so you want to buy it too, but you think do you need to buy it? Maybe you already have good shoes. How do you know if it's in trend now, maybe later it will go and another will come, are you going to buy that one as well? Maybe there is something more important to buy? … Maybe you want them because everybody else does, if you ask yourself, maybe you do not like the shoes.

When asked again to give an example of an instance engaging in CT within an academic setting, Irada could not comprehend how CT is related to education. The most relevant example of CT to academia she could think of was of a hypothetical friend who wants to study abroad and is asking for advice on how to tell her family, "I will ask does she really want it? What will she do there and does she have a plan? Does she believe in it? If she puts her mind to it, she can do it."

When urged even further to provide an example of CT related to learning or her studies, Irada stated that she normally does her homework according to her instructors' expectations by following the criteria they set; indicating she either did not rely on CT in her studies or that she was not aware that the criteria set demanded and guided her to use CT implicitly. Irada experiences difficulty in understanding the notion of CT and its application within academic life, genuinely wondering, "how can you be a critical thinker in academic life? I guess being a critical thinker in your life is more

important than academic setting." When I pointed out her differentiation between being a critical thinker in personal life and in academic life and probed her further on whether one leads to the other, Irada agreed that if someone is critical in life, it might influence their criticality in their academic life as well.

Even though Irada could not think of a person in her life who is 100% critical thinker, she describes a critical thinker as someone who listens to others but also listens to herself. "She also does research about the topic she wants to find out about and will be careful before making any decision. She won't follow what her mother says. She will think first."

She also envisions a critical thinker as someone who does not strive to be a perfect student, but would rather prioritize her life accordingly, "…she will see if a 4.00 GPA is important for her career or not. Maybe instead of getting the best grade, she would study and research the topics she needs in her career." This image of a critical thinker reflects exactly what Irada desires herself to be, as it corresponds with her latest realizations that obtaining high grades does not necessarily equate a higher level of knowledge: "it doesn't mean that I learned more. Even though if I don't get all A's, if I study and learn about CT, I can use it in my life." However, it seems that according to Irada, this usage is restricted to addressing life issues, and does not encompass education-related matters.

When asked to recall the last time she engaged in CT, Irada provided an instance from her personal life regarding an important life decision she had to make, which required courage on her part. "I needed to believe in myself. I used my CT; I didn't accept what would happen to my future." Trying to steer the conversation back to academia, the

researcher inquired if Irada could specifically recall an exam, an assignment, a group project, a situation with her instructor or classmates, or the last time she was required to engage in CT at university. Unfortunately, Irada could not think of any situation, "I guess I didn't use it (laughter)." For Irada, the need for CT in her personal life is more immediate and demands a higher priority than in education. CT gives her the freedom and power to make her own decisions and express herself to others, which is clear in her following statement:

> …even though I see other powers controlling my life.... still, I can battle with them. If it is my family, I can communicate and explain myself to convince them that yes, they know the best for me but still I have my own needs, wants, dreams, and plans for the future.

Although Irada struggled to find the connection between CT and her ELT education, she still held the view that CT is important in language teaching and her perception of CT-oriented pedagogy in ELT concentrated on the following themes:

1. Openness to new methodologies, "you're using some methodology for many years, it's working. But still, you should try to learn other methodology or technique … to incorporate something different in your teaching."
2. Adjusting to students' needs, "you see that something is not working, you just don't follow it, try to find new things to help your students to learn better."
3. Challenging ineffective teaching practices and outdated institutional policies, "you work at a school, they tell you to use the coursebook all the time. But you see that your students don't learn from it, so you shouldn't blindly follow those rules."
4. Having teacher agency and taking the initiative in the institution, "it's about teachers not following everything is given to them. Instead, they should try something new."

Irada presented the following factors that could impact the development and understanding of CT shown in the table (Table 4.3) below:

Table 4.3: Factors Perceived by Irada to Impact CT Development

Factor Impacting CT		Quotation
1.	CT-specific Courses	Courses about teaching CT they can also help
2.	Culture	many cultures are still in old mindset. They seem to be modern but rules controlling the society are still old-fashioned.
3. 4.	Friends Meeting people from different backgrounds	Having friends from different cultures can also affect, because you can learn from other cultures what they do differently in the same situations
5. 6.	Travelling Studying abroad	I think it's important to see different cultures. If I studied in my country, I wouldn't learn that much about other people.
7.	Genetical pre-disposition to CT	sometimes, character, maybe a person is born with thinking abilities, they can develop CT more.
8.	Institution's policy/regulations	you're connected to the institution in which you work, and that institution has rules and policies and if you want to be working there successfully you have to follow them.
9.	Knowledge of English language	Knowing English could help in developing CT. As I learned English, I started to watch more videos, read more, and learn more things when I read in English because all of the information in English is available.
10. 11. 12.	Reading Habits General Knowledge Curiosity	Reading and learning more about different things, developing your knowledge curiosity, searching on the internet and reading some articles about the questions you're interested in.
13. 14. 15.	Teachers' background Teachers' teaching experience Teachers' general knowledge	Teachers who have different backgrounds, experiences in teaching, in their personal lives, they can give some examples from their life and share more knowledge about different teaching contexts, and instances how they solve something, how they convince school administrators to do some change.

4.2.3 CT at the ELT Program

Irada was first introduced to the concept of CT at the university. She could not recollect having heard of CT before, even in her native language. However, she did not come to learn about CT at the ELT program, but rather while taking university elective courses from the Faculty of Arts and Sciences. She relays that the ELT program was more concerned with teaching methodologies and was not focused on CT: "we learn how to be a good teacher versus bad teacher but not so much about CT". She developed an understanding of the term while attending the following courses:

1) *Woman in Fairytales (AHSS115):* The course examined gender roles and stereotypes of women and men as well as their portrayal in the literature and traditional tales.
2) *Interpretation of Stories and Films (AHSS114):* In this course, which was provided by the same instructor, Irada and her classmates were interpreting movies and short stories, how the characters act, and whether they are autonomous thinkers or not. She says, "it was the deepest we got into CT."

Irada has expressed her appreciation of EMU's diverse environment in comparison to her country, which consisted of the same people within the same social context, "I studied at the same school, and there were no foreigners." She believes this diversity of thinking in EMU is a result of both students and instructors coming from different backgrounds and having visited different countries. "I think it's important to see people from different cultures and with different habits. If I studied in my country, I wouldn't learn that much about other people." Irada also emphasized how approachable the instructors were, stating the following:

> They are interested in you and try to teach you more things. In Turkmenistan, teachers are not so much interested in us as individuals. Here teachers care

> about you as a person no matter what culture you come from and they try to help you.

Another advantage of studying at TRNC is having access to the internet and different sources. “In my country, most websites are banned, YouTube, Instagram, Facebook. If I don’t understand something about a topic, I can't rely on the internet because it is limited.” Irada also found some of the assignments useful, such as finding references and reading articles from ELT journals: “I would learn different ideas from them … it made me think and learn different aspects about teaching.” Despite the various advantages Irada has experienced in her education at EMU, when specifically asked if the ELT program helped improve her CT, Irada’s reply was negative, “I think no. because what I learned is how to be a teacher and how to teach, not how to be a critical thinker. But my experience of being and studying abroad helped me to improve my CT.” Irada recalls some instructors lecturing and others were giving activities and discussions, group or pair work. Yet, she could not remember any explicit instruction on CT, “I don’t remember any teacher who had directly told us and taught us about CT.”

Irada also recounts her experience of having assignments and homework, of which she did not understand the purpose. “I see no logic in doing it for my future. I do this project not knowing what it will bring to me, what skills I can develop.” This has led Irada to doubt her CT abilities, “I cannot say that I am much of a critical thinker because I don't see the connection between my academic life and my future right now.” Not being able to see how her education at the ELT program relates to her future teaching indicates a lack of CT understanding and confidence to teach. She even questions the point of learning critical thinking in the field of ELT, since in the end

teachers must adhere to the policies of the institution they work in: “if you want to be working there successfully, you have to follow it. Yes, you want to be a critical teacher, but still, it's also threatening to our career.”

The following are suggestions provided by Irada to enhance the ELT program’s instruction on CT and Ct-oriented pedagogy:

1. Support students to question what they learn. (e.g., when learning about a methodology, students should consider its effectiveness within a given context).
2. Encourage students to practice what they have learned in the program after graduation by relating teacher beliefs to teacher classroom practice, and to resist blindly following what is expected from them by their institutions.
3. Offer more elective courses to Turkish students, as they can be beneficial and would allow them to learn different things from different departments. “I was lucky because I am a foreign student and I had the chance to take elective courses.”
4. Organize more events at the department, such as Career Days, inviting speakers to the department, holding seminars and conferences, offering workshops on CT.
5. Provide courses on CT-oriented pedagogy and how to teach CT in certain contexts.

4.2.4 Future Use of CT-oriented Pedagogy

Contradictory to her doubts in her CT abilities and whether she will need to employ it as a teacher in the future, Irada still believes in the importance of teaching CT to her students and perceives it as one of her responsibilities as an EFL teacher. This belief,

however, is bound to her understanding of CT. “I want them to stand for themselves, for their needs, for their wants. If their parents say don’t be a musician or a painter, I don’t want them to passively agree and follow.” Irada adopts a holistic approach to teaching English, where importance lies not in students learning the language perfectly, but rather learning about life and how they use their skills and abilities in addition to their English. “Being a teacher is not just teaching grammar, it’s also teaching life to students. It's important they know how to live their life.” Irada is planning to continue her professional development and training and reach out to peer mentors or colleagues abroad to learn effective teaching for CT. She is also adopting the following techniques to promote CT in her teaching:

1. Prioritizing students’ needs over other stakeholders’ interests,
2. Understanding students’ needs and goals in learning English,
3. Actively listening to students and maintaining a balanced relationship with them,
4. Engaging in finding concrete solutions to social problems.
5. Teaching life skills to students.

Irada expects a number of challenges to teaching for CT such as:

1. Social and political consequences to engaging in change and social reformation that CT pedagogy stands for and advocated by the teachers,
2. Cultural barriers preventing students from embracing CT,
3. Parents opposing her philosophy of teaching,
4. Limited comprehension capacities of CT in some students,
5. Risk of losing her job for disagreeing with the administration.

4.3 Case #3 – Eman

Eman is a 4th-year student at the ELT BA program at EMU. Her mother is a Kuwaiti businesswoman who was previously a politician back in her country. Eman's father, who is from India, was an engineer and was separated from her mother since Eman was a child. Eman grew up and studied in Kuwait until grade 10. Then she moved to Egypt with her mother, where she studied in grades 11 and 12 and prepared for her SATs. She still lives in Egypt and recognizes both cultural backgrounds (i.e., Kuwaiti and Egyptian) as her own, which is evident in the way she code-switches between the Kuwaiti and Egyptian dialects smoothly when she speaks Arabic.

4.3.1 Educational Background

In Kuwait, her mother enrolled Eman to study mostly in private schools for two reasons: 1) to improve her English, and 2) due to discrimination, as she reports: "Kuwaitis are really bad bullies. So, being half Indian in a school that's all Kuwaitis was a risk that my mom didn't want to take." When asked about her experience of education in Kuwait, she exclaimed, "oh my God, it was the worst childhood… (remembering all of a sudden) oh my God! you're bringing back memories… Going back in time is motivating me aggressively!"

Eman attended two Pakistani schools and describes her education there as a traumatizing experience, "These schools are for business, they're not targeting helping students in any way, neither academically nor holistically as child development." According to Eman, it was common in Kuwait for individuals without qualifications or training in teaching to be hired to teach subjects such as English and Maths (including graduates from vocational school). Due to this lack of regulations, Eman recounts transgressions such as "Teachers hit students with sticks, pull their hair, the

sexual harassment… it wasn't an environment of learning. It was an environment to survive every day having to go through that." When asked if this applied to all private schools, Eman stated that those who could afford British or American international schools were provided with a better education since the teachers hired in these schools are native speakers with teaching certificates.

Eman recalls her English teacher in Kuwait, who was from India, and describes her class to be "all drilling and memorization and repetition. There was no practice, no role play. Read through the book, answer the questions at the end of the book, dictate and memorize word spellings." There were no discussions except in English classes which were mainly teacher-student directed. As classes were overcrowded with 35 students, Eman defined the role of the teachers as "trying to control the class." Eman's relationship with her teachers was not healthy. She recalled one teacher pulling her ear in front of her mother, and another later telling her that she would amount to nothing. According to Eman, her teachers often wrote in her report card that "she has the potential to do better", but they did not specify or help her on how to do that. Instead, "they would yell at me, insult me and then call my mom." Eman remembers the response she would get if she asked for clarification during a lesson: "get out of the class":

> Teachers would give us questions, write down the answer on the board, and then we'd have to copy it, learn it by heart, and that's what we should answer in the exams. So even the teachers weren't motivated to teach.

Eman's mother stood by her daughter against her teachers. "My mom knew that they were corrupted so I had my backbone even if I did something wrong. She wouldn't let the teachers insult me, because she will insult them." After stating this, Eman recognizes how this affected her: "I didn't like having the privilege of a mom that could

suspend teachers, I didn't want that." Eman refers to the fact that some Kuwaitis may threaten people of other nationalities by hurling such remarks at them: "I can deport you, so behave", or "I will make you lose your job today." Eman realized that this resulted in a loss of respect between students and teachers:

> I saw my mom go to a principal's office and say, 'if you don't treat my daughter right, I will close down the school and have you sent back to Pakistan'. I didn't like this, that's not something I want to hear as a teacher either. And kids say it too, "speak to me well or I'll call my dad and he will deport you".

In Egypt, Eman studied grades 11 and 12 in a private school. For her, it was comparatively better than the private schools in Kuwait. The curriculum was similarly in English, but the teachers were friendlier, and they had group work as well as discussions in class, especially in arts, social studies, and English. There were also fewer students in each class, with only 10 in senior grades. But Eman argues that this did not help her learn. Since her private school diploma was not accredited by the government, she was required to take SATs or IGCSEs. Therefore, during grade 11 and 12, Eman was preparing for her SATs, but she failed six times. When asked why she failed so many times, she said that it was an act of protest:

> Because I won't let standardized examinations decide that I'm not a smart person. Not doing well in SATs does not mean that I am a failure. … They enslaved us students, we had to study day and night for six months, torturing yourself with English and math and reasoning.

Eman believes that such exams caused extreme pressure and anxiety in students in Egypt, which led some of them to abuse substances, "to stay awake, to study, to pass, to not faint during an exam. Boys especially…" Eman questions the point behind these examinations, "why would I do that to students? How can this determine if I'm a functioning human being, if I will do good in university or work? Standardized examinations are not going to get me anywhere." Eman points out how society views

students who go to private schools as those who pay more to pass, “but that's not true. We had to struggle with our SATs to pass.” However, Eman shares that her family did have to pay thousands for private lessons, tutors, and study centers. When asked about her parents’ role in her education, Eman said that her father was not present since her childhood and her mother was not really involved in her academic life:

> It's very rare to find a parent that would actually sit with their kids and teach them and help them learn. We had private lessons. They teach you how to memorize, write down the answer 15 times, and go through the exam the next day. I had to learn how to study and I discovered my learning styles here at EMU.

4.3.2 Conceptualization of CT and CT-oriented Pedagogy

Eman defines CT as the acceptance of new ideas, to learn, unlearn and relearn, and to be open to changes. It is demanding evidence to base one’s belief on to feel assured. It is questioning what one reads and looking at it from different perspectives, “ask questions ten times, in different ways … there are many ways to learn about the topic.” According to Eman, non-critical thinking would mean “basically believing every single WhatsApp video you receive, without thinking or questioning it.” When asked to give an example, Eman admitted that it would be difficult for her to do so, “I wouldn't know how to give an example… (long pause) no, I swear I don’t know.” Finally, after some pressing and time to think she came with the following example:

> The Egyptian government (laughing)…! When you see things about Egyptian or Kuwaiti governments, or politicians on TV say certain things, you need to look at the backstory before believing them. [For example] there's a new bill in Kuwait proposing to treat sexual harassment cases as a misdemeanor rather than a crime. Before you support this decision, you have to think of the consequences and look for other ways that may be better than this one.

Eman describes a critical thinker as someone who is ready to change his mind. “One who is not easily convinced of what he is being told, unless he sees concrete evidence that supports what is being said. Someone who asks a lot of questions, who is not

satisfied with two or three answers." When asked if she knew anyone whom she considers a critical thinker, her reply was not surprising as two other interviewees (Buse and Melis) also spoke about the same student:

> Ammar. I thrive to be like him in his way of thinking. I see the questions in his eyes, that he would not be convinced with one answer that he has to go back in time, read all about the history [of an issue] in order to make a decision about politics or religion. He would go study it a million times in order to get that one answer.

Despite her understanding of and the value she places on these CT qualities, Eman is still doubting her own CT: "I would like to have the confidence to say I'm a critical thinker. I think it's going to take a while." She attributes her lack of CT to the fact she does not ask as many questions as a critical thinker would, and that there are a number of things that she supports without even questioning. When asked to elaborate on these things, she pauses and lowers her voice saying, "Well, they're mostly religiously related. There are certain things that I support that I'm not supposed to support, that I have to rethink, the LGBTQI community, for example." Eman states that her mother always advised her not to take what others say about religion at face value and that she should look into the issue herself, read and be critical about it. In the beginning, Eman said that she was introduced to CT when she started studying at EMU. But later during the interview and after further probing, she concluded that her mother might be the one who first exposed her to critical thinking:

> It's because she was a politician in Kuwait and so whatever she hears on TV, she knows it's not the truth and has to dig and know what's behind it. And when it comes to debates, she would listen, absorb, and then take time to think, to ask the next question. I never really thought of it as critical thinking. I thought she's just really smart.

The last time Eman has engaged in critical thinking was when she tried to speak out against Kuwaiti policies online. "I'm getting mad and fed up with what's happening in

our country and how people are being treated." Eman's feelings come from being what she calls –not stateless people– but one of the children of Kuwaiti women (from a foreign father). Eman explains that since she is a girl and has had no contact with her father, i.e., he does not exist in her life be it through divorce or from being deceased, by Kuwaiti law, she has the full right to obtain her citizenship by the age of 21. This is yet to happen even though she has turned 24 by the time of the research. Eman describes how young people in her situation have no right to get jobs in certain ministries and could receive less salaries than others. "They're not giving us our rights. And I wanted to speak of that, I wanted to be like my mom, to continue her legacy." However, Eman recounts how she had to pause and consider the consequences of speaking out against the government. She had to worry about her and her mothers' protection and safety:

> I had to think of my mother's name. I had to think of my future because I'm still a student and they still pay me. I am still not financially independent. All of this came to my mind. Critical thinking helped me in avoiding impulsive actions.

When asked about the importance of CT in her studies, Eman replied that CT is a prerequisite to being academically successful. But Eman also points out that CT is not only helpful in her studies. Eman's life experiences has made her place more priority on CT in her personal life than in her academic life, "In terms of my beliefs, relationships, how I act with people, the way they act with me, between me and myself, how I would want to improve myself, [for that] I have to have deeper thinking." As a teacher; however, Eman wishes to have "the brain that has many brains, each one would have more ideas, questions and solutions." When asked to describe the role of CT in ELT, Eman paused and said, "I wouldn't know how to answer that. I don't remember. I remember an instructor whining about it but I don't remember and I

wouldn't know how to put it. I wouldn't know, sorry." However, when asked the same question in another format about the importance of CT in ELT, Eman listed the following advantages of using CT in ELT:

1. Finding faster ways to simplify information to students
2. Better lesson planning
3. Preparing for critical incidents in class
4. Making lessons dynamic to improve students' fluency.

When asked about the factors that could impact the development of CT, Eman mentioned the following factors in the table (Table 4.4) below:

Table 4.4: Factors Perceived by Eman to Impact CT Development

Factor Impacting CT	Quotation
1. Questioning techniques	the questions that we ask students is it yes or no or questions to look for the reasons why something happened or the causes behind it, and the effects that take place.
2. Instruction	The way of instruction, explaining the lesson, delivering information to students, that's the first thing that helps students to start to think.
3. Family/home environment	The person's background does affect. People who live in a home where [CT] it's not there, going according to rules or your mom, dad, brothers and sisters, you're either going to be like them, or be the exact opposite.
4. Knowledge of English language	If someone in Egypt doesn't not know English, the minute he knows and understands the language, he can go further from there. He can think outside of the way Egyptians think, he can meet new people online, he can travel, elevate his status in social hierarchy … The limitation of the language itself, by only knowing Arabic, one can only learn and work in Arabic.
5. Culture	[It's] the environment where you are. In Western countries, most of them, even school children think better than us Arabs who are in our 20s. We do not have a wider vision or different perspectives; we are put in a box and we cannot think outside of it.

4.3.3 CT at the ELT Program

Eman described her experience at EMU as life-changing and the best she had in education. She doted on the teachers' attitude and way of teaching, "One teacher would always say 'it's not impossible, it's manageable.' They would ask questions, make us discuss with each other, help out and support you in any way they can. They loved teaching." Although other than one course, Eman could not recall any CT-oriented courses, assignments or assessments, she listed some of the instruction practices that engaged her in CT:

a) An instructor would allow them time to comprehend what's being said/read in class by leaving the classroom for ten minutes and requesting them to come up with a few questions.
b) Most teachers employed this technique of 'read, understand and write questions' when introducing students to a chapter, where they would ask them to go home, read it again and come up with three questions.
c) Educational Psychology (EDUC114): In this course, Eman learned about Bloom's Taxonomy and was engaged in group work assignments in which students had to come up with questions related to the topic or the 'psychological theories' behind these approaches and discuss how and why they would use them and their effects on students' minds.

Eman also noted that instructors in EMU are accepting of whatever question they receive. "I can ask, share my opinions, have discussions with instructors. But not all of classmates and in real life, not everyone." Even though Eman appreciated having classmates who are considered critical thinkers in class, she felt criticized and judged by some of them. "I would be too afraid to comment or give my opinion because I think I'm going to receive a lot more questions and I will feel a complete idiot." Eman

distinguishes between two types of her classmates who practice CT: those from whom she learns and would feel motivated by; and those who have a sense of self-entitlement "because they're smart", that would prevent her from learning from them. Eman stated that she felt limited and did not use 100% of her critical thinking in class due to fear of being judged and made fun of. However, Eman said that this is not the case during online classrooms, "you don't see them, you don't even show your own anxiety. You're in a safe spot, comfort zone."

According to Eman, the ELT program did not enhance her understanding of CT to a point where she felt prepared to teach it. "I'm a fourth-year student and I don't think I am capable enough, or I have the capacity to teach. I feel I need more." Eman agreed that she was not challenged critically in her academic life, except for the last two semesters during her microteachings in which she felt compelled to be creative and deliver better outcomes and results. Eman reiterated her feeling of lacking academically compared to other students, saying, "I could do better. I would like to level up in the way I think. My thinking has to get bigger and I think I should improve my critical thinking in order to do better." She described her experience learning CT as the following: "it's similar to when you understand (know) something, but you don't really 'comprehend' it. You know what you're doing but you question yourself why you're doing it. You know it's good, but you don't know why it's good." Eman regarded her level of CT practice to be the same since she joined the ELT program, but does not blame it on the program itself. "Improvement has to occur from within. It's up to us to expand our thinking. The teachers are the same, the way they teach is going to be the same. The way we think has to be different." However, Eman offered the following suggestions to improve the department's incorporation of CT practices:

1. Stop teacher-centered classes

1. Engage students in classes that seemingly only require lecturing, “make us think, don't make us just listen”
2. Have dialogues in class.

4.3.4 Future Use of CT-oriented Pedagogy

Although Eman expects teaching CT to be part of her responsibilities as a teacher in the future, she is not confident in her CT-oriented pedagogical ability. Her ultimate aim is to encourage students not to be afraid to state their opinions. “They should be proud of their opinions and questions. They should be confident to speak up, no one will judge.” Even though she believes she has the potential, she admits she needs to improve her CT, “I would be more confident after a few teacher-training classes. Now, it’s only ambition.” However, some of the CT-oriented techniques and approaches she is planning to use include the following:

1. Implicitly/indirectly teaching for CT (incorporated in speaking, writing, listening)
2. Improving the communicative ability and fluency of students as speaking practice can improve CT
3. Asking more questions in class
4. Avoiding memorization and drilling
5. Using guided discovery in introducing topics
6. Problem-solving
7. Encourage effective studying techniques.

As for the challenges she expects to face while teaching for CT, Eman states that she cannot be prepared for them all until she experiences them, but she lists the following:

1. Political and social consequences, especially in Egypt, out of fear of being killed or sent to jail
2. Parents' disapproval of her as a 'rebellious' teacher
3. Different learning styles of students
4. Different comprehension levels of students "to whom you have to explain it more than once and in different ways for them to understand."

4.4 Case #4 – Buse

Buse is a 23-year-old graduate of the ELT program. She is from Antalya, Turkey, and has lived there all her life before coming to TRNC to study. At the time of the interview, Buse had applied for a job as a teacher in another city and was accepted. Buse's parents were both bankers, but her mother quit her job when she was younger to take care of her, while her father continued to work until retirement.

4.4.1 Educational Background

Buse's earlier education experience was far from good. Emphasizing that the role of teachers was to discipline, rather than teach the students, Buse vehemently describes her teachers as psychopaths who were trying to feed their ego through their students. With an average number of 30 students in class, Buse recounts how one of her teachers often verbally abused them by shouting at them slurs such as 'You're idiots!' or 'You don't understand anything!' She explains how this toxic behavior affected her: "Back then I thought that maybe I am really stupid because he's a teacher. He is supposed to know everything, so I am stupid." Buse mentions a case of harassment where the teacher in question was eventually fired after being reported by her mother and the school. "He constantly asked us to massage him, especially the girls. There were six classes in the day, we were spending four of them massaging him. I was in third grade."

According to Buse, high school was much better. There, Buse specialized in Early Child Development where she studied children psychology, children's physical development, and theories by Montessori and Freud, etc. She relates how her teachers were good even though classes were mostly in the lecture style, “I really enjoyed studying, listening to my teachers because they were really good.” Buse described her high school teachers as “tough”, but friendly and were respected by the students. When asked if she had opportunities to ask or disagree with them, Buse confirmed that she could ask for clarification but never to disagree. “No, never. This is the one thing that the Turkish education system taught us. Never, never, never disagree with your teachers, because they will punish you with your grades, or they will hate you.” At that time, Buse’s mother was the one most involved in her daughter’s education since Buse’s father was busy working most of the time.

4.4.2 Conceptualization of CT and CT-oriented Pedagogy

Buse defines critical thinking as thinking deeper, asking questions, searching for different ways, and asking ‘how’ instead of ‘what’. Buse provided instances of CT such as when trying to solve a problem, communicating, or when analyzing, synthesizing a text or an audio. She provides the following simile comparing the abstract process of CT with something more concrete:

> If you look at the surface of the sea, you're going to see water, and you're going to think about the basic things about the sea, its color, its shape… but if you go deep. If you dive, you're going to see a life, you're going to think of everything under the sea. So, diving is critical thinking.

When asked what she meant about ‘synthesizing a text’, Buse provided a step-by-step explanation delineating the process of a reading exercise,

> You see a text, think about it, then skim or scan it, then you read and understand the sentences one by one, then you understand them as a paragraph, after that you analyze the paragraphs one by one to understand the text. After you

> understand you comprehend. You analyze the meaning beyond the words, the linguistic background of the text, then you may solve a problem in the text.

According to Buse, a critical thinker is someone who questions everything and who is not satisfied with the answers. She regards her father as an example of a critical thinker and that he was the one who introduced her to CT, “my dad didn't tell me, ‘This is critical thinking you should do it’ he didn't do that. I observed him, what he was doing and I acquired CT from him.” Buse’s observations were based on her father’s purchasing habits and how he conducted himself as a conscientious customer, questioning the price and the material of the item, inquiring after its country of origin or manufacturer, and asking questions such as, “do we really need this (item)?” Buse recalls the first incident she noticed her father engaging in CT:

> My dad took me with him to buy a new car. Even though he asked my uncle all about it before we go, when we went there, he spent hours asking the same questions to everyone, he questioned every single detail. I remember I was thinking that I should do that, this is important. We didn’t face any problems with that car later.

As for her mother, the case is different. Buse mentions that her mother in fact made her hate critical thinking by being too ‘critical’ and ‘thinking’ too much. Buse describes her mother as an overthinker who thinks deeply about things which often leaves her emotional and upset. When asked if she sees herself as a critical thinker, Buse says, “sometimes yes but sometimes no. I like to question everything deeper, but sometimes I run, in order not to think too much. I sleep. Sometimes I hate to think...so I don't.” When asked why, her reply was, “because it doesn't have an end.”

Philosophically speaking, Buse also believes that criticizing or questioning everything to no end is a sign of a true critical thinker. She explains that a critical thinker should

try to reach a conclusion but does not actually reach it. “Because if you reach a conclusion, you stop thinking critically, so [use CT] until you're satisfied, but you shouldn't be.” Buse’s premise was that in order to keep questioning and thinking deeper, one must not stop and say, ‘this is the furthest point I could reach.’ If one continues thinking, one will see deeper points. Buse exemplifies this by her classmate Ammar, whom she admires for his CT: “I adore the way he thinks, the questions he asks, he asks really smart questions, even the teacher sometimes cannot answer them. It's amazing!” Buse describes Ammar as someone who thinks all the time, questions everything, and is not satisfied with the answers of even the professors. “This is thinking critically to me.”

Buse first heard the term critical thinking at university. However, her first time engaging with CT was when she was 16 years old and preparing for the university entrance exams. At that time, Buse had to think about her future and decide the career path she would take, “I was studying and I didn't know why I was studying. I didn't know what I wanted to do in life, so I really had to think, to know myself better. And it worked.” Although Buse complains of CT, saying, “it's a headache for me because I think too much, really deep and critically.” She believes CT is the reason she was able to graduate successfully. CT’s benefit to Buse was evident again during the last time she engaged in CT recently, where she had to make an important decision about a job offer she had received:

> The job is in another city, and I have to leave my parents, and the city that I was born and raised in. So, I sat down and thought about all of the consequences that would happen, and the reasons behind why I want to go.

Buse perceives CT as a vital component of the education system in any country; however, she notes its deficiency in Turkish students: “we don't know how to think

critically … we don't ask, they tell us what to think, and we're not allowed to question how and why." Buse considers CT an important element of language teaching as well and states the following advantages of CT in ELT:

1. Facilitating comprehension of vocabulary
2. Understanding underlying meaning of text
3. Better communication
4. Solving problems in language teaching
5. Monitoring and evaluating students' learning
6. Motivating/encouraging students to be aware of the importance of learning the language.

Buse perceives the following as impacting factors on the development of CT, as shown in the table (Table 4.5) below:

Table 4.5: Factors Perceived by Buse to Impact CT Development

Factor Impacting CT	Quotation
1. Education system 2. Culture	The education received from schools … It is really important to give a place to critical thinking in the education system of a country. We don't ask, they tell us what to think, we're not allowed to question how and why. This is a deficiency of the Turkish students they don't know how to think critically.
3. Parent's education	parents' education is important
4. Family/home environment 5. Friends/Peers/Social Network	[home] environment is important, even your neighbors, the people that you communicate with on a daily basis.
6. Reading habits	The books that you're reading. I have two cousins, both of them like to read a lot, but one of them reads a lot of romantic books about kidnapping, falling in love, etc. The other reads deep books like Dostoyevsky. When you see them, the second one knows critical thinking better than the first one.

4.4.3 CT at the ELT Program

Buse was happy when she came to the ELT program, as she enjoyed having the ability to discuss and disagree with classmates and professors. She also noted how having higher expectations from others, having more responsibilities as a university student, and living independently with the freedom to study however and whenever she wants, all has motivated her to do better and be autonomous, describing the learning conditions as "me-centered." Buse also observed how the international students (e.g., Iranian, Egyptians, etc.) at the department were more adept at critical thinking compared to Turkish students: "they know how to think critically, they do not only accept information. As Turkish students, we're not. We are programmed to take information and put it somewhere else."

Although Buse asserts that she learned the term CT in EMU, she could not remember the exact course or instructor, "it was probably (instructor's name), but I'm not sure. Or maybe (another instructor's name)? I have no idea, but I remember we learned what critical thinking is, its aspects and objectives." Buse said that almost all of the courses that she took, in addition to certain assignments, enhanced her CT. Buse could remember the following course:

1) *Teaching Practice (ELT406):* In this course, Buse did her teaching practice (or practicum) and was requested to write a final report reflecting on her lessons and the education that she received at EMU, regards the quality of education, what she learned, and what went wrong.

When asked if the department enhanced her ability to practice CT, Buse's reply was, "absolutely, yes, because when you really know and learn about something, it's easy to do it." She confirms that CT plays a big role in her academic life, "I think and think all the time, when I'm listening to lectures, when I'm doing my homework, when I'm

doing a research." When asked if she only thinks internally or if she expresses these critical thoughts and opinions out loud, Buse said it depends on the person whether they are capable of thinking critically and understanding what she is saying or not: "If I feel they wouldn't understand what I'm saying or wouldn't bother to think about it, I keep silent." This, according to Buse, applied to instructors as well who admittedly accept her voicing her opinions, but did not bother to consider or comprehend what she is truly saying." Buse finally concludes her remarks on how the department helped enhance her CT:

> After four years, I can think critically, analyze the information that I gained, observe everything in my environment, solve problems, both in my personal life and in my academic life, and language-related problems. I can communicate better in my own language and in English, in different contexts of everyday life and in academia. I was not able to do that before EMU.

Regardless of her satisfaction with the ELT program and how it helped enhance her CT, Buse asserts that the following would improve the program even more:

1. Prohibit the repetitive use of PowerPoint slides in every class. "What's there to think critically when you are looking at some slides, reading them and listening to the teacher who is also reading from them?"
2. Allow students to participate and ask questions during the lesson, instead of turning off their microphones so that they do not interrupt the lesson.

4.4.4 Future Use of CT-oriented Pedagogy

Even though she admits she is not an expert and does not have experience, Buse feels confident about incorporating CT into her teaching; however, she doubts she will ever be asked to do so, "because I'm going to be working in Turkey." As a language teacher, Buse believes that she should allow her students to question everything she says. "They should be able to question everything without being afraid of me, afraid of their grades,

of me hating them, because they disagree with me, so I should be able to make them comfortable." Buse emphasizes the importance of maintaining a friendly atmosphere in the classroom as well as encouraging students to be aware of how their perspectives, thoughts and emotions may differ from each other's, teaching them how to empathize with others while thinking critically. Buse plans to engage in CT-oriented pedagogy as a teacher by employing the following techniques:

1. State clearly the purpose behind learning a certain lesson or a subject.
2. Inform students on the teaching methods involved and how they are going to learn (metacognitively) during the lesson or subject.
3. Encourage students to ask questions of 'how' and 'why' instead of 'what'.
4. Motivate students to engage in CT via utilizing their curiosity.
5. Teach students how to identify, comprehend, analyze and synthesize information.
6. Teach students to distinguish between reasons, evidences, and conclusions.
7. Employ guided discovery and inductive learning techniques to present information by doing experiments or storytelling to engage students in thinking about and beyond the information rather than learning it.

Buse has a number of concerns when it comes to teaching for CT:

1. Parents' education and CT level might not contribute to improving their children's CT.
2. Students not being familiar with the term critical thinking at all. "I'm going to be the one who introduces critical thinking to them. It requires extra effort."
3. Having no experience teaching CT before. "I'm afraid that I am not good enough, but maybe I am. The thing is I don't know. Having no experience is a bad thing."

4. High school students may have barriers to CT because their characters are starting to shape.” They might not be open to thinking critically.”
5. Students’ level of understanding or comprehension.
6. Students' emotional state and feeling comfortable when they come to class, “because if you feel comfortable, you think better, more freely.”
7. Student’s motivation and interest in learning English. “Whether they’re aware of the fact that it's important to learn a new language, especially English for their academic future.”

4.5 Case #5 – Melis

Melis is a 22-year-old student from Lüleburgaz, Turkey. As a child, she and her family lived in another village where her father used to work. She studied there until fourth grade, where she had the same teacher for most subjects. After fourth grade, she moved to Lüleburgaz and started fifth grade there. Before university, she went to London and studied at a language center for three months. She hopes to continue her studies and do her Master’s at the department or abroad. Ultimately, she would like to work as an EFL instructor at a preparatory school at university.

4.5.1 Educational Background

Melis studied at a school in a village until she moved to another one in the city in her fifth grade. Her education there was better compared to the one she received in the village. A typical lesson was where the teacher came into the classroom, wrote rules on the board, then asked students to do the exercises. After that, students were allowed to do what they would like for the rest of the class. Melis points out how the transition between schools in terms of the number of students affected her. In her first school there were eight students, and in the second school, 37. “From eight I moved to 37

people, it was difficult for me. but when I moved to grade 11, we were eight people in the classroom again."

In grade 11, she specialized in English language because she loved her teacher, whom she described as "knowledgeable", but who later changed due to problems in his life. "He was really a good teacher but because of what happened to him –he got divorced– he couldn't leave personal issues out of the classroom. It affected us." Melis described a typical class would involve him asking students to open a grammar book on a certain page, giving them 30 minutes to solve the questions, before making them read their answers aloud. Melis recalls how she and her classmates used to cheat and open the last page of the book and write the answers from there. "If you cannot answer, he will embarrass you in front of the whole classroom. We did not want that."

Melis expressed how this teacher affected her and her classmate's motivation and self-confidence in class by projecting his anger on them and verbally abusing them saying, "all of you are pieces of shit", "you're under the ground", and "none of you will reach anything". This has particularly affected Melis' preparation for and performance on her university exams as his behavior caused her anxiety: "he kept torturing us mentally." According to Melis, she could not have learned from him even if she tried, "for me, if there's fear, if I'm nervous, if the teacher is not treating me well, I will not –I cannot learn anything from him." Melis reached a conclusion that teachers can affect students' attitude immensely and concludes with the following: "if you're not psychologically stable, you shouldn't be a teacher. Because the students are being shaped according to you and your mood."

As for parents' involvement in her education, Melis expressed her gratitude to them for allowing her to study language in Turkey, "it's hard to find parents who would let you study language. They often refuse and say you will not earn any money; you have to study medicine or pharmacy." Melis' parents also decided to send her to London for three months at the age of 16 to study at a language school.

4.5.2 Conceptualization of CT and CT-oriented Pedagogy

According to Melis, CT involves deep-thinking skills and looking at different perspectives. To her, CT is not passively reading a text or learning a piece of information, but rather to metacognitively engage with it and ask questions such as, "what am I thinking about?" and "how am I going to use this knowledge?" Melis considers CT a way of processing information by observing, discussing, and comparing new information with what one already knows (schema); then create a new definition or new knowledge, after which one identifies how it can be used in one's life. Melis asserts she knows what CT is; however, when asked to, she was unable to give an example of an instance engaging with CT.

Melis describes a critical thinker as someone who is curious, willing to learn, seeks information, collaborative with group members, discusses issues and considers others' perspectives. When asked if she knew someone like this, she said it was her best friend Ammar, whom she considers as a role model: "l wish I can think like him to be honest. He always looks at everything from a different perspective. He doesn't think in a general way. He's deep. He can find the answer, but from a whole different way." Although Melis realizes the importance of being a critical thinker, especially as a teacher, she believes she is yet to develop it fully and apply it in her life: "I think I'm not a critical thinker, I'm mostly an overthinker." Melis seems to be torn between

aspiring to be a critical thinker and finding it tiresome and exhausting when engaging in it: “I prefer most of the time not to use my brain because it makes me tired. … I need some time to relax my mind.” However, she is hopeful, “I don't know how I am supposed to do, but I'm sure with experience I will develop it.” The following are some of the CT-oriented pedagogies Melis thinks can be employed in order to engage students in CT better:

1. Maintain a student-centered classroom.
2. Allow students agency and to engage in CT autonomously. “Teachers shouldn't control students; students should find their own way for critical thinking.”
3. Teaching productive language skills, i.e., speaking, writing. “By focusing on these skills, I believe automatically your critical thinking skill will develop.”
4. Employ debates in class. “Speaking is important for forming CT because when you start speaking, you automatically start thinking.”
5. Assign writing tasks. “When you write, you use your brain. You try to be creative.”
6. Be innovative. “Show that you're different. If you're a normal teacher, it doesn't show that you're knowledgeable about what you are doing or that you put the effort in it.”

The table (Table 4.6) below illustrates what Melis believes to be the factors that can impact CT development:

Table 4.6: Factors Perceived by Melis to Impact CT Development

Factor Impacting CT	Quotation
1. Education system 2. Culture	I think from the education system in Turkey. They are not developing you. They want you to memorize. They don't want you to be a thinker, to ask questions, to know why it's this way … the culture is a factor.

3. Friends/Peers/Social Network 4. Family/home environment 5. Teachers	Your environment. For example, when I sit with my normal friends, we generally talk nothing, but with my friend (Ammar), we talk about deep stuff. The place you grow up, your teachers.
6. Background knowledge of CT 7. Affective factors	If people already had a background of critical thinking, they will accept it faster. I opened a dictionary to see what is critical thinking. That's why I didn't see myself as equal to the other students I always told them I'm coming behind.
8. Genetical pre-disposition to CT	*When asked what factors made Ammar better at CT*: "it's from Allah, their brain works differently from us. Their cognitive skills are higher than us."

4.5.3 CT at the ELT Program

In the beginning, Melis felt overwhelmed at the ELT program as she could not understand her instructors during class and was unfamiliar with academic jargon. This feeling could be due to her previous education, English proficiency, and the fact she entered the ELT program during the 2nd (spring) semester. "For the first semester, I used to run from classes, cry and call my father to tell him I didn't want to study. Sometimes I didn't enter the exams and teachers used to call me to come." Melis started with first-year 2nd-semester courses, which was difficult for her. "I didn't take Reading and Writing I. I took Reading and Writing II. I don't know how to write, so I struggled a lot." Melis expressed how grateful she was to her instructors, who were supportive of her during that time: "When you really have a problem or an issue, they will sit down and talk with you. They know how to leave their problems behind."

Melis first heard about CT in her second year of university during her Language Acquisition (ELTE208) and Educational Psychology (EDUC114) classes. "Before that time, I kept hearing about cognitive ability but didn't know what it is." When asked how she was introduced to CT in these courses, Melis said that she could not remember and it was probably as a definition or rules: "I learned it, but I can't remember. I didn't

use this word for a long time, almost two years." When asked about the courses, instruction, assignments and material that enabled her to get engaged in CT, Melis mentions the following:

1) *Research Methods in ELT (ELTE214)* course, in which she compared articles and synthesized them.
2) *Testing and Evaluation in ELT (ELTE402)* course, in which she prepared an exam (see section 4.1.3).
3) *School Experience (ELTE411):* Observing video-recorded classes on YouTube. Melis explains that this was a substitute to real-life class observation, as they could not do it due to the COVID-19 pandemic at the time. Although she and her classmates found it difficult to take the task seriously, she admits it did require CT on her part:

   > I focused on every single detail. If the teacher used a method, what is behind it? What does she really expect from the students by this? I observed how students take attendance in class, which shows that, in this classroom, students are responsible, there's trust by giving a huge responsibility to the student, a kind of classroom management.

Melis points out that she usually uses CT in her assignments and exams "because the instructor will get the idea you didn't make any effort if you give them very general information. If you're a critical thinker in the exam, they will think you're different from the others." When asked if she received instruction on how to use CT in her exams and assignments before, Melis replied that they were given models to follow: "When teachers give us the examples of it, you understand what's going on and how you should do it." One important statement Melis made during the interview was that she did not see herself as equal to other students because she had no knowledge of CT (and limited English language as well), as she recalls having to look up the term in the

dictionary to find its definition. But later, she came to terms with both her English proficiency and CT level:

> When I came here, I didn't want to accept anything, because I didn't see my level as equal to other students. And I refused to learn. We had many native English speakers, Cypriots who had British citizenship and accent. I come from Turkey, no accent, no vocabulary, no thinking, no writing. I judged myself a lot. But later on, I decided to forget about my past, and told myself I will try my best and take whatever I can take from this university.

Melis has one suggestion on how to improve the ELT program's instruction of CT: Change question formats and not to include definition questions when preparing exams. She explains that students do not learn anything by knowing the definition: "They learn what it means, but when you ask them what they really think about it, to give an example, from a certain kind of perspective, according to a hypothesis, that's when they start thinking critically … they will say "how can I apply this in my life?" According to Melis, knowing a concept's definition does not imply knowing how to apply it in life.

4.5.4 Future Use of CT-oriented Pedagogy

Melis' goal is to become an EFL instructor and teach university students at a preparatory department or school. She does not wish to teach young learners or teenagers as she is worried her mood might affect them negatively, recalling what happened to her as a young student:

> I'm really scared I'll be like my old teacher; I don't want to be like him. I don't want my students to talk about me saying, 'she destroyed my life. I couldn't do well in the exam because of her; she doesn't know how to teach, she's dramatic and negative… her negative energy comes to us.

Melis believes that every person has the ability to critical thinking; however, they might require other people (i.e., teachers) to awaken/activate it in them. "I didn't know I can do it until I came here and I experienced it." Then again, Melis maintains that

she cannot demand from students or expect them to engage in CT without having any previous knowledge of it or willingness to develop it: “I cannot force them to be a critical thinker. It's inside them, they decide it.” This indicates that Melis is ready to guide and facilitate her students’ development of CT as long as they are cooperative. Melis is planning to engage her students in CT by utilizing the following activities and tasks:

1. Explain what CT is to students and how they can apply it. “I will apply this mostly in my writing lessons.”
2. Watch movies to introduce topics/discussions
3. Assign different writing tasks. “Instead of multiple-choice questions, I will give them a topic and tell them I don't want a general answer, I want a deep one, to know what they really think about it.”
4. Provide students with different kinds of essay examples. “I will introduce them to essay format, how to start it and how to finish it, the parts of an essay (the technical aspects).”

Melis expects to encounter the following affective barriers that will make it challenging for her to engage students with CT in her future class:

1. Students’ aversion towards CT: “they will find it difficult because it’s not something easy, they don't know what it is, so it will be challenging for them. If they already had a background of CT, they would accept it faster.”
2. Students who have no background knowledge about CT will feel insecure when comparing themselves with those who are familiar with CT.

4.6 Summary

In this chapter, the analysis of data gathered was performed on each participant's response. A thematic analysis was followed by depending on the research questions of the study, and each participant's response was analyzed separately as an individual case study. Thus, participants' responses were grouped under four main areas: i) their educational background; ii) their conceptualization of CT and CT-oriented pedagogy; iii) how they viewed CT at the ELT program; iv) their future use of CT-oriented pedagogy. In the following chapter, the discussion of these findings will be presented along with its implications.

Chapter 5

DISCUSSION AND CONCLUSION

This chapter provides a comprehensive discussion of the findings reported in Chapter 4, with reference to the participating pre-service teachers' perceptions on the focal themes of the study, that is, their conceptualization of CT and CT-oriented pedagogies in the light of their educational backgrounds, whether the ELT program is contributing to their CT, and what their future use of CT-oriented pedagogies be like. It also presents the research conclusions and potential implications of the study. In the last section, a number of limitations and delimitations of the study are mentioned, along with suggestions for future studies.

5.1 Discussion of the Results of Research Question 1

RQ 1# What are the participating pre-service teachers' educational experiences with critical thinking?

To answer this question, this research referred to Tian and Low's (2011) review of literature, which concluded that a more holistic approach should be adopted when examining university students' CT: "to understand an individual student's learning process or 'journey', it is necessary to take into account factors such as his/her personal history, his/her identity and motivation, teacher-student relationships, and the complex teaching and learning context" (p. 71).

i) Inadequacy of past education to develop CT

Despite the pre-service teachers' different backgrounds, their educational experiences display many similarities with regard to CT learning and development, regardless of being in a public or a private school. The classroom environment was constantly described as teacher-centered, characterized by lecture style, drilling, memorization, and relying heavily on the textbooks. This is similar to findings from South African classrooms where teacher-centered approaches leave little room for creative and critical thinking, and learning is measured in terms of competence to reproduce facts, rather than the competence to think (Grosser & Lombard 2008). This also reflects instructors' expectations of their students' thinking skills, "requiring only superficial thinking approaches such as rote memorization" (Manalo et al., 2015, p. 314). Normally there were no discussions or questioning of teachers' answers or opinions, except in English language classes in which discussions were allowed but were often based on the coursebook and mainly teacher-student directed. This indicates how students' identities or roles were defined as "passive recipients of knowledge [with] an expectation that their teachers were fully in control" (Ruparelia, 2018, p. 144). Their relationship with teachers was described as a power struggle, where teachers were the ultimate authority, and their role was to discipline and control the class. Some teachers displayed toxic and aggressive behaviors such as constant criticisms of students, verbal and physical abuse, as well as harassment. The average number of students in the class was 30, and many resorted to cheating during classwork. Affected by the hostile environment, the pre-service teachers expressed their feelings of anxiety and stress they had in their past education due to fear of failure and being embarrassed or hated by their teachers. This hostile atmosphere was also found prevalent in the classrooms of post-Soviet Kazakhstan (Burkhalter & Shegebayev, 2012). Although there were a

few positive instances in the pre-service teachers' past education, they are incomparable to the overall education they experienced.

At the same time, we can see that negative past education did not completely hinder students from developing CT, but rather helped them appreciate it and their current education even more. This sense of dissatisfaction with their previous education motivated Eman and Buse to engage more in critical thinking and become better critical thinkers. Ammar's experience with mundane instruction only created a sense of intolerance to memorization and a mindset of resilience in him to find meaning behind everything he learns. Yet, the most damaging effect is the lack of self-esteem found in the pre-service teachers to engage in CT in their current education. This was evident in Eman, Buse and Melis, who lacked confidence in their CT abilities simply for lack of experience at being critical (Tian, 2008). This corresponds to Grosser and Lombard's (2008) finding that pre-service teachers may have difficulties executing critical thinking if they come from a cultural environment that does not prepare them to utilize it.

ii) Parental involvement influences students' CT skills

We can see in this research, and from Ammar's case, how parental involvement can have a positive impact on their learning and how they experience education and CT. Ammar's parents helped him with his studies and his father encouraged him to transcend the limited conditions of his education and have the internal motivation to find meaning for what he is learning. Melis was also grateful as she was motivated by her parents' support for her choices. But parental involvement can also affect a student's CT, as we saw in Irada's case, who struggled with her parents' interference in her life decisions. The pressure she experienced from her family has resulted in a

correlation in her mind between the uncritical, blind mindset of getting high grades, and academic success. This led her to believe that there was a discrepancy between being a true critical thinker and an A-student. Buse's mother also displayed extreme criticality and overthinking, which created a sense of aversion in Buse towards CT. The non-involvement of Eman's mother in her education and relying on tutoring lessons may have also impacted Eman's learning experience.

iii) Language proficiency facilitates the expression of CT ability

Ammar was regarded by three other participants in this research as one of the few critical thinkers they know, and they have expressed great admiration for his CT skills. However, this can be due to his language proficiency, having studied from an early age at a private school that employed English as a medium of instruction, in addition to being the only one who obtained his IGCSEs and did not require any English language courses upon arrival at EMU. Therefore, one of the reasons why other students may not have been regarded as good as Ammar at CT could be their relatively low level of oral language proficiency, which has hindered them from expressing themselves freely and articulately. On the other hand, we can see how Melis struggled when joining the department due to her low English proficiency at the time as she could not understand her instructors and academic English used. This confirms Tian and Low's (2011) conclusion that language proficiency can influence the ability of argumentation and CT.

iv) Culture and education go hand in hand

Although Tian and Low (2011) differentiate between big culture (i.e., of a country or a region) and small culture (e.g., of a classroom), emphasizing the importance of the learning contexts for students, the factors involved in the learning contexts are often a

reflection of the local (i.e., bigger) culture that teachers and students engage in (Tian & Low, 2011). This was evident in the participants' responses, always referring to their respective cultures, the society and the community they live in as the reason behind the negative classroom practices they were exposed to. Irada's culture in post-Soviet Turkmenistan still permeated the education system. Her account of experience is identical to that mentioned in Burkhalter and Shegebayev (2012), who examined the elements of Soviet Pedagogy in post-Soviet Kazakhstan. These included: memorization, lecturing, copying off the board, no discussions, plagiarism/cheating for fear of failure and humiliation, students often being yelled at, and social stigma for non-conformity (pp. 62-67).

5.2 Discussion of the Results of Research Question 2

RQ 2# How do the participating pre-service teachers conceptualize critical thinking and CT-oriented pedagogy now?

In order to answer this question, the researcher attempted to examine the participants' conceptualization by inquiring after their understanding of CT, what it is and what it is not, its usage in different contexts, its importance in ELT, what factors impact it, how they were introduced to it and the last time they engaged in it, and what role it plays in their lives now, etc. This questioning technique proved effective in extracting the participants' conceptualization even if they themselves were not aware they had that understanding of or knowledge about CT.

i) Non-operant but growing understanding of CT

Being aware of the fact that scholars and experts of CT are yet to agree on one definition of CT (Rear, 2019), and taking into account the difficulty in defining CT and criticality in general by researchers, teachers, and students alike (Ruparelia, 2018),

the researcher encouraged the interviewees to share all that they know about the term Critical Thinking. The researcher did not inquire after other terms/concepts which have been discussed in previous chapters, such as critical pedagogy, criticality, and CT-oriented pedagogies, since participants were not expected to know them. The fact that none of the participants mentioned these terms is sufficient evidence to their unfamiliarity with them.

All pre-service teachers recognized the term CT and were ready to define it. They all agreed that CT is an integral part of problem-solving, to find the underlying causes, researching information, being open-minded and considering alternatives, looking at different perspectives of an issue, and finding the meaning or purpose behind learning anything. Yet, when asked to, the pre-service teachers struggled to offer examples or instances of CT. Similar to findings from Manalo et al. (2015), the pre-service teachers either could not answer the question or "[w]hen pressed, they displayed uncertainty about the nature of CT" (p. 311), sometimes citing examples that are not relevant to CT, such as learning about a topic in different ways, and thinking while listening to lectures. Yet, it was clear throughout the interviews that, given the right amount of time, the right prompts and dialogic interaction, and an inviting atmosphere for sharing, the pre-service teachers displayed many understandings of CT that shows the potential they have to further develop it. Parallel to Ruparelia's (2018) participants, most of the pre-service teachers during the interview came to the realization that they did possess an understanding of criticality and have engaged in it throughout their lives without being aware of it. To exemplify, Ammar uses it in his education to find the underlying meaning and purpose behind what he is studying, to analyze the way his instructors think and to find the practical implications of any academic research. Irada is using CT to make better life decisions by researching information, considering

alternatives, and challenging the norms and others who undermine her agency. Eman utilizes CT to reevaluate her beliefs and to expose the failings of the political and legal systems in her country. Buse mainly employs CT during critical reading, to analyze and synthesize a text, whereas Melis uses it to process new information, discuss with others and compare viewpoints to construct her knowledge.

ii) Ontological and epistemological approaches to CT

Results show how pre-service teachers expressed different understanding of CT due to their different backgrounds and experiences, and these differences come down to Ruparelia's (2018) distinction between Critical Thinking (i.e., reflections, questioning, study skills, critical reading and writing), and Critical Being (i.e., perceptions of self, relationships with others within contexts, sense of agency, culture and tradition) (p. 148). Chen and Wen (2018) found similar differences between the U.S. and Chinese pre-service teachers: a) the former group, similar to Ammar, Buse and Melis, regarded CT from an epistemological perspective (concerns the nature of knowledge and how to think), providing examples related to learning and academia; b) while the latter group, resembling Irada and Eman's case, understand CT ontologically, regarding it a holistic state of 'being' and 'doing' related to their personal judgments, life decisions and what kind of teacher to be, separate from language teaching and learning.

We can see that each pre-service teacher focuses on one aspect of CT that is more relevant to their life experience. Ammar's definition of CT as a process to reach a point or a means for an end-result is similar to Facione's (2015), who defined CT as a kind of "thinking that has a purpose" (p. 4), and Halpern's (2003), who describes it as "thinking that is purposeful, reasoned and goal-directed" (p. 6). Buse and Melis referred to pragmatic aspects of CT as well, such as analyzing and synthesizing the

information gained, critical reading and writing; however, there was no mention of two important processes related to pragmatic thinking: "brainstorming and mind mapping" (Manalo et al., 2015, p. 309). Ammar and Melis were the only ones who referred to CT as a metacognitive process.

Eman –whose case supports Tsui's (2000) argument, that religious backgrounds influence the development of CT– perceives CT as a means to reflect on her beliefs, similar to Ennis's (2013) definition that describes CT as "reasonable and reflective thinking focused on deciding what to believe or do" (p. 1). Eman's approach to CT in terms of "relationships … how I act with other people, between me and myself, how I would want to improve myself" reflects the Chinese pre-service teachers' perception of CT as "holistic development" (Chen & Wen, p. 86). As for Irada, who is struggling with other forces controlling her life (i.e., their parents, family, society or the government), she identifies with and aspires to one aspect of CT more, that is becoming a 'critical being,' "someone who is the author of their life" (Dunne, 2015, as cited in Ruparelia, 2018, p. 145). Irada's focus on reclaiming ownership of her life decisions shows us how authoritative familial figures can influence pre-service teachers' understanding and practice of CT, which confirms Chen and Wen's (2018) conclusion that the pre-service teachers' conceptualization of CT is "socially, culturally and institutionally contexted … shaped by their cultural understanding of thinking, educational ideals and the development of agency" (p. 87).

iii) Failure to link CT in life with CT in education

Elder and Paul (1996) posit that "persons are critical thinkers only if they display this ability and disposition in all or most of the dimensions of their lives" (p. 34). In this respect, results show that only Ammar, Buse and Melis managed to utilize CT in their

learning contexts, while Irada and Eman struggled to identify CT's role in academic life and deemed it more important to practice CT in their personal, everyday life. They were unable to give specific examples of CT from their teaching or educational experiences, which can be explained by the fact that they were not exposed to explicit discussions of CT during their education (Chen & Wen, 2018). The same was found in Ruparelia's research (2018), where international student teachers failed to connect criticality in life with criticality in education.

The research findings show how the pre-service teachers exercise CT in different contexts. CT can be engaged in within the financial aspects of life, as Irada and Buse conceptualized CT as 'conscious spending', known as a "mindful money habit that encourages you to think critically about all of your purchases … making sure if you do buy something it is at best possible value you can reasonably get" (Vassallo, 2019). Eman exercises it for countering misinformation on social media, identified as an important 21st-century skill by Halpern (2003) against the "rapidly proliferating information that we must select from" (p. 3). The research results indicate that pre-service teachers who were introduced to CT previously and engaged in it in the context of learning display more pragmatic usages of CT, as Ammar and Melis utilize CT to obtain better grades by "getting inside the lecturer's head," a technique also found in New Zealand students (Manalo et al., 2015, p. 313). Likewise, Buse stated that as a result of her education at EMU, "I can think critically, observe everything in my environment, solve problems, both in personal life and in my academic life, and language-related problems".

iv) Lack of understanding and misconceptions related to CT

Buse and Melis expressed feelings of exhaustion when engaging in CT, indicating it is a worrisome cognitive process that takes its toll on an individual's energy and well-being. Buse also conceptualizes CT as endless questioning and a constant pursuit for better solutions. Melis also associated CT with innovation and creative thinking and regards it a means to stand out among her classmates and her colleagues in the future: "I cannot be normal". Irada espouses the belief that CT is irrelevant to her studies and that she will not be allowed to practice it later on in her career, rejecting CT's transferability to other domains, from life to education and career, according to Mason (2008). The pre-service teachers' conceptualization of CT did not show implications to Siegel's (1990) dual-component theory of CT, meaning they did not differentiate between CT as cognitive skills that "assess beliefs and actions and the reasons underlying them" (Tian & Low, 2011, p. 64), and CT dispositions, "the motivated and willing attitude to apply and actively engage in critical thinking" (Tufan, 2008). By recognizing the two components of CT, Pithers and Soden (2000, as cited in Yuan et al., 2021) posit that "with enhanced CT dispositions, individuals are also more likely to apply CT in different aspects of their life through which they can hone their CT skills", which would eventually lead them to "gain more knowledge about the role of CT in their professional work and personal life" (p. 2).

These misconceptions and negative connotations associated with CT are an indication of a lack of understanding and practice of CT that could hinder pre-service teachers from engaging in it fully and promoting it to students in the future. Therefore, it is paramount to clarify any misconceptions related to CT and providing hands-on training in employing CT, which was earlier concluded in Petek and Bedir (2015), "given explicit and purposeful training, English teacher candidates can break the

judgmental barriers about the negative connotation of CT and feel more competent and enriched in infusing CT into their teaching" (p. 20).

v) Reducing CT to language instruction and the absence of CP in ELT

Results show that the pre-service teachers have identified the important role of CT in the field of ELT, with regard to its benefits for effective teaching approaches, methods, and techniques. Yet, this focus on 'asocial' aspects of language learning and cognitive linguistics omits the vital role of CT in empowering students and enhancing their CT skills and sense of agency. This shows a reductionist view of CT where "it is reduce[d] to the mental processes involved in the acquisition of English as a second language and the classroom-bound techniques which enhance these processes" (Abednia & Izadinia, 2012, p. 3), without addressing social issues and partaking in social change.

Results also indicate that the pre-service teachers emphasize the importance of learning English for students' educational, professional, financial, as well as cognitive and critical thinking development. However, this approach to learning and teaching English language displays uncritical acceptance of English/Western culture and ideologies. CP advocates for social justice and calls for students to be critical of both their culture and the target language's. The pre-service teachers did not question the historical reasons behind the status achieved by English language as a lingua franca in the world. They did not address one of CP's central issues of exposing the "values that underlie the spread and promotion of English and questioning some of the assumptions based on which the [ELT] profession currently operates" (Pennycook, 1998, as cited in Akbari, 2008, p. 277). There was also no mention of the importance of learning English for students to be able to communicate their "cultural values and conceptualization" (Akbari, 2008, p. 279), which is also one of the goals of CP.

vi) Comprehensive awareness of factors impacting CT

Research findings show that the pre-service teachers have a sufficient understanding of the factors which could impact the development of their and their students' CT abilities. Results corroborate Indar's (2017) conclusion that most of the factors impacting CT development belong to one of these categories: 1) Teacher characteristics, 2) Student characteristics, and 3) Institutional characteristics. Indar (2017) found the number one factor as the socio-economic status of the individual; yet, the most mentioned factors in this research were culture, education system, family/home environment, and friends/social network. These results are in line with Ruparelia's (2018) conclusion that students' development of criticality is influenced by "their own perceptions of themselves, the relationships they form with others in the contexts they experienced, and cultural or traditional factors" (p. 140). Findings reveal that some of the factors focused on are related to CT disposition and individual differences such as personality, inclination, and mental ability (Tufan, 2008). However, there was no mention of other contextual factors such as students' physical barriers, the design of the curriculum, subject matter, as well as "teacher grasp of critical thinking, class size … the amount of time available to teachers..." (Ennis, 2013, p. 4).

5.3 Discussion of the Results of Research Question 3

RQ 3# How do the participating pre-service teachers perceive the contribution of the BA program in developing their CT?

Although the pre-service teachers enjoyed a positive experience studying at the ELT program and view it as an overall better experience than their previous education due to EMU's diverse environment, teachers' being approachable and supportive, and a welcoming atmosphere of questions and discussions, some pre-service teachers were

very clear that it did not effectively enhance their CT. Ammar even detected a decrease in his CT ability compared to before. Results show that the ELT program did not enhance the pre-service teachers' understanding of CT and CT-oriented pedagogies to a point where they can teach it. Eman refers to the dilemma as 'knowing' something without 'comprehending' it.

i) Lack of explicit instruction on CT and CT-oriented pedagogies

Most of the pre-service teachers complain that they did not receive any practical application of CT-oriented pedagogies as they were not required to teach CT in their microteaching. Their lack of confidence in their ability to teach and incorporate CT is evident. The pre-service teachers were introduced to CT in a number of courses without a direct explanation or authentic practice of teaching it, which only helped them value its importance in ELT without knowing what it is exactly or how to apply it. These results are in line with other descriptive studies' findings (Akdere, 2012; Genç, 2008; Tufan, 2008; Yeşilpınar & Doğanay, 2014) showing that CT tendencies of pre-service teachers in the Turkish context are at "a medium or low level" (Petek & Bedir, 2015), and that despite expressing a positive attitude towards teaching for CT, "the majority of the [ELT] students were not knowledgeable on how to use it in the language classroom" (p. 12). Öztürk and Aydın (2019) also note that teacher education programs in Turkey are being criticized for not "equipping their teachers with the skills 21st century requires in addressing today's learners' needs" (p. 189).

Moreover, the pre-service teachers could not identify any explicit instruction on how to apply CT, and few teachers were mentioned to have implicitly engaged students in CT through instruction techniques, assignments, projects, group work, observations and reflective reports. This appears to be the case in many university contexts as a

recent study by Bellaera et el. (2021) examining CT teaching practices of 176 UK and US instructors from several humanities and social sciences subjects, which found that instructors are "more likely to report teaching critical thinking with an implicit approach as opposed to an explicit approach" (p. 1). However, this goes against empirical evidence that explicit approaches are more effective than implicit instruction for developing critical thinking (Abrami et al., 2008). According to Willingham (2020), any field in higher education should set clear critical thinking goals for students based on domain-specific knowledge and that these skills should be explicitly taught and practiced. Bellaera et el. (2021) also found that the instructors relied mostly on the following activities to develop students' CT (in that order): 1) Teacher-led discussions; 2) Pupil-led discussions; 3) Question and answers; 4) Feedback; 5) Student presentations; 6) Student reflection; 7) Assessment (test/peer-assessment); 8) Problem-based learning; 9) Case studies/role play (p. 10). In contrast to these research findings, the first five dialogue-based activities were not reported to be employed at the ELT program.

ii) Teaching practices and conditions at ELT program unsupportive of CT

The findings show that the research participants struggled with developing and engaging in CT within the ELT program due to affective factors such as lack of confidence and fear of being criticized. This may be due simply to their lack of CT practice, or as Ruparelia (2018) explains, it can be a result of previous educational experiences, cultural norms and being in a foreign country. However, the participants have referred to direct teaching practices and conditions that have affected them, such as Eman, who is afraid of commenting and asking questions for fear of being judged by her classmates and instructors. Buse confirmed that although instructors seemed to accept different opinions in class, they did not genuinely consider them as valid. The

participants are also expected to reiterate instructors' views in their exams and to follow the criteria provided to them for their microteachings to obtain the desired grades.

Ammar and Melis noted that overly simplified assessment and questions formats are also problematic, along with low entrance criteria, which Ammar said led instructors to bring down the quality of their instruction. The lack of events, conferences, seminars, and workshops was also visible compared to other departments, according to Irada. Most notably, no courses on CT-oriented pedagogy and how to teach CT in certain contexts were provided. However, the most agreed-on teaching practice that was not conducive to CT development was the lecture-styled, instructor-centered class that relied primarily on PowerPoint slides and required students not to interrupt the lesson. This reflects Freire's (1974) concept of the banking system of education in which the teacher imparts the knowledge to the students who accept it without question. These conditions and teaching practices acted as a barrier for the pre-service teachers to express their critical views in class or include them in their work.

5.4 Discussion of the Results of Research Question 4

RQ 4# How do the participating pre-service teachers plan to incorporate CT in their teaching within their respective contexts?

Although all of the pre-service teachers expressed their doubts in their CT-oriented pedagogies, they were all optimistic and confident they would be able to enhance them and integrate CT with their language teaching. Equal to student teachers at another study (Yuan et al., 2021), they demonstrated an eagerness to seek external support and guidance from colleagues and mentors, in addition to training and professional

development to increase their pedagogical capacity of incorporating CT into their future classes.

i) Vague and impractical plans of incorporating CT in language instruction

The research results demonstrate how the participants are planning to use a combination of explicit (e.g., explicit metacognitive instruction) and implicit (including CT in teaching language skills) approaches to teaching CT. However, they did not provide specific instruction techniques that would engage students in CT. Some of their responses can even be identified as based on an "educated guess", betrayed by their inability to "describe the practical side of integrating critical thinking into a language classroom elaborately" (Petek & Bedir, 2018, p. 64). For example, one mentioned "explain what CT is to students and how they can apply it" and said she would do this mainly by teaching them writing. To exemplify further, three of the participants mentioned employing problem-solving, but they did not specify examples of projects or task-based activities to do so. Other responses show a lack of clarity and generality, such as "ask more questions in class", and "motivate students to engage in CT via their curiosity." Some are completely irrelevant to CT: "engaging/activating students' schemata", "teaching life skills to students", "encouraging effective studying techniques", and "providing students with different kinds of essay examples."

ii) Awareness of challenges in incorporating CT in future teaching

The participants in this research believed there were barriers to learning critical thinking, unlike Gashan's (2015) study in which pre-service teachers disagreed with the following statement: "I think that students have barriers to critical thinking, regardless of the strategies I use" (p. 31). The challenges expected by the pre-service teachers can be categorized into challenges related to 1) students, i.e., their affective

and cognitive barriers, 2) parents, i.e., their education and disapproval, 3) political and social consequences, and 4) institution, i.e., their opposition. Unlike Yuan and Stapleton's (2019) findings, participants did not mention contextual challenges in promoting CT in their future teaching, such as lack of lesson time and having a strict curriculum to follow.

5.5 Conclusion and Implications

This research aimed to explore how pre-service teachers conceptualize CT and CT-oriented pedagogy and how they plan to incorporate it in their future teaching, while also examining their educational background as well as their lived experience at the ELT program and whether they perceived it contributing to developing their CT abilities. By conducting in-depth semi-structured interviews with five pre-service teachers from different backgrounds studying at the ELT program at EMU, the research sought implications on the role of culture, education, and other factors in understanding and developing CT and CT-oriented pedagogies. The rich data obtained and analyzed in this research provided a number of findings. In terms of educational background, the pre-service teachers' past education was inadequate to develop CT, and that their parents' involvement also had an effect on their CT skills. It was concluded that language proficiency facilitates the expression of CT ability and that culture and education are two factors impacting CT and cannot be separated. In terms of CT conceptualization and the perceived role of CT in ELT, the pre-service teachers displayed a non-operant yet growing understanding of CT. Their approach to CT can be divided into ontological and epistemological approaches to CT; however, two pre-service teachers failed to perceive the role of CT in education. This indicated a lack of understanding and misconceptions related to CT on the part of pre-service teachers.

The teacher education the pre-service teachers received at the ELT program was characterized by a lack of explicit instruction on CT and CT-oriented pedagogies, in addition to a number of teaching practices and conditions at the ELT program, which were unsupportive of CT development. Finally, concerning pre-service teachers' teaching for CT, vague and impractical plans of incorporating CT in future language instruction and a reduction of CT to language instruction with an omission of CP in ELT were observed. However, the pre-service teachers in the study displayed a comprehensive awareness of factors impacting CT and potential challenges in incorporating CT in their future teaching.

5.5.1 Pedagogical Implications

Informed by these research findings, a number of pedagogical implications were recognized. First, ELT teachers are not exposed to CT early on in their early education; therefore, pre-service teachers should engage in CT-oriented pedagogies through concrete forms of professional practice (e.g., classroom observation and classroom teaching) if they are to teach it later on. It is also worthy to introduce other concepts such as critical pedagogy, criticality, critical being, and CT-oriented pedagogies to pre-service teachers from an early stage in their pre-service training to be able to engage with it better and be more aware of its various usages within different contexts.

Drawing on Ruparelia's (2018) 'critical space' in teacher education where student teachers are encouraged to acknowledge their prior experiences and link it with their current learning, this research encourages teacher educators to invite pre-service teachers to share their understanding of and experience with CT in a dialogic classroom atmosphere where everyone engages in a critical discussion on CT. This will allow pre-service teachers to collaborate in a co-construction of knowledge around

CT based on multiple perspectives, which would eventually enhance their CT conceptualization and practice.

Finally, the research findings point to the need for instructors/teacher educators to provide more explicit instruction and more transparent explanations of the thinking skills they expect students to demonstrate in their university courses (Manalo et al., 2015). Instructors/teacher educators also ought to practice what they preach. If their actions do not match up with the advice they give to the pre-service teachers as regards CT, then there would be a serious contradiction. It is high time for the field of ELT to provide CT training according to its specific disciplinary context (i.e., language teaching), where teachers' CT skills can be "applied to authentic subject matter, thereby cultivating critical dispositions, challenging and then transforming their epistemic conceptions, forming sophisticated standards of critical judgment and encouraging a deeper understanding of the subject matter" (Golding, 2011, pp. 358-359).

5.6 Limitations and Delimitations of the Study

The study adds to the existing literature on pre-service teachers' CT and CT-oriented pedagogy conceptualizations. It also provides some practical implications for supporting CT development by explicit instruction within teacher education programs. However, a number of limitations in this research must be mentioned.

The first limitation is the sample size. Only five people participated in this research because of time constraints and the small number of international students studying in the 4th year of the ELT program. The purposive sampling strategy employed in this research can also be considered a limitation since it does not reflect representativeness. However, this sampling technique ensured recruiting rich cases, which fits the

research's qualitative and case study design. Moreover, one of the implications sought in this research was how differences in culture and education impacted CT conceptualization. Yet, due to the small number of international students available at the time of the study, the diversity of participants could not be maintained. The participants were primarily from Eastern cultures, and their backgrounds shared many cultural, educational, political, and religious aspects.

The imbalance of participants' gender is another limitation with a ratio of 1:4 male to female. This can be explained by the fact that female pre-service teachers at the ELT program are higher than their male counterparts.

The research is also characterized by geographical limitations, collecting data from one university in one region; however, one of the aims of this research was reporting on and examining the CT practices of the ELT program at EMU, which is the first of its kind in this research context. Also, this research focused on the pre-service teachers' voices and experiences without considering the perspectives of other stakeholders (e.g., instructors and peers).

Another limitation is concerned with data collection tools and procedures. There is a lack of observational data examining pre-service teachers' actual practice and the interactions in class, which would have allowed for better data triangulation and better ensuring the validity and reliability of data collected.

5.7 Suggestions for Further Studies

Based on the limitations reported above, several suggestions can be made for further studies. First, with a similar focus, new research can employ a mixed-methods research design, collecting both quantitative and qualitative data by testing the pre-service

teachers' CT levels in a locally developed test in the speakers' L1 and on ELT-related topics. This can support the findings on their CT conceptualization and incorporation in language teaching.

Future studies can also employ field observations, discourse analysis of materials and curricula, and interviews with other stakeholders at the teacher education program such as instructors and coordinators, to ensure data triangulation. This research also draws attention to examining the effectiveness of ELT courses and programs provided, especially those who claim that they enhance or promote critical thinking in ELT students. This can be done via course evaluations, surveying, interviewing, and testing the ELT students before and after the course to determine whether there has been any improvement in the pre-service teachers' critical thinking and development. This especially applies to the Critical Reading and Writing course introduced in the new curriculum by the Council of Higher Education in recent years.

Further studies can focus on instructors/teacher educators' beliefs and actual classroom practices to observe how their pedagogies improve (or do not improve) pre-service teachers' CT dispositions, which they will require for their careers. As pointed out by Kumaravadivelu (2012), this would ensure that the teacher education program will help pre-service teachers focus more on becoming transformative intellectuals than being passive technicians. Finally, this research can be the foundation for another study that aims to identify the role of cultural and educational backgrounds and other factors in conceptualizing and developing CT. This can be done by including a larger sample of participants from more diverse backgrounds and countries and examining how cultural and educational differences impact these pre-service teachers' CT and CT-oriented pedagogies.

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APPENDICES

Appendix A: Participant Consent Form for Interviews (Pre-service Teachers)

Participant Consent Form for Interviews
(Pre-service Teachers)

Dear Participant,

I am an MA student and currently working on my thesis entitled "*Investigating Pre-service EFL Teachers' Critical Thinking (CT) Abilities and Perceptions towards Teaching for CT*". I need your ideas and thoughts to investigate this topic in depth. The goal of my research is to identify the cultural factors that impact critical thinking development and understanding among pre-service EFL teachers coming from multicultural backgrounds. This study may help raise awareness about the importance of developing pre-service EFL teachers' critical thinking and identify the current state of CT in the Foreign Language Education Department at EMU as perceived by its students.

You are being kindly asked to take part in this study as you are an ideal candidate for the research: being a 4th year student and one from a different cultural background. There will be one interview, which will take place online on Microsoft Teams or Zoom at your own convenience. The interview will be conducted in English and last about 60-90 minutes. I do not anticipate that there are any risks associated with your participation, but you have the right to stop the interview or withdraw from the research at any time.

The interview will be recorded and a transcript will be produced and shared with you later to check it for accuracy. All of the data from the interview you take part in will be treated and stored confidentially. Any summary interview content or direct quotations from the interview that are made available through academic publication or other academic outlets will be anonymized so that you cannot be identified, and care will be taken to ensure that any information that you share in the interview which could identify you is not revealed.

1

Thank you for reading this. If you have any queries about this research, please feel free to contact the researcher, Mariam Haghegh or the thesis supervisor Prof. Dr. Ülker Vancı Osam. If you are willing to take part in the study, please sign the consent form. Thank you for your participation and cooperation.

Mariam Elhadi Mohammed Haghegh
MA. Candidate
Dept. of Foreign Language Education
Faculty of Education
Eastern Mediterranean University
e-mail: 19500300@emu.edu.tr
Mobile tel.: +90 5338719216

Prof. Dr. Ülker Vancı Osam
MA. Thesis Supervisor
Dept. of Foreign Language Education
Faculty of Education
Eastern Mediterranean University
e-mail: ulker.osam@emu.edu.tr
Office tel.: +90 392 630 2619

Consent Form

Please circle, underline or color your answers:

1. I have been properly informed about the objectives and procedures of the interview. **Yes / No**
2. I understand the information for this study and have had the opportunity to ask any questions. **Yes / No**
3. I agree to take part in the above study. **Yes / No**
4. I understand that my participation is voluntary and that I can withdraw at any time. **Yes / No**
5. I agree to interviews being recorded. **Yes / No**

Name, Surname : ---------- Your Pseudo Name (Optional): ----------

Signature: ---------- Date : ----------

Appendix B: Interview Questions for Pre-service EFL Teachers

Conceptualization of Critical Thinking

1. How do you understand critical thinking?
   - Can you please give an example?
   - How would you describe a critical thinker?
   - Do you think you are a critical thinker? Why?
   - When/where/how did you come to learn about critical thinking?
   - What role does critical thinking play in your life today?
   - When was the last time you engaged in critical thinking?
   - Do you think that critical thinking is interpreted differently in different countries/contexts? Why?
2. What is critical thinking in English Language Teaching (ELT)?
   - Why is critical thinking in English language teaching important?
   - What factors could impact the development of critical thinking in ELT students?
   - How important is it for you to develop your future students' critical thinking?

Educational Background

3. Can you tell me about your education back in your (name of country)?
   - What was the classroom environment like?
   - How many students in a class?
   - What was the teacher's role?
   - What did you do in class?
   - What was the relationship between students and teachers?
   - Did you have opportunities to question and clarify?
   - What did your parents do to help you with your achievements?
4. What was the experience like when you started classes at the ELT program at EMU?
   - How does your educational experience here differ from that in (name of country)?

Critical thinking in the ELT Program at EMU

5. How did the ELT program enhance your understanding of critical thinking?
   - How did your teachers and peers help you in understanding critical thinking?
   - What were some of the instruction/materials/courses you received that helped develop your critical thinking?
   - How did your educational and cultural background impact the way you learned about critical thinking here?
   - How do you practice critical thinking now (having completed the program and being soon to graduate)?
   - What changes can be made to the ELT program to make its instruction on CT more effective?

Future Use of Critical Thinking

6. How will you use what you learned about critical thinking when you return to (name of country) and start teaching?
   - How confident do you feel about incorporating critical thinking into your teaching in the future? Do you think you have the necessary skills to promote CT? Why?
   - What are the roles and responsibilities you expect to take to enhance the development of critical thinking in your students?
   - What are the possible challenges you may face when integrating critical thinking into your future EFL classes? Do you think you will need support to include CT in your courses?
   - Do you think your students will have barriers to CT regardless of how you teach it? What are the factors that may impact their CT development?
7. Is there anything which I have not asked, but which you think is worth mentioning?

Thank you for your collaboration.

Appendix C: List of Parent-codes and Sub-codes

Conceptualization of CT (CON)
CON-Agency/autonomy
CON-clear communication/expression of thought
CON-Consider relevant information
CON-CT for a Purpose
CON-CT for personal interest
CON-CT for Problem-solving
CON-Decision-making
CON-Deeper thinking
CON-Different perspectives
CON-Critical Reading
CON-Finding meaning/purpose/reason behind learning sth
CON-Finding root causes and consequences of sth
CON-Genetical pre-disposition to CT
CON-Looking at bigger picture
CON-Non-confirming/not traditional/challenging the norm
CON-Open-mindedness/Consider alternatives other options
CON-Politics-related
CON-Reconsider opinions/decisions/actions
CON-Research information
CON-Social activism
Conceptualization of CT-Pedagogy in ELT (CTP in ELT)
CTP in ELT-Being aware of developments
CTP in ELT-Challenging institutional policies/outdated instructional practices
CTP in ELT-Eclectic approach to methodologies
CTP in ELT-Engage Ss for better learning
CTP in ELT-Equipping Ss for Academic Studies
CTP in ELT-Equipping Ss for Higher Education
CTP in ELT-Having Teacher Agency
CTP in ELT-Identifying Ss needs/weaknesses
CTP in ELT-Openness to try new methodology
CTP in ELT-Purpose of Ting English
CTP in ELT-Reflecting on learning
CTP in ELT-Teaching students life skills
CT at ELT Program (ELT)
ELT- Lack of CT Instruction
ELT- Project/Assignment
ELT-Classmates
ELT-Courses
ELT-Instruction
ELT-Suggestions
ELT-Teachers
Educational Background (EB)

EB-Curriculum
EB-School System
EB-Testing
EB-Teachers
EB-Instruction
EB-Classroom Environment
EB-Parental Involvement

Factors Impacting CT (F)

F-Career path
F-CT-specific Courses
F-Culture
F-Education System
F-ELT-Language Proficiency
F-ELT-Stimulus
F-End Goal of CT affects Process
F-Friends/Peers/Social Network
F-genetical pre-disposition to CT
F-Going/Studying abroad
F-Institution's policy/regulations
F-Interests
F-Knowledge of English as LF
F-Lack of allowances/demand of CT
F-Need for CT
F-Reading Habits
F-Strict school policies/restrictions on teachers
F-Teachers' background/experience/general knowledge

Future Use of CT-Pedagogy (FUCTP)

FUCTP-Challenges
FUCTP-Confidence in CTP
FUCTP-Differentiation/Individualization
FUCTP-Engaging Ss' Thinking/Activating Schemata
FUCTP-Expectations
FUCTP-Explicit/Metacognitive instruction
FUCTP-Holistic Approach in Ting CT
FUCTP-Importance of CTP
FUCTP-PD
FUCTP-Prioritize Students’ needs
FUCTP-Problem-based Task
FUCTP-Use of L1

Self-perceived CT Ability (Self-Per.CT)

Self-Per.CT-Lack of engagement/exposure to CT
Self-Per.CT-Lack of motivation
Self-Per.CT-Lacking CT
Self-Per.CT-Teachers' expectations/follow criteria
Self-Per.CT-Metacognitive Knowledge of CT
Self-Per.CT-Reflecting on Teaching
Self-Per.CT-Unaware of using CT

Appendix D: 4-Year Curriculum of ELT BA Program (before 2018)

FOREIGN LANGUAGE EDUCATION UNDERGRADUATE PROGRAM (A1)

FIRST YEAR – FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1710	EDUC113	Introduction to Education	(2-0-0)2	3
A1711	EDUC211	Educational Sociology	(2-0-0)2	3
A1712	TARH101	Principles of Ataturk and History of Turkish Reforms-I*	(2-0-0)2	3
A1713	SFLN01	Foreign Language-I	(2-0-0)2	3
A1714	TREG113	Turkish Language-I*	(3-0-0)3	5
A1715	ITEC102	Information Technology	(2-2-0)3	5
A1716	ELTE113	Reading Skills-I	(2-0-0)2	2
A1717	ELTE15	Writing Skills-I	(2-0-0)2	2
A1718	ELTE117	Listening and Pronunciation-I	(2-0-0)2	2
A1719	ELTE119	Oral Communication Skills-I	(2-0-0)2	2
		TOTAL	**22**	**30**

FIRST YEAR – SPRING SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1720	EDUC116	Educational Psychology	(2-0-0)2	3
A1721	EDUC108	Philosophy of Education	(2-0-0)2	3
A1722	TARH102	Principles of Ataturk and History of Turkish Reforms-II*	(2-0-0)2	3
A1723	SFLN02	Foreign Language-II	(2-0-0)2	3
A1724	TREG114	Turkish Language-II*	(3-0-0)3	5
A1725	ELTE114	Reading Skills-II	(2-0-0)2	2
A1726	ELTE116	Writing Skills-II	(2-0-0)2	3
A1727	ELTE118	Listening and Pronunciation-II	(2-0-0)2	3
A1728	ELTE120	Oral Communication Skills-II	(2-0-0)2	3
A1729	ELTE122	Structure of English	(2-0-0)2	2
		TOTAL	**21**	**30**

SECOND YEAR – FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1731	CITE211	Instructional Technology	(2-0-0)2	3
A1732	EDUC219	Principles and Methods of Instruction	(2-0-0)2	3
A1733	EDUC01	Vocational Elective-I	(2-0-0)2	4
A1734	UE01	University Elective-I	(2-0-0)2	3
A1735	**AE001**	**Area Elective-I (ELTE211 Teaching English Vocabulary)**	**(2-0-0)2**	**4**
A1736	ELTE213	Approaches to English Learning and Teaching	(2-0-0)2	3
A1737	ELTE215	English Literature-I	(2-0-0)2	4
A1738	ELTE217	Linguistics-I	(2-0-0)2	3
A1739	ELTE219	Critical Reading and Writing	(2-0-0)2	3
		TOTAL	**18**	**30**

SECOND YEAR – SPRING SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1741	EDUC207	History of Turkish Education	(2-0-0)2	3
A1742	EDUC208	Research Methods in Education	(2-0-0)2	3
A1743	EDUC452 EDUC 462	Vocational Elective-II	(2-0-0)2	4
A1744	UE02	University Elective-II	(2-0-0)2	3
A1745	**AE002**	**Area Elective-II (ELTE224 Language and Society)**	**(2-0-0)2**	**4**
A1746	ELTE222	English Teaching Programs	(2-0-0)2	3
A1747	ELTE216	English Literature-II	(2-0-0)2	4
A1748	ELTE218	Linguistics-II	(2-0-0)2	3
A1749	ELTE220	Language Acquisition	(2-0-0)2	3
		TOTAL	**18**	**30**

THIRD YEAR – FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1751	EDUC311	Classroom Management	(2-0-0)2	3
A1752	EDUC317	Morals and Ethics in Education	(2-0-0)2	3
A1753	EDUC03	Vocational Elective-III	(2-0-0)2	4
A1754	UE03	University Elective-III	(2-0-0)2	3
A1755	**AE003**	**Area Elective-III (ELTE311 World Englishes and Culture)**	**(2-0-0)2**	**4**
A1756	ELTE313	Teaching Foreign Language to Young Learners-I	(3-0-0)3	5
A1757	ELTE315	Teaching English Language Skills-I	(3-0-0)3	5
A1758	ELTE317	Literature and Language Teaching-I	(2-0-0)2	3
		TOTAL	**18**	**30**

THIRD YEAR – SPRING SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1761	EDUC318	Measurement and Evaluation in Education	(2-0-0)2	3
A1762	EDUC307	Turkish Education System and School Administration	(2-0-0)2	3
A1763	EDUC04	Vocational Elective-IV	(2-0-0)2	4
A1764	UE04	University Elective-IV	(2-0-0)2	3
A1765	**AE004**	**Area Elective-IV (ELTE312 Pragmatics and Language Teaching)**	**(2-0-0)2**	**4**
A1766	ELTE314	Teaching Foreign Language to Young Learners-II	(3-0-0)3	5
A1767	ELTE316	Teaching English Language Skills	(3-0-0)3	5
A1768	ELTE318	Literature and Language Teaching-II	(2-0-0)2	3
		TOTAL	**18**	**30**

FOURTH YEAR – FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1771	ELTE413	Teaching Practice-I	(2-0-6)5	10
A1772	EDUC411	Special Education and Inclusion	(2-0-0)2	3
A1773	EDUC05	Vocational Elective-V	(2-0-0)2	4
A1774	ELTE310	Community Service	(1-0-2)2	3
A1775	**AE005**	**Area Elective-V (ELTE415 New Approaches in ELT)**	**(2-0-0)2**	**4**
A1776	ELTE417	Course Content Development in English Language Teaching	(3-0-0)3	3
A1777	ELTE419	Translation*	(3-0-0)3	3
		TOTAL	**19**	

FOURTH YEAR – SPRING SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1781	ELTE414	Teaching Practice-II	(2-0-6)5	15
A1782	EDUC406	Guidance in Schools	(2-0-0)2	3
A1783	EDUC06	Vocational Elective-VI	(2-0-0)2	4
A1784	**AE006**	**Area Elective-VI (ELTE416 Materials Design in ELT)**	**(2-0-0)2**	**4**
A1785	ELTE418	Testing and Evaluation in English Language Teaching	(3-0-0)3	4
		TOTAL	**14**	**30**

For Turkish Speaking Students only. International students take TUSL181 instead of TREG113 (A1714) in the first semester of the first year and four elective (NTE) courses instead of TREG114 (A1724); TARH101 (A1712); TARH102 (A1722); ELTE419 (A1777).

TOTAL CREDITS	TOTAL ECTS CREDITS
148	**240**

Eastern Mediterranean University Faculty Of Education FLE DEPARTMENT

ENGLISH LANGUAGE TEACHING UNDERGRADUATE PROGRAM (A1)
İNGİLİZCE ÖĞRETMENLİĞİ LİSANS PROGRAMI (A1)

FIRST YEAR - FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1411	ELTE101	Contextual Grammar I	(3-0-0)3	3
A1412	ELTE103	Advanced Reading and Writing I	(3-0-0)3	6
A1413	ELTE105	Listening and Pronunciation I	(3-0-0)3	3
A1414	ELTE107	Oral Communication Skills I	(3-0-0)3	3
A1415	EDUC101	Introduction to Educational Sciences	(3-0-0)3	6
A1416	TREG111	Turkish I: Written Communication *	(2-0-0)2	3
A1417	ITEC105	Computer I	(2-2-0)3	3
A1418	GPSC109	Effective Communication Skills	(3-0-0)3	3
TOTAL			23	30

FIRST YEAR – SPRING SEMESTER

REF.C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1421	ELTE102	Contextual Grammar II	(3-0-0)3	3
A1422	ELTE104	Advanced Reading and Writing II	(3-0-0)3	6
A1423	ELTE106	Listening and Pronunciation II	(3-0-0)3	3
A1424	ELTE108	Oral Communication Skills II	(3-0-0)3	3
A1425	ELTE112	Vocabulary	(3-0-0)3	3
A1426	EDUC114	Educational Psychology	(3-0-0)3	6
A1427	TREG112	Turkish II: Oral Communication *	(2-0-0)2	3
A1428	ITEC106	Computer II	(2-2-0)3	3
TOTAL			23	30

SECOND YEAR - FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1431	ENGL211	English Literature I	(3-0-0)3	3
A1432	ELTE203	Linguistics I	(3-0-0)3	3
A1433	ELTE205	Approaches in English Language Teaching I	(3-0-0)3	6
A1434	ELTE207	English-Turkish Translation*	(3-0-0)3	3
A1435	ELTE209	Presentation Skills	(3-0-0)3	6
A1436	EDUC205	Principles and Methods of Instruction	(3-0-0)3	6
A1437	EDUC207	History of Turkish Education	(2-0-0)2	3
TOTAL			20	30

SECOND YEAR – SPRING SEMESTER

REF.C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1441	ENGL212	English Literature II	(3-0-0)3	3
A1442	ELTE204	Linguistics II	(3-0-0)3	3
A1443	ELTE206	Approaches in English Language Teaching II	(3-0-0)3	6
A1444	ELTE208	Language Acquisition	(3-0-0)3	3
A1445	ELTE303	Special Teaching Methods I	(2-2-0)3	6
A1446	CITE336	Instructional Technology and Materials Design	(2-2-0)3	6
A1447	ELTE214	Research Methods in English Language Teaching	(2-0-0)2	3
TOTAL			20	30

THIRD YEAR - FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1451	ELTE301	Teaching Eng. to Young Learners I	(2-2-0)3	6
A1452	ELTE304	Special Teaching Methods II	(2-2-0)3	3
A1453	ELTE305	Teaching Language Skills I	(2-2-0)3	6
A1454	ELTE307	Literature and Language Teaching I	(3-0-0)3	3
A1455	EDUC311	Classroom Management	(2-0-0)2	3
A1456	ELTE309	Language and Society	(3-0-0)3	6
A1457	SFLN1	Second Foreign Language I	(2-0-0)2	3
TOTAL			19	30

THIRD YEAR – SPRING SEMESTER

REF.C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1461	ELTE302	Teaching Eng. to Young Learners II	(2-2-0)3	6
A1462	ELTE212	Turkish - English Translation*	(3-0-0)3	3
A1463	ELTE306	Teaching Language Skills II	(2-2-0)3	6
A1464	ELTE308	Literature and Language Teaching II	(3-0-0)3	3
A1465	EDUC313	Measurement and Evaluation	(3-1-0)3	6
A1466	ELTE310	Applications of Service to Community	(1-2-0)2	3
A1467	SFLN2	Second Foreign Language II	(2-0-0)2	3
TOTAL			19	30

FOURTH YEAR - FALL SEMESTER

REF. C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1471	ELTE401	Materials Development and Adaptation in English	(3-0-0)3	6
A1472	ELTE01	Major Area Elective I	(2-0-0)2	3
A1473	ELTE411	School Experience	(1-4-0)3	6
A1474	EDUC312	Counseling	(3-0-0)3	6
A1475	EDUC413	Special Education	(2-0-0)2	3
A1476	TARH101*	Atatürk Principles and History of Turkish Reforms I*	(2-0-0)2	3
A1477	SFLN3	Second Foreign Language III	(2-0-0)2	3
TOTAL			17	30

FOURTH YEAR – SPRING SEMESTER

REF.C.	C. CODE	COURSE TITLE	CREDITS	ECTS CREDITS
A1481	ELTE402	Testing and Evaluation in English Language Teaching	(3-0-0)3	6
A1482	ELTE02	Major Area Elective II	(2-0-0)2	3
A1483	ELTE406	Teaching Practice	(2-6-0)5	9
A1484	ELTE03	Major Area Elective III	(2-0-0)2	3
A1485	EDUC412	Comparative Education	(2-0-0)2	3
A1486	TARH102*	Atatürk Principles and History of Turkish Reforms II*	(2-0-0)2	3
A1488	EDUC307	Turkish Education System and School Administration	(2-0-0)2	3
TOTAL			18	30

TOTAL CREDITS	TOTAL ECTS CREDITS
159	240

*** For Turkish Speaking Students**

International students take TUSL181 instead of TREG 111 (A1416)
in the first semester of the first year and five elective (NTE) courses instead of

TREG112 (A1427)

ELTE207 (A1434)

ELTE212 (A1462)

TARH101 (A1476)

TARH102 (A1486)

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Appendix E: Excerpts from Course Descriptions (before 2018)

EDUC 101 Introduction to Educational Studies (3-0-0)3
Basic concepts of education; basics of education as a Science (philosophical, social, legal, psychological, economic, political), historical development of education, methodology of educational sciences; functions of education; societal change and nevvness from the stand point of educational sciences; teaching as a profession; applications and developments in the field of teacher training.

EDUC 114 Educational Psychology (3-0-0)3
Definition and functions of psychology and educational psychology; child and adolescent development; physical, social, cognitive, emotional and moral development; leaming and factors that affect learning; today's learning theories (behaviorist, cognitive theories and especially constructivist, brain-based learning theories, ete.); affeetive teaching and factors that impact affeetive learning; motivation, individual differences and student behavior in group activities.

ELTE 208 Language Acquisition (3-0-0)3
Theories of first and second language acquisition (e.g.; behaviorism, innatism, information Processing, connectionism, the interactionist position) and developmental stages and sequences of first and target language acquisition; case studies. comparative analysis of the use of native and target languages in corpus data (e.g.: CHILDES database), recordings and/or transcriptions of real second language classroom interaction will be employed for the analysis of first and second language acquisition; comparison of second language acquisition in children and in adults; identifying developmental sequences in first language acquisition; stages in second language morpho-syntactic development; processes in second language acquisition; learner characteristics and individual variation in ultimate attainment in second language acquisition (e.g.: role of personality, language aptitude, intelligence, age of acquisition, motivation and attitudes, learner preferences and beliefs); differences between second language acquisition and foreign language learning contexts (e.g.: natural vs. instructional settings).

ELTE 214 Research Methods in English Language Teaching (2-0-0)2
Teaching research methods and techniques, encouraging students to prepare small scale research projects in their own ileld of study, and evaluating them. Basic concepts of research; the structure of scientific research; problem, research model, sampling, data collection (qualitative and quantitative data collection techniques); data analysis and interpretation.

EDUC 313 Measurement and Evaluation (3-l-0)3
The value of measurement and evaluation; basic terms related to measurement and evaluation; qualities of measurement instruments such as reliability, validity, usefulness, and measurement instruments used in Education and their characteristics; traditional measurement instruments (written exams, short answer exams, true-false and multiple-choice tests, matching tests, oral exams, assignments), instruments related to getting to know learners better from multiple perspectives (observation, interview, performance appraisal, portfolio, research papers, attitude scales); basic statistical operations on measurement results; evaluation of learner products; grading; developing a measurement instrument related to the learner's own subject-mater area.

ELTE 401 Materials Development and Adaptation in English (3-0-0)3
Theory and principles of ELT materials design (e.g.: selecting, adapting, developing and evaluating materials) and the basic arguments for and against the use of coursebooks in the classroom; the relation between methodology, ideology and the coursebook writer; format for the selection of language materials: suitability regarding the format, the students' proficiency level, leamability, ease of use, cultural content, availability of communicative interaction and language use, and the use of corpus-based authentic materials set in a real-world context which allows learners to interact with each other or the teacher in meaningful ways; adapting or developing materials for language teaching: adapting coursebook materials to particular learning needs and teaching contexts, designing teaching materials and supplementing materials parallel to the methodology, to the level and needs of the students and to present

school environment; evaluation of materials and text books used in EFL classroom settings, language material and textbook evaluation criteria and ways to relate materials design to current ELT methodology.

ELTE 411 School Experience (l-4-0)3
Observing a typical day of a teacher and a student, the way the teacher organizes his/her lesson, the stages of a lesson, how the teacher uses teaching methods and techniques, what types of activities the teacher utilizes, how the teacher manages the class, the way the teacher finishes the lesson and his/her method of evaluation of student performance; analyzing the organizational structure of a school, how the principal conducts his duty, and the relationship of the school with the society; preparing a portfolio reflecting ali the work related to school experience.

ELTE 402 English Language Testing and Evaluation (3-0-0)3
Basic concepts, principles and constructs of classroom-based assessment; different types of tests and testing (e.g.: proflciency, achievement, diagnostic and placement tests, direct vs. indirect testing, discrete point vs. integrative testing, norm referenced vs. criterion referenced testing, objective testing vs. subjective testing, communicative language testing) and various types of questions for a wide range of language assessment purposes. development and evaluation of such language tests and of other available types (e.g.: portfolio, self-assessment, learner diaries); language tests for different age groups, different proflciency levels and various learner styles; test preparation techniques for testing reading, vvriting, listening, speaking, vocabulary and grammar individually and testing language skills in an integrated manner; application of basic descriptive and inferential statistical calculations and the principles underlying test design (e.g.: content, criterion related, construct, face validity; reliability, Standard error of measurement and the true score; practicality); stages of test construction, item analysis and interpretation of test scores, standardized tests (e.g.: TOEFL, IELTS and exams accredited by the Council of Europe for the European Language Portfolio), teacher-prepared language tests and beneficial backwash.

ELTE 406 Teaching Practice (2-6-0)5
Preparing prospective teachers for practice teaching and real classroom situations in schools; planning, observation, and teaching practice throughout one semester covering either one whole day, a week or two half days; every week, preparing a daily lesson plan and applying it in the classroom; evaluation of the teaching performance by the class teacher, the supervisor and the trainee teacher him/herself; revising and repeating the teaching practice; preparing a portfolio.

AHSS 114 Interpretation of Stories and Films
This course is designed to convey knowledge and skills for interpreting short stories and films. It is mainly aimed to develop students? interpretive skills in relation with some moral, social, cultural, sexual, psychological and philosophical issues regarding human life. In this regard, it is also aimed to increase critical thinking and intellectual autonomy as well as to develop human values and virtues such as empathy, modesty, and love.

AHSS 115 Woman in Fairytales
This course is designed to study the portrayal of woman in fairy tales. It includes a comparative analysis of the representations of woman in the tales from different countries and cultures in terms of exploring how woman roles and identities are constructed. It especially aims to increase awareness about the ideologically constructed gender roles and stereotypes. It also aims to increase critical thinking skills which enable students to question and evaluate beliefs and ideologies about gender.

Appendix F: Petition to Chair of Foreign Language Education

To: Assoc. Prof. Dr. Javanshir Shibliyev
Chair, Department of Foreign Language Education
From: Mariam Elhadi Mohammed Haghegh (St. No: 19500300)
Date: 02.06.2021

Permission Request

I am Mariam Elhadi Mohammed Haghegh, an MA student in the ELT Program, who is conducting research for the purpose of accomplishing an MA thesis that is entitled "*Investigating Pre-service EFL Teachers' Critical Thinking (CT) Abilities and Perceptions towards Teaching for CT*" under the supervision of Prof. Dr. Ülker Vancı Osam.

This research aims to identify the role of cultural factors in conceptualizing and developing CT and CT-oriented pedagogies as perceived by the pre-service teachers studying at the Foreign Language Education (FLE) department at EMU. It will investigate the critical thinking experiences of international ELT students coming from different cultures and explore how the FLE department has contributed in the development of their CT and CT-oriented pedagogy.

The study is a case-study and will follow a qualitative approach, utilizing detailed online semi-structured interviews to capture the depth of the participants' lived experiences with critical thinking. The interviews will be conducted with six multinational 4th year pre-service EFL teachers studying at the Foreign Language Education department at EMU. This study can add to the literature on CT by identifying the cultural factors that impact critical thinking development and conceptualization among pre-service EFL teachers coming from multicultural backgrounds. It can also help identify the current state of CT in the Foreign Language Education Department at EMU as perceived by its students

Therefore, I kindly request your approval to initiate the 'Research Ethics Eligibility' process of my research study.

Sincerely yours,

Mariam Elhadi Mohammed Haghegh (19500300)

E-mail : 19500300@emu.edu.tr
Phone : 05338719216

Attachments:
1. BAYEK application form
2. Consent form of Interview (for pre-service teachers) + Interview Questions

Appendix G: Approval letter of the Graduate Institute

Doğu Akdeniz Üniversitesi
"Erdem, Bilgi, Gelişim"
Eastern Mediterranean University
"Virtue, Knowledge, Advancement"
99628, Gazimağusa, KUZEY KIBRIS / Famagusta, North Cyprus, via Mersin-10 TURKEY
Tel: (+90) 392 630 1995
Faks/Fax: (+90) 392 630 2919
E-mail: bayek@emu.edu.tr
Etik Kurulu / *Ethics Committee*

Reference No: ETK00-2021-0173 16.06.2021

Subject: Your application for ethical approval.

Re: Mariam Elhadi Mohammed Haghegh (19500300)

Faculty of Education.

EMU's Scientific Research and Publication Ethics Board (BAYEK) has approved the decision of the Ethics Board of Education (date: 15.06.2021, issue: 95) granting Mariam Elhadi Mohammed Haghegh from the Faculty of Education to pursue her MA thesis titled **"Investigating Pre-service EFL Teachers' Critical Thinking (CT) Abilities and Perceptions towards Teaching CT"** supervised by Prof. Dr. Ülker Vancı Osam.

Best Regards

Prof. Dr. Yücel Vural

Chair, Board of Scientific Research and Publication Ethics - EMU

YV/şk.