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AN ANALYSIS OF FACE-TO-FACE EDUCATION VERSUS EMERGENCY-REMOTE TEACHING: READINESS OF ELT TEACHER TRAINEES

M.A. THESIS

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YÜZ YÜZE EĞİTİM İLE UZAKTAN EĞİTİM KARŞILAŞTIRMALI ANALİZİ: İNGİLİZCE ÖĞRETMENİ ADAYLARININ HAZIR BULUNUŞLUKLARI

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ABSTRACT

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AN ANALYSIS OF FACE-TO-FACE EDUCATION VERSUS EMERGENCY-REMOTE TEACHING: READINESS OF ELT TEACHER TRAINEES

Since World Health Organization (WHO) declared the virus called COVID-19 a pandemic in March 2020, the education system all around the world has gone into a total shutdown. Turkey was one of the countries that were negatively affected by this unexpected change of context. Emergency-remote teaching (ERT) was suddenly introduced to prevent the disruption of education and almost all countries adopted this alternative system that allows access to education through digital devices. Turkish teacher education institutions also switched to ERT during this phase. With the digitalization of education, being well equipped with digital users has gained more importance for student teachers studying in the English Language Teaching departments. Thus, the present study first aimed to find out the emergency-remote teaching experiences of ELT student teachers. The study also asked the 2nd, 3rd and 4th year student teachers to compare their ERT experiences and perspectives with that of the face-to-face education experiences they had before the epidemic. Secondly, the participants' readiness for and perceptions of ERT were scrutinized alongside analyzing the factors of student teachers' technical possibilities and digital competencies with their effect on readiness during this phase. The research took place in the fall semester of the 2020-2021 academic year, consisting of 194 English teacher candidates in their second, third and fourth years throughout Turkey. This mixed-method thesis study implemented four scales and a

semi-structured interview to elicit rich information and thus provide a comprehensive and elaborate framework. Quantitative data were analyzed through descriptive statistics, independent samples T-test and one-way ANOVA analysis in SPSS while the qualitative data were transcribed, coded and presented with a flow chart. The findings showed the extent to which emergency-remote teaching shaped English student teachers' experiences, choices for a face-to-face context, readiness for online learning and remote learning perceptions. Although student teachers indicated neutral opinions about their ERT experiences, they are inclined to prefer face-to-face education. In addition, student teachers seem to exhibit a moderate level of readiness for ERT, which seems not to have been influenced by their perception of ERT, technical opportunities and digital competencies. The reason for this fact is that student teachers have already been familiar with the use of digital devices before the lockdown. Therefore, these factors did not have any significant effect on their overall readiness for ERT. The study also reported the strengths and weaknesses of the ERT in Turkish teacher training institutions. The results of the study have provided implications for teacher education programs and teacher educators regarding how better prepare them for wider use of digital educational technologies in the near future.

Keywords: Emergency-remote teaching, ELT teacher trainees, face-to-face education, learner perception, online education, readiness for online learning

ÖZET

Yazarın Adı-Soyadı	Gözde KARAKAYA
Üniversite	Bursa Uludağ Üniversitesi
Enstitü	Eğitim Bilimleri Enstitüsü
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YÜZ YÜZE EĞİTİM İLE UZAKTAN EĞİTİM KARŞILAŞTIRMALI ANALİZİ: İNGİLİZCE ÖĞRETMENİ ADAYLARININ HAZIR BULUNUŞLUKLARI

Dünya Sağlık Örgütü (WHO), Mart 2020'de COVID-19 adlı virüsü pandemi ilan ettiğinden beri, tüm dünyadaki eğitim sistemi tamamen durma noktasına geldi. Bu beklenmedik durum değişikliğinden olumsuz etkilenen ülkelerden biri de Türkiye oldu. Eğitimin aksamaması için birdenbire acil uzaktan eğitim (AUE) kullanılmaya başlanmış ve neredeyse tüm ülkeler eğitime dijital cihazlardan erişim sağlayan bu alternatif sistemi benimsemiştir. Türkiye'deki öğretmen yetiştiren kurumlar da bu aşamada AUE'ye geçmiştir. Eğitimin dijitalleşmesiyle birlikte İngilizce Öğretmenliği bölümlerinde okuyan öğretmen adayları için dijital kullanıcı olmak daha fazla önem kazanmıştır. Bu nedenle, bu çalışma ilk olarak İngilizce Öğretmenliği adaylarının acil-uzaktan eğitim deneyimlerini incelemeyi amaçlamıştır. Çalışmada ayrıca üniversite 2., 3. ve 4. sınıf öğretmen adaylarından AUE deneyimlerini ve bakış açılarını salgın öncesi yüz yüze eğitim deneyimleriyle karşılaştırmaları istenmiştir. İkinci olarak, bu aşamada öğretmen adaylarının teknik imkânları ve dijital yeterlilikleri ile hazırbulunuşluk üzerindeki etkileri analiz edilerek, katılımcıların AUE'ye yönelik hazır bulunuşlukları ve algıları irdelenmiştir. Araştırma, 2020-2021 eğitim-öğretim yılı güz döneminde, Türkiye genelinde ikinci, üçüncü ve dördüncü sınıflarında öğrenim gören 194 İngilizce öğretmeni adayı ile gerçekleştirilmiştir. Bu karma yöntemli tez çalışması, önemli bilgileri ortaya çıkarmak ve böylece kapsamlı ve ayrıntılı bir çerçeve sağlamak için dört ölçek ve yarı yapılandırılmış bir görüşme uygulamıştır. Nicel veriler betimleyici istatistikler, bağımsız örnekler t-testi ve SPSS'de tek yönlü ANOVA analizi ile analiz edilirken, nitel veriler deşifre edildi, kodlandı ve bir akış şeması ile sunuldu. Bulgular, acil uzaktan eğitimin İngilizce öğretmen adaylarının deneyimlerini, yüz yüze bağlam seçimlerini, çevrimiçi öğrenmeye hazır oluşunu ve uzaktan öğrenme algılarını ne ölçüde şekillendirdiğini gösterdi. Öğretmen adayları, AUE deneyimleri hakkında tarafsız görüşler belirtseler de, yüz yüze eğitimi tercih etme eğiliminde olmuşlardır. Ayrıca, öğretmen

adaylarının AUE'ye yönelik algılarından, teknik fırsatlardan ve dijital yeterliliklerden etkilenmemiş gibi görünen orta düzeyde bir AUE hazır bulunuşluk sergiledikleri görülmektedir. Bunun nedeni, öğretmen adaylarının karantinadan önce dijital cihazların kullanımına zaten aşina olmalarıdır. Bu nedenle, bu faktörler AUE'ye genel olarak hazır olmalarını önemli ölçüde etkilememiştir. Çalışma ayrıca Türkiye'de öğretmen yetiştiren kurumlarda AUE'nin güçlü ve zayıf yönlerini de rapor etmiştir. Çalışmanın sonuçları, öğretmen eğitimi programlarına ve öğretmen eğitmenlerine, onları yakın gelecekte dijital eğitim teknolojilerinin daha geniş kullanımına nasıl daha iyi hazırlanacağına dair çıkarımlar sağlamıştır.

Anahtar Sözcükler: Acil uzaktan eğitim, çevrimiçi eğitim, çevrimiçi öğrenmeye yönelik hazır bulunuşluk, İngilizce öğretmeni adayları, öğrenci algısı, yüz yüze eğitim

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List of Abbreviations

CFA:	Confirmatory Factor Analysis
COVID-19:	Corona Virus Disease
EFA:	Exploratory Factor Analysis
EFL:	English as a Foreign Language
ERT:	Emergency-Remote Teaching
ELT:	English Language Teaching
ICT:	Information Communication Technologies
IS:	Information System
IT:	Information Technologies
KMO:	Kaiser-Meyer-Olkin
TV:	Television
TAM:	Technology Acceptance Model
OLPS:	Online Learning Perception Scale
OLRS:	Online Learning Readiness Scale
PEOU:	Perceived ease of use
PU:	Perceived usefulness
TBP:	Theory of Planned Behavior
SCT:	Social Cognitive Theory

CHAPTER 1
INTRODUCTION

1.1. Problem Statement

During the digital era, the virus named COVID-19, which can be considered the first worldwide health crisis, turned life on earth upside down. This crisis has affected people's lives in many ways, and one of the most affected sectors was education. The spread of the virus led the educational authorities to switch to distance education at all levels, including universities in Turkey in March 2020. The spring semester had just begun in February but the academic context had to change to online platforms due to the quarantine process.

This term, which entered the literature as emergency-remote teaching or ERT (Bozkurt & Sharma, 2020) with the pandemic, started to be used out of necessity as an alternative education system to temporary, synchronous and face-to-face education (Bozkurt, 2020; Hodges et al., 2020). With the epidemic, the concept of distance education, which had been ignored by many educators and students for years, suddenly became the only way to continue education in all countries where technical affordances allow it. However, this type of education was not a very new concept. It has been maintaining its place in the literature in the context of distance education for years.

Although it is common worldwide, there seems to be confusion about its terminology. From the beginning of the pandemic, several terms have been used to describe the emergency-remote teaching procedure such as online teaching, remote teaching, distance education, and e-learning. However, the concept of emergency-remote teaching which suddenly entered the educational processes during the COVID-19 epidemic can be distinguished from distance education. First of all, distance education or remote teaching is defined as an education system that is carried out synchronously or asynchronously, regardless of any time zone and place by using information and communication technologies (Elhaty et al., 2020). Online education, which can be defined almost in a similar way, is seen as a new form of distance education and has been closely associated with distance education in most studies (Moore et al., 2011; Basilaia & Kvavadze, 2020). There are several differences between emergency-remote teaching and pre-pandemic face-to-face education including the platform where the education takes place. In terms of assignments, assessment, teacher-student and student-student interaction, students' attitudes and technical possibilities,

these differences have been noted in the literature either by considering emergency-remote education advantageous or that this education system should already be developed (Glazier & Harris, 2020; Rapanta et al., 2020). The educational habits that entered our lives with the ERT procedure include experiences that can profoundly influence the face-to-face or distance education practices to be carried out after the epidemic. The problems experienced by both educators and students in content development, finding the right technological tools, learning and using them in the ERT process may cause reluctance to transition to distance education in the future (Day et al., 2020). One of the foundations of face-to-face education is Vygotsky's (1987) theory of social constructivism. In other words, one of the most important features of face-to-face classes is that the teacher can include the student in active interaction in the classroom. However, with the rapid introduction of emergency distance education into our lives, feedback has been reported that social interaction cannot be achieved online, especially from the perspective of Turkish students (Bozkurt, 2020; Yolcu, 2020). Thus, understanding the ELT student teachers' experience of ERT, comparing and developing according to the previous face-to-face environment can provide rich information about the process.

According to UNESCO's (2020a) report, as of April 2020, educational institutions in 188 countries were closed due to the epidemic, affecting more than 1.5 billion students and 63 million educators worldwide. This number constitutes approximately 92% of the student population in the world. Even if the change to the online platforms required access through technological tools and having sufficient digital competencies, another report noted that nearly 64% per cent of teaching processes included educators' lack of digital proficiency while %48 per cent involved students who did not have sufficient digital competencies; globally %84 per cent of students could not access to education equally with their fellow students; internet connection problems occurred %62 per cent worldwide; last but not least, power blackouts were experienced %42 per cent in groups with lower income, and %23 per cent worldwide (UNESCO, 2020b). Therefore, it is important to find out about learners' technological facilities, their digital competencies, and the problems they encountered during ERT to portray a detailed and thorough view of education in the pandemic era.

Along the same lines, ELT student teachers' attitudes and perspectives related to the use of technology are also fundamental according to the literature. ELT teachers, like other teachers, are expected to use information technologies with ease to create teaching materials for this purpose. As technology changes, what teachers and students have and need also

changes rapidly (Daugherty, 2005). The epidemic crisis has brought up many issues about the quality of teaching and ways of encouraging pre-service teachers, but it has also encouraged teacher education to (re)think of ways of (re)educating teachers so they could be effective in uncertain situations. ERT took place during the closure of the teacher education departments and forced both lecturers and teacher trainees to adopt a new perspective on the concept of education and practice (Özkanal et al. 2020).

Since the transition to ERT has been unexpected and immediate for the world, student teachers' readiness for online education, perspectives and technical possibilities have been the factors determining how effective it is on the learning process in the ERT period and how much it facilitates online learning (Wei & Chou, 2020). Readiness is a frequently emphasized and measured variable in the literature on distance education, e-learning and online learning (Smith et al., 2003; Demir Kaymak & Horzum, 2013). The concept of readiness for online learning is expressed as a phenomenon that focuses on the ability to manage time and adapt to self-management of the online learning process, adopting internal motivation and understanding their learning styles (Hung et al. 2010). Measuring readiness helps to find out the needs of the individual and to shape the processes such as the preparation of the course content following these needs. It can be said that it is crucial to understand the needs and readiness of students, one of the essential stakeholders in online environments to reach success (Dray et al., 2011). The information that student teachers' readiness for online education directly affects student teachers' knowledge and abilities, attitudes, academic success and academic achievements related to technology use skills has been obtained from related studies (Hong & Kim, 2018; İliç, 2022).

The experiences of student teachers in the process of emergency-remote teaching are shaped into overall impressions of the delivery of online courses. These impressions are referred to as online learning perceptions in this study. To be successful in an online course, learners should have increased motivation and they should be self-disciplined (Clark, 2020). With the abruptness of the introduction of ERT to mainstream education, nearly all stakeholders including instructors and learners confused as to how they could use ICT tools and conduct online lessons alongside the constant stress of the disease and lockdown (Amemado, 2020). Moreover, the unpredictability of this academic year 2020-2021 in terms of more lockdowns, continuity of online teaching and the spread of the disease has deeply

influenced learners' perspectives and experiences (Gillis & Krull, 2020). Therefore, it is necessary to interpret how ELT student teachers reflect on their learning in online settings.

1.2. The Purpose of the Study

The purpose of the study is two-fold. The first goal of this thesis study was to elicit data on the experiences and attitudes of ELT teacher candidates towards ERT which suddenly started due to the closure of schools in March 2020 with the COVID-19 epidemic in the Turkish context. Then, it was aimed to compare the emergency-remote teaching experiences with their experiences and attitudes in the pre-epidemic face-to-face education processes and examine the overall effect it had on pre-service English teachers during the ERT.

The second goal was to determine the readiness of the same participants for emergency distance education in general. In this context, it was aimed to determine how well the ELT student teachers' technical possibilities and digital competencies were, and how they perceived their emergency-remote teaching experiences. That is, the study also aimed to investigate the effects of these variables on pre-service English teachers' readiness for this type of education.

1.3. Research Questions of the Study

The study aimed to answer the following research questions:

1. To what extent do English teacher candidates evaluate their experiences positively after their experiences in the 2019-2020 spring semester and 2020-2021 fall semester emergency-remote teaching?

2. When the pre-pandemic face-to-face education and training processes of English teacher candidates are compared with the emergency-remote teaching processes of the 2019-2020 spring semester and 2020-2021 fall semester, is there a difference in the
   a) interactions,
   b) achievements,
   c) experiences of the students?

3. To what extent were the English teacher candidates ready for the emergency distance education that started as of March 2020?

4. Do prospective English language teachers' perspectives and technical possibilities for emergency-remote teaching and their ability to use digital devices significantly contribute to their readiness?

1.4. Significance of the Study

This mixed-method study includes both quantitative and qualitative methods to present a thorough and extensive framework for ERT and the training process of the English language teaching (ELT) departments in Turkey. The researcher gathered quantitative data to explore the emergency-remote teaching experiences of English teacher candidates during the outbreak of COVID-19. In addition, in order to get a better understanding of how this sudden change affected ELT teacher candidates, the study compared their experiences of ERT with their previous face-to-face education experiences. In this matter, information on the student teachers' online learning experiences was also collected through semi-structured interviews. Eliciting their comments and self-explanations was critical further to explain the advantages and disadvantages of emergency-remote teaching. Gaining rich information is essential to evaluate the new normal in education, especially in ELT teacher education departments and English language teaching. In addition, with the sudden introduction of ERT across the country, the readiness of English teacher candidates for online education has been another factor to consider for the future of education. Readiness for online learning can contribute to learning and its success. Moreover, English teacher candidates' technical opportunities, digital skills and perspectives on online education have also been identified as factors which potentially affect the process of ERT. Technical devices and a stable Internet connection were necessary to access education as well as users' know-how on the use of gadgets and software. In addition, ELT student teachers' perceptions of online learning are determined in the analysis in order to understand the feelings of student teachers in terms of motivation, anxiety and self-discipline. Adding the affective factors to the study will reach a full picture of their experiences during this process. Finally, the study correlates the effect of technical opportunities student teachers have, their digital skills, and their online learning perceptions with their readiness levels for emergency-remote teaching. The correlation of these variables provides richer information to shed light on the phase which could not have been foreseen previously.

1.5. Limitations of the Study

As the study took place in the 2019-2020 spring semester and 2020-2021 fall semester academic years, Turkey was still undergoing the confinement process and higher education institutions were closed. Thus, collecting data and communicating with suitable participants had to be conducted on synchronous online platforms. The second limitation of the study was that the semi-structured interviews had to take place in phone calls because of the restrictions. Furthermore, due to the time and place constraints, the research resorted to choosing a certain number of participants. Due to the fact that the number of participants is small, it may not be possible to generalize the results to all English language teachers in Turkey.

CHAPTER 2

LITERATURE REVIEW

1.1. Definitions

1.1.1. Online Learning

The literature is rich with various definitions of online learning which have been suggested by researchers with different study backgrounds. In its broadest form, Carliner (2004, p.2) refers to online learning as "an educational format to which learners have access via digital technologies". According to Gilbert (2005), online education has multiple advantages in both K12 and higher education. For instance, online education can be accessed by anyone, anytime and anywhere. It also encourages interaction and self-regulation between students and instructors. Still, these benefits are not solely enough to increase the effectiveness of online learning. According to Volery & Lord (2000), which type of technology is used during the teaching and how it is conveyed in the classroom through specifying the learners' and instructors' attitudes and needs are important for efficient online teaching and learning. Lowenthal et al. (2009) discussed the anatomy of online learning. The type of education (formal or non-formal), the place where online learning occurs, in accordance with the curriculum, learning pace of students, software, class population, a necessary functional approach, specifying the aim of learning based on gaining knowledge or skills, sorts of academic disciplines constitute the requisite framework of online learning. In terms of tools, the researchers emphasized the rise of multimedia and simulated environments in online learning. That is, teachers may play different parts in online courses such as being an instructor, a mentor or not even existing in classes. However, their presence requires certain preparations for online lessons. In this case, instructors should be trained for their future online teaching experiences. Lastly, from the learner perspective, three basic principles can be analyzed in online instructions: learner cooperation, heterogeneity in classrooms, and a dynamic approach where students collaborate and finish the required tasks as groups.

De Paepe, Zhu & Depryck (2017) analyzed in their research that online learning is advantageous, especially in language learning, because students are flexible whenever, wherever and however they would like to receive their education and they can gain autonomy. However, they reflected that in terms of the problems in getting feedback and responses from the teacher, forming an efficient interaction in the classroom, and instructing

students explicitly, the use of technology, and online learning might not be the best choice at all.

1.1.2. E-Learning

Mayer (2020) describes e-learning as a contemporary learning form that conveys education through an online platform, mainly a computer. It is aimed to give information to learners and assist them to practice the course topic. It is also a new phrase for the future era which will frequently be using the internet and be involved in up-to-date teaching as well as an alternative education to support a constructive point of view in a pedagogical context (Ebner, 2007). In the literature on e-learning, the case of communication technologies has been a different criterion to consider. Lim (2017) mentions that all educational activities are completed with synchronous or asynchronous processes with the help of information technologies and communication tools in e-learning. In this process, users establish interactive communication between the system and users through images and sounds, thanks to e-learning systems. Giesbers et al. (2013) defined synchronous e-learning as educational activities carried out by students and teachers in different places at the same time while asynchronous e-learning refers to the educational activities that students and teachers carry out at different time intervals while they are in different places. For synchronous and asynchronous learning to take place, it is necessary to use at least one communication technology tool. This is only possible through a network, namely the Internet.

An e-learning system offers that the educator and the learners do not need to come together in the same environment at the same time during the education process. Since there is always the opportunity to access all documents and equipment related to the subject through the system, the learners can obtain the same information at different times and complete their learning processes. In this context, space and time savings can be achieved with the educational documents and materials transferred to the internet environment, and also, the learners can customize the learning for themselves and complete it in a flexible process (Martins et al., 2012). Socially, they can learn from their peers through discussions thanks to digital communication tools, and teachers can easily compile and interpret the individual learning data of each student (Rogerson‐Revell, 2007). Interaction is not only an important element of teaching and learning processes but also one of the essential foundations affecting the quality of teaching in the e-learning system (Thorpe & Godwin, 2006).

The use of e-learning in language teaching can be a beneficial option instead of traditional environments (Solak & Cakir, 2015; Fandiño et al., 2019). Presenting a wide variety of content, fast feedback, the convenience of time, availability of tools that increase cooperation and input, boosting motivation and the fact that interaction is at the forefront are some of the reasons to consider e-learning as a valuable learning method (Mohammadi et al., 2011).

1.1.3. Distance Learning

The expressions "distance learning", "distance teaching", "distance education", and "remote teaching" are used interchangeably in the literature as these terms explain basically the same phenomenon. Thus, distance education can be defined as formal learning when the educator and the learner are at a distance from each other (Willis, 1993). Similarly, another definition of distance education is a system in which the teacher and the student are in different environments from each other (Berg & Simonson, 2002). In this respect, distance education is more flexible than traditional education, which allows it to be applied to various conditions, including self-learning. It is aimed to remove the limitations in providing education services to learners partially or completely and to reach wider masses of education opportunities with distance education. The use of multimedia tools and presentation systems might make it difficult to define distance education because all of the educational practices that are structured in environments where the teacher and the student are separated from each other in terms of time and space are called distance education (Gunawardena & McIsaac, 2013).

Education has always been affected whenever new technology was introduced to the world. In this case, changes in technology constitute a turning point in the history of distance education. The first communication medium was in the form of text and instructions made by mail and correspondence, letters within the 19th century. Later on, although the entrance of electronic technology such as radio and TV broadcasting has been exciting, it could not meet the expectations of educators as they were proved not to be appropriate for teaching purposes. However, founded in 1971, the British Open University is considered to be the start of modern distance education. Open universities, even if they were not defined much by communication technologies, offered flexibility for students that enables access to education from different places (Ekren, 2014). In the 1980s, audio and video teleconferencing lectures via telephone, satellite, cable and computer networks attempted to establish synchronous

group interaction remotely. At present, these technological means have been replaced with modern online digital educational technologies soon after they become a part of our daily life (Perraton, 2020).

Distance education focuses on collaborative, individual and active learning, in which the educator has the role of guiding rather than directly transferring the information. Distance education supports both students and teachers with effective tools by accessing resources in digital environments. These new teaching methods require knowing active participants' perception levels to develop more effective distance education. It is a learner-centred education system, and this process takes place at the individual's own pace and under the guidance of the instructor. It is an alternative and interactive learning resource for students of all ages and levels (Harry et al., 2013). Despite the advantages it provides, distance education also has some limitations. Individuals' limited computer literacy, the need for time for the development of the system, the cost of the system, difficulties in presenting the subjects, technical failures and learning difficulties are considered to restrict the desired learning outcomes (Sadeghi, 2019).

1.1.4. Face-to-face Education

Face-to-face education is the teaching activity in which the trainers communicate with the students in the same environment at a certain time in formal education institutions. As face-to-face education brings an obligation for teachers and learners to be together, it enables students who do not have the habit of learning independently and without assistance to learn. Since teachers and students provide one-to-one communication in face-to-face education, this form of education is very suitable for applied learning. For this reason, it is an effective teaching technique in the realisation of skills and attitudes. In addition, since the trainers and students are in a certain place at a certain time, the socialization of those who participate in face-to-face education becomes easier (Wuensch et al., 2006).

In literature, face-to-face education has been compared with online teaching, e-learning and distance education (Yılmaz, 2019; Soffer, & Nachmias, 2018). Most studies imply that the biggest advantage of face-to-face education is the coexistence of teachers and students in the classroom. Teacher observation and instant feedback facilitate learning as learners can adjust their outcomes accordingly. Moreover, in lessons that require practical training, face-to-face is advantageous since students gain the ability to use what they have

learned in real life by practising the required skill. It is worth mentioning that face-to-face classes undeniably contribute to socialization (Tratnik, Urh & Jereb, 2017). Sharing the same environment for certain periods allows individuals to socialise together. With socialization, motivation for learning and attitudes are affected positively. Interacting with fellow students and teachers consistently assists the learner to engage in classroom activities, thus, this promotes learning (Perry et al., 2006). In a study by Bali & Liu (2018), face-to-face classes led to positive student perceptions in their learning because students had more opportunities to interact with their peers in the classroom. Classrooms exist as a social environment in face-to-face education.

1.1.5. Emergency-Remote Teaching (ERT)

Emergency-remote teaching (ERT) is a recent term that intervened in educational practices with the arrival of the COVID-19 pandemic all around the world. Bozkurt et al. (2020, p.2) define this term as "distance education applications that emerge in crisis, in the form of an unplanned system conducted with available tools". Differing from distance education, emergency-remote teaching is a must when face-to-face teaching is not an option. Distance education is carried out with a planned structure and certain arrangements; on the contrary, this is not the case with ERT (Bozkurt and Sharma, 2020). Unexpectedly, students had to separate from their teachers and peers as a consequence of full lockdowns in most countries. In these times, teaching procedures were called by distinct terms such as distance education, e-learning, online teaching etc. Instead, "emergency-remote teaching" is a more comprehensive expression because it signifies the abrupt and unplanned nature of education (Gacs et al., 2020).

Distance education is a conceptualized educational system that aims at overcoming time and place limits, and offers flexibility, reaching all different kinds of sources. To adopt distance education, there needs to be a working plan that structures the learning process, outcomes, application techniques, technical possibilities of both learners and professors, timetable etc. Nonetheless, emergency-remote teaching, as the name suggests, comes out of a critical and urgent situation as an impermanent and short-term practice. The goal is to continue the teaching practices in the course of lockdown (Barbour et al., 2020).

Since the transition to ERT due to mandatory social isolation is not a well-prepared long-term system, this obligatory change has affected professors, learners and parents all

around the world (UNESCO 2020a). Whalen (2020) indicated that most instructors were not ready for the shift to online platforms for several reasons. Online experiences played an important part here as some teachers who had taken part in blended classes had more digital competencies on how to conduct and manage an online lesson. Erdem-Aydin (2021) which was conducted with university professors, reflected that they thought the ERT period was a short-term process and in the end, they would return to face-to-face lessons. In addition, most of the instructors complained about their students' insufficient online training, Internet skills, and their negative attitudes towards the ERT process. In addition, engaging learners in an interactive environment have been an important issue in the ERT period. M. Ekici & D.I. Ekici (2021) reported that learners' technical possibilities such as possessing a computer, A personal room, a stable Internet connection, digital competencies, and online learning background were essential for learners to participate actively in the classroom as to have a proper online lesson. From the parents' perspective, ERT has been reflected as a tough process in some studies (Telli, Yamamoto & Altun, 2020; Misirli & Ergulec, 2021). It was reported that both students and families had difficulties in transitioning to ERT. Having no technological gadget, training or competence made this process more problematic for both groups which lead to a greater economic burden on parents.

1.2. Theoretical Background

It is beneficial to shed light on theories that try to explain behavior patterns towards the adoption of technology. These studies have brought a very useful perspective to the cognitive, emotional, sensory and behavioral responses of individuals to technology, as well as to external variables that directly affect the purpose and behavior of the user (Davis, 1989; Legris et al., 2003; Fishbein & Ajzen, 1980; Delone & McLean, 2003).

1.2.1. The Technology Acceptance Model (TAM)

Since 1970, the rapidly increasing use of technology as a solution in application systems alongside constant changes has focused researchers on explaining and interpreting the behavior patterns of users. Davis (1985) developed the Technology Acceptance Model (TAM) to explain the rapid changes in technology with the user dimension. It is aimed to give evidence of the effect of information technologies (IT) on technology users' opinions, attitudes and intentions.

TAM obtains four fundamental determinants in terms of technology acceptance: perceived ease of use (PEOU), perceived usefulness (PU), attitude towards use, and behavioral intention. Perceived usefulness (PU) is the positive or negative thoughts that users have about the performance increase in their work or study thanks to the use of technology. Perceived ease of use, one of the basic variables of the TAM, is the degree to which a person finds a certain technology easy to use and learns to use it without giving extra effort. The easier individuals find the use of new technologies, the more positive their intention to use them. Perceived ease of use indirectly affects perceived usefulness (Davis, 1989). Attitude is a person's positive or negative judgments about performing the behavior in question (Eagly & Chaiken, 2007). Davis (1989) believes that in his model, perceived usefulness and perceived ease of use statistically and jointly estimate attitude. Intention is a measure of the possibility of a person's behavior toward performing a particular behavior. In other words, intention is also explained as the individual's readiness to exhibit the behavior in question. TAM asserts that the primary factor determining an individual's acceptance or refusal to use information technologies, in other words, actual use, is the individual's intention. Intention precedes the actual behavior. Emphasized in the model, the relationship between attitude and intention means that the person intends to show the behavior that he or she has positive feelings when all conditions are equal.

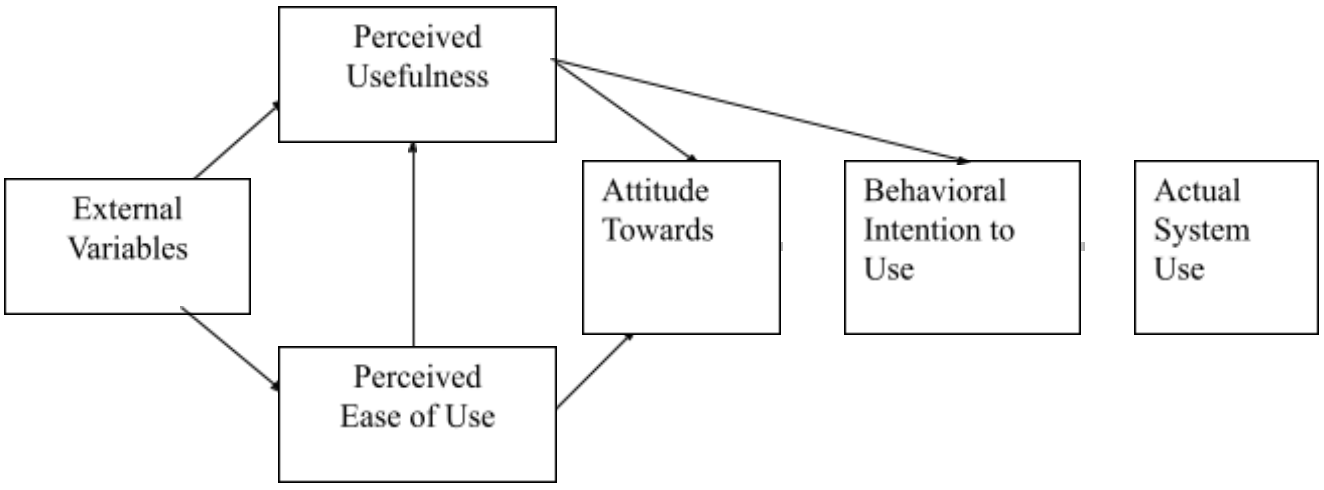

Figure 1. Original Technology Acceptance Model by Davis (1989)

Technology Acceptance Model is a useful predictive model that can be used in any specialized field. It is a very easy and flexible model to implement. TAM has proven to be a useful theoretical model in helping to understand and explain use behaviour in IT

implementation, especially in an educational context. For instance, Gong et al., (2004) examined the basic factors of information technology acceptance with in-service teachers. They found that enhancing teachers' perceived ease of use and perceived usefulness as well as developing computer self-efficacy helped with their technology use and acceptance. Recently, Scherer et al. (2019) analyzed whether the TAM model could be directly applied in teacher training in terms of technology use. That is, it turned out to be a dynamic structure that can be used for both pre-service and in-service teachers to facilitate technology use by proving its importance in the literature on teacher training and career improvement. Moreover, TAM offers very useful tools to understand how students' technology acceptance levels affect technology integration. Masrom (2007) investigated the university students' acceptance of e-learning to detect its effectuality for learning using TAM. According to the findings, learners' intention for technology use was greatly influenced by perceived usefulness as the researcher implicated that learners intended to concentrate on how technology is useful in their learning. Sukendro et al. (2020) investigated the elements of technology acceptance to anticipate the use of technology during e-learning in the quarantine period. Due to the various variables including inadequacy of resources, and internet connection problems, understanding learners' technology acceptance and use during e-learning was more difficult; however, the model was achieved to explain the transition to e-learning. In this study, perceived ease of use was found to predict perceived usefulness, in other words, learners stated the system was positively convenient to use.

1.2.2. Theory of Planned Behavior (TPB)

Planned behavior theory (TPB) is one of the crucial theories that explain human behavior in the social psychology literature. Planned behavior theory is the successor to the theory of thoughtful action developed by Fishbein & Ajzen (1980) to explain the volitional behavior of individuals. According to the theory of thoughtful action, it is the individual's intention towards that behavior that determines whether or not he or she will do it. Intention, on the other hand, is affected by the individual's attitude towards the behavior and other people's thoughts about the behavior. Attitude, which is one of the factors that determine the intention, has mostly been handled as an attitude towards an object, a person or a group in the social psychology literature. In the theory of planned behavior and its predecessor theory of action, attitude is considered as an attitude towards behavior. What determines the attitude towards behavior is the individual's beliefs about the possible consequences of the behavior and his evaluation of these results (Ajzen, 1991).

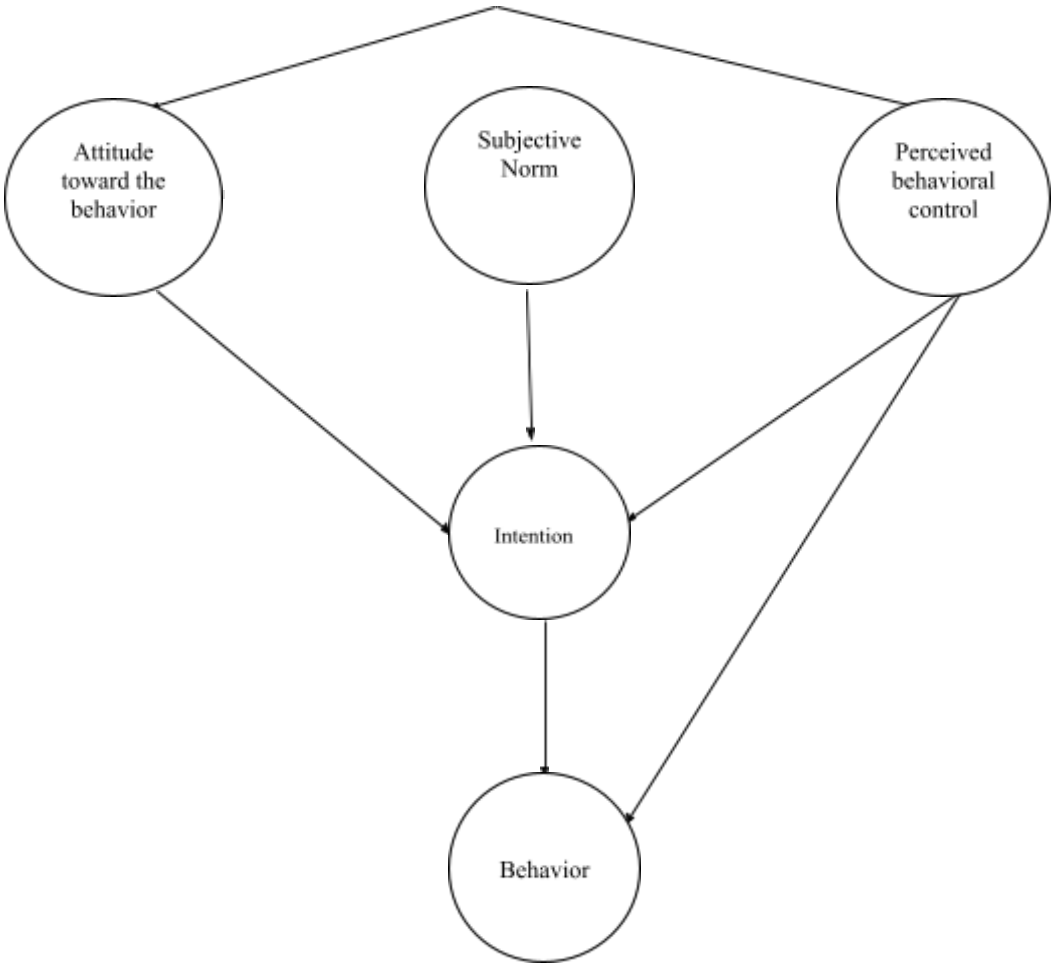

Figure 2. Theory of Planned Behavior by Fishbein & Ajzen (1980)

According to the planned behavior theory model shown in Figure 2, the direct factor of individuals' behavior is intention. Behavioral intentions of individuals are explained by attitude, subjective norm and perceived behavioral control (Ajzen, 1991). Attitude towards behavior is the result of the beliefs about the behavior of the individual and the evaluations about the consequences of the behavior. Subjective norm is a social factor that expresses the perceived social pressure to perform or not perform a behavior as the second important determinant of behavioral intention in the model (Fishbein & Ajzen, 1980). Thirdly, perceived behavioral control refers to the individual's perception of whether performing a behavior is under the individual's control in desperate or satisfactory situations (Ajzen, 1991).

These three independent variables contribute significantly to predicting behavioral intention to perform a behavior. In the theory of planned behavior, in general, an individual demonstrates a strong intention to act when he or she has the necessary opportunities and resources. Otherwise, when the individual feels that resources and opportunities are lacking

before performing the behavior in question, a strong intention toward the behavior does not emerge. The perceived behavioral control determinant, which was added later to the model, affects the behavior together with the intention in some cases but it directly affects the behavior in others. Three factors affecting intention are under the influence of behavioral beliefs, normative beliefs and control beliefs seen in figure 2. While behavioral beliefs affect attitude towards behavior, normative beliefs directly affect subjective norms and control beliefs affect perceived behavioral control (Mathieson, 1991).

The theory of planned behavior is used in many studies to bring a better understanding of the adaptation process of information technologies in the education sector. In Cheon et al.'s study (2012), university students' perceptions of mobile learning were investigated within the framework of planned behavior theory. In the end, the framework was achieved to clarify the intention of most university students to use mobile learning in their education. As most of the students were familiar with using mobile devices before, perceived ease of use and perceived usefulness were significantly important levels. Another study by Tagoe & Abakah (2014) confirmed that the theory was successful in illustrating college students' m-learning readiness. This makes the model useful for explaining the adaptation process in terms of learners' perceptions of technology. When Cheng (2018) examined both the theory of planned behavior and the technology acceptance model jointly on higher education students, it was revealed that the theory of planned behavior might account for the intention to use technology better than the technology acceptance model as a consequence of social effects.

1.2.3. Information System (IS) Success Model

The most popular and validated approach to evaluate the success of information systems is the approach introduced by Delone & McLean: Information System Success Model. The model offers a comprehensive perspective to understanding the success of information systems. It does this by identifying, defining and explaining the relationship between the most critical dimensions of information systems success (Delone & McLean, 2003). The original model, which was first introduced by Delone and McLean (1992) to draw attention to the problems that arise due to the multidimensional and complex nature of the success of information systems, was updated and republished in 2003 due to changes in the role and management of information systems over time. After the emergence of the information system, which includes certain system and information quality features, users

and administrators experience these features by using the system; depending on this, they are either satisfied with using the system or they are not. As a result, the individual effects on the use of the system collectively create organizational effects (Ojo, 2017).

According to the original model, the factors that measure success can be listed as system quality, information quality, usage, user satisfaction, individual impact, and organizational impact. System quality is a technical success; information quality is a semantic success; the remaining determinants, use, user satisfaction, individual impact, and organizational impact criteria are aimed at determining the success of productivity. Based on both process and causal situations, it has been suggested that these six dimensions of success are interrelated rather than independent (Delone & McLean, 2003).

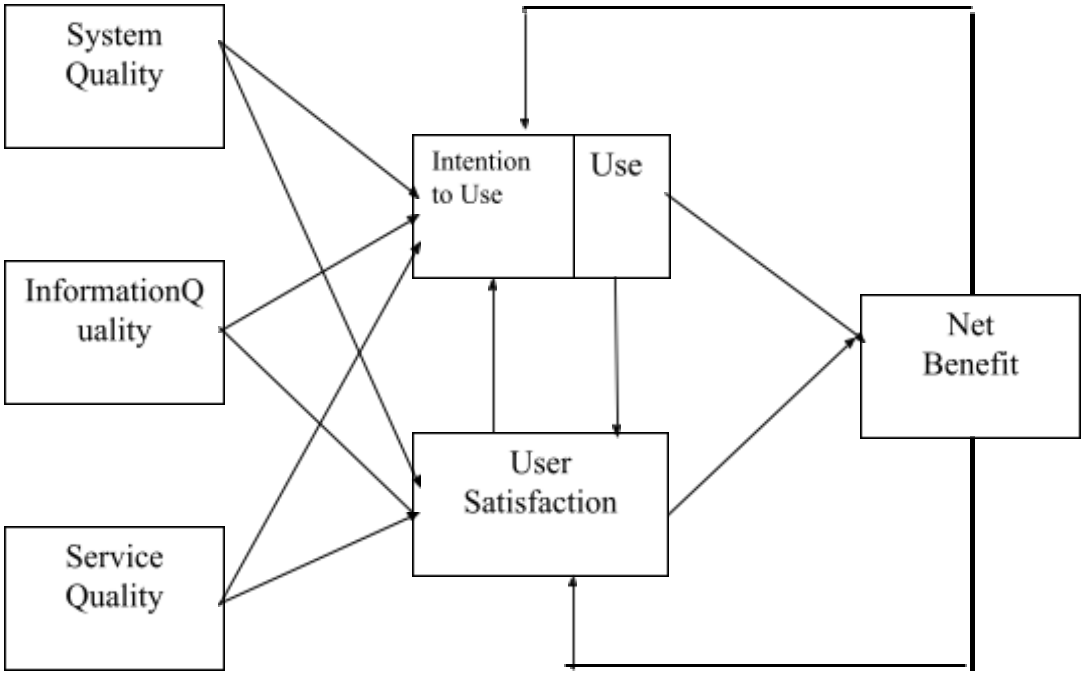

Figure 3. Delone & Mclean's (2003) Information System Success Model

The Delone & McLean model (2003) categorized quality into three dimensions: information quality, system quality, and service quality. Each is individually measured for its impact on usage and user intent. As in the original formulation of the model, use and user satisfaction are closely related. Usage precedes user satisfaction, but a positive experience in

use will causally lead to greater user satisfaction. Similarly, increased user satisfaction will lead to an increase in intention to use and thus use.

System use is an important component in measuring system success. In the component of system use, there are examples such as usage amount, usage frequency and usage purpose (Legris et al., 2003). In addition, the use of the system is assessed as the probability of use and the tendency to use it. User satisfaction is a measure of successful interaction between an information system and its users. If a system can meet the needs of its users, users' satisfaction with the system will increase. Otherwise, users will not be satisfied when the system cannot meet their needs (Petter et al., 2008). DeLone and McLean (1992) emphasized that user satisfaction is an important measure of the success of information systems. Net benefits are the benefits obtained after the use of information systems for both individuals and organizations. Measuring user satisfaction and intention to use the system alone is not enough to determine net benefits. Since there is an important link between system quality, information quality and net benefit measures, the dimensions of system quality and information quality should also be taken into account (Ojo, 2017).

The model was implemented in most of the educational research, especially for e-learning. In an e-learning system, students determine the success of the system by the perceived value of the learning outcomes. If students are satisfied with the system and its contribution to their learning, the system can be perceived as successful. Considering the components of system quality and information quality, which are assumed to affect system usage, it was observed that system quality did not have a significant effect, but information quality had a significant effect. In other words, learners think that the e-learning system provides the information they need sufficiently and is easy to understand. Therefore, problems encountered in the system from time to time might affect the perception of system quality and therefore the use of the system (Petter et al., 2013). Yengin et al. (2011) developed an e-learning model that was based on the IS Success Model. It aimed to research the determinants that influence the performance of university professors in an online context. In the end, the model could clarify the instructor needs, student needs and faculty needs and determine the ultimate university professors' satisfaction with e-learning. To determine the e-learning achievements of students, Eom & Ashill (2018) implemented an E-learning Success Model. Researchers found that learning outcomes affected students' satisfaction. If

the main stakeholders such as provosts and university professors cooperate on the quality of online courses and understanding student needs, the e-learning system could be successful.

1.2.4. Social Cognitive Theory (SCT)

Understanding the complex nature of not only face-to-face education but also online teaching is key in this study to identify its beneficial characteristics and the ultimate value in the education sector. Social Cognitive Theory by Bandura (1977, 1986) is an explanatory theory that shed light on the efficiency of teaching, the creation of an education plan and the selection of education methods.

Everything is shaped according to the individual's cognitive world, but it should not be forgotten that the individual does not have to learn everything directly, the source of learning is the social environment. In other words, learning occurs in the background with social interactions in which individuals actively participate, cooperate and exchange information. The structuring and sharing of information in the education of the individual begin with his/her socialisation in the early years of his/her life. When the subject matter is education and training, it is very important that the interaction of students with the environment is not limited to only teachers, and that other students and different information sources are included in the interaction in this process (Bandura, 1986; Vygotsky, 1978). Thus, the social cognitive theory is an important theory that evaluates the psychosocial factors that affect the individual's behaviors, and these factors offer the methods that lead to behavior change. According to this theory, people can learn behaviors and cognitive characteristics much better and maintain these behaviors. While learning from other people, how much people know and the accuracy of their knowledge on this subject are two key factors. Because the exchange of information between individuals will also change their feelings, Bandura's (1977) social cognitive theory helps us to understand the effectiveness of education by enabling social interactions. The theory possesses six major principles: reciprocal determinism, symbolizing capability, forethought capability, vicarious capability, self-regulatory capability, and self-reflective capability (Bandura, 1977, p.192). The section will summarize these major principles.

1.2.4.1. Reciprocal Determinism

There are three mutually influencing foundations of social cognitive theory: individual, environmental, and behavioral aspects. The behavior is determined as an outcome of the interaction between the environment and the individual. In the formation of a behavior, the effects of the individual and the environment may not always be equal. This is called “reciprocal determinism” (Bandura, 1985, p.82). This interdependence occurs in three ways: “relationships between personal factors-behavior, environment-personal factors, and environment-behavior” (Compeau and Higgins, 1995, p.190).

1.2.4.2. Symbolizing Capability

Individuals can predict their future by remembering or imagining the past. According to this principle, people interpret the events they experience by symbolizing them and continue their lives accordingly. Symbols consist of pictures, figures and verbal expressions. Verbal expressions are the most effective in demonstrating behavior. Individuals remember the behavior of the individual they take as a model by symbolizing (Bandura, 1985, p.86).

1.2.4.3. Forethought Capability

Individuals predict how others will treat them in order to set their goals and plan their future accordingly. Their ability to motivate themselves to perform the behavior and to create a guide for the activities they will do is called the "forethought capability" (Bandura, 1985, p.88).

1.2.4.4. Vicarious Capability

Individuals generally learn by observing the behavior of others or the consequences of their own actions. According to Bandura (1977, p.192), learning through observation and imitation are different concepts. While imitation is defined as the repetition of the behavior in the same way as beneficial and harmful, observation is a means of acquiring beneficial behavior by cognitively processing the behavior. There are four steps in learning by observation: “attention, retention, production and motivation” (Bandura, 1977, p.192). In order for social learning to take place, the individual must first pay attention to the event to model and perceive the event correctly. Then, the individual can use the information learned through observation depending on the recall of the modelled behavior. For this reason, the observed information is coded in symbols and stored in memory. In the production process, the individual should exhibit what he has learned through observations in order for it to turn

into behavior. For this, they must have a belief in being successful. (Bandura, 1977). Finally, the theory suggests that learning and exhibiting behavior differ from each other. Individuals need the motivation to do the behavior. The motivation process is a process that enables the transformation of what has been learned into performance (Schunk & Usher, 2012).

1.2.4.5. Self-Regulatory Capability

In terms of social cognitive perspective, people are able to regulate themselves. They regulate their behavior partly according to their expectations. Behaviors are practised and used in a way that will create positive results while avoiding those that will bring punitive results. Internal reinforcements are effective in regulating the behaviors of individuals (Bandura, 1986). Moreover, Bandura (1999) states that individuals reinforce themselves internally when they evaluate themselves. According to the social learning theory, the effect of internal reinforcement is greater than the effect of external reinforcement from others in terms of the regulation of behavior. In everyday life, behavior often produces mixed effects. The results of the behaviors can go away over time and lose their effect which can lead to the formation of wrong evaluations. People can adjust themselves by observing the experiences of others and looking at the consequences. Once individuals develop the ability to regulate themselves, they can create demands, guides, incentives or deterrents for themselves (Bandura, 1986).

1.2.4.6. Self-Reflective Capability

Individuals evaluate their behaviors and review the adequacy of their thoughts with their supervision. Through self-controlling, individuals will be successful in their studies. This assessment capacity is called “self-efficacy”. For an individual to exhibit behavior, he or she must have sufficient knowledge about the behavior and have sufficient perception of self-efficacy regarding the behavior (Bandura, 1986, p.94).

Bandura (1977, p.194) stated that self-efficacy beliefs are organized into four main principles. First of all, success is a factor that strengthens one's self-efficacy. If a person has not developed a sense of self-efficacy, the state of failure undermines self-efficacy. Secondly, indirect experiences, that is, successful or unsuccessful experiences of other individuals taken as models, affect the success of the individual and therefore their self-efficacy. In terms of verbal persuasion, incentives and recommendations about what the individual can or cannot achieve affect self-efficacy judgments to varying degrees, and the individual makes the

necessary effort to perform the targeted behavior. In addition, the psychological and emotional state of the individual is another factor that affects the self-efficacy of individuals. A positive mood increases self-efficacy, while the reverse decreases it. Self-efficacy is increased by enabling individuals to cope with stress and helping them change a negative mood. When faced with failure, the individual tries harder and immediately restores their sense of self-efficacy after failure. On the other hand, individuals with low self-efficacy are afraid when faced with difficult tasks because they have an insufficient belief that they can solve this task (Miltiadou & Savenye, 2003).

In the field of information technologies (IT), the social cognitive theory was referred to in many studies. The incorporation of this theory with information technologies was especially included in the studies of Compeau & Higgins (1995) and Compeau et al. (1999) pioneering the field. When Compeau & Higgins (1991) researched the effects of socio-cognitive factors on individuals' computer use in terms of possible outcomes and self-efficacy. In the end, an explicit effect was found even if the emotional factors did not have much of an effect on computer use. Then, Compeau & Higgins (1995) investigated the procedures of computer training by forming a research pattern related to Social Cognitive Theory (Bandura, 1977, 1986). They concluded that self-efficacy is an essential factor to consider in online learning achievements. The behavior modelling that SCT theory represents is appropriate for incorporating into computer training as the training can offer opportunities to practice and use the targeted behavior to reach success. Therefore, the assistance of the instructor and learner engagement affect the overall performance of students in online environments. Carillo (2010) explored the perspectives of social cognitive theory in IS model. Self-efficacy, in this matter, can be defined as having the belief to conduct any online task successfully. The theory underlines the significance of self-efficacy while considering the ultimate behavior, the possible outcomes, and emotional and environmental determinants. Individuals' self-efficacy is easily influenced by emotional determinants such as anxiety, stress and depression. It is also expected that former experiences are crucial in learning and that previous learnings lead to a better understanding in the future. In Wang & Lin's study (2007), students' reflections on web-based learning showed that the socio-cognitive viewpoints, personal, behavioral and environmental influences affect the effectuality of the online system. For instance, instructor feedback had an important effect on learners' self-efficacy. Learners' academic achievements were positively affected by social interactions and strategy use within the system.

1.3. Emergency-Remote Teaching (ERT) Experiences of Teacher Trainees

The COVID-19 pandemic has caused school closures in universities throughout the world since March 2020. The school closures changed the context and quality of education all over the world. To be able to present a thorough perspective of the effects of this pandemic on education, what educationalists in teacher education programmes experienced all around the world will be presented. Several studies explain the experiences of teacher candidates during the emergency-remote teaching era. For instance, Moorhouse (2020) explained the steps that were adopted in a Hong Kong teacher education system because of the unprepared shift to ERT with the effect of pandemics. The courses had to be redesigned according to the online environments like synchronous lessons. In these lessons, student engagement was found to be low as student-centred tasks were not as abundant as in face-to-face sessions. Even in group interactions, student teachers still chose not to actively participate. In England, La Velle et al. (2020) examined the effects of school closures in teacher training programs due to the COVID-19 pandemic. Since teacher training procedures require a combination of theory and practice, the balanced execution of online courses has been difficult for both lecturers and prospective teachers. Consequently, the researchers claimed that these distance learning experiences would contribute significantly to English language teaching programs (La Velle et al., 2020). Juárez-Díaz & Perales (2021) examined the online learning experiences of English teacher candidates during the lockdown in Mexico. They reflected that most of the teacher candidates did not mostly attend the online lessons. Even when they attended, they did not pay much attention to the lesson or learn anything at all. They finished their homework, lesson requirements and exams as a matter of formality.

The lack of ICT training and digital incompetencies for both parts of English teacher trainees and lecturers were stressed as unfavourable learning results in this process. In the Arabian context, Hazaea et al. (2021) underlined the limits of ERT in the area of English language teaching. The study differentiated the countries that had lower and higher access to technology. In the countries where there was lower access, ERT could not completely occur as most students had neither technological devices nor regular Internet connection. In other countries with higher access, insufficient digital skills of students and instructors and not being ready for online teaching were listed as the two most important challenges. Furthermore, Subekti (2020) investigated the point of view of English teacher trainees concerning their experiences during online classes in times of lockdown. Most of them could not easily benefit from online resources especially due to Internet connection problems.

Secondly, teacher trainees mentioned that their lecturers could not conduct the classes efficiently as they lacked the necessary digital skills. Lastly, limited social interactions with peers and lecturers made the quality of their experience mediocre. In other words, the communications remained limited as most students were not willing to actively participate in the lessons and teachers could not provide elaborate feedback as they used to in traditional lessons.

Sandra's (2021) research brings out a different prospect to the ERT. In the context of Germany, pre-service teachers reflected that with this abrupt transition, student teachers had a chance to get into the online world and gain digital skills. ERT procedure emphasized the missing element of digital competencies in an EFL curriculum in the university context. Also, Cabangacala et al. (2021) compared the English language student teachers' attitudes toward online learning with their digital competencies when the pandemic began. They found that student teachers had positive attitudes to a degree. However, many of them were not fully qualified to use technological tools. As a result, a positive correlation was reported despite unsupporting circumstances. This signified that academic institutions need to establish all-inclusive systems to encourage students to learn and practice technological devices in their lessons.

How to organize practicum was a problematic issue when face-to-face teaching could not be done. Although many teacher trainees were not very happy at the beginning, digital teaching environments offered spontaneous opportunities for observation and practice. Personal homes were replaced with professional workspaces for both educators and student teachers. This era brought out the possibility of reshaping the usual practicum in teacher education by adding online features to curricula or even blending (Kidd & Murray, 2020). Hill (2021) reviewed the senior prospective teachers' remote educational practices in the pandemic era. The abrupt change to online environments greatly affected student teachers' experiences. Obtaining new classroom management skills and transforming what they learned within the traditional academic context into the new online settings was difficult for some student teachers. Therefore, supervisors had to adapt to different observation and assessment methods. A different analysis was conducted in the Canadian context by Burns et al. (2020). Out of necessity, the internship took place in online sessions where teacher trainees delivered lessons by using several instructional strategies with ICT tools. This transition brought many problems with it. Alongside the difficulties with the Canadian

policies in education and certificates, the controversy for the effectiveness of the delivered online class and the abruptness of the shift complicated this process. Even if trainees reflected on their disappointments with this new system, they were content enough to be able to use information technologies for their career development. In Chile, Sepulveda-Escobar & Morrison (2021) also reported the viewpoints of English teacher candidates regarding their remote internship experiences. According to the research, even if most teacher candidates were not sufficiently trained for online teaching, proper use of information and communication technologies (ICT), and strategy use in online lessons, they mentioned that their online internship experiences were beneficial for their future teaching careers. Being able to use ICT on their own and establishing interaction with pupils via synchronous communication tools led them to gain autonomy for their future online classes.

The examples from the Turkish context also explain how this process was conducted in Turkish higher education institutions, especially in the field of teacher education. Bozkırlı & Er (2021) explored the perspectives of prospective teachers toward ERT. Their results underlined the Internet connection problems and technical issues that occurred among most prospective teachers. These challenges negatively contributed to their perspectives toward online classes. Taşkaya (2021) reviewed the evaluations of pre-service teachers for the ERT term. Most of the trainees did not have sufficient Internet access for online lessons. Due to the circumstances, most lecturers chose formative assessment, but with more homework loads which led to more stress and anxiety among trainees. However, as formative assessment required constant feedback and communication with the lecturer, some of the lecturers appear to have failed in this process. Fidan & Yıldırım (2022) probed what pre-service teachers experienced in online practicum lessons during times of lockdown. Most of their reflections are positive way. It was inevitable that this process was the only good option to educate individuals in the pandemic era and it helped them develop their 21st-century skills by implementing technology in an educational context. Also, they felt self-confident while managing online classrooms. In the English language teaching area, Çamlıbel-Acar & Eveyik-Aydın (2022) presented a background on the benefits and disadvantages of ERT in terms of English teacher trainees. Results split in half as negative and positive experiences. Some of them could neither concentrate and motivate themselves nor interact with their classmates and lecturers. The overloading of homework, problems in accessing the Internet, the insufficiency of knowledge in ICT tools for both lecturers and students, and technological failures could be considered as the downsides of ERT. On the other hand, ERT overcame time

and place constraints and offered a valuable solution for the times when face-to-face education was not possible due to the lockdown. Kaygısız & Balçıkanlı (2021) reported on the reflections of teacher candidates instructing English lessons during their online practicums via EBA. EBA is an educational online platform founded by the Ministry of National Education of Turkey to find an alternative system in the COVID-19 era to educate K-12 students all around the country. Most of the English pre-service teachers have taken their practicum through EBA classes. Thus, their study focused on teacher trainees' main considerations in terms of EBA experiences. According to the reflections, system-related problems such as time limits, learner-related problems such as forming interactions, and giving attention, instructor-related problems such as digital illiteracy and classroom management, and lesson-related problems such as technical issues, and unusual approaches to learning concerned English pre-service teachers while they were teaching English during practicum.

1.4. The Comparison of Emergency-Remote Teaching (ERT) Experiences of Teacher Trainees to Face-to-Face Education

This sudden transition to emergency-remote teaching raised the question of whether ERT could be a better alternative to face-to-face teaching. Before the epidemic, traditional face-to-face settings imposed more stress on most students compared to online teaching because of social factors (Lazarevic & Bentz, 2020). However, the pandemic and quarantine processes forced individuals into social isolation which affected the whole scene in education. Most of the studies showed that in times of a global epidemic, online environments could successfully replace traditional settings in higher education whereas the other studies proved online teaching is not solely effective for teaching compared to face-to-face education. Stevens et al. (2021) assessed if online education could be the new reality for the education sector throughout the world. According to the analysis, online teaching brought a contemporary perspective to the teaching concept and proved to be as effective as regular lessons in universities. Donitsa-Schmidt & Ramot (2020) reported from Israel that even if the unexpected pandemic caused a lot of confusion and anxiety among teacher trainees, lecturers and academic personnel, education continued steadily in online settings. Therefore, this process proved that online learning was not insufficient for providing the information student teachers need compared to face-to-face teaching. Even if it was difficult to maintain similar conditions with face-to-face classes for lecturers, their hard-working made it possible. Also, for career development, trainees went through online

practicum classes having the opportunity to use both synchronous and asynchronous ICT tools. This online internship experience helped trainees acquire both digital and professional skills. There is also evidence that emphasizes the negative aspects of ERT and the importance of face-to-face teaching. Erarslan (2021) presented a thorough review of English teacher education and language learning in Turkey. This rough experience confirmed the use of online teaching for any future crisis. Although the idea of online learning replacing face-to-face teaching seemed to be an option for a time, several challenges put this idea aside such as the lack of technological tools and internet connection, classroom management problems and digital illiteracy among candidates and educators. In addition, Burazer & Skela (2021) compared online versus face-to-face education for the English language teaching department related to student teachers' ERT experiences. Specifically, the term they pointed out as "e-practicum" referred to the training programme conducted on online platforms (p.132). Some students regarded their e-practicum experiences as beneficial for providing an opportunity to gain professional skills and more than half of the student teachers reflected their preferences on the blended mode of training (online and face-to-face).

1.5. Online Learning Readiness

Readiness is when the individual is ready to perform certain behaviors as a consequence of maturation and learning. Readiness is remembering the skills and information about the new object to be learned by the individual; the ability to use and control. In short, it is the state of the learner's physical, emotional and mental readiness to acquire new knowledge (Borotis & Poulymenakou, 2004). Determining learners' readiness before implementing an online system is a crucial step in the context of online learning to evaluate the data beforehand. Negative online learning experiences of individuals who are not ready for online learning can also negatively affect their subsequent learning processes. In other words, failure in the online learning system could be mostly due to the low level of online learning readiness of the learners. Online readiness is an important part of distance education as it is associated with the success of an online program (Demir Kaymak & Horzum, 2013).

The importance of readiness has increased more since the notion of emergency-remote teaching was introduced to the field of education with the beginning of the COVID-19 outbreak and confinements. The effectiveness of distance education depends on the readiness level of the students. Thus, Megawati et al. (2021) provided some visions to increase the level of online learning readiness in teacher education during a time of a crisis

like this. First, the digital skills of pre-service teachers should be supported. Gaining technical knowledge is a must for pre-service teachers. Student teachers should also be professionally informed about how to manage an online session and how to adapt crucial learning skills. Some studies stated that most prospective teachers did not have any difficulties switching to online platforms; in other words, they were ready for online learning. Paetsch & Drechsel (2021) considered the positive contributions of ERT on pre-service teachers' use of ICT tools for their professional development. In general, readiness is promoted with efficient online education and students' positive attitudes and eagerness to employ ICT tools in their future classrooms. In the Philippines, Joe et al. (2022) sought out to what degree teacher trainees were ready when the educational context was switched to online platforms. In conclusion, teacher trainees reflected their adequate knowledge of basic ICT programmes, teaching applications and how to use the Internet; thus, Filipino teacher candidates' readiness level was high. Ardiyansah (2021) identified the online teaching readiness of prospective teachers in their worldwide online practicums. Supplying the necessary technological tools, offering digital training, previous virtual experiences, informing students about problems that may take place and developing suitable solutions accordingly, and time arrangements indicated above-average online learning readiness in teacher training. Dorsah (2021) stated the extent to which teacher candidates were ready for e-learning introduced with the epidemic in Ghana. The study concluded a moderately high level of readiness in teacher candidates. Accordingly, it was strongly emphasized that teacher candidates needed to manage their training and have a responsibility so that they could be more ready. Another research by Fuchs et al. (2022) investigated pre-service teachers' online learning readiness in Germany. In conclusion, pre-service teachers were mostly ready for online learning as they were familiar with most of the technological tools and applications. In the Chinese context, Li (2022) reviewed how pre-service ELT teachers adapted to this process and how ready they were to use ICT devices in the remote sessions. Accordingly, they accepted information communication technologies to a large extent in their courses and they were possibly ready for online learning. Reister & Rook (2021) investigated the preparedness of pre-service teachers for remote classrooms prompted by school closures. The study concluded that most of the pre-service teachers were ready to receive online education during the quarantine process. They were well-experienced enough to utilize the necessary educational applications in their learning. Ramzan (2021) evaluated how teacher candidates were ready for ERT based on their computer literacy. The study showed a high readiness level for online settings. In other words, they accepted emergency-remote teaching without having any difficulty since their computer skills were

sufficient. Kiok et al. (2021) reviewed several articles that scrutinized the teacher candidates' background in teaching during the pandemic. Overall, teacher candidates were mostly positive about their online learning experiences. Therefore, they tended to show moderately high levels of readiness for online teaching internships as they were highly motivated. Dewi (2021) explored the perspectives of English teacher candidates regarding their readiness for online teaching internships. The results were based on two distinct concepts. Technically, teacher candidates reflected on their previous experiences in using technology and software. However, pedagogically, they did not have any experience in how to teach online classes. Arnold & Groenewald (2022) gathered data about how pre-service teachers identified their online experiences and what they went through with online teaching internships. In the end, most student teachers considered positively in terms of their online teaching internships despite the hard work and stress factors. In Oman, Naqvi & Zehra (2020) discovered the way English teacher candidates approached ERT and constant technology use. The researchers reported that the teacher candidates were predominantly ready for technology and online learning during the COVID-19 isolation. Unfortunately, the negative impact of the absentees and technical problems hampered the process. Furthermore, the term 'new normal' started to be used after the context of education was modified abruptly when the quarantine process was announced by the governments. As this change to a 'new normal' was not expected by educational institutions, most teacher educators and candidates were not ready for digital learning and teaching. They needed more time to utilize ICT devices, improve their digital skills and transfer into remote classroom settings (Laguitao et al., 2021). To state more examples, Mavuru et al. (2022) discovered the adaptability procedure of a developing country for transitioning to ERT. The study emphasized the distinction between privileged and less privileged teacher trainees. Less privileged teacher trainees encountered plenty of hardships such as Internet connection issues, the lack of technological tools, and digital incompetencies. On the contrary, privileged teacher trainees found it easy to switch to virtual courses at they had previous experiences with technology use. Estrella (2022) examined how ELT teacher trainees viewed their preparedness in Ecuador. The results reflected low readiness levels in teacher trainees. In addition, ELT teacher trainees stressed the negative perspectives and challenges of their experiences in online sessions.

In order to review the issue of online learning readiness thoroughly in Turkey, OECD (2020) prepared a report based on all stakeholders' digital competencies, the use of ICT devices, the containment of necessary resources, the capability to prepare or be prepared for

suitable circumstances and settings for educating and learning and overall perspectives towards online teaching/learning when the educational institutions were forced to be closed due to the expansion of COVID-19 disease. Most teachers mentioned that they acquired the necessary digital skills in their pre-service teacher training; however, this might not be enough to guarantee the efficient use of technology in classrooms. Moreover, even if there were some challenges with the transition, most students and teachers agreed on the adaptability of modern concepts in education. To give more concrete examples, İliç (2022) evaluated a session related to the use of ICT that might have the possibility to influence prospective teachers' online learning readiness. In summary, this study proved the necessity of a session that encourages the use of ICT devices and develops computer skills in order to equip prospective teachers for online environments and increase their readiness. Han (2021) reviewed teacher candidates' online learning readiness for ERT practices. Even if they were not highly motivated toward learning online, most of the teacher candidates felt ready to switch to remote educational settings mostly owing to having necessary digital skills. Similarly, Eroğlu (2021) conducted a study with prospective teachers from different teaching departments to determine their readiness. Consequently, their experiences contributed to their readiness positively. The COVID-19 disaster has also had adverse effects on how student teachers developed their self-identity with the shift to online learning and practicum experiences. Teacher candidates who are trained in a good teacher training system can have the qualifications and a professional identity at the end of this process. Thus, Gündoğdu & Alkayalar (2021) researched the concept of teacher identity among English teacher candidates and the process of identity improvement during the ERT process in Turkey. In conclusion, most English teacher candidates were not highly ready for this abrupt transition to online platforms. Consequently, the term "teacher identity" was redefined again with the beginning of distance education. Kosar (2021) explored how the remote teaching internship process affected the English teacher trainees' readiness to teach English in their professional lives. However, their reflections were mostly based on the disadvantages of practising their teaching skills on online platforms. They could not entirely witness the functioning of a classroom such as management, student performance, choosing appropriate teaching methods and interaction. Thus, they did not feel ready for teaching in terms of career development.

1.6. Online Learning Perceptions

Perceptions are as important as experiences, perceptions shape whether the experience will be negative or positive. If the participants of online education have positive feelings and thoughts about it, they will be more willing to prefer it and will spend more effort to show better performances (Lee et al., 2005). To prove this point, many studies related to online learning perceptions and experiences during the COVID-19 era could be given as concrete examples.

In terms of the emergency-remote teaching procedure, many pre-service teachers from different countries reflected their positive online learning perceptions. Prastikawati (2021) explored how English prospective teachers reflected on virtual assessment methods. According to their reflections, virtual methods helped student teachers practice their teaching skills more efficiently. That is, using ICT tools in the formative assessment process seems to have supported prospective teachers' professional future careers. Batmang et al. (2021) reported the Arabic teacher trainees' perceptions by considering their remote learning experiences. In conclusion, most students had the motivation to participate in online classes and acquire information but their limited digital skills, some technical issues and Internet connection problems externally affected their learning progress. Aprinastuti (2021) analyzed the responses of teacher candidates to reveal their perceptions and experiences of using an online application. The findings pointed out the fact that using an online application was a beneficial influence for reinforcing repetition with activities, including interesting and engaging materials, and presenting the information effectively. Another synchronous application, Microsoft Teams, was scrutinized in research by Almodaires et al. (2021) to evaluate its efficiency as a main online learning environment related to teacher candidates' points of view. In times of widespread disease, Teams displayed great assistance to the student teachers' professional and digital competencies as well as social skills. Thus, using effective synchronous software was positively perceived by teacher candidates. With the use of learning technologies, prospective teachers' perceptions were scrutinized by Naah (2020). The results showed that prospective teachers appreciated the advantages and opportunities of online learning mentioned as offering a diverse variety of learning materials, resources, assessment methods, receiving synchronous education in a home environment, and sincere interactions with peers and lecturers. Additionally, Laborada et al. (2020) examined the standpoints of pre-service language teachers on e-learning and constant technology use during the lockdown. They reported that pre-service teachers did not have sufficient technical

knowledge and computer skills but being able to regularly implement information technologies assisted prospective teachers to develop positive attitudes toward e-learning. Shinta & Aprilia (2020) discussed the perceptions of senior ELT teacher trainees on their online teaching internships. The trainees highlighted that despite the barriers encountered, they still value the online practices for broadening their perspectives on teaching and learning 21st-century skills. In terms of teacher education in Turkey, Öztürk (2021) aimed to find out whether asynchronous or synchronous virtual sessions were effective in learner achievement, social relationships and adaptability to the environment according to pre-service teachers' perceptions. As a result, student teachers showed better performances during synchronous sessions and they were more satisfied with their learning pace. Ersin et al. (2020) set out a study to explore the experiences of English teacher candidates related to their online practicums and how they perceived the process and outcomes considering the school closures. Most of the ELT student teachers stated that technical problems could be overcome with the right policies despite being a serious challenge. Instead of focusing on the challenges, a supportive and cooperative learning environment could easily be achieved in an online setting. Overall, high-level perceptions towards online training were inspected among English teacher candidates. Additionally, the investigation of Uçar & Yazıcı (2021) showed that pre-service English teachers considered ERT as a practical system when regular classes were not possible because of the quarantine. In a review, Kızıldağ & Tuncer (2022) observed a moderate level of perceptions towards virtual practicum experiences of prospective ELT teachers. Virtual platforms were reported to be able to replace the typical in-person settings in the future; thus, preparing student teachers could be a good start for a scenario like this.

As much as positive online learning perceptions were reported in some studies of the COVID-19 academic education period, negative evidence was also reported in other related studies. When Mishiwo et al. (2021) assessed the perceptions of teacher trainees in a Ghanaian university through their ERT practices, their perception level was below average. Even though most of the trainees believed in the urgency of online practices in a pandemic situation, they still preferred face-to-face sessions. In Colombia, Aguilar-Cruz & Medina (2021) studied with English teacher candidates based on their considerations of the e-learning system. Even if some teacher candidates acknowledged the necessity of technology in educational settings with or without pandemics, they still mentioned plenty of challenges that impacted their overall opinions such as internal factors (finding motivation, losing interest), technical problems, and Internet connection issues. In the background of Turkish faculties of

education, Önal & Özdemir (2021) investigated the virtual classroom environment that had to be created for teacher trainees because of the pandemic. According to trainees' responses, factors such as inadequate interactions between trainees and professors and digital incompetencies significantly decreased the perception levels of trainees. Prospective teachers' general mindset based on remote experiences was inspected by Balcı et al. (2020) in Turkey. The study showed rather low attitudes towards online learning practices. Learner performances, assessments, social interactions, and instructor scaffolding were not handled adequately on digital platforms. In an analysis of Güven & Uçar (2021), teacher candidates reflected how the quality of education and the lack of technological tools negatively affected their perceptions. Unfortunately, the practicum course that the final year student teacher took was not properly implemented. Instead, it was treated like a theoretical course.

CHAPTER 3

METHODOLOGY

1.1. Introduction

This thesis aims to compare the experiences and attitudes of English teacher candidates towards emergency-remote education that started to be implemented in Turkish universities in the spring of 2020 and continued until the 2021 fall semester due to the COVID-19 epidemic. The study will also look at the relationship between the student teachers' attitudes with other variables related to their background and perceptions of face-to-face education.

The second goal is to determine the readiness of the same participant group for online education in general after experiencing the emergency-remote education period, how good their technical opportunities were, and investigate the effect of these variables on participants' attitudes towards online education by determining their understanding.

1.2. Research Design

The study took place in the fall semester of the 2020-2021 academic year with the second, third, and fourth grades of pre-service English teachers. The permission for the study from the Ethics Committee of Bursa Uludağ University was obtained on the 2nd of March 2021 (See Appendix A). Because of the school closure and quarantine process in Turkey, the research was conducted via online platforms (Google Form, Whatsapp). It was planned to reach out to approximately sixty student teachers from each grade group to participate in the study.

Both quantitative and qualitative research methods were implemented in this research to bring a deeper and more thorough explanation of the participants' online learning experiences. That is, the study adopted mixed-methodology during the data collection and analysis phases. A mixed-method method is a way to analyze the case through various perspectives and a compilation of different techniques in social sciences (Creswell, 1999, p.460). Qualitative methods were specifically preferred as Hignett & McDermott (2015) explained that this method gives an understanding of individuals' background, thoughts and interpretation of a subject matter via words, it was essential to see the pre-service English teacher experiences and point of view of emergency-remote teaching.

Quantitative data were collected by using online questionnaires to elicit information on students' experiences and achievements in online teaching and face-to-face education. The study also looked into students' readiness for online instruction, and their perceptions of online education and compare. The study adopted a comparative stance to find out whether the findings would vary depending on the student teachers' study year in the programme, technical opportunities and thoughts. To collect data, four surveys alongside the consent form in the design of Google Forms were sent to the ELT student teachers on online platforms based on the voluntary response method, which necessitates choosing the participants in terms of the research's requirements (Murairwa, 2015).

In the second stage, student teachers studying in English language teaching departments at Turkish universities were asked to participate voluntarily in the semi-structured interview process via their emails that they included as a result of convenience sampling. That is, the participants were chosen according to their available times and voluntariness (Etikan et al., 2016). Ten students were selected from the 2nd, 3rd and 4th-grade groups. Those participants who agreed to talk to the researcher were called and interviewed on the phone. It was essential to gather their authentic responses; therefore, the individual interview method was applied (Gubrium & Holstein, 2002). The researcher formed the interview questions with the help of the thesis supervisor based on online learning experiences and perceptions. The elicited information by means of the interview protocols helps the researcher to gather a more detailed view of the thoughts of the participants (Glesne, 2016). The questions were asked to the participants in Turkish and they were asked to reply to them in Turkish. The researcher, then, translated the responses into English. The participants were informed about the aims of the thesis and their consent was taken for the recordings at the beginning of the interview. Each interview took nearly ten minutes. The voice recordings were transferred to a laptop, then, the researcher transcribed the recordings. The transcribed data was analyzed for repeated themes. Then, it was coded by taking student teachers' answers into consideration. Both qualitative and quantitative data were presented in the following chapter.

1.3 Participants

The researcher contacted university students studying in the English Language Teaching (ELT) department throughout Turkey at the time of data collection. As a result, 194 pre-service English teachers responded affirmatively. The participants were asked to provide bio-data. It is generally known that studying the field of English Language Teaching is more popular among females than males, so the gender distribution in our sample is not even. That is, 194 students, 148 (76,3%) students are female while 46 (23,7%) students are male. Their ages vary from 18 to 45. The sample group includes almost equal numbers of students from each year group in the course program. That is, 78 (40.8%) students were in the 2nd year, 51 (26.7%) students were in the 3rd year, and 62 (32.5%) were in the 4th year of the course program. The demographic table shows that 71 (36.8%) students are from metropolitan cities, 58 (30,1%) students are from middle-size cities, 53 (27.5%) students are from small cities, 4 (2.1%) students are from towns, and 7 (3.6%) students are from villages. (See Table 1)

Table 1

Information about Survey Participants

Descriptive Characteristics		**n**	**%**
Gender	Female	148	76.3
	Male	46	23.7
Ages	19	22	11.3
	20	41	21.1
	21	54	27.8
	22	30	15.5
	23	21	10.8
	24	9	4.6
	Over 25	17	8.7
Year	2nd Year	78	40.8
	3rd Year	53	27.5
	4th Year	63	33.2

The information about participants' gender, age and the year the participants in the course program is presented in Table 1. It can clearly be inferred that female students (76.3%) prefer to study ELT more than male students (23.7%). Most of the participants are aged 20

(21.1%), 21 (27.8%) and 22 (15.5%) at the time of data collection. Besides, the number of 2nd-year student teachers (40.8%) is higher than that of the 4th-years (%33.2) and that of the 3rd-years (27.5%). Both qualitative and quantitative data analyses will be presented comparatively according to the participants' years in the course program. In this sense, it is hypothesised that the 4th year participants who had most of their university education in the classroom are expected to behave differently in comparison to the participants, whereas, second-year and third-year students may have a different opinion about attending online classes in comparison to that of 4th-year students.

Table 2

Hometown of Participants

	City	n	%
Over 750.000	Bursa	46	23.1
	İzmir	20	10.4
	İstanbul	16	8.7
	Ankara	9	4.6
	Hatay	8	4.2
	Mersin	7	3.7
	Aydın	6	3.1
	Balıkesir	6	3.1
	Denizli	5	2.5
	Manisa	5	2.5
	Diyarbakır	4	2.1
	Tekirdağ	4	2.1
	Antalya	3	1.5
	Kocaeli	3	1.5
	Konya	3	1.5
	Mardin	3	1.5
	Şanlıurfa	3	1.5
	Samsun	2	1
	Adana	2	1
	Kayseri	2	1
	Gaziantep	2	1

	Muğla	2	1
	Ordu	2	1
	Eskişehir	1	0.5
	Kahramanmaraş	1	0.5
	Malatya	1	0.5
Less than 750.000	Çanakkale	5	2.5
	Afyonkarahisar	3	1.5
	Elazığ	2	1
	Kütahya	2	1
Small cities represented with 1 participant		13	6.7
Abroad	Köln	2	1
	Girne	1	0.5
Settlement	Metropolitan City	71	36.8
	City Center	58	30.1
	Town	57	29.6
	Village	7	3.6

The city and settlement information of the participants are presented in Table 2. Settlement areas are ranged from the most populated to less populated. Firstly, the participants are mainly from metropolitan cities (with a population of over 750.000). That is, 46 students are from Bursa (23.1%), 20 students are from İzmir (10.4%), and 16 students are from İstanbul (8.7%). Secondly, 30% of the rest of the sample group is from cities with a population of less than 750,000. For example, 5 students are from Çanakkale (2.5%), 3 students are from Afyonkarahisar (1.5%), 2 students are from Elazığ (1%) and 2 students are from Kütahya (1%). Thirdly, almost 30% of the participants are from small towns such as 4 students are from Nazilli (in Aydın) (2.5%), 13 students (6.7%) are from cities represented with 1 participant (Batman, Sivas, Osmaniye, Çorum, Giresun, Isparta, Düzce, Kastamonu, Kırklareli, Niğde, Hakkari, Iğdır, Tunceli). Finally, 3.6% of the group is from villages. In addition, 3 students attended the study from foreign cities. 2 students are from Köln (1%) and 1 student is from Girne (0.5%). In summary, the participants accessed emergency-remote teaching mostly from metropolitan cities (38.8%), city centres (30.1%) and towns (27.5%). The table shows that our participants come from a wide variety of geographical locations,

which appears to indicate that our sample can be said to represent university students in Turkey.

The study hypothesises that the location of students may have an impact on the quality of internet connection and the number of digital gadgets.

Table 3

Information about the Participants who took part in the Interview

Descriptive Characteristics		**n**	**%**
Gender	Female	23	76.6
	Male	7	23.3
Ages	19	4	13.3
	20	7	23.3
	21	9	27.8
	22	4	13.3
	23	6	19.9
Grades	2nd Year	10	33.3
	3rd Year	10	33.3
	4th Year	10	33.3
Settlement	Metropolitan City	21	69.9
	City Center	5	16.6
	District	4	13.3

1.4. Data Collection Instruments

This study used both qualitative and quantitative methods to collect data and answer the research questions. For quantitative data, a total of five surveys, including a bio-data questionnaire and four different surveys with a Likert scale were uploaded to online platforms. The participants were first asked to fill in the personal data survey, items to collect demographic information (gender, age, year, city of residence, place of residence) and the questions related to past experiences and readiness for online education were included.

The second survey aimed to collect data on the experiences, achievements and satisfaction levels of the students in the English language teaching department in the online learning process, and the third survey aimed to collect data on the pre-service teachers' experiences in both online and face-to-face education, the fourth survey aimed to collect data on the pre-service teachers' readiness levels for online learning, and the fifth survey elicited information on the prospective teachers' online learning perceptions. Scales were distributed to students in their original (English) versions. The following sections will provide detailed information about these surveys.

1.4.1. Online Learning Experiences Scale

With the permission of the researchers, the Online Learning Experiences Scale was borrowed from the study of Paechter & Maier (2010) “Online or face-to-face? Students' experiences and preferences in e-learning” (see Appendix B). This scale included 26 items having both positive and negative statements about online experiences with a six-point Likert scale (from 1 “Completely Disagree” to 6 “Completely Agree”); however, no factor analysis has been conducted for the items of the original scale. Thus, the present study performed exploratory factor analysis on the scale. As a result, 6 dimensions were found and 2 items were excluded from the study. In this study, Cronbach's alpha was calculated to be .896.

In order to observe the applicability of the scales on the sample group and the factors, The Kaiser Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were conducted. After, it was applied to Exploratory Factor Analysis (EFA) to reveal the construct validity of both scales of the online learning experiences and the comparison of online and face-to-face teaching. While indicating the factors, Principal Component Analysis and Direct Oblimin rotation methods were regulated.

However, as they did not comply with the structure of the scale of Students’ Experiences on Online Teaching, two items were disregarded from the analysis displayed in Table 4.

Table 4

Items that were disregarded from the scale of Students' Experiences on Online Teaching

Item Number	
1	The course itself and the learning material are clear and well structured.
2	The learning environment is easy to handle.

In Table 5, the analysis concerning the structure is shown with the 6 dimensions and 25 items of the scale of Students' Experiences on Online Teaching.

Table 5

Exploratory Factor Analysis Findings of the Scale of Students' Experiences in Online Teaching

Kaiser-Meyer-Olkin (KMO)	**Sampling Adequacy Criterion**	0.872
Bartlett's Test of Sphericity	Approximate chi-square value	2846,831
	Degrees of Freedom	276
	Significance	0.000
Total variance explained (%)		%71.219
Item		**Factor Loading**
1. My tutor gives fast feedback via e-mail, chat, newsgroups and/or other communication facilities.		0.972
2. I acquire skills in using the internet for scientific work routines (e.g., online research).		0.932
3. My tutor supports and counsels me with regard to my learning processes.		0.885
4. I decide on my own at what times and where I am learning (e.g., at the university, at home).		0.875
5. I acquire skills in communication with media.		0.865
6. The online communication tools facilitate establishing new contact with other students.		0.864

7. I can decide on my own about the pace of learning and the use of learning strategies.	0.846
8. There are ample opportunities in the course to establish personal contact with other participants.	0.833
9. My tutor has a high expertise in the implementation of e-learning courses.	0.827
10. Due to the online communication in the course personal relations are neglected.	0.820
11. The course is demanding with regard to the organizational and temporal effort.	0.817
12. When I need advice from my tutor, I can easily get in contact with her/him via e-mail, chat, forum etc.	0.798
13. I miss the personal contact with my tutor.	0.784
14. I often have to deal with technical problems (e.g., errors of the software, slow access to the internet).	0.770
15. I acquire skills in the self-regulation of learning.	0.713
16. I find it difficult to motivate myself and to maintain learning motivation in the course.	0.666
17. I learn to apply my knowledge to different problems.	0.657
18. I can easily and fast exchange knowledge with other course participants via e-mail, chat, newsgroups etc.	0.628
19. Learning in groups and cooperation with other learners are fostered in the course (e.g., by group activities, discussions etc.).	0.620
20. The communication with media complicates group work.	0.613
21. I acquire (conceptual) knowledge in the subject matter of the course.	0.562
22. The learning environment offers the possibility to control my increase in knowledge (e.g., via tests).	0.555
23. The learning environment offers e-mail, chat, newsgroups and/or other communication facilities for the interaction with other course participants.	0.512
24. Overall satisfaction	0.469

As presented in table 5, it was revealed that the KMO sampling adequacy criterion was found to be 0.872 and Bartlett's test of Sphericity value was 2846,831; $p = 0.000$ being

suitable for the factor analysis for this scale (Kaiser & Rice, 1974). The total variance was also found as %71.219. The factor loadings of the items in the scale varied between 0.972-0.469. (See Table 5)

1.4.2. Comparisons of Online and Face-to-face Teaching Scale

This scale was adopted from the same study by Paechter & Maier (2010) "Online or face-to-face? Students' experiences and preferences in e-learning" (See Appendix C). This 19-item questionnaire has a six-point scale from "better in online teaching" valued as "-3", "good in online teaching" valued as "-2", "slightly good in online teaching" valued as "-1" and "better in face-to-face teaching" valued as "3", "good in face-to-face teaching" valued as "2", "slightly good in face-to-face teaching" valued as "1". The English version of this survey was uploaded as a Google Form. The results from this scale were estimated to be reliable (Cronbach's Alpha: .947).

In terms of the scale of Comparisons of Online and Face-to-face teaching, the analysis can be seen in Table 6 displaying the 5 dimensions and 19 items.

Table 6

Exploratory Factor Analysis Findings of the Scale of Comparisons of Online and Face-to-face teaching

Kaiser-Meyer-Olkin (KMO)	**Sampling Adequacy Criterion**	0.931
Bartlett's Test of Sphericity	Approximate chi-square value	2760.778
	Degrees of Freedom	171
	Significance	0.000
Total variance explained (%)		%76.888
Item		**Factor Loading**
1. Favorable cost-benefit ratio of effort and learning outcomes.		0.913
2. Fast feedback from the tutor		0.868
3. Possibility to establish personal contact with the tutor.		0.857
4. Flexibility of learning with regard to time and place.		0.824
5. Counseling and support of learning by the tutor.		0.822
6. Acquisition of skills in the application of one's knowledge and of using one's knowledge in practice.		0.794

7. Easy and fast accessibility to the tutor.	0.793
8. Opportunities for monitoring one's learning outcomes.	0.788
9. Clarity and explicit structuring of the course and learning contents.	0.775
10. Flexibility with regard to about learning strategies and pace of learning.	0.756
11. Acquisition of skills in communication and cooperation.	0.755
12. Easy and fast exchange of information and knowledge with other course participants.	0.731
13. Support of cooperative learning and group work with other course participants.	0.729
14. Support for maintaining learning motivation.	0.719
15. Acquisition of skills in scientific work procedures.	0.697
16. Acquisition of skills in self-regulated learning	0.655
17. Opportunities for exercising and applying one's knowledge.	0.650
18. Acquisition of conceptual knowledge in the subject matter.	0.600
19. Possibility to establish positive social relations with other course participants.	0.593

The KMO sampling adequacy criterion was measured as 0.931 and Bartlett's test of Sphericity value as 2760,778; p = 0.000 alongside the total variance as %76.888. These results make the scale applicable for the factor analysis. Additionally, the factor loadings of the items in the scale ranged from 0.913 to 0.593.

1.4.3. Online Learning Readiness Scale (OLRS)

Online Learning Readiness Scale (OLRS) was used with the permission of one of the corresponding authors who published the article "Learner readiness for online learning: Scale development and student perceptions" (Hung et al., 2010) (See Appendix D) to be able to see pre-service English teachers' readiness levels for online learning. It was a five-point Likert scale with 18 items having five factors (computer/ Internet self-efficacy, self-directed learning, learner control, motivation for learning, and online communication self-efficacy). Having conducted the reliability analysis, the value was found as .817. The English version was delivered to students via Google Form.

When Wei & Chou (2020) conducted the confirmatory factor analysis, it was revealed the model was "$\chi 2/df = 3.37$" signifying the possibility of the acceptable fit of the model. Aside from that, the other ratio in order to obtain a suitable measurement for the structure were "root-mean-square of approximation (RMSEA) = .082, comparative fit index (CFI) = .894, and standardized root mean- square residual (SRMR) = .065" (p.10). According to the results of the model, the composite reliabilities (CR) varied between "0.697 and 0.849" (p.11) while the average variance extracted (AVE) was between "0.443 and 0.653" (p.11). These findings display "an adequate internal consistency of the measurement model" and acceptable convergent validity (Bagozzi & Phillips, 1988).

1.4.4. Online Learning Perception Scale (OLPS)

Online Learning Perceptions Scale (OLPS) by Wei and Chou (2020) "Online learning performance and satisfaction: do perceptions and readiness matter?" (See Appendix E) is used in this study with the permission of the relevant author to determine the perceptions of the college students of the ELT department. It includes 23 items with a five-point Likert scale. Here, overall scale scores show whether the participants have affirmative perceptions towards online learning or reversed.

The reliability analysis was conducted on this scale and the result was found to be .947. For the validity, according to the original research, an exploratory factor analysis (EFA) was conducted to uncover the construct validity by implementing a Promax Oblimin rotation and the scale was suitable for factor distributions. As a result, five factors emerged: accessibility, interactivity, adaptability, knowledge acquisition, and ease of loading (Wei & Chou, 2020).

Table 7

Scales Calculated by the Author of the Present Study

Variable	Mean	STD	Min	Max	Kurtosis	Skewness	Cronbach's Alpha
Online Learning Experiences	3.94	.80	1.31	5.50	.648	-.829	.896
Comparison of Online and Face-to-Face Teaching	-0.86	1.62	-3.00	3.00	-.596	.590	.947
Online Learning Readiness	3.37	.61	1.33	4.61	.527	-.746	.817
Online Learning Perceptions	2.94	.83	1.22	5.00	-.561	.032	.947

In Table 7, the normality analysis of research scales is given. The results show that the average of the "Online Learning Experience Scale" was 3.94 ± 0.80; the average of the "Comparisons of Online and Face-to-face Teaching Scale" was -0.86 ± 1.62; the average of the "Online Learning Readiness Scale" was 3.37 ± 0.61, and the average of "Online Learning Perceptions Scale" was 2.94 ± 0.83. Also, skewness and kurtosis values were measured; subsequently, the data was distributed normally. Finally, evaluating Cronbach's value revealed their reliability.

1.5. Data Analysis Process

The quantitative data were analyzed by using the SPSS 24 statistical program. First of all, to measure the validity of the scales the "Online Learning Experiences Scale" and "Comparisons of Online and Face-to-face Teaching Scale", exploratory factor analysis (EFA) was conducted. For the scales "Online Learning Readiness Scale" and "Online Learning Perceptions Scale", both EFA and CFA (Confirmatory Factor Analysis) had already been conducted in their original articles. To be able to implement EFA, the Kaiser-Meyer-Olkin Coefficient and Bartlett's Test of Sphericity were measured; as a result, the KMO value turned out to be more than 0.500 and Bartlett's test of Sphericity lower than 0.05, the

analyses were applicable (Büyüköztürk, 2017). The Cronbach's Alpha coefficient was also estimated on each scale to show reliability and the high values indicate the scales are reliable (Büyüköztürk et al., 2012). As to observe whether the data were distributed normally, skewness and kurtosis values were measured between -1.5 and +1.5, making the data to be normally distributed (Tabachnick & Fidell, 2013).

To give information about the sample group, tables demonstrated number, percentage, mean, and standard deviation values. By using descriptive statistics in SPSS, the mean values of the quantitative data by means of the four scales were calculated. A one-way ANOVA analysis was used to compare the results within grades, technical facilities, hardware and software used by students. Independent samples *t*-test analyzed student teachers' acquired online learning experience, certificate/education and internet connection status according to their readiness levels. In addition, the researcher evaluated Cohen's d to demonstrate the effect size. The findings of how much online learning perspectives affect the readiness results were provided by regression analysis. The qualitative data was collected through semi-structured interviews (See Appendix F). Interview questions were prepared by the researcher and the thesis supervisor in order to complete the framework in terms of student teachers' ERT experiences and perceptions. The interview data were analyzed by using thematic content analysis through transcription and coding (Burnard, 1991). In order to present the themes, a flow chart was designed which was similar to the one in the study of Fidan & Karatepe (2021). Chapter 4 will present the findings of the study in detail.

CHAPTER 4

RESULTS OF THE DATA ANALYSIS

In this chapter, the results of the data analysis and answers to each research question will be presented based on the qualitative and quantitative data analyses.

1.1. Research Question 1

First of all, the analysis focused on the research question: *"To what extent do pre-service English teachers evaluate their experiences after experiencing the 2019-2020 spring semester and 2020-2021 fall semester emergency-remote teaching periods?"*. To shed light on the experiences of pre-service English teachers, this study first conveyed descriptive statistics for the Students' Experiences on Online Teaching Scale.

Table 8

Descriptive Findings of Participants' Experiences on Online Teaching

Item	Mean	STD
Course Design		
1. The learning environment offers e-mail, chat, newsgroups and/or other communication facilities for the interaction with other course participants.	4.41	1.24
2. I often have to deal with technical problems (e.g., errors of the software, slow access to the internet).	3.91	1.62
3. The course is demanding with regard to the organizational and temporal effort.	3.94	1.27
Interaction with the Tutor		
4. When I need advice from my tutor, I can easily get in contact with her/him via e-mail, chat, forum etc.	4.06	1.59
5. My tutor has a high expertise in the implementation of e-learning courses.	3.65	1.48
6. My tutor gives fast feedback via e-mail, chat, newsgroups and/or other communication facilities.	3.85	1.53
7. My tutor supports and counsels me with regard to my learning processes.	3.67	1.54

Interaction with Peer Students		
8. I can easily and fast exchange knowledge with other course participants via e-mail, chat, newsgroups etc.	4.03	1.46
9. There are ample opportunities in the course to establish personal contact with other participants.	3.52	1.39
10. The online communication tools facilitate establishing new contact with other students.	3.47	1.53
11. Learning in groups and cooperation with other learners are fostered in the course (e.g., by group activities, discussions etc.).	3.50	1.52
Individual Learning Processes		
12. I decide on my own at what times and where I am learning (e.g., at the university, at home).	4.05	1.67
13. I can decide on my own about the pace of learning and the use of learning strategies.	4.09	1.65
14. The learning environment offers the possibility to control my increase in knowledge (e.g., via tests).	3.67	1.56
Learning Obstacles		
15. I miss the personal contact with my tutor.	4.57	1.65
16. Due to the online communication in the course personal relations are neglected.	4.56	1.42
17. I find it difficult to motivate myself and to maintain learning motivation in the course.	4.43	1.59
18. The communication with media complicates group work.	3.92	1.47
Learning Outcomes		
19. I acquire (conceptual) knowledge in the subject matter of the course.	3.89	1.27
20. I learn to apply my knowledge to different problems.	3.79	1.36
21. I acquire skills in the self-regulation of learning.	4.16	1.33
22. I acquire skills in using the internet for scientific work routines (e.g., online research).	4.48	1.32
23. I acquire skills in communication with media.	4.34	1.36

24. Overall satisfaction	3.17	1.38

Table 8 presents the findings obtained from the Experiences and Preferences of the Online Teaching Scale. The highest score in the course design factor was item 1 “Learning environment offering e-mail, chat, newsgroups and/or other communication facilities for interaction with other course participants” (M: 4.41 ± 1.24). However, item 3 “The course is demanding with regard to the organizational and temporal effort” (M: 3.94 ± 1.27) has the lowest mean in the same factor. In the dimension of the interaction with the tutor, item 4 “When I need advice from my tutor, I can easily get in contact with her/him via e-mail, chat, forum etc." has the highest mean (M: 4.06 ± 1.59) whereas the item 5 “My tutor has a high expertise in the implementation of e-learning courses.” has the lowest average (M: 3.65 ± 1.48). Third-factor “Interaction with peer students” reveals that in item 8 “I can easily and fast exchange knowledge with other course participants via e-mail, chat, newsgroups etc.” the highest mean (M: 4.03 ± 1.46) is observed; while in item 10 “The online communication tools facilitate establishing new contact with other students.” the lowest average could be seen (M: 3.47 ± 1.53). The dimension of individual learning processes shows that item 13 “I can decide on my own about the pace of learning and the use of learning strategies.” has the highest average (M: 4.09 ± 1.65) while item 14 “The learning environment offers the possibility to control my increase in knowledge (e.g., via tests).” has the lowest one (M: 3.67 ± 1.56). In the factor of learning obstacles, item 15 “I miss the personal contact with my tutor.” has the highest mean signifying a negative effect (M: 4.57 ± 1.65) as item 18 “The communication with media complicates group work.” has the lowest one (M: 3.92 ± 1.47). Finally, item 22 “I acquire skills in using the internet for scientific work routines (e.g., online research). (M: 4.48 ± 1.32)” has the highest average in terms of the dimension of learning outcomes although item 20 “I learn to apply my knowledge to different problems.” possesses the lowest one in the same dimension (M: 3.79 ± 1.36). The overall mean of the scale was found to be 3.91 which showed a moderate level.

In order to differentiate the findings within grades, the One-way ANOVA technique was utilized in this research.

Table 9

ANOVA Findings According to the Year of Participants in terms of their Online Learning Experiences

	Year	N	Mean	std	f	p
Course design	2nd Year	78	4.04	1.00	0.157	0.855
	3rd Year	53	4.12	1.19		
	4th Year	63	4.13	0.98		
Interaction with the tutor	2nd Year	78	3.82	1.40	1.648	0.195
	3rd Year	53	3.55	1.44		
	4th Year	63	4.01	1.17		
Interaction with peer students	2nd Year	78	3.45	1.25	1.903	0.152
	3rd Year	53	3.64	1.26		
	4th Year	63	3.85	1.11		
Individual learning processes	2nd Year	78	3.61	1.49	5.226	0.006
	3rd Year	53	3.88	1.59		
	4th Year	63	4.39	1.21		
Learning Obstacles	2nd Year	78	3.72	1.01	4.733	0.010
	3rd Year	53	3.99	1.18		
	4th Year	63	4.27	1.02		
Learning outcomes	2nd Year	78	3.73	1.07	4.805	0.009
	3rd Year	53	4.00	1.21		
	4th Year	63	4.31	1.04		

According to the results shown in Table 9, there is not a significant distinction between grades and the sub-factor of course design, interaction with the tutor and interaction with peer students. However, an important difference has been found in “Individual learning processes”, “Learning obstacles” and “Learning outcomes” factors ($p < 0.05$):

√ In the sub-dimension of “Individual learning processes”, the students in “4th year ” (M: 4.39 ± 1.21) and “3rd year” (M: 3.88 ± 1.59) have higher averages compared to the students in “2nd year” (M: 3.61 ± 1.49).

√ In the “Learning obstacles” factor, the students in “4th year” (M: 4.27 ± 1.02) and “3rd year” (M: 3.99 ± 1.18) obtained higher means contrary to the students in “2nd year” (M: 3.72 ± 1.01).

√ In the “Learning outcomes” factor, the students in “4th year” (M: 4.31 ± 1.04) and “3rd year” (M: 4.00 ± 1.04) have higher averages while the students in “2nd year” (M: 3.61 ± 1.49) has the lowest mean.

1.2. Research Question 2

In order to find an answer to the research question *“When the pre-pandemic face-to-face education and training processes of pre-service English teachers are compared with the emergency-remote teaching processes of the 2019-2020 spring semester and 2020-2021 fall semester, is there a significant difference in the interactions, achievements and experiences of the students?”,* the descriptive results of the comparison scale were presented in Table 10.

Table 10

Descriptive Findings of Participants’ Comparisons of Online and Face-to-face Teaching

Items	Mean	STD
Course design		
1. Clarity and explicit structuring of the course and learning contents.	-1.24	2.18
2. Favorable cost-benefit ratio of effort and learning outcomes.	-0.60	2.39
Interaction with the tutor		
3. Fast feedback from the tutor	-0.95	2.29
4. Counseling and support of learning by the tutor.	-1.40	2.10
5. Possibility to establish personal contact with the tutor.	-1.14	2.26
Interaction with peer students		
6. Easy and fast accessibility to the tutor.	-0.45	2.40

7. Easy and fast exchange of information and knowledge with other course participants.	-0.73	2.40
8. Support of cooperative learning and group work with other course participants.	-1.25	2.20
9. Possibility to establish positive social relations with other course participants.	-1.57	2.03
Individual learning processes		
10. Flexibility of learning with regard to time and place.	1.19	2.25
11. Flexibility with regard to about learning strategies and pace of learning.	0.46	2.46
Learning outcomes		
12. Opportunities for exercising and applying one's knowledge.	-0.64	2.44
13. Opportunities for monitoring one's learning outcomes.	-1.05	2.29
14. Support for maintaining learning motivation.	-1.34	2.16
15. Acquisition of skills in scientific work procedures.	-0.91	2.35
16. Acquisition of conceptual knowledge in the subject matter.	-1.28	2.18
17. Acquisition of skills in the application of one's knowledge and of using one's knowledge in practice.	-1.38	2.16
18. Acquisition of skills in communication and cooperation.	-1.55	2.06
19. Acquisition of skills in self-regulated learning	-0.52	2.46

In Table 10, the descriptive statistics regarding students' preferences for either face-to-face teaching or online teaching are presented. In the course design dimension, item 1 "Clarity and explicit structuring of the course and learning contents" (M: -1.24 ± 2.18), item 9 "Possibility to establish positive social relations with other course participants " (M: -1.57 ± 2.03), and item 4 "Counselling and support of learning by the tutor" (M: -1.40 ± 2.10) in the factor of interaction with the tutor; item 14 "Support for maintaining learning motivation" (M: -1.34 ± 2.16) and item 18 "Acquisition of skills in communication and cooperation" (M: -1.55 ± 2.06) in the dimension of learning outcomes have the highest averages indicated as "almost good in face-face teaching" according to the scale. However, only two items (item 10

and item 11) existed in the factor of the individual learning process, “Flexibility of learning with regard to time and place” (M: 1.19 ± 2.25) and “Flexibility with regard to learning strategies and pace of learning” (M: 0.49 ± 2.46), reveal that they are slightly good in online teaching. When the mean of all the items is assessed, it seems that ELT teacher candidates think face-to-face teaching is almost good (M: -0.86).

To be able to see the differences between grades in terms of their comparisons of online and face-to-face teaching, one-way ANOVA was used in this analysis.

Table 11

ANOVA Findings of the impact of the Participants' years on their preference for Online and Face-to-face teaching

	Year	N	Mean	Std	f	p
Course Design	2nd Year	78	-1.26	1.95	1.977	0.141
	3rd Year	53	-0.78	2.16		
	4th Year	63	-0.61	2.04		
Interaction with the Tutor	2nd Year	78	-1.01	1.93	2.182	0.116
	3rd Year	53	-1.39	1.72		
	4th Year	63	-0.63	2.12		
Interaction with Peer Students	2nd Year	78	-1.37	1.89	0.618	0.540
	3rd Year	53	-1.05	1.92		
	4th Year	63	-1.06	2.00		
Individual Learning Processes	2nd Year	78	0.37	2.20	3.040	0.050
	2nd Year	53	1.09	2.11		
	4th Year	63	1.17	2.05		
Learning Outcomes	2nd Year	78	-1.30	1.88	0.815	0.444
	3rd Year	53	-0.96	1.90		
	4th Year	63	-0.93	1.92		

Table 11 shows that statistical analysis indicates that the year students in does not play an important role in determining their preference for either online or face-to-face teaching. However, a meaningful difference was observed (p=0.05) in the “Individual Learning Processes” factor.

1.2.1. Qualitative (Interview) Data

The analysis of the interview data collected from 30 ELT teacher candidates revealed repeated themes. These themes were determined based on what the participants said in the interview. They were formed into three titles: strengths, weaknesses and moderate aspects. (See Figure 1)

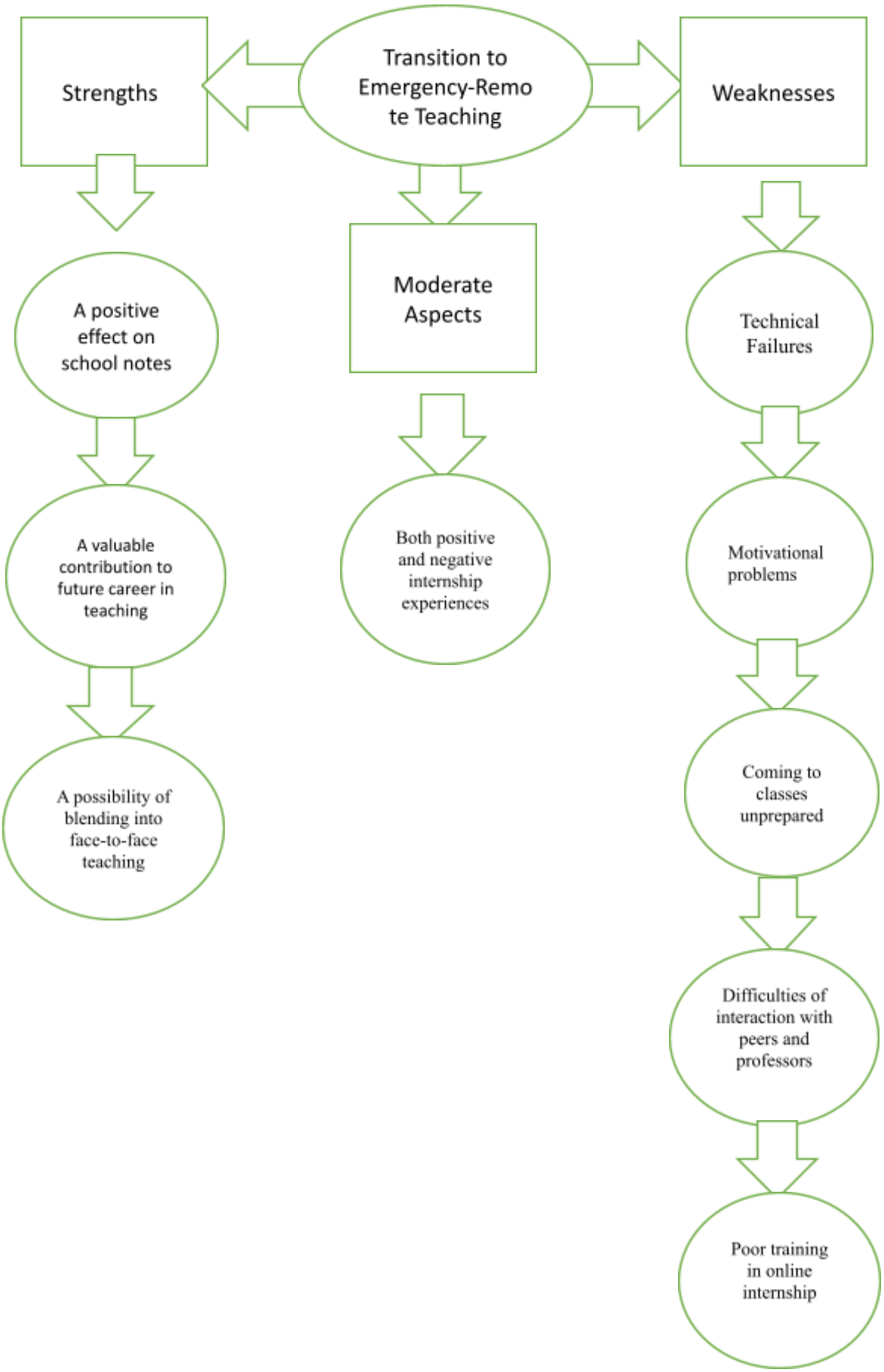

Figure 1. *Themes and Sections of Qualitative Data Analysis*

1.2.1.1. Strengths

Out of 8 questions about the transition to emergency-remote teaching, ELT teacher trainees answered three questions positively in the interview. The questions were about emergency-remote teaching having a positive or negative effect on exam grades at the end of the term, being a valuable contribution to a future career as a teacher and the possibility of online teaching replacing face-to-face teaching. Their answers were categorized as the strengths of emergency-remote teaching.

Table 12

The Perspectives of Pre-service ELT Teachers on the Strengths of Emergency-Remote Teaching

Categories	Interview Expressions	Year	N
A positive effect on school notes	*"Because of the homework-based system, it was easier to get higher grades on homework instead of exams…."*	2nd Year	8
		3rd Year	6
		4th Year	7
A valuable contribution to future career	"*As I gained a better understanding on how online teaching affected K-12 students' lives, this experience will contribute to my teaching career greatly…"*	2nd Year	10
		3rd Year	10
		4th Year	10
A possibility of blending into face-to-face	*"It won't replace face-to-face teaching. There are motivational problems, internet connection problems and technical problems. If it does, the* education *quality of education will decrease more and more..."*	2nd Year	5
	"Online teaching should be in our lives. Face-to-face teaching and online teaching can be blended. In courses where we do microteaching, face-to-face is advantageous whereas online teaching can save time in theoretical courses and we can access a lot of resources on online platforms..."	3rd Year	5
		4th Year	5

For the first category, English teacher candidates were asked whether they got higher grades during emergency-remote teaching. Most of them reflected that compared to face-to-face teaching, accessing education remotely helped them get higher grades. Some lecturers preferred a homework-based system which is more flexible instead of online exams. Even though other tutors still chose online exams, they asked easy questions which led to higher grades.

In the second category, all of the interviewees agreed on the value of online education in their future teaching careers. Some of the candidates commented that learning to use Web 2.0 tools will be beneficial for use inside and outside of the classroom. They also reflected that they were able to manage problems that might occur during online teaching and create better solutions in the future.

In addition, in the question related to the possibility of online education replacing face-to-face teaching, several oppositions appeared, especially among 2nd graders. Most of the 2nd graders believed that face-to-face teaching could not be replaced with online teaching due to the factors such as motivational problems, internet connection problems, other technical problems, and interactional problems. However, most of the 3rd-year and 4th-year student teachers pointed out the fact that if online teaching and face-to-face education are blended, it would be time-saving, effective, and resourceful for both students and teachers.

1.2.1.2. Moderate Aspects

Pre-service ELT teachers replied to one question related to 4th-year students experiencing positive or negative outcomes during and after the internship in the online platforms moderately. Therefore, a second theme was introduced as a moderate aspect.

Table 13

The Perspectives of Pre-service ELT Teachers on the Moderate Aspects of Emergency-Remote Teaching

Categories	Interview Expressions	Year	N
Both positive and negative internship experiences	*"Online teaching had positive and negative aspects. In this process, we used Web 2.0 tools a lot for our future career, we had experience with them; the negative side was that we could not get real teaching experience, we could not observe teacher-student interaction in a real classroom environment. Because I did not see the students while teaching, I couldn't see their facial expressions, the way they spoke…"*	4th Year	5

Most of the 4th-grade participants mentioned both positive and negative teaching practice experiences. Among them, saving time, practical advantages of using Web 2.0 tools, using different and contemporary techniques instead of traditional ones, and overcoming time and place constraints were stated as advantages of experiencing online teaching during their practicum. However, senior participants stated that face-to-face teaching provided more opportunities to have classroom interaction, and fewer technical problems, but it could not completely replace the experience that they could have had if they had the chance to teach face-to-face.

1.2.1.3. Weaknesses

The answers to the last four questions revealed five themes under the title of weaknesses because most of the ELT teacher trainees gave negative responses to the questions about student teachers' experiencing technical issues and motivational problems during ERT, interaction with peers and professors during ERT compared to face-to-face teaching, being more well-prepared for the classes during ERT, and the procedure of the online teaching practicum.

Table 14

The Perspectives of Pre-service ELT Teachers on the Weaknesses of Emergency-Remote Teaching

Categories	Interview Expressions	Year	N
Technical Failures	*"I had a lot of problems during this process. I had no knowledge of how to deal with technology, so my motivation decreased gradually as we were having online education for the last three terms..."*	2nd Year	6
		3rd Year	6
		4th Year	5
Motivational problems	"*Going through this process was really troublesome in this process. I didn't have any idea what to do, there was uncertainty. I didn't have many technical issues, but I was affected negatively. I had a hard time motivating myself during the semester..."*	2nd Year	9
		3rd Year	8
		4th Year	9
Coming to classes unprepared	*"I don't think I was well-prepared for the classes throughout the term. Since I was home all the time, there was no reason for me to be prepared. I participated in the lessons mostly in bed, so…"*	2nd Year	6
		3rd Year	9
		4th Year	5
Difficulties of interaction with the peers and professors	*"In comparison to what we had in the past, even if the professors checked their emails more than they used to, we still had limited interaction as they did not get to know us in the lessons. Likewise, with the students, we could not communicate properly except for compulsory group work. Since our communication was asynchronous, it was harder..."*	2nd Year	7
		3rd Year	4
		4th Year	4

The first and second categories were developed according to most of the ELT teacher trainees emphasizing their technical issues and motivational problems during ERT. Some students claimed they had to buy new electronic tools to access education. Others summarized their issues as internet connection problems, software and hardware problems, and microphone and camera problems. These issues had affected students' motivation. The transition to online education was not easy for almost all of the teacher trainees according to

their reflections. Alongside the uncertainty on further process, social isolation and anxiety about the COVID-19 disease caused more demotivation among student teachers.

The third category was related to how well prepared they were when teacher candidates joined online classes. It appears that most of them did not have any preparation before classes during ERT. Some of the teacher candidates reported a lack of motivation for any preparation in advance as they were able to access most of the class recordings and documents. The fourth category emerged from what the interviewees said about how difficult it was to interact with their peers and professors during ERT in comparison to that face-to-face teaching. Some of the candidates mentioned that the integrity of the classes was disrupted due to ineffective communication. Online platforms limited the amount of interaction even when some lecturers tried to facilitate communication via other electronic means such as e-mail, Whatsapp, phone calls etc. Unstable internet connection and microphone and camera issues made it more difficult to interact with classmates and professors.

The last category was based on the question about the procedure of an online internship. Senior students noted that they got their internship through EBA which is an online synchronous platform established by the Ministry of National Education of Turkey to continue primary, secondary and high school education. However, nearly all of the final year participants reported that they were dissatisfied with the quality of teaching practicum. They highlighted the difficulties of having been dealing with an unfamiliar system, technical issues, inattentive K-12 students, limited classroom interaction and problems with class management.

1.3. Research Question 3

Thirdly, descriptive results of the Online Learning Readiness Scale (OLRS) were explained to answer the research question: *"To what extent were the English teacher candidates ready for the emergency-remote education (online education) that started as of March 2020?"*

As a first step, in order to demonstrate the readiness of student English teachers for emergency-remote teaching, descriptive statistics were used for this analysis. Secondly, the ANOVA technique was applied to find out differences between grades in terms of their readiness levels for online teaching.

Table 15

Descriptive statistics of OLRS (Online Learning Readiness Scale)

Items	Mean	STD
Computer/Internet self-efficacy		
1. I feel confident in performing the basic functions of Microsoft Office programs. (MS Word, MS Excel, and MS PowerPoint).	3.49	1.24
2. I feel confident in my knowledge and skills of how to manage software for online learning.	3.44	1.23
3. I feel confident in using the Internet (Google, Yahoo) to find or gather information for online learning.	3.65	1.34
Self-directed learning		
4. I carry out my own study plan.	3.53	1.23
5. I seek assistance when facing learning problems.	3.28	1.12
6. I manage time well.	3.06	1.22
7. I set up my learning goals.	3.30	1.24
8. I have higher expectations for my learning performance.	3.38	1.29
Learner control		
9. I can direct my own learning progress.	3.41	1.16
10. I am not distracted by other online activities when learning online (instant messages, Internet surfing).	3.49	1.29
11. I repeated the online instructional materials on the basis of my needs.	3.35	1.26
Motivation for learning		
12. I am open to new ideas.	3.12	1.24
13. I have motivation to learn.	3.29	1.28
14. I improve from my mistakes.	3.26	1.18
15. I like to share my ideas with others.	3.32	1.35
Online communication self-efficacy		
16. I feel confident in using online tools (email, discussion) to effectively communicate with others.	3.13	1.25
17. I feel confident in expressing myself (emotions and humor) through text.	3.52	1.32
18. I feel confident in posting questions in online discussions.	3.60	1.13

The findings in Table 15 show that item 3 “I feel confident in using the Internet (Google, Yahoo) to find or gather information for online learning.” belonging to the

computer/Internet self-efficacy dimension had the highest mean score (M: 3.65 ± 1.34) whereas item 2 “I feel confident in my knowledge and skills of how to manage software for online learning.” statement had the lowest one (M: 3.44 ± 1.23). In the self-directed learning dimension, item 4 “I carry out my own study plan.” item had the highest score (M: 3.53 ± 1.23) while item 6 “I manage time well.” had the lowest average score (M: 3.06 ± 1.22). In the learner control dimension, item 10 “I am not distracted by other online activities when learning online (instant messages, Internet surfing)” had the highest score (M: 3.49 ± 1.29) while item 11 “I repeated the online instructional materials on the basis of my needs.” was with the lowest mean score (M: 3.35 ± 1.26). In the motivation for learning dimension, item 15 “I like to share my ideas with others.” had the highest score (M: 3.32 ± 1.35) while item 12 “I am open to new ideas.” had the lowest score (M: 3.12 ± 1.24). Finally, in the online communication self-efficacy dimension, item 18 “I feel confident in posting questions in online discussions.” had the highest score (M: 3.60 ± 1.13) whereas item 16 “I feel confident in using online tools (email, discussion) to effectively communicate with others.” had the lowest mean score (M: 3.32 ± 1.35).

Table 16

ANOVA Results of OLRS According to the Year of Participants

	Year	N	Mean	std	f	p
Computer/Internet self-efficacy	2nd Year	78	3.53	1.07	0.417	0.659
	3rd Year	53	3.64	1.14		
	4th Year	63	3.43	1.34		
Self-directed learning	2nd Year	78	3.32	0.81	0.186	0.830
	3rd Year	53	3.35	0.90		
	4th Year	63	3.26	0.89		
Learner control	2nd Year	78	3.49	0.95	0.531	0.589
	3rd Year	53	3.44	1.02		
	4th Year	63	3.31	1.17		
Motivation for learning	2nd Year	78	3.12	0.78	1.559	0.213
	3rd Year	53	3.31	0.77		
	4th Year	63	3.35	0.88		
Online communication self-efficacy	2nd Year	78	3.50	0.66	1.482	0.230
	3rd Year	53	3.43	0.77		
	4th Year	63	3.30	0.65		

In order to differentiate and analyze the readiness levels of student English teachers by grades, the ANOVA test was implemented in the research. Table 16 shows no meaningful distinction between student teachers' readiness levels and their study year in the program.

1.4. Research Question 4

Finally, for the research question *"Do pre-service English language teachers' perceptions and technological possibilities for emergency-remote learning (online education) and their ability to use digital devices significantly contribute to their readiness for online teaching?"*, the descriptive statistics obtained from Online Learning Perception Scale (OLPS) were given to determine the pre-service teachers' online learning perceptions.

Table 17

Descriptive Findings of OLPS (Online Learning Perception Scale)

Items	Mean	STD
Accessibility		
1. Online learning provides various multimedia learning resources.	3.71	1.01
2. Online learning provides various online resources.	3.89	1.00
3. Online learning enables me to retrieve and obtain more learning resources.	3.39	1.21
4. Online learning enables me to share and exchange resources.	3.50	1.12
Interactivity		
5. Online learning enables me to interact directly with other learners.	2.63	1.28
6. Online learning can encourage interaction between instructors and students.	2.35	1.19
7. Online learning can shorten the distance between instructors and students.	2.57	1.31
8. Online learning enables me to meet more classmates or peers with the same interests or habits.	2.15	1.17
9. Online learning provides sufficient discussion opportunities.	2.34	1.11
10. Online learning provides convenient tools to communicate with other learners.	2.86	1.21
Adaptability		
11. Online learning enables me to decide on the best time to learn.	2.99	1.26
12. Online learning enables me to decide on the best location to learn.	3.14	1.23
13. Online learning enables me to repeatedly review learning materials.	3.52	1.21
14. Online learning overcomes time and place constraints.	3.43	1.24

Knowledge acquisition		
15.Online learning can broaden my common knowledge base.	3.00	1.16
16. Online learning enables me to learn more about the knowledge that I desire to learn.	2.97	1.31
17. Online learning can expand my academic knowledge capacity.	2.70	1.21
18. Online learning is an effective learning style.	2.49	1.18
19. Online learning enables an abstract idea or concept to be presented in a concrete manner.	2.77	1.10
Ease of loading		
20. Online learning environments lead to less pressure to catch up with a course schedule.	3.08	1.38
21. Online learning environments are less stressful.	2.87	1.41
22. Online learning environments place less pressure on exams and assessments.	2.70	1.45
23. Online learning environments can effectively reduce learning burden.	2.65	1.19

According to the results in Table 17, in the dimension of accessibility, the first item "Online learning provides various online resources." has the highest mean score (M: 3.89 ± 1.00) while item 3 "Online learning enables me to retrieve and obtain more learning resources." had the lowest mean score (M: 3.39 ± 1.21). In the interactivity dimension, item 10 "Online learning provides convenient tools to communicate with other learners. " had the highest mean score (M: 2.86 ± 1.21) but item 8 "Online learning enables me to meet more classmates or peers with the same interests or habits." had the lowest mean score (M: 2.15 ± 1.17). In the adaptability dimension, item 13 "Online learning enables me to repeatedly review learning materials. " had the highest score (M: 3.52 ± 1.21) while item 11 "Online learning enables me to decide on the best time to learn." had the lowest mean score (M: 2.99 ± 1.26). In the factor of knowledge acquisition dimension, item 14 "Online learning can broaden my common knowledge base. " had the highest mean score (M: 3.00 ± 1.16) while item 17 "Online learning is an effective learning style." had the lowest one (M: 2.49 ± 1.18). Finally, in the final factor of ease of loading, item 19"Online learning environments lead to

less pressure to catch up with a course schedule.” had the highest mean score (M: 3.08 ± 1.38); however, the lowest score belonged to item 22 (M: 2.65 ± 1.19) “Online learning environments can effectively reduce learning burden.”. The mean score from the scale has been measured as 2,93 which can be considered a slightly lower perception level.

Regression analysis was applied in this research to see the effects of pre-service English teachers’ online learning perceptions on their readiness levels.

Table 18

Regression Analysis Considering the Effects of Perceptions on Readiness Level

Variable	B	Standard Error	β	t	p
Constant	3.125	0.163		19.228	0.000
Online Learning Perceptions	0.084	0.053	0.113	1.581	0.116
R: 0.113	R Square: 0.013		F:2.499	p:0.116	

In Table 18, the dependent variable was considered to be “Online learning readiness" and the independent variable as “online learning perceptions”. The results of the regression analysis showed that the model was not meaningful (F=2.499; p=0.116). Online learning perceptions described only %1,3 of the total variance of online learning readiness.

Table 19

Descriptive Characteristics of the Participants

Descriptive Characteristics		n	%
Technical devices used in Emergency-Remote Teaching	Mobile Phone	179	92.5
	Laptop	167	86.1
	Headphones	140	72.2
	Camera	71	36.6
	Desktop Computer	26	13.4
	Tablet	22	11.3
	Microphone	4	2.1
	Speaker	1	0.5
Software Programs and Applications used in Emergency-Remote Teaching	Zoom	140	72.2
	Google Meets	69	35.5
	Microsoft Teams	50	26.3
	Skype	17	8.7
	School System	6	3
	Perculus	3	1.6
	ALMS	2	1
	Whatsapp	2	1
	Google Classroom	2	1
	Sakai	2	1
	Moodle	2	1
	Bigbluebutton	2	1
	Adobe Connect	2	1
	Youtube	1	0.5
	Discord	1	0.5
	Webex	1	0.5
	Blackboard	1	0.5
Technical Setbacks during Emergency-Remote Teaching	Internet problems	169	87.1
	Problems related to microphone and camera	121	62.3
	Power blackout	112	57.7
	Problems during group work	109	56.1
	Problems during online exams	95	48.9
	Feedback problems between the tutor and the students	86	44.3
	Hardware problems	70	36
	Problems with uploading the exam file	63	32.4
	Problems of sending homework to the tutor	53	27.3
	Software problems	52	26.8
	Problems in synchronous applications	48	24.7
Have you received online training before?	Yes	66	34
	No	128	66

Have you received training or preparation for online education before?	Yes	20	10.3
	No	174	89.7
Did you have a stable Internet connection during emergency-remote teaching?	Yes	159	81.9
	No	35	18.1

In Table 19, the descriptive features of pre-service English teachers' technological affordances and digital competencies are presented. Accordingly, to find out about their readiness levels, the effects of English pre-service teachers' technological affordances were calculated by using Independent Samples T-Test analysis.

Table 20

Independent Samples T-Test Results of Pre-service English Teachers' Technical Equipments Used in Emergency-Remote Teaching Compared to their Readiness Levels

Devices	N	Mean	std	f	p
Mobile Phone	179	3.38	0.61	0.289	0.592
Laptop	167	3.38	0.61	0.017	0.896
Headphones	140	3.38	0.60	0.581	0.447
Camera	71	3.39	0.62	0.004	0.949
Desktop Computer	26	3.41	0.58	0.286	0.594
Tablet	22	3.22	0.87	8.661	0.004

As the findings in Table 20 affirms that using a mobile phone, laptop, headphones, camera and the desktop computer did not have an important effect on student teachers' readiness. ($p > 0.05$). However, a significant impact emerged in tablet use as the p-value was lower than 0.05. This signifies using tablets during ERT facilitated their learning.

Table 21

Independent Samples T-Test Results of Pre-service English Teachers' Software Programs Used in Emergency-Remote Teaching Compared to their Readiness Levels

Software	N	Mean	std	f	p
Zoom	140	3.41	0.61	0.513	0.475
Google Meets	69	3.43	0.65	0.516	0.474
Microsoft Teams	50	3.31	0.57	0.393	0.531
Skype	17	3.55	0.42	3.958	0.048
School Systems	6	3.22	1.14	11.338	0.001

The results in Table 21 indicate that the type of means pre-service teachers used for accessing ERT with applications such as Zoom, Meets, and Teams did not play an important role in influencing their readiness levels, whereas accessing via Skype and other specific school systems (DEÜZEM, UZEM, UES) had a statistically important effect on their readiness levels ($p<0.05$).

Table 22

Independent Samples T-Test Results of Pre-service English Teachers' Technical Setbacks during Emergency-Remote Teaching Compared to their Readiness Levels

Setbacks	N	Mean	std	f	p
Internet problems	169	3.37	0.60	0.079	0.779
Problems related to microphone and camera	121	3.36	0.61	0.158	0.691
Power blackout	112	3.35	0.62	0.238	0.626
Problems during group works	109	3.40	0.58	0.426	0.515
Problems during online exams	95	3.39	0.59	0.000	0.984
Feedback problems between the tutor and the students	86	3.34	0.54	2.479	0.117
Hardware problems	70	3.36	0.57	0.115	0.735
Problems of uploading the exam file	63	3.45	0.66	2.577	0.110
Problems of sending homework to the tutor	53	3.36	0.61	0.229	0.633
Software problems	52	3.43	0.68	0.441	0.508
Problems in synchronous applications	49	3.31	0.61	0.008	0.928

Table 22 presented that technical setbacks that student teachers experienced during ERT did not play a significant role in their readiness levels ($p>0.05$).

The effectiveness of our participants' digital competencies can be looked into from three perspectives: having received online training previously, any training or preparation for online teaching and having a stable Internet connection during ERT. Independent samples t-test results were presented in Table 23, Table 24 and Table 25.

Table 23

T-test findings to compare the impact of previous digital training on pre-service English teachers' readiness for emergency-remote teaching

Responses	N	X	ss	sd	t	p
Yes	66	3.36	0.66	192	-.067	0.946
No	128	3.37	0.59			

Table 23 presents that since the p-value is analyzed as .946, there is not an important difference in terms of readiness between the pre-service teachers who have taken online training previously and those who do not have any digital training. (p=0,946, p>0,05)

When Cohen's d was calculated in order to see the effect size of received online education, the "d" value turned out to be 0.01, which shows a very small effect on readiness level for emergency-remote teaching (Cohen, 1988).

Table 24

T-test findings to compare the effects of whether pre-service English teachers' receiving digital training or having a digital learning experience for online education before on their readiness

Responses	N	X	ss	sd	t	p
Yes	20	3.51	0.63	192	1.060	0.290
No	174	3.35	0.61			

When the findings in table 24 are examined, it is clear that having previous digital training or digital learning experiences for online education is not a notable issue in preparing them for ERT (p=0,290, p>0,05). However, compared with the value in receiving digital training in Table 24, it can be seen that the value is not as high as the one calculated in this analysis; thus, this could be interpreted as having a slightly more important effect on readiness. The result of this analysis has also affected the Cohen d value as the effect size was calculated as 0.24, displaying a small effect on readiness.

Table 25

T-test findings to compare the effects of having a stable Internet connection on their readiness

Responses	N	X	ss	sd	t	p
Yes	159	3.36	0.63	192	-.270	0.787
No	35	3.39	0.54			

According to table 25, having a stable Internet connection during ERT is not a significant aspect of student teachers' readiness levels. (p=0,787, p>0,05) Moreover, the calculation of effect size proves this result. (d= 0.05)

Qualitative and quantitative findings were measured and examined thoroughly in this chapter. Following the results, student teachers' online learning experiences, their comparisons of online and face-to-face teaching, their readiness levels, their online learning perceptions, technical possibilities and digital competencies compared to their readiness were revealed. Afterwards, the results will be discussed within the literature in the next chapter.

CHAPTER 5

DISCUSSION

This chapter will discuss the results from quantitative and qualitative data analysis. It will be divided into three subparts in order to draw the readers' attention to highlighted findings.

1.1. Discussion Concerning the First Research Question

The study first set out to find the extent to which pre-service English language teachers evaluate their experiences positively after their experiences in the 2019-2020 spring semester and 2020-2021 fall semester emergency-remote teaching. In order to investigate their online learning experiences, the study used Online Learning Experiences Scale from Paechter & Maier (2010) "Online or face-to-face? Students' experiences and preferences in e-learning". To support the data obtained from the scale, student teachers' responses to the semi-structured interviews were also presented to categorize their experiences. They reported that English teacher candidates evaluated their online learning experiences moderately. That is, student teachers' experiences were neither positive nor negative. According to the statistical data, they noted overall neutral responses towards ERT. Even if student teachers reflected on a lot of technical problems and poor digital skills, they still underlined the fact that their ERT experiences will contribute to their professional teaching skills in the future. Only in the factors of "Individual learning processes", "Learning obstacles" and "Learning outcomes", a statistically meaningful difference was found between year groups. Accordingly, senior student teachers turned out to have more positive attitudes towards their experiences than third and second-year student teachers. This can be explained as fourth-year student teachers had already taken the crucial courses face-to-face while third and second-year student teachers had to take them online which shows that 4th year students have had better study skills. In other words, fourth-year teacher candidates were more capable of self-regulation during ERT based on their experience as teacher candidates in the department. The quantitative findings are in parallel with the findings which have been reported by Cabangacala et al. (2021). The scholars found that pre-service English language teachers' attitudes towards their experiences of ERT were at a moderate level. Similarly, Düzgün & Sulak (2020) found primary school teacher candidates' online learning experiences

moderately satisfying. The researchers also found a meaningful distinction between grade levels of student teachers. That is, senior students tended to have more positive attitudes, too. Furthermore, Uysal and Karagöz (2021) aimed to determine the attitudes of pre-service teachers towards distance education practices carried out during the pandemic. In the research, it was determined that the pre-service teachers found the distance education applications moderately successful. In addition, Nuangchalerm et al. (2020) gave a strong verification of why senior student teachers tended to have more positive experiences in ERT than third and second-year student teachers. They explained that senior student teachers appeared to feel more ready for online education than their fellow students.

According to the interview data analysis, three categories are revealed in terms of emergency-remote teaching experiences: strengths, weaknesses and moderate aspects. The strengths of emergency-remote teaching are a positive effect on school notes (Pozo-Rico et al., 2020), a valuable contribution to future careers (Eti & Karaduman, 2020; Gorgulu-Arı & Hayır-Kanat, 2020; Oliveira et al., 2021), and a possibility of blending into face-to-face education (Burazer & Skela, 2021). Both positive and negative internship experiences are considered as moderate aspects (Van Nuland et al., 2020; Çoban & Vardar, 2021). However, the weaknesses outnumber compared to the other aspects. Technical failures and motivational problems (Karakuş et al., 2020; Ozkaral & Bozyigit, 2020; Ayumi et al., 2021; Yılmaz, 2021), joining classes unprepared (Juárez-Díaz & Perales, 2021; Subekti, 2020), difficulties of interaction with the peers and professors (Özüdoğru, 2021), and poor training in online internships (Karatepe et al., 2020; Tekel et al., 2022) are considered as the weaknesses of emergency-remote teaching based on the reflections of English teacher candidates.

The first positive attribution of emergency-remote teaching has been found to have a positive effect on the overall academic success of student teachers. This finding is parallel with the study by Pozo-Rico et al. (2020) conducted with pre-service primary school teachers. They showed better academic performance in their remote training during the lockdown in Spain. As the acquisition of ICT skills was one of the objectives of this training, pre-service teachers completed their programs by gaining these skills to a great extent. Second of all, this study showed that emergency-remote teaching has been a valuable contribution to the future career of pre-service ELT teachers. Gorgulu-Arı & Hayır-Kanat (2020) reported that according to student teachers in the Turkish context, online teaching has been evaluated as the best way despite the challenges of the epidemic era. Eti & Karaduman (2020) examined the opinions of graduate pre-service teachers who were about to start their

teaching careers during the pandemic. Their findings revealed that they mostly had positive thoughts, believed that they could overcome any difficulties, felt adequate, and they could adapt to the pandemic and had the necessary motivation. In other words, this experience appears to have prepared them for the worse and they felt ready to face other challenges in their teaching career. Oliveira et al. (2021) demonstrated how distant learning technologies have been adopted in response to the pandemic, with implications for the use of ICT platforms, the educational process, and individual adaptability. Thus, using ICT platforms was primarily a pleasant experience for career development. As the third positive attribution refers to both emergency-remote teaching and face-to-face education as a blended version, it will be discussed further in the second research question.

Similar to this study, teacher candidates from the Canadian context evaluated their experiences of online teaching practicum both positively and negatively (Van Nuland et al., 2020). While the unpredictability of the COVID-19 crisis made the education and training processes stressful for all the stakeholders, it has been beneficial for student teachers' professional development in terms of constant ICT usage in their teaching. Also, when Çoban & Vardar (2021) assessed pre-service English language teachers' point of view on their background of ERT internship experiences, the researchers cited several points similar to this study's findings. Pre-service teachers reported both positive and negative opinions about virtual internships during the pandemic period. Besides, online courses offered flexibility in both time and place and recording the courses helped them to be reviewed later. Most pre-service teachers were able to adjust their learning at their own pace in their environment. Since the only communication medium is the virtual setting, the students were able to receive instant feedback. However, the technical problems experienced in the applied courses during this period, the unexpected spread of the virus and the greater workload decreased the motivation of the teacher candidates. Furthermore, it was difficult to measure and evaluate students' knowledge and the socialization rate decreased significantly.

As for the weaknesses, technical issues were one of the most frequent challenges mentioned by the English teacher trainees. Similarly, in the study conducted with social studies and prospective geography teachers, it was observed that not all teacher trainees were economically equal in terms of technological opportunities. In this case, pre-service teachers could not focus enough on the lessons due to the constant stress they felt during the ERT process. In addition, limited, expensive and insufficient Internet access in most regions is

among the factors that influenced the success of ERT (Ozkaral & Bozyigit, 2020). Second of all, English student teachers reflected that they had motivation issues during this period. Likewise, pre-service Turkish teachers in Karakuş et al. (2020) believed that ERT did not help to increase their motivation. The low motivation often led to distraction from studying and not focusing on the lessons. Furthermore, in Indonesia, Ayumi et al. (2021) also observed that both English teacher candidates' and K-12 students' motivation were low during the teaching practicum because of limited interactions, disinterest in online lessons, and technical problems. Thirdly, most student teachers were not prepared for online classes. They did not see any reason to be prepared or even attend online lessons as they thought that they could watch the recordings later. Similarly, the findings of Juárez-Díaz & Perales (2021) also confirmed this outcome. Accordingly, they did not pay much attention to what the lesson offered or required. Besides, they even completed the required assignments as a formality. In addition, Subekti (2020) pointed out that pre-service English teachers were not motivated enough to get ready for the classes. Furthermore, student teachers had difficulties of interaction with peers and professors, which was also reported in Özüdoğru (2020). Due to the epidemic, teacher education classes and practices lacked interaction with the tutors and classmates. Most pre-service teachers and teacher educators did not get used to or were not eager to use digital communication means. Karatepe et al. (2020) verified that the researchers found that teacher trainers and trainees had several problems with communication in virtual courses during the confinement process. Moreover, another aspect of weaknesses of ERT was observed in the same study: the poor quality of online teaching practicum. As a consequence of the online training, teacher candidates did not see themselves as competent enough to teach in the future. Likewise, Tekel et al. (2022) found that in many countries including Turkey, the professional competencies of teacher candidates were adversely affected during the pandemic period. Student teachers felt inexperienced and inadequate after the ERT training period. Face-to-face teaching practicum offers pre-service teachers a unique opportunity to gain experience in their subject areas such as classroom management, teaching-learning procedure, student evaluation and teaching skills while most student teachers could not learn more than how to implement ICT tools.

1.2. Discussion Concerning the Second Research Question

The second research question was related to the comparison of the pre-pandemic face-to-face education and training processes of pre-service ELT teachers and the ERT phase of the 2019-2020 Spring semester and 2020-2021 fall semester in terms of differences in interactions, achievements and experiences of the students. Online and Face-to-face Teaching Scale in the same study by Paechter & Maier (2010) was employed. This questionnaire had a six-point scale from "better in online teaching" valued as "+3", "good in online teaching" valued as "+2", "slightly good in online teaching" valued as "+1" and "better in face-to-face teaching" valued as "-3", "good in face-to-face teaching" valued as "-2", "slightly good in face-to-face teaching" valued as "-1". To support the quantitative data, the study also benefitted from elicited data which was collected via semi-structured interviews. The interview data was presented in combination to the statistical data which was obtained as a result of the analysis of this questionnaire.

When the mean of all the items is assessed, it seems that ELT teacher candidates have tended to think face-to-face teaching is 'almost good' as the questionnaire was worded. Besides, the analysis of the factors showed that the course design, interaction with the tutor, interaction with the peer students, and learning outcomes were 'slightly good' in face-to-face teaching while individual learning processes were slightly good in online education. The average of the scale demonstrated that pre-service English teachers appeared to gravitate towards face-to-face education. There was only one meaningful distinction in the dimension of individual learning processes regarding the difference among year groups.

Studies in the relevant literature split into two categories: those that favor face-to-face teaching (Serhan, 2020; Hadiyanto et al., 2021) and those that favor emergency-remote teaching, or online learning. (Donitsa-Schmidt & Ramot, 2020; Stevens et al., 2021). The results of this study supported English teacher candidates' choice of face-to-face education to some degree. Likewise, in the Turkish context, Erarslan (2021) noted pre-service English language teachers' tendency to prefer face-to-face teaching during the COVID-19 epidemic although ERT was a suitable alternative in a crisis like this. Blackley et al. (2021) also indicated that almost all teacher candidates favored traditional classroom settings.

Most of the English teacher candidates' responses appeared to base on the effectiveness of course design in traditional settings. According to Sutiah et al. (2020), the course design is shaped according to how much student teachers were active in their training.

Thus, traditional settings cannot be entirely replaced by online practices. Similarly, Carrillo & Flores (2020) reported that most student teachers could not directly interact with their peers and lecturers during the ERT period as much as they did in regular classes. Likewise, Fathoni & Retnawati (2021) found that during the ERT phase, the amount - of interaction between student-student and student-teacher decreased. Consequently, student teachers were mostly passive during lessons (ibid.). That is, they were not motivated enough to participate in the virtual classes and interact with their fellow students and their educators. In other words, ERT has heavily depended on the delivery of teacher educators (Mohamad Nasri et al., 2020).

Another result revealed that pre-service ELT teachers reflected that face-to-face teaching settings brought slightly better learning outcomes. Along the same lines, Ciğerci (2020) also reported that emergency-remote teaching has negatively affected the attitudes of pre-service teachers towards their academic improvement and the acquisition of crucial teaching skills. Only in the dimension of individual learning processes, teacher candidates inclined slightly toward online settings. This can be validated by the fact that online learning settings offer flexibility in terms of time and place constraints and self-regulation (De Paepe, Zhu & Depryck (2017). Abdelhafez (2021) stressed that despite many challenges, ERT actually offered a great opportunity for student teachers to adapt their learning and training according to their schedule at home. In addition, the present study reported a significant difference among year groups of participants solely in this dimension. This difference could be better explained by the online learning readiness of senior and junior teacher trainees especially more than second-year student teachers.

Last but not least, in the semi-structured interviews, most pre-service teachers believed that it would be a better option to blend face-to-face and online teaching in both higher education and teacher education programs. In Turkey, teacher education programs offer both theoretical and practical courses. According to most student teachers, the emergency-remote teaching process has proved that theoretical courses could be effectively conducted on online platforms; however, practical courses should be implemented in face-to-face education. Thus, blended learning might be the best option in the future. Burazer & Skela (2021) also reported a similar finding where more than half of the teacher candidates prefered blended teaching practices which comprise a mix of online and face-to-face methods.

1.3. Discussion Concerning the Third and Fourth Research Questions

The third aim of this study was to find out the extent to which English teacher candidates were ready for emergency distance education that started in March 2020. To find out the readiness levels, the Online Learning Readiness Scale (OLRS) by Hung et al. (2010) was implemented for the student teachers. The scale assessed five factors: computer/Internet self-efficacy, self-directed learning, learner control, motivation for learning, and online communication self-efficacy.

The findings suggest that the readiness of participants for ERT was at a medium level. Likewise, A. A. Cobanoglu & İ. Cobanoglu (2021) reported an average level of readiness for online teaching among Turkish teacher candidates. Similarly, Özdemir & Önal (2021) collected data from teacher candidates in most Turkish universities; the researchers found that Turkish teacher candidates had a medium-level readiness for self-directed learning during the COVID-19 era. In Thailand, teacher candidates reflected a moderate level of readiness toward ERT as a consequence of the restricted interaction on online platforms (Jeh-Awae & Wiriyakarun, 2021). On the other hand, the present study reported no significant difference between the participants' study year and their readiness level for ERT. This finding was in contrast to the findings reported by Balci et al. (2021), which indicated a significant difference between the student teachers' year of study and their readiness for ERT.

The final goal of this study was to investigate whether student teachers' perceptions of online learning, their technical possibilities to gain access to ERT and their ability to use digital devices significantly contribute to their readiness for ERT. For this purpose, ELT teacher trainees' online learning perceptions were explored with a survey by Wei & Chou (2020), Online Learning Perceptions Scale (OLPS). The analysis revealed that English teacher candidates' perceptions of emergency-remote teaching were low. Likewise, Özdemir & Önal (2021) reported that the student-teacher participants indicated that they regarded their ERT experience as unsatisfactory. Similarly, Güven & Uçar (2021) showed the negative perceptions of teacher trainees toward ERT because of the poor quality of education and the problems with technological affordances. On the other hand, Gestiardi et al. (2021) reported that pre-service teachers had positive attitudes towards the transition to online platforms and the constant use of ICT tools in Indonesia. Thus, student teachers were highly ready for this era. The findings of the present study showed that there was not a meaningful relationship between student teachers' perceptions and readiness toward ERT. Furthermore, student teachers' technical opportunities and digital competencies have been researched further in

order to understand if there was a meaningful relationship with online learning readiness. First of all, the most used technical devices by English student teachers were mobile phones, laptops and headphones. Besides, in Karatepe et al.'s (2020) study, teacher candidates mostly used mobile phones to access education during ERT. However, aside from tablets, the analysis revealed no significant impact between the kind of technical devices and online learning readiness. Likewise, Egede (2021) stated that the type of technical equipment used by teacher trainees did not have any impact on their readiness.

Secondly, the most frequently used software and applications in ERT were Zoom, Meets and Teams. Similar to the study by Maizyurah et al. (2021), Zoom meetings were primarily implemented for teaching in teacher education. Nevertheless, the results indicated that these software applications that English teacher candidates utilized for accessing emergency-remote teaching were not regarded as important variables to affect their readiness levels except for Skype and school systems (DEÜZEM, UZEM, UES). To compare with undergraduate education, Aksu (2020) concluded that students who used UZEM as an educational online platform had lower readiness levels for ERT since UZEM has been a contemporary setting used for compensating educational needs.

Thirdly, the most frequent technical setbacks that occurred during ERT were Internet problems, problems related to microphone and camera, power blackouts and problems during group work. Similarly, Özüdoğru (2021) found that most teacher trainees did not have any Internet access. Even the ones who had Internet access reflected that they had several connection issues because they were attending to the lessons from villages or smaller cities. Subekti (2020) reported the most common challenges of distance education within the ELT community that both Internet connection problems and limited interactions with peers made group works even more challenging. Surprisingly, the study found that technical setbacks did not have any important effect on the online learning readiness of English student teachers. Falling under the term of digital competencies, most English teacher candidates did neither receive any online training nor any training for online education previously. These findings are also consistent with the research by Egede (2021). Whether having received any online training is not significantly related to senior teacher candidates' readiness. On the other hand, Liza & Andriyanti (2020) also negates this result by stating that digital competencies had a positive effect on online learning readiness.

The final finding of the present study was that most of the student teachers had a reliable Internet connection during ERT. Therefore, the findings of the present study indicated that English student teachers' online learning readiness was not significantly affected. However, A. A. Cobanoglu & İ. Cobanoglu (2021) pointed out that a stable Internet connection positively augments readiness.

In the discussion chapter, the results of the study have been interpreted and compared with the examples from the literature. The next section will summarize the findings of the study, present implications for future studies and make suggestions for further research.

CHAPTER 6

CONCLUSION

This last chapter will provide a summary of the study, implications for future studies and suggestions for further research.

1.1. Summary

The fact that COVID-19 has become a pandemic around the world and affected all areas of our lives accelerated the transition to a new era, especially in education. Turkey's education was also forced to switch to ERT. Like many other education systems, Turkish education has entered ERT unplanned and abruptly as a necessity due to a global crisis. As seen in the literature and discussion sections, the education process during the pandemic period both in Turkey and in the world was carried out almost similarly, but the experiences, preferences, readiness and perspectives of teacher candidates were shaped differently in due process.

This thesis study was conducted in the 2019-2020 spring semester and 2020-2021 fall semester academic years, during the ERT period, which started to be implemented when the Turkish Higher Education Council (YÖK) decided to conduct lessons online due to the COVID-19 epidemic in March 16th, 2020. This sudden change of context brought many disputes, specifically in teacher education departments. Teacher education programs consist of both theoretical and practical courses in order to train student teachers for their future careers. Consequently, the context changed to online platforms without planning the entire educational term. Thus, it was necessary to find out the ERT experiences of student teachers who were studying in ELT departments and how they compared their previous experiences with ERT. Because of the abrupt nature of emergency-remote teaching, student teachers' online learning readiness should be taken into account when evaluating the whole online education process. Since readiness can be affected by many variables, this research also has looked into student teachers' online learning perceptions, technical opportunities and digital competencies during ERT. The findings of this study can contribute to the field of teacher training which should gain lessons on this aspect to prepare teacher education programs for the future where digital technologies will be used extensively (Uzun, 2016).

The analysis of the data which was elicited by means of four scales and semi-structured interviews with English teacher candidates revealed strengths, weaknesses,

and moderate aspects of ERT. The strengths of ERT are a) having a positive effect on school notes, b) being a valuable contribution to future careers, and c) having the possibility of blending remote teaching into face-to-face education. Both positive and negative comments on the teaching practicum experiences are integrated with the moderate aspects. The reported weaknesses are a) technical failures, b) motivational problems, c) coming to classes unprepared, d) difficulties of interaction with peers and professors, and e) poor training in online internships. Results indicated that student teachers seem to have avoided evaluating both their ERT and online practicum experiences. Surprisingly, their stance was neither positive nor negative.

Regardless of the challenges of ERT, this abrupt transition actually tested student teachers' ability to experiment, self-learn and adapt to online teaching, while emphasizing the lack of online training and digital skills within ELT programs. Also, ERT was the most practical choice when education could not be conducted face-to-face because of the lockdown. Interestingly, the fourth-year English teacher candidates tended to have more positive experiences than the third and second-year teacher candidates. As the fourth-year teacher candidates have had more chances to practice their teaching skills both during the past three years and the practicum, their online teaching experiences were more valuable for their future careers despite the challenges. Secondly, most of the teacher candidates tended to prefer face-to-face education over ERT. The technical problems and digital incompetencies experienced by teacher candidates have the possibility of leading to the preference for face-to-face education. Most English student teachers experienced Internet problems, problems related to microphone and camera, power blackouts and problems during group work, partly because they had neither received online training nor any training or preparation for online teaching previously. Thus, these factors seem to affect the preferences of the participants toward face-to-face teaching. Thirdly, English student teachers' readiness for ERT was at moderate levels. Most student teachers had a stable Internet connection to access ERT from their homes. In addition, mobile phones, laptops and headphones mainly were used as technical devices while Zoom, Google Meets and Microsoft Teams were the most used software applications during ERT. However, student teachers did not perceive their remote learning positively. This finding can be validated by the fact that most student teachers had technical troubles and inadequate digital skills, also affecting their choice toward a traditional educational context. Their perceptions, technical opportunities and digital competencies did not have a significant impact on their readiness for ERT. One of the advantages of living in

the age of technology in the 21st century, it has been observed that most students have access to both technological tools and a stable internet connection. Therefore, student teachers' readiness was not affected by these factors.

The results of this study should be interpreted according to the fact that each prospective teacher's ERT experience will be unique, and the factors affecting it will differ concerning each individual. In addition, these results suggest the future place of distance education in teacher education departments, especially in the English language teaching department.

The findings indicate that student teachers need better training specifically to support themselves during ERT. Similarly, teacher educators need training on how to use educational technologies more effectively. The higher education council should prepare training programs to assist lecturers.

1.2. Implications for Future Studies

This study revealed that emergency-remote teaching contributed to pre-service ELT teachers' professional lives. Educational technology will be a crucial part of future classrooms. Moreover, this experience showed that the transition from face-to-face education to ERT could be done. The educational authorities should make a better transition plan for the future. The findings suggest that English teacher candidates have the chance to use information and communication technology (ICT) devices and software efficaciously for teaching purposes during theoretical and practical courses. The term, teacher identity, was reshaped with the shift to a new normal in education since English teacher candidates were forced to adapt to new settings without getting prepared. Language teaching courses should deliver different kinds of input to meet learners' needs. Technology facilitates language learning and leads to better learning outcomes by offering various kinds of material and resources and engaging learners effectively (Öz, 2015).

After experiencing emergency-remote teaching and reviewing the strengths, blended learning might be an option for the post-pandemic period to be implemented in most universities. Online sessions overcome time and place constraints; thus, most English teacher candidates prefer getting theoretical lessons online. Face-to-face education, on the contrary, is more suitable for classes that require constant practice and interaction. Teaching how to integrate technology into EFL classrooms in teacher education programs also serves the purpose of meeting the intended language learning goals. On the other hand, based on

English student teachers' experiences and virtual learning perceptions, there are several aspects to consider within the framework of ERT. As a first step, the technical opportunities and Internet connection problems should be looked into properly. First of all, the educational authorities should work on strategies for developing a more expansive, reliable and affordable Internet network. As for digital competencies, the curriculum of teacher education programs should include practical courses that teach student teachers how to effectively implement ICT tools and educational software for their professional lives. Receiving online training could also positively affect student teachers' perceptions of distance education. Socialization is one of the important elements that mainly exist in face-to-face education but it is missing in online courses. Educators' and faculties' primary concern should be about how to increase social interactions between student-student and teacher-student in remote courses. Another concern is student motivation. Motivation is needed for attendance and engagement, both of which were greatly lacked among English teacher candidates during remote lessons. Thus, the increase in motivation will have a positive effect on student teachers' engagement and attendance; thus, it will lead to better academic performances. The constant stress and anxiety felt by most student teachers can be alleviated by providing students with a high level of autonomy and by taking the initiative to keep their motivation high. The teaching practice course, which was previously held face-to-face, has been transformed into a virtual environment for senior EFL candidates. In this case, both teacher candidates and advisor teachers had to adapt to new platforms. Even if using technology-assisted student teachers to improve their 21st-century skills, they still experienced several problems such as internet problems, lack of communication, lack of motivation to study, problems with evaluation, and K-12 students' participation which led to poor training results. For these reasons, EFL trainees should learn how to use online environments better. Pre-lesson preparations with ICT tools can achieve better results by applying various online learning strategies to encourage students. By encouraging students to turn on cameras and microphones this way, they can keep them motivated and eager to learn. In-service teachers should help teacher candidates more in this regard. Face-to-face teaching is considered a comfort zone for most student teachers. Therefore, it is expected for teacher candidates to be able to go beyond the limit they are used to, to put more on the knowledge they have acquired, and try to adapt to new environments. Since the emotional burden of this period is more intense on student teachers, teacher educators and faculties should have a role as a counsellor and facilitators in this matter.

In light of all this information, the COVID-19 pandemic period has shown us that the background of education can change at any time. The post-pandemic era is uncertain and that is why we need to be able to readjust. Although the current crisis has led to a need to reorganize teacher preparation programmes, the very foundations of education do not change: we need to know teacher candidates well in order to meet their learning needs. The main objectives of teacher programs should be to create student-oriented, harmonious and holistic teachers for future face-to-face/online/blended courses or any other means of teaching. The issue of how quickly and effectively both students and teachers need to adapt to new social and educational patterns should remain on the agenda.

1.3. Suggestions for Further Research

Concluding the study while discussing the findings in line with the relevant literature, it was determined that some suggestions may be provided for further research. Firstly, including a higher number of universities and expanding the sample size while conducting a study would be considered to obtain more reliable and valid results and it may be possible to make a broader generalization regarding the research subject. Secondly, since this research has a limitation in regards to a brief data collection time impacted by the pandemic, further research with an extended period allocated for data collection may provide different results. According to Irvine et al. (2013), telephone calls do not completely transfer the participants' feelings and authentic responses to the interviewer; thus, a face-to-face environment could be arranged for semi-structured interviews. Thirdly, this study, conducted within the framework of ERT, focused on the perceptions of pre-service English language teacher students. However, in order to have a broader perspective, research can be conducted with prospective English language teachers as well as pre-service teachers from different branches and participants from different institutions. In addition, the emergency-remote teaching process could be compared with a planned online education or a blended education model in teacher education departments to differentiate the results in terms of teacher trainees, educators and faculties' perspectives and learning performances. Lastly, this study only focused on English teacher trainees. More studies related to the experiences and readiness of teacher educators for ERT are needed in the literature.

REFERENCES

Abdelhafez, A. (2021). Digitizing teacher education and professional development during the COVID-19 pandemic. *Academia Letters*, *295*, 1-7. https://doi.org/10.20935/AL295

Aguilar-Cruz, P.J., Medina, D.L. (2021). Pre-service English teachers' perceptions of their online teaching practice during pandemic times. *Propósitos y Representaciones, 9*(1). http://dx.doi.org/10.20511/pyr2021.v9nSPE1.925

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.

Aksu, Z. C. (2020). Distance Education in COVID-19 Pandemic: Insights from Turkish Students. *Research Methods in Social Sciences Final Report*. 1-15.

Almodaires, A. A., Almutairi, F. M., & Almsaud, T. E. (2021). Pre-Service Teachers' Perceptions of the Effectiveness of Microsoft Teams for Remote Learning. *International Education Studies*, *14*(9), 108-121. https://doi.org/10.5539/ies.v14n9p108

Amemado, D. (2020). COVID-19: An unexpected and unusual driver to online education. *International Higher Education*, *102*, 12-14. Retrieved from https://ejournals.bc.edu/index.php/ihe/article/view/14599

Aprinastuti, C. (2021, April). Primary School Pre-Service Teachers' Perceptions of Effective Online Learning by Using LINE Application during COVID-19 Pandemic. In *International Conference on Elementary Education*, *3*(1), 489-496. Retrieved from http://proceedings2.upi.edu/index.php/icee/article/view/1505

Ardiyansah, T. Y. (2021). Pre-service teachers' perceived readiness in teaching online in international internship program. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, *8*(1), 90-102. https://doi.org/10.22219/celtic.v8i1.16456

Arnold, L., & Groenewald, E. (2022). Exploring How COVID-19 Shapes the Professional Identities of South African Student Teachers. *International Journal of Learning, Teaching and Educational Research*, *21*(4), 292-315. https://doi.org/10.26803/ijlter.21.4.17

Ayumi, J.S., Rezeki, Y.S. & Wardah (2021). Pre-service teachers' experiences doing practicum during COVID-19. *Journal of English Literacy Education*, *9*(1), 65-77. https://doi.org/10.36706/jele.v9i1.17316

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative science quarterly*, 421-458.

Balci, T., Temiz, C. N., & Sivrikaya, A. H. (2021). Transition to Distance Education in COVID-19 Period: Turkish Pre-Service Teachers' E-Learning Attitudes and Readiness Levels. *Journal of Educational Issues*, *7*(1), 296-323. https://doi.org/10.5296/jei.v7i1.18508

Bandura, A. (1977). "Self-efficacy Toward a Unifying Theory of Behavioral Change." *Psychological Review, 84*(2), 191-215.

Bandura, A. (1985). *Model of causality in social learning theory.* In Cognition and psychotherapy (pp. 81-99). Springer, Boston, MA.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology, 2*(1), 21-41.

Bali, S., & Liu, M. C. (2018, November). Students' perceptions toward online learning and face-to-face learning courses. In *Journal of Physics: Conference Series, 1108*(1), IOP Publishing (pp.1-7). https://doi.org/10.1088/1742-6596/1108/1/012094

Barbour, M. K., LaBonte, R., Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., ... & Kelly, K. (2020). Understanding pandemic pedagogy: Differences between emergency remote, remote, and online teaching. *State of the Nation: K-12 e-Learning in Canada*. 1-24. Retrieved from http://hdl.handle.net/10919/101905

Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, *5*(4), 1-9. https://doi.org/10.29333/pr/7937

Batmang, B., Sultan, M., Azis, A., & Gunawan, F. (2021). Perceptions of Pre-Service Teachers on Online Learning during the COVID-19 Pandemic. *International Journal of Education in Mathematics, Science and Technology*, *9*(3), 449-461. https://doi.org/10.46328/ijemst.1595

Berg, G. A., & Simonson, M. (2002). *Why distance learning? Higher education administrative practices.* Greenwood Publishing Group.

Blackley, S., Wilson, S., Sheffield, R., Murcia, K., Brown, P., Tang, K. S., ... & Williams, J. (2021). How have Covid-19-related changes to tuition modes impacted face-to-face initial teacher education students? *Issues in Educational Research*, *31*(2), 421-439. Retrieved from http://www.iier.org.au/iier31/blackley-abs.html

Borotis, S. & Poulymenakou, A. (2004). E-Learning Readiness Components: Key Issues to Consider Before Adopting e-Learning Interventions. In J. Nall & R. Robson (Eds.), *Proceedings of E-Learn 2004-World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1622-1629). Washington, DC, USA: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/primary/p/11555/.

Bozkirli, K. Ç., & Er, O. (2021). Examination of attitudes towards e-learning of Turkish teacher candidates. *Revista Argentina de Clínica Psicológica*, *30*(1), 753-759.
DOI: 10.24205/03276716.2020.2072

Bozkurt, A. (2020). Koronavirüs (Covid-19) pandemi süreci ve pandemi sonrası dünyada eğitime yönelik değerlendirmeler: Yeni normal ve yeni eğitim paradigması. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6*(3), 112-142. Retrieved from https://dergipark.org.tr/en/pub/auad/issue/56247/773769

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, et al. (2020). A global outlook to the interruption of education due to COVID-19 Pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, *15*(1), 1-126. Retrieved from http://www.asianjde.com/ojs/index.php/AsianJDE/article/view/462

Bozkurt, A. & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Corona Virus pandemic. *Asian Journal of Distance Education, 15*(1), 1–4. https://doi.org/10.5281/zenodo.3778083

Burazer, L., & Skela, J. (2021). The Effectiveness of In-Person versus Online Instruction in the Pre-service Teacher Preparation Programme. *ELOPE: English Language Overseas Perspectives and Enquiries*, *18*(2), 117-137. https://doi.org/10.4312/elope.18.2.117-137

Burnard, P. (1991). A method of analysing interview transcripts in qualitative research. *Nurse education today*, *11*(6), 461-466.

Burns, A., Danyluk, P., Kapoyannis, T., & Kendrick, A. (2020). Leading the pandemic practicum: One teacher education response to the COVID-19 crisis. *International Journal of E-Learning & Distance Education*, *35*(2), 1-25. http://www.ijede.ca/index.php/jde/article/view/1173/1836

Büyüköztürk, Ş. (2017). *Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum [Data analysis handbook for social sciences: Statistic, research design, SPSS applications and comment]*. (23rd Ed.). Ankara: Pegem Akademi.

Büyüköztürk, Ş., Kılıç Çakmak, E., Erkan Akgün, Ö., Karadeniz Ş., & Demirel F. (2012). *Bilimsel Araştırma Yöntemleri*, Ankara: Pegem Yayıncılık.

Cabangcala, R., Alieto, E., Estigoy, E., De Los Santos, M., & Torres, J. M. (2021). When Language Learning Suddenly Becomes Online: Analyzing English as Second Language Learners' (ELLs) Attitude and Technological Competence. *TESOL International Journal*, *16*(4.3), 115-131. Retrieved from https://ssrn.com/abstract=3847103

Carillo, K. D. (2010). Social Cognitive Theory in IS Research – Literature Review, Criticism, and Research Agenda. *Communications in Computer and Information Science, 54*, 20–31. https://doi.org/10.1007/978-3-642-12035-0_4

Carrillo, C., & Flores, M. A. (2020). COVID-19 and teacher education: a literature review of online teaching and learning practices. *European Journal of Teacher Education*, *43*(4), 466-487. https://doi.org/10.1080/02619768.2020.1821184

Carliner, S. (2004). *An overview of online learning* (2nd ed.). Armherst, MA: Human Resource Development Press.

Cheng, E.W.L. (2018). Choosing between the theory of planned behavior (TPB) and the technology acceptance model (TAM). *Education Tech Research Dev*, *67*, 21–37. https://doi.org/10.1007/s11423-018-9598-6

Cheon, J., Lee, S., Crooks, S. M., & Song, J. (2012). An investigation of mobile learning readiness in higher education based on the theory of planned behavior. *Computers & Education, 59*(3), 1054–1064. https://doi.org/10.1016/j.compedu.2012.04.015

Ciğerci, F. M. (2020). Slowmation experiences of pre-service teachers via distance education during the COVID-19 pandemic disease. *International Online Journal of Primary Education*, *9*(1), 111-127. Retrieved from https://dergipark.org.tr/en/pub/iojpe/issue/69689/1111166

Clark, J.T. (2020) *Distance Education. In Clinical Engineering Handbook*. Elsevier: Amsterdam, The Netherlands (pp. 410–415).

Cobanoglu, A. A., & Cobanoglu, I. (2021). Do Turkish student teachers feel ready for online learning in post-covid times? A study of online learning readiness. *Turkish Online Journal of Distance Education*, *22*(3), 270-280. https://doi.org/10.17718/tojde.961847

Compeau, D. R., & Higgins, C. A. (1991). *A social cognitive theory perspective on individual reactions to computing technology.* AIS Electronic Library (AISeL)

Compeau, D.R. & Higgins, C.A. (1995). Computer self-efficacy: development of a measure and initial test. *MIS Quarterly, 19*(2), 189-211.

Compeau, D.R., Higgins, C.A., Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS Quarterly, 23*(2), 145–158

Creswell, J. W. (1999). Mixed-Method Research: Introduction and Application. In G.J. Cizek (Ed.), *Handbook of Educational Policy* (pp. 455-472). San Diego, CA: Academic Press. doi:10.1016/b978-012174698-8/50045-x

Çamlıbel-Acar, Z., & Eveyik-Aydın, E. (2022). Perspectives of EFL teacher trainers and pre-service teachers on continued mandatory distance education during the pandemic. *Teaching and Teacher Education*, *112*, 1-12. https://doi.org/10.1016/j.tate.2022.103635

Çoban, B. T., & Vardar, A. K. (2021). Evaluation of Distance English Language Teaching Education during COVID-19 Pandemic from the Perspectives of ELT Student Teachers and Their Instructors. *Journal of Pedagogical Research*, *5*(3), 198-220. https://doi.org/10.33902/JPR.2021371746

Daugherty, M. K. (2005). A Changing Role for Technology Teacher Education. *Journal of Industrial Teacher Education*, *42*(1), 41-58.

Day, T., Chang, I. C. C., Chung, C. K. L., Doolittle, W. E., Housel, J., & McDaniel, P. N. (2020). The Immediate Impact of COVID-19 on Postsecondary Teaching and Learning. *The Professional Geographer, 73*(1), 1-13. https://doi.org/10.1080/00330124.2020.1823864

Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results*. Massachusetts Institute of Technology.

Davis, F. (1989). Technology Acceptance Model: Origins. *Working Papers on Information Systems*, 35-59.

De Paepe, L., Zhu, C., & Depryck, K. (2017). Online Dutch L2 learning in adult education: educators' and providers' viewpoints on needs, advantages and disadvantages. *Open Learning: The Journal of Open, Distance and e-Learning, 33*(1), 18–33. https://doi.org/10.1080/02680513.2017.1414586

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information systems research*, *3*(1), 60-95.

Delone, W. & McLean, E., (2003). The DeLone& McLean Model of Information systems success: A ten-year update. *Journal of Management Information Systems. 19*(4), 9-30.

Demir Kaymak, Z., & Horzum, M. B. (2013). Relationship between online learning readiness and structure and interaction of online learning students. *Educational Sciences: Theory and Practice*, *13*(3), 1792-1797. DOI: 10.12738/estp.2013.3.1580

Dewi, N. K. S. (2021). The EFL Pre-Service Teachers' Perception of Their Readiness in Teaching Online during COVID-19 Pandemic. *The Art of Teaching English as a Foreign Language*, *2*(1), 83-88. https://doi.org/10.36663/tatefl.v2i2.172

Donitsa-Schmidt, S., & Ramot, R. (2020). Opportunities and challenges: teacher education in Israel in the COVID-19 pandemic. *Journal of Education for Teaching*, *46*(4), 586-595. https://doi.org/10.1080/02607476.2020.1799708

Dorsah, P. (2021). Pre-Service Teachers' Readiness for Emergency Remote Learning in the Wake of COVID-19. *European Journal of STEM Education*, *6*(1), 2-12. https://doi.org/10.20897/ejsteme/9557

Dray, B. J., Lowenthal, P. R., Miszkiewicz, M. J., Ruiz‐Primo, M. A., & Marczynski, K. (2011). Developing an instrument to assess student readiness for online learning: A validation study. *Distance Education*, *32*(1), 29-47. https://doi.org/10.1080/01587919.2011.565496

Düzgün, S., & Sulak, S. E. (2020). Öğretmen Adaylarinin COVID-19 Pandemisi Sürecinde Uzaktan Eğitim Uygulamalarina Ilişkin Görüşleri. *Milli Eğitim Dergisi*, *49*(1), 619-633. https://doi.org/10.37669/milliegitim.787874

Eagly, A. H., & Chaiken, S. (2007). The advantages of an inclusive definition of attitude. *Social cognition*, *25*(5), 582-602. http://dx.doi.org/10.1521/soco.2007.25.5.582

Ebner, M. (2007). E-Learning 2.0 = e-Learning 1.0 + Web 2.0? *The Second International Conference on Availability, Reliability and Security* (ARES'07), 2007, pp. 1235-1239. https://doi.org/10.1109/ARES.2007.74.

Egede, B. A. J. (2021). An Assessment of Final Year Pre-Service Teachers' Readiness to Use ICT to Teach: Implication for COVID-19 Education, *Frontiers in Education Technology*, *4*(1), 66-82. http://dx.doi.org/10.22158/fet.v4n1p66

Ekici, M., & Ekici, D. I. (2021). Factors Influencing Student Engagement During COVID-19 Emergency Remote Teaching. In *Handbook of Research on Emerging Pedagogies for the Future of Education: Trauma-Informed, Care, and Pandemic Pedagogy* (pp. 127-144). IGI Global. http://dx.doi.org/10.4018/978-1-7998-7275-7.ch007

Ekren, G. (2014). *Türkiye'de uzaktan eğitim yönetiminde liderlik anlayışı.* (Unpublished Master's Thesis), Gazi Üniversitesi.

Elhaty, I. A., Elhadary, T., Elgamil, R., & Kilic, H. (2020). Teaching university practical courses online during COVID-19 crisis: A challenge for e-learning. *Journal of Critical Reviews*, *7*(8), 2865-2873. http://dx.doi.org/10.31838/jcr.07.08.472

Eom, S. B., & Ashill, N. J. (2018). A System's View of E-Learning Success Model. *Decision Sciences Journal of Innovative Education, 16*(1), 42–76. http://dx.doi.org/10.1111/dsji.12144

Erarslan, A. (2021). English language teaching and learning during COVID-19: A global perspective on the first year. *Journal of Educational Technology & Online Learning, 4*(2), 349-367. https://doi.org/10.31681/jetol.907757

Erdem-Aydin, İ. (2021). Investigation of higher education instructors' perspectives towards emergency remote teaching. *Educational Media International, 58*(1), 78–98. http://dx.doi.org/10.1080/09523987.2021.1908501

Ersin, P., Atay, D., & Mede, E. (2020). Boosting pre-service teachers' competence and online teaching readiness through e-practicum during the COVID-19 outbreak. *International Journal of TESOL Studies*, *2*(2), 112-124. https://doi.org/10.46451/ijts.2020.09.09

Eroğlu, M. (2021). *Examining The Prospective Teachers' Level Of Online Learning Readiness.* Paper presented at ERPA International Congresses on Education. 443-449.

Estrella, F. (2022). Ecuadorian university English teachers' reflections on emergency remote teaching during the COVID-19 pandemic. *International Journal of Educational Research Open*, *3*, 1-10. https://doi.org/10.1016/j.ijedro.2022.100141

Eti, İ. & Karaduman, B. (2020). Covid-19 pandemisi sürecinin öğretmen adaylarinin mesleki yeterlikleri açisindan incelenmesi. *Millî Eğitim Dergisi*, *49*(1), 635-656. https://doi.org/10.37669/milliegitim.787238

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Fandiño, F. G. E., Muñoz, L. D., & Velandia, A. J. S. (2019). Motivation and E-Learning English as a foreign language: A qualitative study. *Heliyon*, *5*(9), 1-7. https://doi.org/10.1016/j.heliyon.2019.e02394

Fathoni, A., & Retnawati, H. (2021). Challenges and strategies of postgraduate students in online learning during the Covid-19 pandemic. *Jurnal Prima Edukasia, 9*(2), 233- 247. https://doi.org/10.21831/jpe.v9i2.37393

Fidan, N., & Karatepe, C. (2021). How Do Erasmus Students Evaluate Their Language Learning Experience Abroad? *Eurasian Journal of Educational Research*, *93*, 51-72. DOI: https://doi.org/10.14689/ejer.2021.93.3

Fidan, N. K., & Yıldırım, N. (2022). Teacher Education in Turkey in the COVID-19 Pandemic: Experiences of the Pre-Service Teachers about the Online Teaching Practice. *Psycho-Educational Research Reviews*, *11*(1), 77-92. https://doi.org/10.52963/PERR_Biruni_V11.N1.06

Fishbein, M., & Ajzen, I. (1980). *Belief, Attitude, Intention, and Behavior, An Introduction to Theory and Research*. Addison-Wesley Publishing Co., Reading, MA.

Fuchs, K., Pösse, L., Bedenlier, S., Gläser-Zikuda, M., Kammerl, R., Kopp, B., ... & Händel, M. (2022). Preservice Teachers' Online Self-Regulated Learning: Does Digital Readiness Matter? *Education Sciences*, *12*(4), 272. https://doi.org/10.3390/educsci12040272

Gacs, A., Goertler, S., & Spasova, S. (2020). Planned online language education versus crisis‐prompted online language teaching: Lessons for the future. *Foreign Language Annals. 53*, 1-13. https://doi.org/10.1111/flan.12460

Gestiardi, R., Sarwanto, S., Chumdari, C., & Maryani, I. (2021). Using a Technology Readiness Model to Understand Perceived Usefulness of Learning in the Covid-19 Era. *International Journal of Elementary Education*, *5*(4), 631–638. https://doi.org/10.23887/ijee.v5i4.39188

Giesbers, B., Rienties, B., Tempelaar, D., & Gijselaers, W. (2013). A dynamic analysis of the interplay between asynchronous and synchronous communication in online learning: The impact of motivation. *Journal of Computer Assisted Learning, 30*(1), 30–50. https://doi.org/10.1111/jcal.12020

Gilbert, B. (2015). *Online learning revealing the benefits and challenges.* Rochester, US: Fisher Digital Publications.

Gillis, A., & Krull, L. M. (2020). COVID-19 Remote Learning Transition in Spring 2020: Class Structures, Student Perceptions, and Inequality in College Courses. *Teaching Sociology*, *48*(4), 283-299. https://doi.org/10.1177/0092055X20954263

Glazier, R., & Harris, H. S. (2020). *Common Traits of the Best Online and Face-to-face Classes: Evidence from Student Surveys.* Paper presented at the American Political Science Association Teaching and Learning Conference, Albuquerque, New Mexico, February 7-9, 2020.

Glesne, C. (2016). *Becoming qualitative researchers: An introduction.* Pearson. One Lake Street, Upper Saddle River, New Jersey 07458.

Gong, M., Xu, Y., & Yu, Y. (2004). An enhanced technology acceptance model for web-based learning. *Journal of Information Systems Education*, *15*(4), 365-374.

Gorgulu-Arı, A. & Hayır-Kanat. M. (2020). Prospective Teacher' Views on Covid-19 (Coronavirus). *Van Yüzüncü Yıl University the Journal of Social Sciences Institute*, Outbreak Diseases Special Issue, 459-492.

Gunawardena, C. N., & McIsaac, M. S. (2013). Distance education. In *Handbook of research on educational communications and technology* (pp. 361-401). Routledge.

Gubrium, J. F., & Holstein, J. A. (2002). From the individual interview to the interview society. In *Handbook of interview research: Context and method*, Thousand Oaks, California: Sage, 3–32.

Gündoğdu, B., & Alkayalar, A. (2021) Early Teacher Identity and Initial Teaching Beliefs of EFL Pre-service Teachers During COVID-19 Pandemic: What Changed?. *Eurasian Journal*

of Teacher Education, *2*(3), 196-227. Retrieved from https://dergipark.org.tr/en/pub/ejte/issue/66119/915102

Güven, S., & Uçar, M. (2021). Öğretmen adaylarının uzaktan eğitim ve öğretmenlik uygulaması dersine ilişkin görüşleri. *Journal of Awareness*, *6*(3), 165-183. https://doi.org/10.26809/joa.6.3.08

Hadiyanto, S. W., Wilyanti, L. S., & Supian, R. A. (2021). The Effective Use of Full Online Learning to Replace Classroom Learning During the COVID-19 Pandemic. *IJCRR*, *13*(11), 23-32. http://dx.doi.org/10.31782/IJCRR.2021.SP205

Han, B. (2021). Covid-19 pandemisi sürecindeki uzaktan eğitim uygulamasında öğretmen adaylarının e-öğrenmeye hazırbulunuşluk düzeylerinin incelenmesi. In *Sosyal Bilimlerde Covid-19 salgını Dönemler ve Değişim Dinamikleri - 2*. Ankara: Astana Yayınları.

Harry, K., John, M., & Keegan, D. (2013). *Distance education: New perspectives*. Routledge.

Hazaea, A. N., Bin-Hady, W. R. A., & Toujani, M. M. (2021). Emergency remote English language teaching in the Arab league countries: Challenges and remedies. *Computer-Assisted Language Learning Electronic Journal*, *22*(1), 201-222.

Hignett, S., & McDermott, H. (2015). Qualitative methodology. In *Evaluation of human work* (4th edn.). CRC Press, Boca Raton, 119-138.

Hill. J. B. (2021). Pre-Service Teacher Experiences during COVID 19: Exploring the Uncertainties between Clinical Practice and Distance Learning. *Journal of Practical Studies in Education, 2*(2), 1-13. https://doi.org/10.46809/jpse.v2i2.18

Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, (March 27, 2020). https://er.educause.edu/articles/2020/3/the-differencebetween-emergency-remote-teaching-and-online-learning.

Hong, A. J., & Kim, H. J. (2018). College students' digital readiness for academic engagement (DRAE) scale: Scale development and validation. *The Asia-Pacific Education Researcher*, *27*(4), 303-312. https://doi.org/10.1007/s40299-018-0387-0

Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, *55*(3), 1080-1090. https://doi.org/10.1016/j.compedu.2010.05.004

Irvine, A., Drew, P., & Sainsbury, R. (2013). 'Am I not answering your questions properly? 'Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. *Qualitative research*, *13*(1), 87-106. https://doi.org/10.1177/1468794112439086

İliç, U. (2022). The Impact of ICT Instruction on Online Learning Readiness of Pre-Service Teachers. *Journal of Learning and Teaching in Digital Age*, *7*(1), 116-126. https://doi.org/10.53850/joltida.1007868

Jeh-Awae, V., & Wiriyakarun, P. (2021). Effects of Self-Efficacy and Teacher Autonomy on Thai EFL Pre-Service Teachers' Online Teaching Practices During COVID-19 Pandemic. *Journal of Liberal Arts Prince of Songkla University*, *13*(2), 89-119. DOI: 10.14456/jlapsu.2021.5

Joe, N. J., Handang, J. G., Gregorio, K. A., & Saldariega, L. C. (2022). Readiness to Transition to Online Learning: A Survey among Filipino Pre-service Teachers. *International Journal on Integrated Education, 5*(4), *259-270*

Juárez-Díaz, C., & Perales, M. (2021). Language Teachers' Emergency Remote Teaching Experiences During the COVID-19 Confinement. *Profile Issues in Teachers Professional Development*, *23*(2), 121-135. https://doi.org/10.15446/profile.v23n2.90195

Kaiser, H. F., & Rice, J. (1974). *Little Jiffy, Mark Iv.* Educational and Psychological Measurement, *34*(1), 111–117. https://doi.org/10.1177/001316447403400115

Karakuş, N.,Ucuzsatar, N., Karacaoğlu, M. Ö., Esendemir, N., Bayraktar, D. (2020). Türkçe öğretmeni adaylarının uzaktan eğitime yönelik görüşleri. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, *19*, 220-241. https://doi.org/10.29000/rumelide.752297

Karatepe, F., Küçükgençay, N., & Peker, B. (2020). Öğretmen adayları senkron uzaktan eğitime nasıl bakıyor? Bir anket çalışması. *Journal of social and humanities sciences research*, *7*(53), 1262-1274. http://dx.doi.org/10.26450/jshsr.1868

Kaygisiz, S., & Balçikanli, C. (2021). Is it possible to teach English through EBA TV? Exploring student teachers' concerns and self-efficacy beliefs. *Journal of Educational Technology and Online Learning*, *4*(3), 489-502. https://doi.org/10.31681/jetol.932218

Kızıldağ, A., & Tuncer, H. A. (2021). Scoping Review on Practicum of Turkish Pre-Service EFL Teachers during COVID-19. *OPUS Journal of Society Research*, *19*(45), 128-141. https://doi.org/10.26466/opusjsr.1063236

Kidd, W., & Murray, J. (2020). The COVID-19 pandemic and its effects on teacher education in England: how teacher educators moved practicum learning online. *European Journal of Teacher Education, 43*(4), 1–17. https://doi.org/10.1080/02619768.2020.1820480

Kiok, P. K., Din, W. A., Said, N., Swanto, S. (2021).The Experiences of Pre-service Teachers Teaching Practicum During the COVID-19 Pandemic: A Systematic Literature Review. *International Journal of Education, Psychology and Counseling, 6*(43), 280-295. https://doi.org/10.35631/IJEPC.643022

Kosar, G. (2021). Distance Teaching Practicum: Its Impact on Pre-Service EFL Teachers' Preparedness for Teaching. *IAFOR Journal of Education*, *9*(2), 111-126. https://doi.org/10.22492/ije.9.2.07

La Velle, L., Newman, S., Montgomery, C., & Hyatt, D. (2020). Initial teacher education in England and the COVID-19 pandemic: Challenges and opportunities. *Journal of Education for Teaching*, *46*(4), 596-608. https://doi.org/10.1080/02607476.2020.1803051

Laborda, J. G., Díaz, V. C., & Ramírez, E. J. (2020). Foreign language pre-service teachers' attitudes towards integrated technology. *International Journal of Emerging Technologies in Learning (iJET)*, *15*(23), 85-94. https://doi.org/10.3991/ijet.v15i23.18797%0d

Laguitao, J. D. S., Cubalit, B. F. A., Teppang, R. A. J. O., dela Cruz, M. A. R., & Bautista, R. G. (2021). Plea from Within: The Plights of Pre-service Teachers in the Midst of the New Normal of Education. *American Journal of Educational Research*, *9*(12), 701-707. https://doi.org/10.12691/education-9-12-2

Lazarevic, B., & Bentz, D. (2020). Student Perception of Stress in Online and Face-to-Face Learning: The Exploration of Stress Determinants. *American Journal of Distance Education, 35*(1), 1–14. https://doi.org/10.1080/08923647.2020.1748491

Lee, M. K., Cheung, C. M. and Chen, Z. (2005). Acceptance of internet-based learning medium: The role of extrinsic and intrinsic motivation. *Information and Management, 42*(8), 1095-1104. https://doi.org/10.1016/j.im.2003.10.007

Legris, P., Ingham, J., & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management, 40*(3)*, 191–204.* https://doi.org/10.1016/s0378-7206(01)00143-4

Li, B. (2021). Ready for online? Exploring EFL teachers' ICT acceptance and ICT literacy during COVID-19 in mainland China. *Journal of Educational Computing Research*, *60*(1), 196-219. https://doi.org/10.1177/07356331211028934

Lim, F. P. (2017). An analysis of synchronous and asynchronous communication tools in e-learning. *Advanced Science and Technology Letters*, *143*(46), 230-234. http://dx.doi.org/10.14257/astl.2017.143.46

Liza, K., & Andriyanti, E. (2020). Digital Literacy Scale of English Pre-Service Teachers and Their Perceived Readiness toward the Application of Digital Technologies. *Journal of Education and Learning (EduLearn)*, *14*(1), 74-79. https://doi.org/10.11591/edulearn.v14i1.13925

Lowenthal, P. R., Wilson, B., & Parrish, P. (2009). Context matters: A description and typology of the online learning landscape. In M. Simonson (Ed.)*, 32nd Annual proceedings: Selected research and development papers presented at the annual convention of the Association for Educational Communications and Technology.* AECT.

Maizyurah, M., Yasim, S., & Danial, M. (2021). Pre-service Teachers' Attitudes Towards Online Learning During The Covid-19 Pandemic. *English Language, Linguistics, and Culture International Journal*, *1*(3), 120-130. https://doi.org/10.24252/elstic-ij.v1i3.25924

Masrom, M. (2007). Technology acceptance model and e-learning. *Technology*, *21*(24), 81.

Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information systems research*, *2*(3), 173-191.

Martins, J., Gonçalves, R., Santos, V., & Pereira, J. (2012). Network based model for e-learning 2.0. *Procedia-Social and Behavioral Sciences*, *47*, 1242-1248. https://doi.org/10.1016/j.sbspro.2012.06.807

Mayer, R. (2021). New Opportunities and a View of the Future. In M. London (Ed.), *The Oxford Handbook of Lifelong Learning* (pp.409-426). Oxford University Press.

Mavuru, L., Pila, O. K., & Kuhudzai, A. G. (2022). Pre-Service Teachers‟ Levels of Adaptations to Remote Teaching and Learning at A University in A Developing Country in the Context of COVID-19. *International Journal of Higher Education*, *11*(1), 12-30. https://doi.org/10.5430/ijhe.v11n1p12

Megawati, F., Mukminatien, N., El Khoiri, N., & Anugerahwati, M. (2021, December). Barriers to Emergency Remote Teaching and Learning During the COVID-19 Outbreak: Pre-Service Teachers' View. In *International Seminar on Language, Education, and Culture (ISoLEC 2021)* (pp. 113-118). Atlantis Press.

Miltiadou, M., & Savenye, W. C. (2003). Applying social cognitive constructs of motivation to enhance student success in online distance education. *AACE Review (formerly AACE Journal)*, *11*(1), 78-95.

Mishiwo, M., Danku, B. E. M., Ayivor, M., & Doe, F. (2021). Online Teaching and Learning: Perceptions and Readiness of Pre-Service Teachers. *British Journal of Education*, *9*(9), 101-113. https://doi.org/10.37745/bje.2013

Misirli, O., & Ergulec, F. (2021). Emergency remote teaching during the COVID-19 pandemic: Parents experiences and perspectives. *Education and information technologies*, *26*(6), 6699-6718. https://doi.org/10.1007/s10639-021-10520-4

Mohammadi, N., Ghorbani, V., & Hamidi, F. (2011). Effects of e-learning on language learning. *Procedia computer science*, 3, 464-468. https://doi.org/10.1016/j.procs.2010.12.078

Mohamad Nasri, N., Husnin, H., Mahmud, S. N. D., & Halim, L. (2020). Mitigating the COVID-19 pandemic: a snapshot from Malaysia into the coping strategies for pre-service teachers' education. *Journal of Education for Teaching*, *46*(4), 546-553. https://doi.org/10.1080/02607476.2020.1802582

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and higher education*, *14*(2), 129-135. https://doi.org/10.1016/j.iheduc.2010.10.001

Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching*, *46*(4), 609-611. https://doi.org/10.1080/02607476.2020.1755205

Murairwa, S. (2015). Voluntary sampling design. *International Journal of Advanced Research in Management and Social Sciences, 4*(2), 185-200.

Naah, A. M. (2020). Pre-service teachers' perception of online teaching and learning during the COVID–19 era. *International Journal of Scientific Research and Management*, *8*(10), 1649-1662. https://doi.org/10.18535/ijsrm/v8i10.el01

Naqvi, S., & Zehra, I. (2020). *Online EFL emergency remote teaching during COVID 19, challenges and innovative practices: A case of Oman.* In Arab World English Journal (AWEJ) Proceedings of 2nd MEC TESOL Conference, 17-35. https://dx.doi.org/10.24093/awej/MEC2.2

Nuangchalerm, P., Prachagool, V., & Dostál, J. (2020). Digital learning of pre-service teachers during COVID-19 outbreak. *Journal of Technology and Information Education*, *12*(2), 143-151. https://doi.org/10.5507/jtie.2020.007

OECD (2020). School Education During Covid -19: Were Teachers And Students Ready? Retrieved from
https://www.oecd.org/education/Turkey-coronavirus-education-country-note.pdf

Ojo, A. I. (2017). Validation of the DeLone and McLean information systems success model. *Healthcare informatics research*, *23*(1), 60-66. https://doi.org/10.4258/hir.2017.23.1.60

Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021). An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID‐19 pandemic. *British Journal of Educational Technology, 52*(4), 1357-1376. https://doi.org/10.1111/bjet.13112

Ozkaral, T. C., & Bozyigit, R. (2020). Social studies and geography teacher candidates' views on coronavirus (COVID 19) and online education process. *Review of International Geographical Education Online*, *10*(3), 467-484. https://doi.org/10.33403/rigeo.756757

Önal, A. & Özdemir, A. (2021). An investigation into pre-service teachers' online learning climate perceptions. *Journal of Educational Technology & Online Learning, 4*(2), 310-333. https://doi.org/10.31681/jetol.927998

Öz, H. (2015). Assessing pre-service English as a foreign language teachers' technological pedagogical content knowledge. *International Education Studies*, *8*(5), 119-130. http://dx.doi.org/10.5539/ies.v8n5p119

Özdemir, A., & Önal, A. (2021). An Investigation into Pre-Service Teachers' Self-Regulated Online Learning Perceptions. *International Journal of Contemporary Educational Research, 8*(2), 143-159. https://doi.org/10.33200/ijcer.865189

Özkanal, Ü., Yüksel, İ., & Başaran-Uysal, B. Ç. (2020). The pre-service teachers' reflection-on-action during distance practicum: A critical view on EBA TV English courses. *Egitimde Nitel Araştırmalar Dergisi – Journal of Qualitative Research in Education, 8*(4), 1347-1364. https://doi.org/10.14689/issn.2148-2624.8c.4s.12m

Öztürk, M. (2021). Open and Distance Education Perceptions of Pre-Service Teachers: Asynchronous and Synchronous Online Learning. *Journal of Ahmet Keleşoğlu Education Faculty. 3*(2), 216-230. Retrieved from https://dergipark.org.tr/tr/pub/akef/issue/65129/1001751

Özüdoğru, G. (2021). Problems faced in distance education during Covid-19 Pandemic. *Participatory Educational Research*, *8*(4), 321-333. https://doi.org/10.17275/per.21.92.8.4

Paechter, M., & Maier, B. (2010). Online or face-to-face? Students' experiences and preferences in e-learning. *The internet and higher education*, *13*(4), 292-297. https://doi.org/10.1016/j.iheduc.2010.09.004

Paetsch, J., & Drechsel, B. (2021). Factors Influencing Pre-service Teachers' Intention to Use Digital Learning Materials: A Study Conducted During the COVID-19 Pandemic in Germany. *Frontiers in Psychology*, *12,* 1-12. https://doi.org/10.3389/fpsyg.2021.733830

Perraton, H. (2020). A theory for distance education. *In Distance education: International perspectives* (pp. 34-45). Routledge.

Perry, N. E., Turner, J. C., & Meyer, D. K. (2006). Classrooms as context for motivating learning. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (pp. 326–348). Erlbaum.

Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: models, dimensions, measures, and interrelationships. *European journal of information systems*, *17*(3), 236-263. https://doi.org/10.1057/ejis.2008.15

Petter, S., DeLone, W., & McLean, E. R. (2013). Information systems success: The quest for the independent variables. *Journal of management information systems*, *29*(4), 7-62. https://doi.org/10.2753/MIS0742-1222290401

Pozo-Rico, T., Gilar-Corbí, R., Izquierdo, A., & Castejón, J. L. (2020). Teacher training can make a difference: tools to overcome the impact of COVID-19 on primary schools. An experimental study. *International Journal of Environmental Research and Public Health, 17*(22), 8633-8655. https://doi.org/10.3390/ijerph17228633

Prastikawati, E. F. (2021, July). Pre-service EFL teachers' perception on technology-based formative assessment in their teaching practicum. In *ELT Forum: Journal of English Language Teaching, 10*(2), 163-171. https://doi.org/10.15294/elt.v10i2.47965

Ramzan, N. A. F. M. (2021). *Measuring Digital Competence: Pre-Service Teachers (PST) Readiness for Online Teaching*. Paper presented in 29th MELTA International Conference, 23-42.

Rapanta, C., Botturi, L., Goodyear, P., Guardia, L. & Koole, M. (2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. *Postdigital Science and Education*, *2*, 923–945. https://doi.org/10.1007/s42438-020-00155-y

Reister, M., & Rook, R. (2021). Perceptions of preparedness for online teaching due to the COVID-19 pandemic as a graduate of an education program at a university in the Midwest. *Journal of Digital Learning in Teacher Education*, *37*(2), 128-146. https://doi.org/10.1080/21532974.2021.1908920

Rogerson‐Revell, P. (2007). Directions in e‐learning tools and technologies and their relevance to online distance language education. *Open Learning: The Journal of Open, Distance and e-Learning*, *22*(1), 57-74. https://doi.org/10.1080/02680510601100168

Sadeghi, M. (2019). A shift from classroom to distance learning: Advantages and limitations. *International Journal of Research in English Education*, *4*(1), 80-88. https://doi.org/10.29252/ijree.4.1.80

Sandra, S. H. (2021). Introducing German pre-service teachers to remote teaching: Policy, preparation and perceptions of competence development of future foreign language teachers. *Training, Language and Culture*, *5*(1), 68-85. https://doi.org/10.22363/2521-442X-2021-5-1-68-85

Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, *128,* 13-35. https://doi.org/10.1016/j.compedu.2018.09.009

Schunk, D. H., & Usher, E. L. (2012). Social cognitive theory and motivation. In R.M. Ryan, *The Oxford handbook of human motivation*, (pp.11-26) New York: Oxford University Press.

Sepulveda-Escobar, P., & Morrison, A. (2020). Online teaching placement during the COVID-19 pandemic in Chile: challenges and opportunities. *European Journal of Teacher Education*, *43*(4), 587-607. https://doi.org/10.1080/02619768.2020.1820981

Serhan, D. (2020). Transitioning from face-to-face to remote learning: Students' attitudes and perceptions of using Zoom during COVID-19 pandemic. *International Journal of Technology in Education and Science*, *4*(4), 335-342. https://doi.org/10.46328/ijtes.v4i4.148

Shinta, L. G. B., & Aprilia, N. (2020). Efl Pre-Service Teachers' Perceptions of Online Teaching-Practicum During COVID-19 Pandemic. *J-ELLiT (Journal of English Language, Literature, and Teaching)*, *4*(2), 58-66. http://dx.doi.org/10.17977/um046v4i2p%25p

Soffer, T., & Nachmias, R. (2018). Effectiveness of learning in online academic courses compared with face‐to‐face courses in higher education. *Journal of Computer Assisted Learning*, *34*(5), 534-543. https://doi.org/10.1111/jcal.12258

Solak, E., & Cakir, R. (2015). Language learning strategies of language e-learners in Turkey. *E-Learning and Digital Media*, *12*(1), 107-120. https://doi.org/10.1177/2042753014558384

Stevens, G. J., Bienz, T., Wali, N., Condie, J., & Schismenos, S. (2021). Online university education is the new normal: but is face-to-face better? *Interactive Technology and Smart Education*, *18*(3), 278-297. https://doi.org/10.1108/ITSE-08-2020-0181

Subekti, A. S. (2021). COVID-19-triggered online learning implementation: Pre-service English teachers' beliefs. *Metathesis: Journal of English Language, Literature, and Teaching*, *4*(3), 232-248. http://dx.doi.org/10.31002/metathesis.v4i3.2591

Sukendro, S., Habibi, A., Khaeruddin, K., Indrayana, B., Syahruddin, S., Makadada, F. A., & Hakim, H. (2020). Using an extended Technology Acceptance Model to understand students' use of e-learning during COVID-19: Indonesian sport science education context. *Heliyon, 6*(11), 1-9. https://doi.org/10.1016/j.heliyon.2020.e05

Sutiah, S., Slamet, S., Shafqat, A. & Supriyono, S., (2020). Implementation of distance learning during the COVID19 in Faculty of Education and Teacher Training. *Cypriot Journal of Educational Science. 15*(5), 1204-1214. https://doi.org/10.18844/cjes.v15i5.5151

Tabachnick, B.G., & Fidell, L. S. (2013). *Using Multivariate Statistic* (6th ed.) Boston: Pearson.

Tagoe, M. A., & Abakah, E. (2014). Determining Distance Education Students' Readiness for Mobile Learning at University of Ghana Using the Theory of Planned Behavior. *International Journal of Education and Development using Information and Communication Technology*, *10*(1), 91-106.

Taşkaya, S. M. (2021). Teacher Candidates' Evaluation of the Emergency Remote Teaching Practices in Turkey during COVID-19 Pandemic. *International Journal of Progressive Education, 17*(4), 63-78. https://doi.org/10.29329/ijpe.2021.366.5

Tekel, E., Bayır, Ö. Ö., & Dulay, S. (2022). Teaching Practicum During the Covid-19 Pandemic: A Comparison of the Practices in Different Countries. *International Journal of Progressive Education*, *18*(2), 71-86. https://doi.org/10.29329/ijpe.2022.431.5

Telli Yamamoto, G., & Altun, D. (2020). Coronavirüs ve çevrimiçi (online) eğitimin önlenemeyen yükselişi. *Üniversite Araştırmaları Dergisi,* *3*(1), 25–34. https://doi.org/10.32329/uad.711110

Thorpe, M., & Godwin, S. (2006). Interaction and e-learning: The student experience. *Studies in continuing education*, *28*(3), 203-221. https://doi.org/10.29329/ijpe.2022.431.5

Tratnik, A., Urh, M., & Jereb, E. (2017). Student satisfaction with an online and a face-to-face Business English course in a higher education context. *Innovations in Education and Teaching International,* 1–10. https://doi.org/10.1080/14703297.2017.1374875

Uçar, S., & Yazici, Y. A. (2021). Mixed Method Research: A Study on Turkish Pre-Service EFL Teachers' Perspectives Towards Online Learning via the Online Learning Platform for Enhancing English Language Learning. In Ş. Koca & P.Erten (Eds.), *Research & Reviews in Educational Sciences*. Ankara: Gece Publishing.

UNESCO (2020a). *COVID-19 educational disruption and response*. Retrieved from https://en.unesco.org/covid19/educationresponse

UNESCO (2020b). *National education responses to COVID-19: summary report of UNESCO's online survey*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000373322

Urbach, N., Müller, B. (2012). The Updated DeLone and McLean Model of Information Systems Success. In Dwivedi, Y., Wade, M., Schneberger, S. (Eds), *Information Systems Theory. Integrated Series in Information Systems.* Springer, New York, NY. https://doi.org/10.1007/978-1-4419-6108-2_1

Uysal, M., & Karagöz, A. E. (2021). Aday Öğretmenlerin COVID-19 Pandemi Sürecinde Yürütülen Uzaktan Eğitim Uygulamalarına İlişkin Tutumlarının İncelenmesi: Atatürk Akademisi Örneği. *Uluslararası Anadolu Sosyal Bilimler Dergisi, 5*(4), 1274-1290. https://doi.org/10.47525/ulasbid.969087

Uzun, L. (2016). Evaluation of the latest English language teacher training programme in Turkey: Teacher trainees' perspective. *Cogent Education*, *3*(1), 1-16. https://doi.org/10.1080/2331186X.2016.1147115

Van Nuland, S., Mandzuk, D., Tucker Petrick, K., & Cooper, T. (2020). COVID-19 and its effects on teacher education in Ontario: a complex adaptive systems perspective. *Journal of Education for Teaching*, *46*(4), 442-451. https://doi.org/10.1080/02607476.2020.1803050

Volery, T., & Lord, D. (2000). Critical success factors in online education. *International Journal of Educational Management, 14*(5), 216−223.

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, *23*(3), 34-41.

Vygotsky, L. S. (1987). *Thinking and speech.* In R.W. Rieber & A.S. Carton (Eds.), The collected works of L.S. Vygotsky, Volume 1: Problems of general psychology (pp. 39–285). New York: Plenum Press. (Original work published 1934.)

Wang, S.-L., & Lin, S. S. J. (2007). The application of social cognitive theory to web-based learning through NetPorts. *British Journal of Educational Technology, 38*(4), 600–612. https://doi.org/10.1111/j.1467-8535.2006.00645.x

Wei, H. C., & Chou, C. (2020). Online learning performance and satisfaction: do perceptions and readiness matter? *Distance Education, 41*(1), 48-69. https://doi.org/10.1080/01587919.2020.1724768

Whalen, J. (2020). Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Journal of Technology and Teacher Education*, *28*(2), 189-199. Retrieved from https://www.learntechlib.org/primary/p/215995/.

Willis, B. D. (1993). Distance education: A practical guide. *Educational Technology.*

Wuensch, K. L., Aziz, S., Ozan, E., Kishore, M., & Tabrizi, M. (2006, October). Pedagogical characteristics of online and face-to-face classes. In *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 2422-2429). Association for the Advancement of Computing in Education (AACE).

Yengin, I., Karahoca, A., & Karahoca, D. (2011). E-learning success model for instructors' satisfactions in perspective of interaction and usability outcomes. *Procedia Computer Science, 3*, 1396–1403. https://doi.org/10.1016/j.procs.2011.01.021

Yılmaz, A. B. (2019). Distance and face-to-face students' perceptions towards distance education: A comparative metaphorical study. *Turkish Online Journal of Distance Education*, *20*(1), 191-207. https://doi.org/10.17718/tojde.522705

Yolcu, H. H. (2020). Koronavirüs (COVID-19) pandemi sürecinde sınıf öğretmeni adaylarının uzaktan eğitim deneyimleri. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, *6*(4), 237-250. Retrieved from https://dergipark.org.tr/en/pub/auad/issue/57638/788890

APPENDICES

Appendix A: Research Ethics Committee Approval

BURSA ULUDAĞ ÜNİVERSİTESİ
ARAŞTIRMA VE YAYIN ETİK KURULLARI
(Sosyal ve Beşeri Bilimler Araştırma ve Yayın Etik Kurulu)
TOPLANTI TUTANAĞI

OTURUM TARİHİ	OTURUM SAYISI
29 Ocak 2021	2021-01

KARAR NO 26: Eğitim Bilimleri Enstitüsü Müdürlüğü'nden alınan Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı Yüksek Lisans programı öğrencisi Gözde KARAKAYA'nın "Yüz Yüze Eğitim ile Uzaktan Eğitim Karşılaştırmalı Analizi: İngilizce Öğretmeni Adaylarının Hazır Bulunuşlukları" konulu tez çalışması kapsamında uygulanacak anket ve ölçek sorularının değerlendirilmesine geçildi.

Yapılan görüşmeler sonunda: Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı Yüksek Lisans programı öğrencisi Gözde KARAKAYA'nın "Yüz Yüze Eğitim ile Uzaktan Eğitim Karşılaştırmalı Analizi: İngilizce Öğretmeni Adaylarının Hazır Bulunuşlukları" konulu tez çalışması kapsamında uygulanacak anket ve ölçek sorularının fikri, hukuki ve telif hakları bakımından metot ve ölçeğine ilişkin sorumluluğu başvurucuya ait olmak üzere uygun olduğuna oybirliği ile karar verildi.

Prof. Dr. Feridun YILMAZ
Kurul Başkanı

Prof. Dr. Abamüslim AKDEMİR
Üye

Prof. Dr. Doğan ŞENYÜZ
Üye

Prof. Dr. Ayşe OĞUZLAR
Üye

Prof. Dr. Vejdi BİLGİN
Üye

Prof. Gülay GÖĞÜŞ
Üye

Prof. Dr. Alev SINAR UĞURLU
Üye

Appendix B: Online Learning Experiences Scale

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. The learning environment offers e-mail, chat, newsgroups and/or other communication facilities for the interaction with other course participants.						
2. I often have to deal with technical problems (e.g., errors of the software, slow access to the internet).						
3. The course is demanding with regard to the organizational and temporal effort.						
4. When I need advice from my tutor, I can easily get in contact with her/him via e-mail, chat, forum etc.						
5. My tutor has a high expertise in the implementation of e-learning courses.						
6. My tutor gives fast feedback via e-mail, chat, newsgroups and/or other communication facilities.						
7. My tutor supports and counsels me with regard to my learning processes.						
8. I can easily and fast exchange knowledge with other course participants via e-mail, chat, newsgroups etc.						
9. There are ample opportunities in the course to establish personal contact with other participants.						
10. The online communication tools facilitate establishing new contact with other students.						
11. Learning in groups and cooperation with other learners are fostered in the course (e.g., by group activities, discussions etc.).						
12. I decide on my own at what times and where I am learning (e.g., at the university, at home).						
13. I can decide on my own about the pace of learning and the use of learning strategies.						
14. The learning environment offers the possibility to control my increase in knowledge (e.g., via tests).						

15. I miss the personal contact with my tutor.						
16. Due to the online communication in the course personal relations are neglected.						
17. I find it difficult to motivate myself and to maintain learning motivation in the course.						
18. The communication with media complicates group work.						
19. I acquire (conceptual) knowledge in the subject matter of the course.						
20. I learn to apply my knowledge to different problems.						
21. I acquire skills in the self-regulation of learning.						
22. I acquire skills in using the internet for scientific work routines (e.g., online research).						
23. I acquire skills in communication with media.						
24. Overall satisfaction						

Appendix C: Comparison of Online and Face-to-face Teaching Scale

	Better in Online Learning (+3)	**Good in Online Learning (+2)**	**Slightly Good in Online Learning (+1)**	**Slightly Good in Face-to-face teaching (-1)**	**Good in Face-to-face teaching (-2)**	**Better in Face-to-face teaching (-3)**
1. Clarity and explicit structuring of the course and learning contents.						
2. Favorable cost-benefit ratio of effort and learning outcomes.						
3. Fast feedback from the tutor						
4. Counseling and support of learning by the tutor.						
5. Possibility to establish personal contact with the tutor.						
6. Easy and fast accessibility to the tutor.						
7. Easy and fast exchange of information and knowledge with other course participants.						
8. Support of cooperative learning and group work with other course participants.						
9. Possibility to establish positive social relations with other course participants.						
10. Flexibility of learning with regard to time and place.						
11. Flexibility with regard to about learning strategies and pace of learning.						
12. Opportunities for exercising and applying one's knowledge.						
13. Opportunities for monitoring one's learning outcomes.						
14. Support for maintaining learning motivation.						
15. Acquisition of skills in scientific work procedures.						
16. Acquisition of conceptual knowledge in the subject matter.						

Appendix D: Online Learning Readiness Scale

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel confident in performing the basic functions of Microsoft Office programs. (MS Word, MS Excel, and MS PowerPoint).					
2. I feel confident in my knowledge and skills of how to manage software for online learning.					
3. I feel confident in using the Internet (Google, Yahoo) to find or gather information for online learning.					
4. I carry out my own study plan.					
5. I seek assistance when facing learning problems.					
6. I manage time well.					
7. I set up my learning goals.					
8. I have higher expectations for my learning performance.					
9. I can direct my own learning progress.					
10. I am not distracted by other online activities when learning online (instant messages, Internet surfing).					
11. I repeated the online instructional materials on the basis of my needs.					
12. I am open to new ideas.					
13. I have motivation to learn.					
14. I improve from my mistakes.					
15. I like to share my ideas with others.					
16. I feel confident in using online tools (email, discussion) to effectively communicate with others.					
17. I feel confident in expressing myself (emotions and humor) through text.					
18. I feel confident in posting questions in online discussions.					

Appendix E: Online Learning Perception Scale

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Online learning provides various multimedia learning resources.					
2. Online learning provides various online resources.					
3. Online learning enables me to retrieve and obtain more learning resources.					
4. Online learning enables me to share and exchange resources.					
5. Online learning enables me to interact directly with other learners.					
6. Online learning can encourage interaction between instructors and students.					
7. Online learning can shorten the distance between instructors and students.					
8. Online learning enables me to meet more classmates or peers with the same interests or habits.					
9. Online learning provides sufficient discussion opportunities.					
10. Online learning provides convenient tools to communicate with other learners.					
11. Online learning enables me to decide on the best time to learn.					
12. Online learning enables me to decide on the best location to learn.					
13. Online learning enables me to repeatedly review learning materials.					
14. Online learning overcomes time and place constraints.					
15. Online learning can broaden my common knowledge base.					
16. Online learning enables me to learn more about the knowledge that I desire to learn.					
17. Online learning can expand my academic knowledge capacity.					
18. Online learning is an effective learning style.					

19. Online learning enables an abstract idea or concept to be presented in a concrete manner.					
20. Online learning environments lead to less pressure to catch up with a course schedule.					
21. Online learning environments are less stressful.					
22. Online learning environments place less pressure on exams and assessments.					
23. Online learning environments can effectively reduce learning burden.					

Appendix F: Interview Questions- Turkish Version

GÖRÜŞME SORULARI

1. Yüz yüze eğitimden uzaktan eğitime ani geçiş sizin için nasıl bir tecrübe oldu? Teknik veya motivasyonel olarak sıkıntılar yaşadınız mı?
2. Uzaktan eğitim sürecinin dönem sonu notlarınıza iyi mi yoksa kötü mü etki ettiğini düşünüyorsunuz?
3. Çevrimiçi eğitimle beraber derslere daha hazırlıklı katılabildiğinizi düşünüyor musunuz?
4. Çevrimiçi derslerde yüz yüze derslere göre hem öğrencilerle hem öğretmen ile daha kolay etkileşim sağladığınızı düşünüyor musunuz?
5. 4.sınıf öğrencisiyseniz eğer, yüz yüze almanız gereken staj dersini çevrimiçi ortamda nasıl aldınız?
6. Çevrimiçi ortamda staj dersi almak sizin için olumlu mu yoksa olumsuz bir tecrübe mi oldu?
7. İlerideki öğretmenlik hayatınız için çevrimiçi eğitimi tecrübe edinmenin size bir katkı sağladığını düşünüyor musunuz?
8. Sizce gelecekte çevrimiçi eğitim yüz yüze eğitimin yerini alabilir mi?

Appendix G: Interview Questions- English Version

INTERVIEW QUESTIONS

1. How do you evaluate your experience of the sudden transition from face-to-face education to distance education? Have you had any technical or motivational difficulties?
2. Do you think the distance education process had a positive or negative effect on your end-of-term grades?
3. Do you think you attended classes more prepared with online education?
4. Do you think that you interact with both students and teachers more easily in online classes than in face-to-face classes?
5. If you are a 4th year student, how did you take the internship course that you had to take face-to-face online?
6. Was taking an online internship course a positive or negative experience for you?
7. Do you think that having this experience of online education contributes to your future teaching career?
8. Do you think online education can replace face-to-face education in the future?

ÖZGEÇMİŞ			
Adı-Soyadı	Gözde KARAKAYA		
Bildiği Yabancı Diller	İngilizce	İspanyolca	
Eğitim Durumu	**Başlama-Bitirme**	**Kurum**	**Adı**
Lise	26.09.2011-12.06.2015	Dokuz Eylül	Anadolu Lisesi
Lisans	05.08.2015-25.06.2019	Dokuz Eylül	Üniversitesi
Yüksek Lisans	06.09.2019-halen	Uludağ	Üniversitesi
Çalıştığı Kurum	**Başlama- Ayrılma**	**Çalışılan**	**Kurumun Adı**
1. Altınözü Anadolu Lisesi	28.09.2020-halen	Milli Eğitim	Bakanlığı
Üye Olduğu Bilimsel ve Meslekî Kuruluşlar	TEGEV		
Katıldığı Proje ve Toplantılar	Kıvılcım Projesi - Dokuz Eylül Üniversitesi		
Yayınlar	**-**		
		Tarih **İmza** **Adı-Soyadı**	**24.08.2022** **Gözde KARAKAYA**