PRE-SERVICE EFL TEACHERS' CURRENT PRACTICES AND
PERCEPTIONS OF MOBILE ASSISTED LANGUAGE LEARNING

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

SERAP ÖZGE AYGÜL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
THE DEPARTMENT OF ENGLISH LANGUAGE TEACHING

JULY 2019

Approval of the Graduate School of Social Sciences

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ABSTRACT

PRE-SERVICE EFL TEACHERS' CURRENT PRACTICES AND PERCEPTIONS OF MOBILE ASSISTED LANGUAGE LEARNING

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July 2019, 239 pages

The current study investigated the pre-service EFL teachers' current practices and perceptions of mobile assisted language learning. In the study, using mixed methods research design, quantitative data were collected through a questionnaire, applied to 142 volunteer participants, and qualitative data were collected through semi-structured interviews conducted with 10 volunteer students. Quantitative data were analyzed by using descriptive statistics and qualitative data were analyzed by employing constant comparative analysis method. According to the research results, the pre-service EFL teachers used their mobile devices most frequently for learning English vocabulary and least frequently for facilitating their writing skills. They found mobile assisted language learning effective, especially for facilitating their listening skills in English. Moreover, while the pre-service EFL teachers agreed upon the possible affordances of using mobile devices for language learning purposes mentioned in the relevant literature, they had moderately positive perceptions of classroom implications of mobile assisted language learning. The findings of the present study, providing a comprehensive view of the pre-service

EFL teachers' current practices and perceptions of mobile assisted language learning, might be a guide for those who design and develop mobile applications for language learning, those who develop curricula for English Language Teaching programs, and those who implement the curriculum, namely the lecturers offering courses in English Language Teaching programs.

Keywords: Mobile Learning, Mobile Assisted Language Learning, Pre-Service English Teachers' Perceptions

ÖZ

İNGİLİZCE ÖĞRETMEN ADAYLARININ
MOBİL DESTEKLİ DİL ÖĞRENME PRATİKLERİ VE
MOBİL DESTEKLİ DİL ÖĞRENMEYE İLİŞKİN ALGILARI

AYGÜL, Serap Özge
Yüksek Lisans, İngiliz Dili Öğretimi Bölümü
Tez Yöneticisi   : Doç. Dr. Perihan SAVAŞ

Temmuz 2019, 239 sayfa

Bu çalışma İngilizce öğretmen adaylarının mobil destekli dil öğrenme pratiklerini ve mobil destekli dil öğrenmeye ilişkin algılarını araştırmak amacıyla yürütülmüştür. Karma araştırma deseninin kullanıldığı çalışmada, nicel veriler 142 gönüllü katılımcıya uygulanan bir anket aracılığıyla, nitel veriler ise 10 gönüllü öğrenci ile yürütülen yarı-yapılandırılmış görüşmeler aracılığıyla toplanmıştır. Nicel veriler tanımlayıcı istatistik kullanılarak, nicel veriler ise sabit karşılaştırmalı analiz yöntemi ile analiz edilmiştir. Araştırma sonuçlarına göre İngilizce öğretmen adayları mobil cihazlarını en çok İngilizce kelime öğrenmek, en az ise İngilizce yazma becerileri geliştirmek amacıyla kullanmaktadır. İngilizce öğretmen adayları mobil destekli dil öğrenmeyi özellikle İngilizce dinleme becerilerinin geliştirilmesinde etkili bulmaktadır. Bunula birlikte, İngilizce öğretmen adayları mobil cihazların İngilizce öğrenmek amacıyla kullanılmasının alan yazında belirtilen avantajlarına katılmaktadır fakat mobil cihazların sınıf içinde dil öğretmek amacıyla kullanılmasına gelince, İngilizce öğretmen adaylarının orta

derecede olumlu algılarının olduğu görülmektedir. İngilizce öğretmen adaylarının mobil destekli dil öğrenme pratikleri ve mobil destekli dil öğrenmeye ilişkin algılarının oldukça kapsamlı bir resmini sunmakta olan bu çalışma; mobil destekli dil öğrenimine yönelik uygulamalar tasarlayan ve geliştirenler, müfredat geliştirenler ve müfredatı uygulayanlar, yani İngilizce öğretmenliği lisans programlarında ders veren öğretim elemanları için bir rehber niteliğindedir.

Anahtar Kelimeler: Mobil Öğrenme, Mobil Destekli Dil Öğrenme, İngilizce Öğretmen Adaylarının Algıları

To my beloved son, *Furkan*

and in the loving memory of my beloved father, *Ahmet AYDIN*…

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere gratitude to my supervisor, Assoc. Prof. Dr. Perihan SAVAŞ, who has been more than a supervisor to me with her valuable support, guidance and encouragement through this study. It would not be possible to finish this study without the motivation she provided to me.

I would also like to thank to other thesis committee members Assoc. Prof. Dr. Nurdan ÖZBEK GÜRBÜZ and Asst. Prof. Dr. Necmi AKŞİT for their valuable contributions.

I present my deepest gratitude to my mother Zehra Aydın, to my father Ahmet Aydın, and to my sisters; Fatma Merve Aydın, Sena Çelik, and Elif Aydın for their unconditional love, support, and encouragement through my life. I am so thankful to God for giving me such wonderful and loving family.

I am grateful to my best friend, my husband Faruk Aygül for his never ending patience, support and encouragement during my thesis study. He did his best for making my life easier in this process.

The last but not the least, I want to thank to my beloved son Furkan Aygül, who made my life meaningful. I am so lucky to have him as my son. I love him with all my heart…

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LIST OF ABBREVIATIONS

EFL   English as a Foreign Language

ESL   English as a Second Language

MALL   Mobile Assisted Language Learning

CALL   Computer Assisted Language Learning

SPSS   Statistical Package for Social Sciences

B.A.   Bachelor of Arts

ELT   English Language Teaching

CHAPTER 1

INTRODUCTION

1.1. Introduction

The current study aims to investigate Turkish pre-service EFL teachers' current practices and perceptions of mobile assisted language learning. In this chapter, the background of the study, statement of the problem, purpose of the study, research questions, significance of the study, and definition of key terms are presented.

1.2. Background of the Study

In today's world, advancements in mobile technologies have led to rapid and profound changes in our daily life and mobile devices have become an indispensable part of everyday life. Deloitte, one of the leading companies renowned worldwide, conducted the Global Mobile Consumer survey on 49,500 participants from 6 different continents and 31 different countries. The report (Deloitte, 2016) highlighted that 78% of the consumers had smart phones, nearly 10% of them had wearables, and more than 50% of them own tablets. As for the percentage of the consumers who had all the three mobile devices was 7%. The case in Turkey does not differ greatly from those findings. In the same vein, according to the analysis results of a study conducted by TurkStat (2018), the percentage of the households who owned mobile phones or smartphones was 98,7% and the percentage of the households who got tablet computers was 28,4%. As is seen, the number of people who own mobile devices are increasing day by day. Furthermore, another study carried out by Deloitte in 2017, with 53,150 participants from 6 different continents and 33 different countries, informed about the number of times participants check their mobile phones per day and the global average was around 40 times a day. As for the average for mobile phone users in Turkey, it was found out as 78 times. All of these connote that mobile technologies

are everywhere and a considerable number of people have mobile devices and actively use them in their daily lives. As an expected consequence, mobile technologies and mobile devices have had many implications in various fields and one of those fields of study is education.

Rapid changes and advancements in mobile technology have had a considerable impact on teaching and learning practices. This impact was conceptualized as mobile learning. Although there have been many research studies on mobile learning in educational settings, there is not a single agreed definition of the term due to both rapid changes in mobile technologies and vagueness of the notion, "mobile" (Kukulska-Hulme, 2009).

According to Winters (2006), perspectives on mobile learning fall into four main categories as techno-centric, learner-centered, relationship to e-learning, and augmenting formal classroom education. In the first perspective, the term "mobile learning" is defined by putting more emphasis on the mobile technology and devices used in the learning context. In the second perspective, mobility of learners and learning is emphasized. As for the third perspective, mobile learning is conceptualized as a kind of e-learning. Lastly, in the fourth perspective, mobile learning is perceived as a powerful tool for augmenting the traditional learning. In the present study examining the pre-service EFL teachers' current practices and perceptions of mobile-assisted language learning (MALL), the term mobile learning was defined as using mobile technologies and mobile devices for educational purposes (Traxler, 2005; Ally, 2009).

There are certain defining characteristics of mobile learning which are immediacy (Kynaslahti, 2003), ubiquity (Kukulska-Hulme et al., 2009), contextuality (Kearney et al., 2012), individuality (McLoughlin and Lee, 2008; Chen et al., 2010), collaboration (Chen et al., 2010), time independence and non-spatiality (Peters, 2007; Valk, Rashid, and Elder, 2010), connectivity (Caudill, 2007), authenticity (Radinsky, et al., 2001), and interaction (Gikas and Grant, 2013).

With these defining characteristics, mobile learning has found its own way into language learning and teaching practices. As to using mobile technologies and mobile devices for language learning purposes, it is conceptualized as mobile assisted language learning (MALL) (Wagner et al., 2016; Bezircioğlu, 2016).

Relevant literature highlighted that using mobile technology and mobile devices had positive effects on language skills and knowledge. It helped language learners to foster their listening skills (Azar and Nasiri, 2014; Hwang and Chen, 2013), reading skills (Wang, 2017; Gheytasi, Azizifar, and Gowhary, 2015; Hsu, Hwang, and Chang, 2013; Lin, 2014), speaking skills (Saran, Seferoğlu, and Çağıltay, 2009; Ahn and Lee, 2016; Cheng, 2015; Almekhlafy and Alzubi, 2016; Sun, Lin, You, Shen, Qi, and Luo, 2017), and writing skills (Khodi, 2015; Andujar, 2016; Eubanks, Yeh, and Tseng, 2017). Additionally, it helped language learners to expand their grammar knowledge (Khodabandeh, Alian, and Soleimani, 2017; Moghart and Marandi, 2017) and vocabulary knowledge in English (Hayati, Jalilifar, and Mashhadi, 2013; Wu, 2014; Wu and Huang, 2017; Kurt and Bensen, 2017; Sarıçoban and Özturan, 2013). Moreover, language learners learned the target-language culture thanks to the mobile technology and devices (Ducate and Lomicka, 2013).

Studies on the practices of MALL in ESL context (Park and Slater, 2014; Nino, 2015; Wrigglesworth and Harvor, 2017) pointed out that language learners used mobile technologies for language learning purposes. On the other hand, in EFL context, while some of the language learners did not use or rarely used their mobile devices for language learning purposes (Dashtestani, 2013; Dashtestani, 2016), some of them preferred using their mobile devices mostly in the classroom context (Bezircioğlu, 2016), and some others benefitted from their mobile devices for fostering their language skills out of the classroom context (Öz, 2014). In this respect, Yang (2013) remarked that MALL could not get the attention that it deserves in teaching and learning practices. To put another way, although it was found to be effective in fostering language skills and knowledge, it was seen that there were different practices in this respect.

Furthermore, findings of the research studies on the perceptions of MALL pointed out that language learners in different contexts had different perceptions about the affordances and constraints of MALL. In ESL context, Nino (2015) suggested that language learners had positive perceptions about both MALL and its integration into classroom instruction. Similarly, Li, Cummins, and Deng (2017), remarked that EFL learners had positive perceptions about using their mobile devices for language learning purposes due to its perceived effectiveness. On the other hand, in a different study carried out in EFL context, Dashtestani (2016) pointed out that language learners had some due concerns about benefitting from their mobile devices for learning English although they agreed with its possible affordances.

Similarly, findings of the research studies carried out in the same context indicated that language teachers could hold different perceptions about MALL. To exemplify, Golshan and Tafazoli (2014) suggested that Iranian EFL teachers had positive perceptions about integrating mobile technologies into their teaching practices in the classroom settings. On the other hand, Dashtestani (2013) mentioned that Iranian EFL teachers erred on the side of caution in this regard. As is seen, although both research studies (Golshan and Tafazoli, 2014; Dashtestani, 2013) were carried out in Iranian EFL context, findings of them differed from each other.

Moreover, there exist some other research studies comparing the language teachers' and learners' perceptions of MALL. In ESL context, Park and Slater (2014) pointed out that while the teachers were hesitant about the potential of MALL and did not integrate MALL into the curriculum due to some technological and pedagogical challenges, the learners were enthusiastic about using mobile devices for language learning. Similarly, in EFL context, Saudouni and Bahloul (2016) indicated that both students and teachers had positive perceptions about MALL due to its perceived effectiveness. However, as for their perceptions about the integration of MALL into the curriculum, the students maintained their positive attitudes while the teachers put forward their concerns about it. Another study carried out in Turkish EFL context (Bezircioğlu, 2016) suggested that while

Turkish EFL learners had positive perceptions of MALL Turkish EFL had negative perceptions of integrating MALL into their teaching practices in the classroom settings. It can be inferred that the literature informs about a discrepancy between language learners' and teachers' perceptions. Namely, while the language learners have positive perceptions about MALL, language teachers have some due concerns about it.

As is seen, there are some studies carried out in different contexts, examining EFL learners', EFL teachers', ESL learners', and ESL teachers' current practices and perceptions of MALL. However, the number of them is too limited to get a more complete understanding of the phenomenon in this respect. Moreover, to the best of the researchers' knowledge, there exist almost no studies investigating the pre-service EFL teachers' current practices and perceptions of MALL. The only study conducted in Turkish EFL context (Öz, 2014) suggested that Turkish pre-service EFL teachers had positive perceptions about MALL (Öz, 2014).

It is believed that it is crucial to investigate the pre-service EFL teachers' current practices and perceptions of MALL since they learn English as a foreign language and they are to teach English as a foreign language. Namely, this investigation is essential since it will provide information on both EFL learners' current practices and perceptions of MALL and on future EFL teachers' tendencies of integrating mobile technologies into their teaching practices in the classroom settings.

1.3. Statement of the Problem

Empirical findings suggest that MALL is effective in fostering language skills and knowledge both in and out of the classroom settings. However, MALL could not get the attention that it deserved in teaching and learning practices (Yang, 2013).In ESL context, Park and Slater (2014) pointed out that language learners were enthusiastic about using their mobile devices for learning English. According to Nino (2015), ESL learners frequently used their mobile devices for language learning. Similarly, Wrigglesworth and Harvor (2017) remarked that ESL learners

used their mobile phones for language learning purposes on a daily basis. It can be inferred that studies conducted in ESL context had similar findings on ESL learners' practices of MALL. However, in EFL context, there existed different findings on the practices of MALL. According to Dashtestani (2013) and Dashtestani (2016), Iranian EFL learners rarely used their mobile devices for learning English out of the classroom context. In Turkish EFL context, Bezircilioğlu (2016) pointed out that although they didn't have a tendency to benefit from their mobile phones for fostering their language skills out of the classroom context, Turkish EFL learners used them for translating and looking up in the dictionaries in the classroom settings. As to the current practices of teachers, Dashtestani (2013) mentioned that Iranian EFL teachers did not integrate mobile technologies into their teaching practices in the classroom settings. It is seen that the number of studies informing the literature about MALL and teaching practices is very limited and to the best of the researchers, there is almost no research investigating the pre-service EFL teachers' current practices of MALL. The only study was conducted by Oz (2014) and highlighted that a great majority of Turkish pre-service EFL teachers used their mobile devices for developing their language skills. Thus, there is a need for further study examining the current practices of MALL from the perspectives of various stakeholders, especially from the perspectives of pre-service EFL teachers. Moreover, although these studies inform the relevant literature about if language learners use their mobile devices for language learning purposes or if language teachers benefit from mobile technologies for instructional purposes in the classroom settings, it is still unclear "how" they use mobile technologies or mobile devices in the learning or teaching processes. Therefore, there is a need for further studies examining how mobile technologies or mobile devices are used in teaching and learning practices.

As for the perceptions of MALL, there exist some studies informing the literature from the viewpoints of various stakeholders; ESL learners (Nino, 2015; Park and Slater, 2014), EFL learners (Li, Cummins, and Deng, 2017; Dashtestani, 2013, Dashtestani, 2016; Saudouni and Bahloul, 2016; Bezircioğlu, 2016), ESL teachers

(Park and Slater, 2014), EFL teachers (Golshan and Tafazoli, 2014; Dashtestani, 2013; Saudouni and Bahloul, 2016; Bezircilioğlu, 2016). It is seen that the number of studies informing the literature about perceptions about MALL and teaching practices is very limited and to the best of the researchers, there is almost no research investigating the pre-service EFL teachers' perceptions of MALL. The only study was conducted by Oz (2014) and its findings remarked that Turkish pre-service EFL teachers had positive perceptions of MALL and they mentioned that they would benefit from the potential of mobile devices for teaching English in the classroom settings in the future. As is seen, there is a need for further study examining the perceptions of MALL from the perspectives of various stakeholders, especially from the perspectives of pre-service EFL teachers since this investigation will provide information on the future EFL teachers' tendencies of integrating mobile technologies into their teaching practices in the classroom settings. Moreover, although these studies inform the relevant literature about perceptions of MALL, there is still a need for further studies examining perceptions about the effectiveness of MALL, perceptions about the affordances and constraints of MALL, and perceptions about the classroom implications of MALL in detail to get a more complete understanding of the phenomenon since it is evident that there exists a discrepancy between language learners' perceptions and language teachers' perceptions.

Although Viberg and Gröunland (2013) indicated just the opposite, Morton and Jack (2010) remarked that the cultural background of a learner was a non-negligible variable in research studies investigating learners' attitudes towards CALL programs. Correspondingly, Hsu (2013) suggested that learners with different cultural backgrounds hold different beliefs about the opportunities MALL could offer. Considering the relevant literature, there is a need for further study to investigate language learners' and teachers' perceptions about MALL in Turkish EFL context.

Richards (1996) pointed out that teachers had some personal principles that were formed by "cultural factors, belief systems, experience, and training" (p.281) and

these principles guided their teaching practices in the classroom settings. Thus, there is a need for further study to investigate Turkish pre-service EFL teachers' perceptions about MALL to be informed about their possible future teaching practices in this respect. Similarly, as Lai (2016) pointed out language learners' perceptions about MALL had an influence on their learning practices and outcomes. Therefore, further studies are neededto be informed about the possible variables affecting the EFL learners' current practices and learning outcomes of MALL.

1.4. Purpose of the Study and Research Questions

The current study aims to investigate Turkish pre-service EFL teachers' current practices and perceptions of MALL. In this respect, research questions are as it follows:

1. What are the pre-service EFL teachers' current practices of MALL?
2. What are the pre-service EFL teachers' perceptions about the effectiveness of MALL?
3. What are the pre-service EFL teachers' perceptions about the affordances and constraints of MALL?
4. What are the pre-service EFL teachers' recommendations to EFL learners about increasing the effectiveness of MALL?
5. What are the pre-service EFL teachers' perceptions about the classroom implications of MALL?
6. What are the pre-service EFL teachers' recommendations to EFL teachers about increasing the effectiveness of the integration of mobile devices into their teaching practices in the classroom context?
7. What are the pre-service EFL teachers' expectations from the lecturers offering courses in ELT programs for promoting their pedagogical skills to integrate MALL into their curriculum in the future?

8. What are the pre-service EFL teachers' expectations from the ELT program for promoting their pedagogical skills to integrate MALL into their curriculum in the future?

1.5. Significance of the Study

Findings of the current study are crucial for some reasons. Firstly, considering the limitation of the research studies few in number, the current study will fill the aforementioned gaps in the literature about the pre-service EFL teachers' current practices and perceptions of MALL. To put another way, it will both inform the literature about how Turkish EFL learners' use their mobile devices for language learning purposes and their perceptions about the effectiveness of MALL, their perceptions about possible affordances and constraints of MALL, and their perceptions about the classroom implications of MALL in a detailed way. Thus, the investigation additionally can inform the literature about the Turkish EFL teacher candidates' tendencies of integrating mobile technologies into their teaching practices in the classroom settings in the near future.

Secondly, findings of the study might inform the relevant literature about for improving which language skills and knowledge (listening, speaking, reading, writing, grammar, vocabulary, culture) Turkish EFL learners use their mobile devices, how often they use their mobile devices for improving each language skills, and how they use their mobile devices for facilitating each language skills. The results will guide mobile application developers about Turkish EFL learners' preferences of mobile applications for improving their English language skills and knowledge by providing a need analysis in this respect.

Thirdly, it can guide the curriculum developers about the pre-service EFL teachers' expectations from the ELT program for promoting their pedagogical skills to integrate MALL into their curriculum in the future.

Lastly, the findings of the study might guide the instructors offering courses in ELT programs to improve their practices for the pre-service EFL teachers' promoting their pedagogical skills to integrate MALL into their curriculum in the future.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This chapter presents the review of the relevant studies pertaining to definition of mobile learning, affordances and contraints of mobile learning, definition of mobile assisted language learning, practices of mobile assisted language learning, effects of mobile assisted language learning on language skills, and perceptions of mobile assisted language learning.

2.2. Defining Mobile Learning

According to Traxler (2007), advancements in mobile technology and their implications on educational settings reformed the conceptualization of learning. This yielded the term, "mobile learning". There exist many research studies pertaining to the implications of mobile learning in formal and informal educational contexts (Sharples, 2013).

Although the necessity of a single agreed definition of the term was pointed out by the researchers (Laouris and Eteokleous, 2005), there is still a lack of agreement in this respect (Sharples et al., 2009), due to both rapid changes in mobile technologies and vagueness of the notion, "mobile" (Kukulska-Hulme, 2009).

In this regard, some researchers brought the aspect of mobility of technology and devices into the forefront in their definitions (Clazzo, Ronchetti, Trifonova, and Molinary, 2003; Traxler, 2005). Some others emphasized the mobility of learner and learning (Kadyte, 2004; Sharples, 2005). While some of the researchers conceptualized the term as a kind of e-learning (Quinn, 2000; Pinkwart et al., 2003; Georgieve et al., 2004; Ally, 2005; Mostakhdemin-Hosseini and Tuimala, 2005),

some others indicated it as a different kind of learning somehow similar to e-learning (Charmonman and Chorpothong, 2005). Moreover, there were some other researchers arguing that these two terms, mobile learning and e-learning, were different from each other (Ellis, 2003; Masrom and Ismail, 2010).

According to Winters (2006), perspectives on mobile learning fall into four main categories as techno-centric, learner-centered, relationship to e-learning, and augmenting formal classroom education. In the first perspective, the term "mobile learning" is defined by putting more emphasis on the mobile technology and devices used in the learning context. In the second perspective, mobility of learners and learning is emphasized. As for the third perspective, mobile learning is conceptualized as a kind of e-learning. Lastly, in the fourth perspective, mobile learning is perceived as a powerful tool for augmenting the traditional learning.

Immediacy (Kynaslahti, 2003), ubiquity (Kukulska-Hulme et al., 2009), contextuality (Kearney et al., 2012), individuality (McLoughlin and Lee, 2008; Chen et al., 2010), collaboration (Chen et al., 2010, time independence and non-spatiality (Peters, 2007; Valk, Rashid, and Elder, 2010), connectivity (Caudill, 2007), authenticity (Radinsky, et al., 2001), interaction (Gikas and Grant, 2013) are the defining characteristics of mobile learning.

2.3. Affordances and Constraints of Mobile Learning

Mobile technology and mobile devices have had such a huge impact on the educational settings that the researchers called for the re-conceptualization of learning in the mobile age. (Sharples et al. 2005) and it is believed that it is almost inevitable to integrate mobile technologies into teaching and learning practices (Naismith et al., 2004; Kukulska-Hulme, 2006; Murray, 2010).

Acording to Corbeil and Valdes (2007), mobile learning is learner-centered and addresses individual learner differences in learning. It provides learners with enjoyable learning experience and they can learn whenever and wherever they want. It fosters interaction between teachers and learners and collaboration among

peers. In the same vein, Masrom and Ismail (2010) indicates that it builds community of practice, "an informal network or group of people who exchange tips, best practices, and solutions to real problems" (p.18). Moreover, Traxler (2007) mentions that learners own their own learning since the learning through mobile devices is individualized. Another issue highlighted is that it meets the learning needs of the new generation (Beethan and Sharpe, 2007). In this regard, Kukulska-Hulme and Jones (2011) remark the necessity of integrating technology into educational context for not widening the gap between the teachers and learners' perceptions of the ideal learning.

On the other hand, Wagner (2005) indicates that hardware problems of mobile devices constitute significant impediments to learning. In the same vein, Mcconatha et al. (2008) assures that those problems even cause the failure of the implementations. By the same token, Masrom and Ismail (2010) asserts that mobile learning proposes some technological and pedagogical barriers. The researchers believed that most of the learners do not have the meta-cognitive skills necessary for managing and evaluating their own learning processes and the learning process was interrupted by various kinds of distractions, which leads to "fragmented learning experience" (p.20). Moreover, using mobile devices for educational purposes is not cost-effective and poses some problems related to security and privacy. Similarly, Vavoula and Sharples (2009) points out the security problems.

Shudong and Higgins (2006) grouped the constraints of mobile learning under three main categories as technological, pedagogical, and psychological constraints. Problems with battery life, broadband connection, small screen size, the lack of any physical keyboard were indicated as technological constraints. As for the pedagogical challenges, it was pointed out that learners might not take responsibility of their own learning or they might not accept mobile learning. Moreover, the researchers indicated that learners might be cautious about using those multi-functional devices for learning purposes or they might not get accustomed to this 'new kind of learning'. Moreover, they might have some concerns about the issues related to privacy or they might abstain from using those

devices giving off radiation, harmful for health. These were indicated as the psychological constraints of mobile learning from the perspective of the researchers.

2.4. Defining MALL

Although some of the researchers perceive MALL as the subset of computer assisted language learning and mobile learning (Caudill, 2008), some others indicate that MALL differs from computer-assisted language learning "in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use" (Kukulska-Hulme and Shield, 2008; as cited in Kukulska-Hulme, 2009, p.162).

It is defined as learning languages by taking advantages of the mobile technology and devices (Wagner et al., 2016; Bezircilioglu, 2016).

2.5. Practices of MALL

To the best of the researcher's knowledge, there are a few research studies informing the literature about English language learners' practices of MALL in different contexts.

In ESL context, Park and Slater (2014) figured out that Chinese ESL learners were enthusiastic about using their mobile devices for learning English. According to Nino (2015), ESL learners frequently used their mobile devices for language learning. Similarly, Wrigglesworth and Harvor (2017) pointed out that Korean ESL learners used their mobile phones for language learning purposes on a daily basis. It can be inferred that studies conducted in ESL context had similar findings on ESL learners' practices of MALL.

In EFL context, Dashtestani (2013) Iranian EFL teachers stated that neither they nor their students used mobile devices in the classroom settings for teaching and learning a foreign language. Similarly, Dashtestani (2016) Iranian EFL learners rarely used their mobile devices for learning English out of the classroom context.

Additionally, there are a few research studies informing the literature about the nature of English language learners' practices of MALL or technology enhanced language learning experiences.

In ESL context, Wrigglesworth and Harvor (2017) examined the nature of Korean ESL learners' language learning experience with mobile phones in seamless language learning context. Quantitative data was collected by an online survey administered to 241 university students and qualitative data was obtained from the semi-structured interviews conducted with 28 students. Interpretation of the data led to the conclusion that almost all of the ESL learners used their mobile phones for language learning purposes on a daily basis. By taking the participants' MALL praxis into consideration, the researchers defined three different types of ESL learners: passive-unaware, passive-aware, and active aware learners. Passive-unaware learners used their mobile phones in their daily routines and acquired English as the second language by benefitting from the potential of their mobile phones in an unconscious way. Although passive-aware learners were aware of the potential of mobile phones for fostering language skills, they benefitted from it when they were under the guidance of an instructor. As for the active-aware learners, they were both aware of affordances of MALL and actively involved in MALL activities.

Similarly, Lai, Hu, and Lyu (2018) conducted a two-phase research study to investigate the nature of EFL learners' experience with technology-enhanced language learning experience out of the classroom context. On the basis of the qualitative and quantitative data collected from students studying at a university in Hong Kong, the researchers defined three types of language learning experience with technology. Firstly, if the learners applied to the relevant technological tools in accordance with their language learning needs, this kind of experience was referred as instruction-oriented technological experience. Secondly, if the learners developed their language skills with a technological tool by means of which they dealt with the issues related to daily life routines in the target language, this kind of experience was defined as entertainment and information-oriented technological

experience. Lastly, if the learners used technological tools for interacting with native speakers or other language learners to enhance their language learning, this kind of experience was referred as social-oriented technological experience. Additionally, researchers highlighted that these three types of experience could be ordered from the most common to the least one as it followed respectively: instruction-oriented technological experience, entertainment and information-oriented technological experience, and social-oriented technological experience.

Apart from these research studies regarding the practices and nature of practices of MALL, there are some others comparing the language learners' preferences for the technological devices for facilitating their language skills in English. In this respect, Stockwell (2013) examined Japanese EFL learners' experience with technology-enhanced language learning out of the classroom context. The participants of the study were 50 pre-intermediate university students. On the basis of the data obtained from the activity logs and a survey, it was found that learners preferred personal computers rather than mobile phones for fostering their language skills and knowledge out of the classroom context which had been remarked once more by Stockwell (2008).

Similarly, Ko (2017) sought after Korean EFL learners' preferences of technological devices for developing their language skills out of the classroom context and underlying reasons for their preferences. Data obtained by an online survey administered to 167 university students at the end of the term suggested that almost half of the students preferred personal computers for developing their language skills since they found them comfortable although they were not portable. As for the other half of the participants, they preferred mobile phones since they offer ubiquitous language learning opportunities although they were not cost-effective.

2.6. Effects of MALL on Language Skills

There exist many studies examining the use of mobile devices for learning language skills and knowledge. In this section, to the best of the researcher's knowledge, those studies were reviewed.

2.6.1. Grammar

Through a quasi-experimental research study, Khodabandeh, Alian, and Soleimani (2017) questioned whether the mobile language learning tasks improved EFL learners' grammar knowledge or not. Based on the mean and standard deviation of the participants' pre-validated grammar examination scores, 60 male intermediate EFL learners aged between 14 and 16 at a junior high school in Iran were randomly assigned to two groups of 30. Although both groups received inductive grammar instruction from the same instructor they fulfilled different assignments. The participants in the control group engaged in various traditional paper-and-pencil activities like finding grammatical errors, fill-in-the blanks and multiple-choice questions. As for the participants in the experimental group, they joined a group created by the teacher on Telegram, a mobile app enabling the users with instant messaging service. As the course assignments, they created their own course materials for learning grammatical points and shared them with their peers. After the 12-week treatment, post-tests for measuring learning outcomes for grammatical points were administered to the learners. The participants in the experimental group achieved higher scores than the learners in the control group since the Telegram, the mobile application, created a collaborative language learning platform and fostered learners' motivation for learning.

Similarly, Moghart and Marandi (2017) investigated the effects of short message service on EFL learners' grammar learning in out-of-classroom context. In line with this purpose, 60 female elementary EFL learners aged between 13 and 14 at a junior high school in Iran were randomly assigned to two groups of 30 in each. In the course of 12-week treatment, 120 text messages about the grammatical points

and relevant exercises were sent to participants in the experimental group. As for the learners in the control group, they fulfilled the traditional, namely paper-and-pencil tasks related to grammatical points and received text messages on vocabulary items just for eliminating the Hawthorne effect (Best and Khan, 2006). In the post-tests administered after the treatment, participants learning and practicing grammatical points by means of text messages outscored the learners in the control group. In this study, the researchers also conducted interviews with various stakeholders to scrutinize their perceptions about using short message service for grammar teaching and learning. Findings indicated that while the learners believed that it gave them the chance of learning whenever and wherever they wanted which resulted in higher motivation and concentration, the teacher was totally against for using short message service for grammar teaching and learning due to its disadvantage in terms of cost-effectiveness.

Both studies indicated that mobile assisted grammar learning in English was effective and augmented formal instruction. Additionally, EFL learners appreciated the affordances of the implementations.

2.6.2. Vocabulary

Research on mobile assisted vocabulary learning tackled the issue from different perspectives. Some of the studies compared the effectiveness of it with other kinds of learning, mostly with traditional one. For example, Hayati, Jalilifar, and Mashhadi (2013) interrogated the compared efficiency of three different instruction modes for teaching English idioms. To this end, the researchers formed three different homogenous groups of EFL learners aged between 19 and 24. The first group learned 80 English idioms by means of daily short message services sent to their mobile phones. The second group was given written documents including the same number of idioms with their definitions and expected to learn the relevant content by themselves. The third group of learners had the opportunity to learn via contextualized delivery mode. English idioms were presented in short texts and learners were introduced some exercises. In accordance with the data

collected by pre- and post-tests, the first group of learners learned better than the other two groups due to the "push-aspect of mobile technology" (p. 76). Namely, they exposed to the relevant language items on a regular basis which made them study regularly.

In the same vein, Wu (2014) designed a mobile application for vocabulary learning and examined the effects of using it on Chinese EFL learners' vocabulary knowledge. 50 university students were randomly assigned to two groups, the control group and the experimental group, 25 in each. Throughout the semester, the students in the control group learned vocabulary items in a traditional way out of the classroom context. As for the students in the experimental group, they used the mobile application designed by the researcher. On the basis of the data collected by means of pre- and post-tests, the experimental group outscored the control group which remarked the effectiveness of using the mobile application on vocabulary learning.

Similarly, Wu and Huang (2017) designed a mobile application which helped Taiwanese EFL university students to learn the curriculum-related vocabularies in a game-based learning environment and investigated the effectiveness of using the application on learners' vocabulary knowledge. To this end, three groups were formed and for 18 weeks, the first group consisting of 30 students only received the classroom instruction for learning vocabulary. The second group consisting of 32 students and receiving the same classroom instruction were allocated half of the class time for revising the vocabulary items in a traditional way. As for the third group, it consisted of 32 students and although they were given the same instruction and allocated the same amount of time for vocabulary revision, they employed different revision method, using the mobile application. Analysis of the data obtained from the pre- and post-tests indicated that while students who received the classroom instruction only did not make any progress in vocabulary learning since they were the passive recipient of vocabulary knowledge, the other two groups achieved better results in the post-tests in comparison with the pre-tests. Additionally, students reviewed the vocabulary items by using the mobile

application outperformed the students employing a traditional vocabulary revision method.

Kurt and Bensen (2017) scrutinized the use of mobile phones for improving EFL learners' vocabulary knowledge. 32 freshmen divided into two homogenous groups of 16 in terms of their levels of vocabulary knowledge: intervention group and control group. As a course requirement, the students in the intervention group used a mobile application for vocabulary learning which enabled them to freely create maximum six-second vocabulary video clips and share them with the other users on the platform. Post-test results indicated that learners in the intervention group improved their vocabulary knowledge more than the students in the control group. Additionally, qualitative data collected by means of semi-structured interviews demonstrated that the mobile application was helpful, motivating and fun for vocabulary knowledge improvement since it provided learners with a collaborative language learning environment and fostered learners' creativity which is unique for learning.

As it was seen in those studies, MALL was more effective than traditional way of vocabulary learning and was integrated into the regular curriculum for augmenting formal instruction. Additionally, findings of those studies informed the literature about the EFL learners' positive perceptions about using mobile devices for expanding their vocabulary knowledge in English as in another study carried out by Li, Cummins, and Deng (2017). The researchers examined Canadian EFL learners' perceptions about the use of texting to foster academic vocabulary learning. Qualitative and quantitative data was collected from 48 learners attending to an English for academic purposes course at an English-medium university. The findings of the study suggested that students had positive attitudes towards the MALL implementation due to its perceived effectiveness.

In the study, carried out by Sato, Murase, and Burden (2015), both the effectiveness of mobile assisted vocabulary learning and its impact of mobile assisted vocabulary learning on Japanese EFL learners' autonomy in language learning were examined.

97 university students were randomly assigned to two groups, the control group and the experimental group. Out of the classroom context, the students in the control group studied English vocabulary by means of written hand-outs and the students in the experimental group used their mobile phones for reaching the same content. The treatment lasted for three weeks and the relevant data was collected by means of pre- and post-tests and a questionnaire for learner autonomy administered before and after the treatment. Results showed that the students in the experimental group achieved better results than the students in the control group in the post-tests used for measuring the vocabulary gain. While both groups improved learner autonomy, no significant difference was found between the groups in terms of this strand. On the other hand, Kondo et al (2012) carried out a two-phased research project at a university in Japan to question if EFL learners' MALL practices out of the classroom context would foster their autonomy in language learning or not and the findings verified the positive effects of MALL on learner autonomy.

Another study (Rahimi and Miri, 2014) compared the effectiveness of using mobile dictionaries and printed dictionaries by conducting a quasi-experimental research study in Iranian EFL context. 34 university students were divided into two groups, 17 in each and one group of students used mobile dictionaries and the other group of students used printed dictionaries in the classroom context. Data was collected by means of an achievement test administered before and after the treatment which lasted for 16 weeks. It was found out that the experimental group achieved better results than the control group.

Moreover, there are some other research studies, reviewed under this section, not directly informing the literature about the effects of using mobile devices on expanding vocabulary, but informing about the variables, playing crucial role in EFL learners' practices of MALL. For example, Amer (2014) investigated language learners' usages of a mobile application for improving their vocabulary knowledge. 45 language learners divided into four different groups based on their TOEFL scores used the mobile application for one week. Qualitative and

quantitative data collected by means of questionnaires, user logs, and follow-up interviews signified that language learners' habits of using mobile devices, learning goals, motivations for learning and levels of language proficiency predicted their usage of a mobile application for learning idiomatic expressions and collocations.

Similarly, Lai (2016) investigated the effects of MALL on second language acquisition. In accordance with this purpose, 45 Chinese 7th grade students were randomly assigned to the control group and the experimental group. Although both groups received the same classroom instruction, the students in the experimental group additionally participated in a mobile immersion environment created by the researcher thanks to a mobile instant messaging service, called WhatsApp. For three months, the students chatted in English with their peers on the mobile platform. Data was obtained from the pre- and post-tests measuring the vocabulary knowledge since the vocabulary gain after the treatment was determined as the criteria for the measurement of learning outcomes. Findings indicated that there was no significant difference between the experimental group and the control group in terms of vocabulary gain. Interestingly, a significant correlation was revealed between students' chat frequencies and their vocabulary gains within the experimental group which meant that learners' readiness for using the platform and their perceptions about the MALL implementation had an influence on learning outcomes.

2.6.3. Listening

Research studies indicated that it was effective to use mobile devices for improving listening skills in English and it was advantageous. In this respect, Azar and Nasiri (2014) conducted a research study to investigate the effectiveness of using mobile phones for developing Iranian EFL learners' listening skills. In that regard, they randomly assigned 70 participants to the experimental and control group, with 35 participants in each group. Average scores obtained from a placement test for measuring listening skills was used to determine the homogeneity of the sample.

Although the participants in both groups received the same instruction for improving their listening skills, the ones in the experimental group listened to the audiobooks by using their mobile phones, the others in the control group listened to the audiobooks on the CD-ROMs. In the post-test administered after the six-week treatment, the participants in the experimental group achieved better results than the ones in the control group which showed the effectiveness of using mobile phones for developing listening skills in EFL context. Additionally, on the basis of the qualitative data obtained from the interviews, it was found out that there were a few reasons why mobile phones were effective for the improvement of listening skills. Firstly, ease of use and portability of mobile phones gave learners the opportunity to learn whenever and wherever they wanted. Furthermore, it offered learners more opportunities for interacting with the teacher and the peers.

Similarly, Hwang and Chen (2013) examined the effects of MALL on Taiwanese EFL learners' vocabulary knowledge, listening, and speaking skills. 60 elementary school students were randomly assigned to the control group and the experimental group. For two months, the participants in the control group did extra language learning activities by employing traditional paper-based learning methods while the students in the experimental group used PDAs (personal digital assistants) for learning English out of the classroom context. On the basis of the quantitative data obtained from the pre- and post-tests conducted before and after the treatment for evaluating the participants' aforementioned language skills and knowledge; it was revealed that the experimental group achieved better results than the control group. Additionally, questionnaire administered to the participants in the experimental group revealed that Taiwanese EFL learners had positive attitudes towards MALL.

However, findings of the study carried out by Hwang, Shih, Ma, Shadiev, and Chen (2016) were different from the ones aforementioned before. The researchers investigated the effects of MALL activities on Taiwanese EFL learners' listening and speaking skills. 40 students attending to a high school were randomly assigned to two groups, the control group receiving traditional instruction and the experimental group using a mobile platform for receiving the same instruction for

three weeks. On the basis of the data obtained from the pre- and post-tests, semi-structured interviews, and the questionnaire, the students in the experimental group achieved better results than the students in the control group in terms of speaking, however, there was no significant difference between the both groups in terms of improvement in listening skills.

2.6.4. Reading

Research studies indicated that it was effective to use mobile devices for improving reading skills in English. In this regard, Wang (2017) examined both the impact of using iPads in classroom context on EFL learners' reading comprehension skills and learners' satisfaction with the implementation. To that end, 196 intermediate EFL learners studying at a university were divided into six groups as three experimental and three control groups. Throughout the semester, they received the same instruction however, the students in the experimental group benefitted from the iPads for fulfilling the assigned tasks in the classroom settings and they used some applications while the students in the control group engaged in traditional activities assigned by the teacher in the classroom settings. In the post-treatment reading comprehension tests, the learners in the experimental groups outscored the learners in the control groups. Furthermore, it was revealed that the learners were quite satisfied with the implementation as the data obtained from a questionnaire suggested.

In the similar vein, Gheytasi, Azizifar, and Gowhary (2015) researched the effect of using mobile phones on EFL learners' reading comprehension skills and learners' perceptions about using their mobile phones for fostering reading comprehension. 40 students attending to a high school in Iran, ranging in age from 13 to 19, were divided into two groups of 20. The learners in the experimental group used a mobile application while the others in the control group did not. Data obtained from the validated pre- and post-reading comprehension tests indicated that the experimental group outperformed the control group. Although it was evident that mobile-assisted reading instruction helped EFL learners improve their

reading comprehension skills, interviews with the participants revealed that they had some concerns with using mobile phones for language learning in classroom context since as a distraction, it could hamper the teaching-learning process.

Another study (Hsu, Hwang, and Chang, 2013), informing about the effectiveness of using mobile devices for improving reading skill in English, additionally mentioned about the importance of individuality. The researchers designed a personalized mobile language learning system which helped users foster their reading skills by providing them with relevant reading materials suitable for their levels of language proficiency and personal interests as well as with individual or collaborative learning opportunities. Thereafter, they examined the impact of the designed system on EFL learners' reading proficiency levels. 108 Chinese high school students were divided into three, one control and two experimental groups. Learners in one of the experimental groups read articles recommended by the system on the basis of their personal interests and levels of proficiency in the individual learning mode. The learners in the other experimental group used the same system in collaborative learning mode that gave them the opportunity to connect with other users reading the same reading materials and to exchange information. As for the learners in the control group, in individual learning mode, they read the materials without any recommendation by the program. The treatment lasted for 4 weeks and data was gathered by means of pre- and post- tests. Findings of the study showed that although the learners in two experimental groups achieved better results than the control group, there was found no significant difference between two experimental groups in terms of learning achievement which suggested that there was no significant difference between mobile assisted individual reading and collaborative reading. In this respect, Yang and Wu (2017) underlined the importance of taking learners' individual differences into consideration in the process of developing mobile applications for language teaching and learning. Furthermore, they drew attention to the scarcity of the research studies conducted for developing context-aware learner support systems for applications in the contexts of MALL by taking a step further.

In another study, Lin (2014) compared the effectiveness of mobile-assisted and computer-assisted reading instruction. 84 pre-intermediate level EFL learners at a high school attending to an extensive reading program were assigned to two groups, the mobile and the computer, receiving mobile-assisted and computer-assisted reading instruction respectively. Data obtained from the users' activity logs and post-treatment tests indicated that the mobile group outperformed the computer group by spending much more time for fostering their reading skills due to the mobility of the device.

2.6.5. Writing

There are a few studies on using mobile devices for developing writing skills in English. In EFL context, Khodi (2015) examined the effects of MALL on Iranian language learners' writing skills and investigated the best method of MALL implementation in the classroom context. 74 university students were randomly assigned to three groups, two experimental groups and one control group. For 15 weeks, all the participants received the same instruction for developing their writing skills and after each instruction they were given the same in-class writing assignments. While fulfilling those assignments, the participants in the control group did not use their mobile phones, the participants in one of the experimental group restrictedly used their mobile phones, and the participants in the other experimental group freely used their mobile phones. Relevant data was collected by means of pre- and post-tests and the results indicated that the participants in the experimental groups achieved better than the participants in the control group. Additionally, restricted access to mobile phones in the classroom context was found as the best method of integration.

In ESL context, Andujar (2016) conducted a quasi-experimental research to investigate the impact of mobile instant messaging on ESL learners' writing accuracy. 80 ESL students attending to a course at a university were divided into two groups of 40 in each. During the 12-week, the participants in the experimental group joined to a WhatsApp group on which they asked and answered the questions

related to topics that they defined outside the classroom settings while the learners in the control group received no treatment. In the light of the data collected by means of pre- and post-tests, it was found out that the treatment contributed to the ESL learners' writing accuracy by helping them to decrease the number of grammatical, lexical, and mechanical errors in their writings.

As it was seen, both studies pointed out the effectiveness of integrating MALL into the curriculum for fostering language learners' writing skills in English.

Although its context is totally different from the aforementioned ones, it is crucial to mention about the study conducted by Eubanks, Yeh, and Tseng (2017). The researchers examined the impact of mobile-assisted writing workshop on learners' learning outcomes and attitudes toward writing in Mandarin Chinese. Participants of the study were 24 students, 7 male and 17 female, attending to a language immersion elementary school in Colorado. These participants learning Mandarin Chinese as a foreign language attended to a 3-week technology-enhanced workshop integrated to the curriculum to foster their writing skills. Data was collected by means of observation, pre- and post-surveys. Findings of the research suggested that using iPads writing skills in Chinese fostered learners' motivation for, engagements and interests in writing.

2.6.6. Speaking

Research studies indicated that it was effective to use mobile devices for improving speaking skills in English. In this respect, Ahn and Lee (2016) conducted a research study on EFL learners' perceptions about and attitudes towards the use of a mobile-based learning system equipped with automatic speech recognition technology for developing their speaking and pronunciation skills. 302 students from five different middle schools in Korea used the mobile application just for two weeks both in and out of the classroom context. In the light of the data, collected by a survey which consisted of both 5-point Likert scale items and open-ended questions, it was figured out that students had positive attitudes towards the use of the mobile

application and automatic speech recognition technology for improving their speaking and pronunciation skills. Additionally, participants reported that automatic speech recognition offered an interactive language learning environment which fostered their motivation for learning English as a foreign language.

Similarly, Almekhlafy and Alzubi (2016) inquired into EFL learners' perception about using mobile phones for fostering language skills out of the classroom settings. A group consisting of 40 intermediate male EFL learners from the preparatory unit at a university in Saudi Arabia and 4 native speakers of English was created by using a mobile application called WhatsApp which enabled users with instant messaging service. Group members used English as a medium for communication for four months. Data was collected by means of group observation, a questionnaire and semi-structured interviews with the participants. Results showed that nearly most of the participants actively contributed to the conversations on the group. Additionally, they stated that it helped them improve their language skills since it fostered their confidence and motivation and reduced their levels of anxiety.

There are some other studies informing the literature about the effects of using SNS (social network service) on language learners' speaking skills in English. In this regard, Shih, Lee, and Cheng (2015) investigated the effects of using a mobile SNS (social network service) on Taiwanese EFL learners' spelling skills. Post-tests administered after 6-week treatment indicated that the use of mobile application helped EFL learners improve their spelling skills and on the basis of the data obtained from the questionnaire, they had positive attitudes towards using a mobile application for enhancing their spelling skills.

Moreover, it was found to be effective to use SNS for improving young EFL learners' speaking skills. In this respect, Sun, Lin, You, Shen, Qi, and Luo (2017) examined the effects of using a mobile SNS (social network service) on Chinese EFL learners' speaking skills by conducting a quasi-experimental research study. The control and experimental group consisted of 35 and 37 students respectively,

average age of whom were 6.5 years old. For 12 weeks, all the participants received the same classroom instruction. However, the students in the experimental group used a mobile SNS (social network service) for fulfilling the given assignments out of the classroom context. Results indicated that both groups achieved higher scores in post-tests in comparison with pre-tests. However, while the control group outperformed the experimental group in terms of accuracy, the experimental group outscored the control group in terms of fluency. Both group made comparable progress in terms of pronunciation. Additionally, analysis of the data obtained from the focus-group interviews with the participants in the experimental group showed that the MALL implementation helped students to reduce their level of anxiety by providing them with more opportunities for speaking practice in an encouraging and enjoyable learning environment. Only drawback of the implementation mentioned by the participants was related to problem with getting accustomed to the use of the mobile application.

2.6.7. Culture

To the best of the researcher's knowledge, there exist quite a few studies informing the literature about the effects of MALL on learning the target-language culture. In this respect, using ecological constructivism as a theoretical framework, Ducate and Lomicka (2013) conducted a research study for examining the perceived use of iPod Touch for learning a foreign language in and out of classroom context. Participants were 39 intermediate French and German learners aged between 18 and 22 studying at a university. They downloaded various applications recommended by their teachers for learning German and French languages on their iPod Touches and engaged in the assignments in and out of the classroom context throughout the semester. Data was collected by means of two surveys administered at the beginning and end of the semester. The findings revealed that due to the portability of the device used in the study, amount of time allocated for mastering language skills increased tremendously. Thus the learners were exposed to the target language more and they had more opportunities for meaningful language

production in the real-world context whenever and wherever they wanted which resulted in learning the culture of the target language.

2.7. Perceptions of MALL

Relevant studies informing the literature about perceptions of mobile assisted language learning can be categorized into learners' perceptions of MALL and teachers' perceptions of MALL. Additionally, there are some other studies comparing the learners' and teachers' perceptions in this respect.

2.7.1. Learners' Perceptions of MALL

There are some research studies shedding some light on the language learners' perceptions about MALL in different contexts. Some of those studies pointed out that language learners had positive perceptions about using mobile devices for fostering their language skills in English.

In ESL context, Nino (2015) investigated ESL learners' perceptions about and attitudes towards MALL. 252 students who had different levels of language proficiency studying at a university in England were surveyed and findings suggested that participants were aware of the affordances MALL could offer and they frequently used their mobile devices for language learning out of the classroom context. Concordantly, they had positive attitudes towards MALL and its integration to the classroom instruction.

In EFL context, Li, Cummins, and Deng (2017) examined Canadian EFL learners' perceptions about the use of texting to foster academic vocabulary learning. Qualitative and quantitative data was collected from 48 learners attending to an English for academic purposes course at an English-medium university. The findings of the study suggested that students had positive attitudes towards the MALL implementation due to its perceived effectiveness.

On the other hand, some of the studies put forward different findings in this regard. For example, Dashtestani (2016) examined Iranian EFL learners' perceptions

about using mobile devices for language learning. Data was collected by a questionnaire, semi-structured interviews, and non-participants observation from 345 participants who had intermediate level of language proficiency. Findings pointed out that, the participants rarely used mobile devices for language learning and they didn't feel proficient enough to benefit from the affordances those devices could offer. Additionally, they thought that their EFL teachers were not qualified enough to integrate mobile devices into the curriculum for instructional purposes, either. As for the affordances and limitations of MALL, they mentioned that mobile devices provided learners with ubiquitous language learning opportunities thanks to their portability and they facilitated language learning. However, they were not cost-effective and using a mobile application might sometimes require more advanced internet and communication technology (ICT) skills. The participants suggested that all the stakeholders had to be trained about the potential of MALL and best practices in the field.

2.7.2. Teachers' Perceptions of MALL

Relevant literature indicated that EFL teachers had different perceptions about MALL. Golshan and Tafazoli (2014) examined Iranian EFL teachers' attitudes towards using technological tools in the classroom context and their practices in this respect. The results of the study showed that they had positive attitudes towards using technological tools in the classroom settings however, since the use of mobile phones was not approved by the administration, almost none of them used mobile phones for instructional purposes.

On the other hand, Dashtestani (2013) conducted a mixed methods research study to examine Iranian EFL teachers' perceptions about integrating MALL into the curriculum. Data was collected from 168 participants via a questionnaire consisting of 5-point Like-type items and semi-structured interviews. Findings suggested that Iranian EFL teachers had moderately positive attitudes towards the integration MALL into the curriculum since they believed that it had some affordances as well as some constraints in EFL context in Iran. Namely, while they approved that

mobile devices facilitated language learning by offering collaborative and ubiquitous language learning opportunities, they stated that they had some concerns about cost-efficiency of the implementation and the possible problems with the internet connection in the classroom settings. As for the current practices, nearly all the participants stated that neither they nor their students used mobile devices in the classroom settings for teaching and learning a foreign language and they didn't feel qualified enough to do this, either. In this respect, Hsu (2016) indicated that EFL teachers' knowledge for integrating technology in their teaching practices was vital to successful MALL implementation.

2.7.3. Comparison of Learners' and Teachers' Perceptions of MALL

Some of the studies informed the relevant literature on language learners' and teachers' perceptions about MALL by making a comparison in this regard. Findings of these studies pointed out that there was a discrepancy between language learners' and teachers' perceptions about using mobile devices in the classroom context for teaching-learning purposes.

In ESL context, Park and Slater (2014) examined ESL teachers and Chinese ESL learners' perceptions about and attitudes towards MALL by conducting a mixed methods design research study at a university in the USA. Findings revealed that while the teachers were hesitant about the potential of MALL and did not integrate MALL into the curriculum due to some technological and pedagogical challenges, the learners were enthusiastic about using mobile devices for language learning.

In EFL context, Saudouni and Bahloul (2016) investigated EFL learners' and teachers' perceptions of MALL. Interpretation of the qualitative and quantitative data collected from 80 students and 14 teachers at a university in Algeria indicated that both students and teachers had positive perceptions about MALL due to its perceived effectiveness. However, as for their perceptions about the integration of MALL into the curriculum, the students maintained their positive attitudes while the teachers put forward their concerns about the inadequate conditions related to

infrastructure, training and awareness of the stakeholders about the potential of MALL.

2.8. Research Studies in Turkish EFL Context

In Turkish EFL context, there exist research studies informing the relevant literature about the current practices of mobile assisted language learning. In this respect, Bezircilioğlu (2016) pointed out that although Turkish EFL learners didn't have a tendency to benefit from their mobile phones for fostering their language skills out of the classroom context, they used their mobile phones for translating and looking up in the dictionaries in the classroom settings. In another study, Öz (2014) figured out that a great majority of Turkish pre-service EFL teachers used their mobile devices for developing their language skills.

Using mobile devices for expanding English vocabulary and for fostering speaking skills were found to be effective in Turkish EFL context. In this regard, Sarıçoban and Özturan (2013) investigated the effects of using SMS (short message service) on learners' vocabulary learning and learners' attitudes towards the mobile assisted vocabulary learning implementation. 36 university students received vocabulary instruction through messages sent to their mobile phones for three weeks and the data collected by means of pre- and post-tests and a questionnaire administered after the treatment for finding out about the students' attitudes towards the treatment. It was found out that the students in the experimental group had more vocabulary learning gains than ones in the control group and their attitudes were satisfactory. Additionally, findings remarked that delivery time of the messages and the content of the messages had impact on students' level of satisfaction with the implementation.

Saran, Seferoğlu, and Çağıltay (2009) investigated the effects of using mobile phones on Turkish EFL learners' pronunciation skills. To this end, 24 university students who had elementary level of language proficiency were randomly assigned to three groups, 8 in each. Although all the participants received the

regular classroom instruction, they were given supplementary learning materials to be engaged in out of the classroom context. One of the groups received those materials by means of multimedia messages sent to their mobile phones. The second group received the same materials via web pages and as for the third group they were given hand-outs. The treatment lasted for four weeks and the data was obtained from pre- and post-tests, semi-structured interviews, and a questionnaire consisting of open-ended items. Results pointed out that mobile group achieved better results than the other two groups in the post-tests and there was no significant difference between the web group and hand-out group in terms of the learning outcomes. Analysis of the qualitative data showed that the participants appreciated the effectiveness of the implementation. The researchers remarked the "push aspect of mobile technology" (p.108) which encouraged regular involvement in learning activities.

Similarly, by developing a mobile application in order to identify and correct the pronunciation errors of the users, Cavus (2016) indicated that it would be more enjoyable to improve pronunciation skills compared to traditional way of learning.

Relevant literature points out the discrepancy between learners' and teachers' perceptions of mobile assisted language learning. Similarly, Bezircioğlu (2016) investigated Turkish EFL learners' and teachers' attitudes towards MALL. Interpretation of the data collected by an open-ended questionnaire suggested that Turkish EFL learners had positive attitudes towards MALL. Although they didn't have a tendency to benefit from their mobile phones for fostering their language skills out of the classroom context, they used them for translating and looking up in the dictionaries in the classroom settings. As for the teacher, they had negative attitudes towards the integration of MALL into the regular curriculum.

The pre-service teachers' perceptions about MALL was additionally the subject of research in Turkish EFL context. In this regard, Şad and Göktaş (2014) examined Turkish pre-service teachers' perceptions about using mobile phones and personal computers in the educational context. On the basis of the data collected by a survey

administered to 1087 participants, it was remarked that participants' attitudes were not satisfactory both for using mobile phones and personal computers in the educational context and they had more negative attitudes towards using mobile phones than using computers. Additionally, department, grade, gender, and ownership of those technological tools didn't explain the difference in attitudes.

Other study carried out by Öz (2014) examined pre-service EFL teachers' perceptions about MALL. Interpretation of the data obtained by a questionnaire administered to 144 students in their fourth year at a university indicated that a great majority of the participants used their mobile devices for developing their language skills and mentioned that they would benefit from the potential of mobile devices for teaching English in the classroom settings in the future.

In another study (Savaş, 2014), examining the pre-service EFL teachers' perceptions about the effectiveness of using Tablet PCs for instructional purposes in the classroom settings, it was pointed out that the pre-service EFL teachers had positive perceptions. Most importantly, they could develop more positive perceptions about the integration of mobile devices into classroom teaching as they gained more experience in this respect.

CHAPTER 3

METHODOLOGY

3.1. Introduction

This chapter aims to present the research questions, research design, population and the selection of the participants, data collection instruments, data collection and analysis procedures, assumptions, and limitations of the conducted study.

3.2. Research Questions

Main research questions answered within the scope of the current study were as it follows:

1. What are the pre-service EFL teachers' current practices of MALL?
2. What are the pre-service EFL teachers' perceptions about the effectiveness of MALL?
3. What are the pre-service EFL teachers' perceptions about the affordances and constraints of MALL?
4. What are the pre-service EFL teachers' recommendations to EFL learners about increasing the effectiveness of MALL?
5. What are the pre-service EFL teachers' perceptions about the classroom implications of MALL?
6. What are the pre-service EFL teachers' recommendations to EFL teachers about increasing the effectiveness of the integration of mobile devices into their teaching practices in the classroom context?
7. What are the pre-service EFL teachers' expectations from the lecturers offering courses in ELT programs for promoting their pedagogical skills to integrate MALL into their curriculum in the future?

8. What are the pre-service EFL teachers' expectations from the ELT program for promoting their pedagogical skills to integrate MALL into their curriculum in the future?

3.3. Research Design

The current study used mixed methods research design for investigating the pre-service EFL teachers' current practices and perceptions of MALL. Creswell and Plano Clark (2007) define mixed methods research as:

> Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone (p.5).

As it could be inferred from the given definition, main reason for mixing the methods is to get more comprehensive view of the problems to be answered within the scope of research. Additionally, Bryman (2006) highlights another reason for employing mixed methods research design by suggesting the term, illustration, which denotes putting flesh on the bare bones of quantitative findings thanks to the qualitative findings. Moreover, as both qualitative and quantitative research design inherently have some strengths and weaknesses, using mixed methods research design gives researchers the opportunity of benefitting from strengths of both research designs and overcoming the weaknesses of each designs since they don't overlap in a mixed methods research design (Creswell and Plano Clark, 2011). Thus, this study employed both quantitative and qualitative research designs for having a more complete understanding of the pre-service EFL teachers' current practices and perceptions of MALL. While the quantitative findings sketch the participants' current practices and perceptions of MALL out, the qualitative

findings sketch them in. Namely, the qualitative findings were used to illustrate the quantitative findings. Last but not least, using mixed methods research design helped the researcher to deal with the weaknesses of each research design.

Creswell and Plano Clark (2011) classify six major types of mixed methods research designs; "convergent parallel design", "explanatory sequential design", "exploratory sequential design", "embedded design", "transformative design", and "multiphase design" and remark that a researcher should take some critical factors into consideration while choosing among the six major types of designs.

Firstly, "the most salient and critical" (Greene, 2007, p.20) factor is to decide whether quantitative and qualitative methods are employed independent from each other or not. If they are not, they interact at any point in any way during the research process. If they are independent from each other, the researcher employs both quantitative and qualitative methods for collecting and analyzing both data separately and then merge them at the end of the research to conclude. In the current study, the researcher had both both quantitative and qualitative phases conducted distinctly, but interactive during the research process.

Secondly, the researcher should decide whether the quantitative research methods or qualitative research methods ranks in priority. Or are they equal importance to the researcher? In the current study, quantitative research methods played more important role in explaining the pre-service EFL teachers' current practices and perceptions of MALL. Qualitative phase, in secondary role, was designed to delve further into the findings obtained from the initial phase of the study.

The third crucial factor is about the timing of the analysis of the results of the quantitative and qualitative data. Does the researcher utilize concurrent, sequential, or multiphase combination timing? In the concurrent timing, both qualitative and quantitative research methods are employed simultaneously and the findings obtained from both strands are interpreted simultaneously. In the sequential timing, the researcher employs one type of research methods and based on the

interpretation of the findings, goes on with the other type. As for the multiphase timing, the researcher exploits concurrent and/or sequential timing in multiphase research studies. The current study used sequential timing. Accordingly, quantitative research methods were employed and based on the interpretation of the finings, qualitative phase was designed and implemented.

Based on the decisions taken by the researcher, the current study fell into the category of "the explanatory sequential design" whose aim is to "to use a qualitative strand to explain initial quantitative results" (Creswell, Plano Clark, et al., 2003). Figure 3.1 below illustrates the details related to the explanatory sequential design.

Figure 3.1 The Explanatory Sequential Design (Creswell and Plano Clark, 2011)

The process through which the researcher goes in the explanatory sequential design was summarized by Creswell and Plano Clark (2011) as it follows:

> during the first step, the researcher designs and implements a quantitative strand that includes collecting and analyzing the quantitative data. In the second step, the researcher connects to a second phase – the point for interface for mixing – by identifying specific quantitative results that call for additional explanation and using these results to guide the development of the qualitative strand (p. 83).

Based on the process defined by Creswell and Plano Clark (2011), in the study examining pre-service EFL teachers' current practices and perceptions of mobile assisted language learning, in the first step, the quantitative phase was designed and implemented. In the second step, the qualitative phase was designed and

implemented for further explaining the findings obtained from the quantitative phase of the study.

3.4. Population and the Selection of the Participants

The population of this study is the pre-service EFL teachers in Turkey. There are 62 public and private universities offering B.A. programs in ELT in 2018 in Turkey. Since it was not time-efficient and cost-effective to access all the pre-service EFL teachers studying at the B.A. programs in ELT in these universities, an accessible sample was defined by the researcher by employing convenience sampling method. According to Tashakkori and Teddlie (2003), a researcher employing convenience sampling method makes purposive decisions for selecting the participants who are easy to access and voluntary to contribute to the research. Thus, the researcher, as a member of a public university offering B.A. program in ELT in Turkey, selected those pre-service EFL teachers who were studying in the ELT program at that public university in Turkey.

3.4.1. Demographics of the Participants of the Quantitative Phase

The quantitative phase of this study was conducted in the 2018-2019 academic year on 142 volunteer pre-service EFL teachers who were studying in the ELT program at a public university in Turkey. Twenty point four percent of the participants (N=29) were 17-18 years old. Thirty-six point six percent of them (N=52) were 19-20 and 28.9% of them (N=41) were 21-22. While 9.9% of the pre-service EFL teachers (N=14) were 23-24 years old, only 4.2% of them were 25 and above. The majority of the participants were 19-20 years old.

The frequencies and percentages of the participants' ages were demonstrated in Table 3.1 and Figure 3.2.

Table 3.1 Participants' Ages in Quantitative Phase

Age Range	Number	Percentage
17-18	29	20.4
19-20	52	36.6
21-22	41	28.9
23-24	14	9.9
25 and above	6	4.2
Total	142	100.0
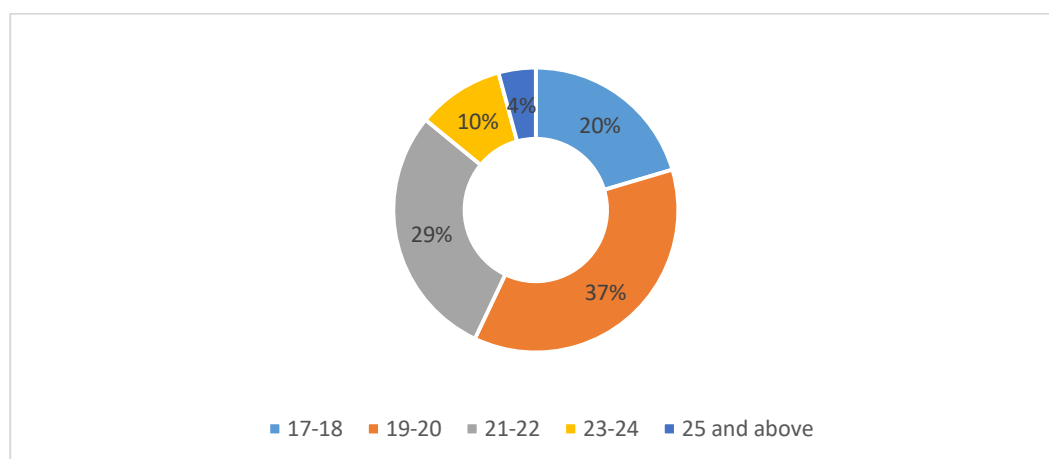
Figure 3.2 Participants' Ages in Quantitative Phase

As for the gender distribution of the pre-service EFL teachers participating into the quantitative phase of the current study, it was seen that 69% of them (N=98) were female, 31% (N=44) were male. Majority of the participants were female students who studied at the BA program in ELT. The frequencies and percentages of the gender distribution of the participants were indicated in Table 3.2 and Figure 3.3.

Table 3.2 Participants' Gender in Quantitative Phase

Gender	Number	Percentage
Male	44	31.0
Female	98	69.0
Total	142	100.0
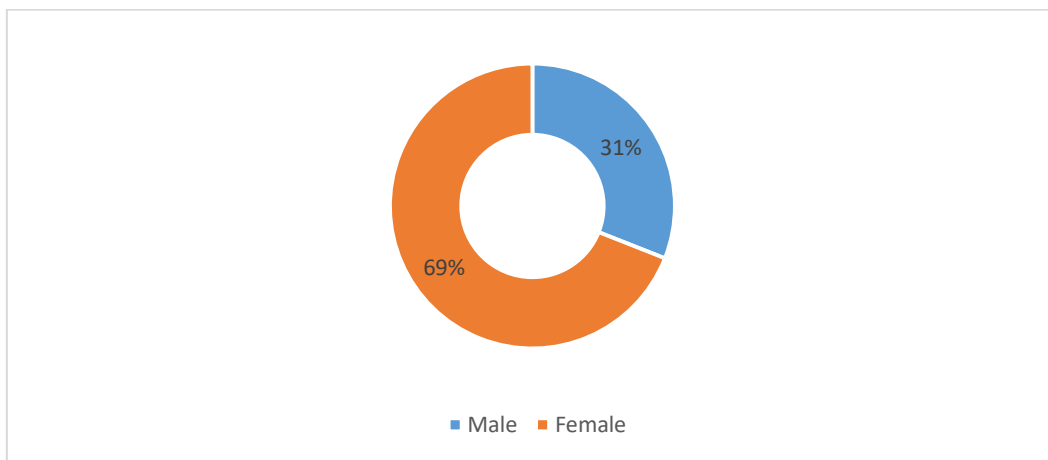
Figure 3.3 Participants' Gender in Quantitative Phase

As illustrated in Table 3.3 and Figure 3.4, 20.4% of the participants (N=29) were studying at the preparatory class. Additionally, 31.7% of them were freshmen (N=45), 18.3% of them (N=26) were sophomores, 13.4% (N=16) were juniors and lastly 16.2% (N=23) were seniors. As it was seen, majority of the participants were in their first year of the study at the department.

Table 3.3 Participants' Year of the Study in Quantitative Phase

Year of the Study	Number	Percentage
Preparatory	29	20.4
1st	45	31.7
2nd	26	18.3
3rd	19	13.4
4th	23	16.2
Total	142	100.0
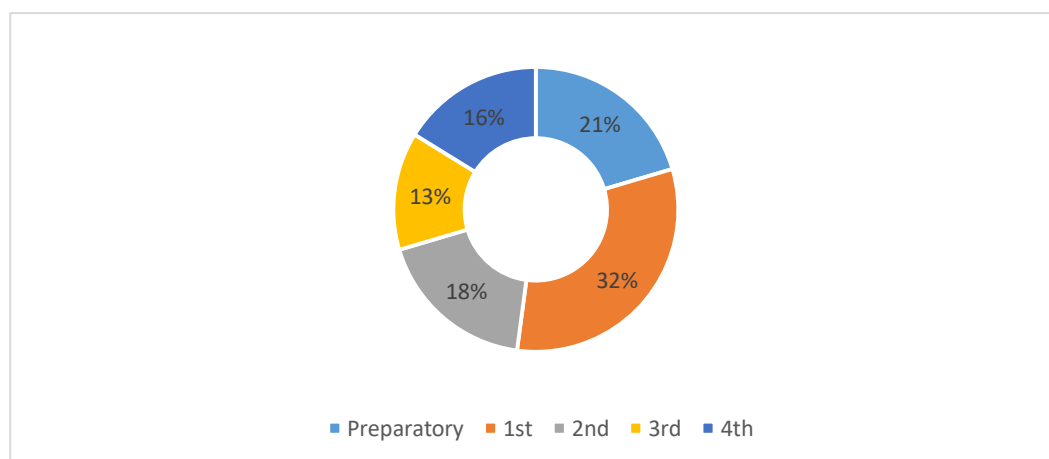
Figure 3.4 Participants' Year of the Study in Quantitative Phase

All of the participants used their smartphones on a daily basis. Nine point nine percent of them (N=14) used their smartphones less than two hours a day. Thirty-three point one percent (N=47) used them 2-4 hours and 37.3% (N=53) used them 4-6 hours a day and smartphones were used for more than 6 hours daily by the 19.7% of the participants (N=28). It was seen that most of the participants used their smartphones 4-6 hours a day.

Ninety-eight point six percent of the pre-service EFL teachers (N=140) never used portable music players, tablets or e-readers on a daily basis. Only 1.4% of the participants (N=2) used one of these mobile devices less than 2 hours a day. The frequencies and percentages of the participants' mobile device use on a daily basis were summarized in Table 3.4.

Table 3.4 Participants' Mobile Device Use on a Daily Basis in Quantitative Phase

Mobile Devices	Never N (%)	Less than 2 hours N (%)	2-4 hours N (%)	4-6 hours N (%)	More than 6 hours N (%)
Smartphone	0 (0)	14 (9.9)	47 (33.1)	53 (37.3)	28 (19.7)
Portable music player	140 (98.6)	2 (1.4)	0 (0)	0 (0)	0 (0)
Tablet	140 (98.6)	2 (1.4)	0 (0)	0 (0)	0 (0)
E-reader	140 (98.6)	2 (1.4)	0 (0)	0 (0)	0 (0)

As it was inferred from Table 3.5, demonstrating the frequencies and percentages of the participants' mobile device use for educational purposes on a weekly basis, one point four percent of the participants (N=2) never used their smartphones for educational purposes. Forty point eight percent of them (N=58) used their smartphones less than three hours, 34.5% of the pre-service EFL teachers (N=49) used them 3-6 hours, and 11.3% (N=16) used their smartphones 6-9 hours. Only 12% of the participants used their smartphones for educational purposes more than nine hours on a weekly basis. As it was seen, most of the participants used their smartphones less than three hours a day weekly for educational purposes.

As for the tablets, they were used weekly less than three hours by only 7.7% (N=11). Ninety-two point three percent (N=131) did not use any tablets.

Moreover, while e-readers used for educational purposes by only 1.4% of the pre-service EFL teachers (N=2) less than three hours on a weekly basis, it was seen that portable music players were used by none of the pre-service EFL teachers in this regard.

Table 3.5 Participants' Mobile Device Use for Educational Purposes on a Weekly Basis in Quantitative Phase

Mobile Devices	Never N (%)	Less than 3 hours N (%)	3-6 hours N (%)	6-9 hours N (%)	More than 9 hours N (%)
Smartphone	2 (1.4)	58 (40.8)	49 (34.5)	16 (11.3)	17 (12.0)
Portable music player	142 (100)	0 (0)	0 (0)	0 (0)	0 (0)
Tablet	131 (92.3)	11 (7.7)	0 (0)	0 (0)	0 (0)
E-reader	140 (98.6)	2 (1.4)	0 (0)	0 (0)	0 (0)

As for the participants' language learning practices by using their mobile devices, it was seen that 3.5% of them (N=5) never used their smartphones for language learning purposes. Forty point one percent of them (N=57) used their smartphones less than three hours weekly and 33.1% of them (N=47) used them 6-9 hours. Only 12% of the pre-service EFL teachers (N=17) used their smartphones more than nine hours on a weekly basis for language learning purposes. As it was inferred, most of the participants used their smartphones less than three hours a week for language learning purposes.

Portable music players were used by only two of the participants for learning English and while one of the participants used it less than three hours, the other one used it 3-6 hours on a weekly basis.

Four point nine percent (N=7) of the participants used their tablets less than three hours while 2.1% (N=3) of them used their tablets 3-6 hours on a weekly basis for learning English. Additionally, e-readers were used by only two of the participants less than three hours a week for language learning purposes.

Table 3.6 Participants' Mobile Device Use for Learning English on a Weekly Basis in Quantitative Phase

Mobile Devices N (%)	Never N (%)	Less than 3 hours N (%)	3-6 hours N (%)	6-9 hours N (%)	More than 9 hours N (%)
Smartphone	5 (3.5)	57 (40.1)	47 (33.1)	16 (11.3)	17 (12.0)
Portable music player	140 (98.6)	1 (0.7)	1 (0.7)	0 (0)	0 (0)
Tablet	132 (93.0)	7 (4.9)	3 (2.1)	0 (0)	0 (0)
E-reader	140 (98.6)	2 (1.4)	0 (0)	0 (0)	0 (0)

All in all, most of the participants were 19-20 years old and female pre-service EFL teachers studying at a public university in Turkey. Additionally, majority of the participants were in their first year of the study at the department.

All of the participants used their smartphones on a daily basis and most of them used their smartphones 4-6 hours a day. Most commonly used mobile devices for both educational and language learning purposes were smartphones and most of the participants used them less than three hours on a weekly basis for educational

purposes. As for the participants' language learning practices by using their mobile devices, it was seen that most of the participants used their smartphones less than three hours a week for language learning purposes.

3.4.2. Demographics of the Participants of the Qualitative Phase

The qualitative phase of this study was conducted in the 2018-2019 academic year on 10 volunteer pre-service EFL teachers who were studying in the ELT program at a public university in Turkey. The participants' ages ranged between 18 and 23. Seven of the participants were female and the other three were male (N=10). Two of the participants were attending to preparatory classes. Additionally, there included two freshmen, two sophomores, two juniors, and two seniors. The details on the participants' age, gender, and year of the study were presented below in the Table 3.7.

Table 3.7 Participants' Age, Gender, and Year of the Study in Qualitative Phase

	Age	Gender	Year of the Study
Participant 1	20	Female	Preparatory
Participant 2	18	Female	Preparatory
Participant 3	19	Female	1st
Participant 4	19	Female	1st
Participant 5	19	Female	2nd
Participant 6	20	Male	2nd
Participant 7	21	Male	3rd
Participant 8	21	Female	3rd
Participant 9	23	Female	4th
Participant 10	22	Male	4th

The mobile devices they have were smartphones and tablets. While all the participants had smartphones, only two of the participants had tablets.

Five of the participants used their smartphones for 4-6 hours on a daily basis, two of them used for 2-4 hours and the other two allocated more than six hours for their smartphones. Only one of the participants spent less than two hours a day on smartphone. Figure 3.5 illustrates the participants' smartphone use on a daily basis.
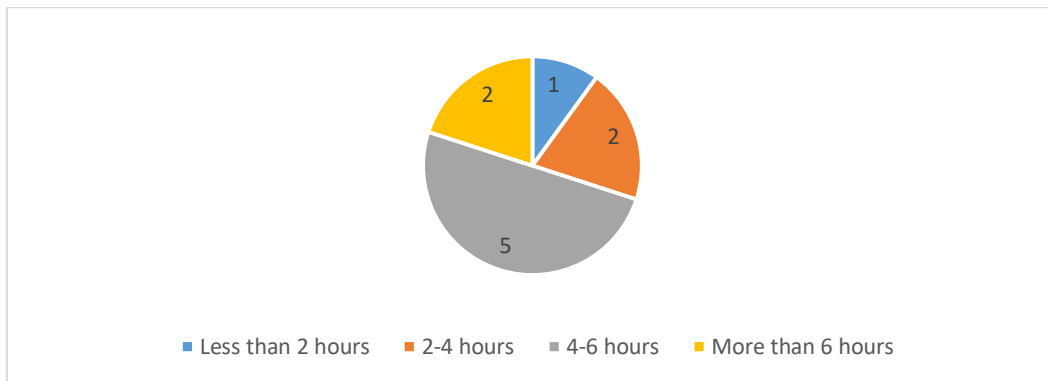
Figure 3.5 Participants' Smartphone Use on a Daily Basis in Qualitative Phase

As for the participants' smartphone use for educational purposes on a weekly basis as demonstrated in Figure 3.6 below, it was seen that four of them allocated less than three hours, the other four allocated 3-6 hours, and only two of them spent more than nine hours.
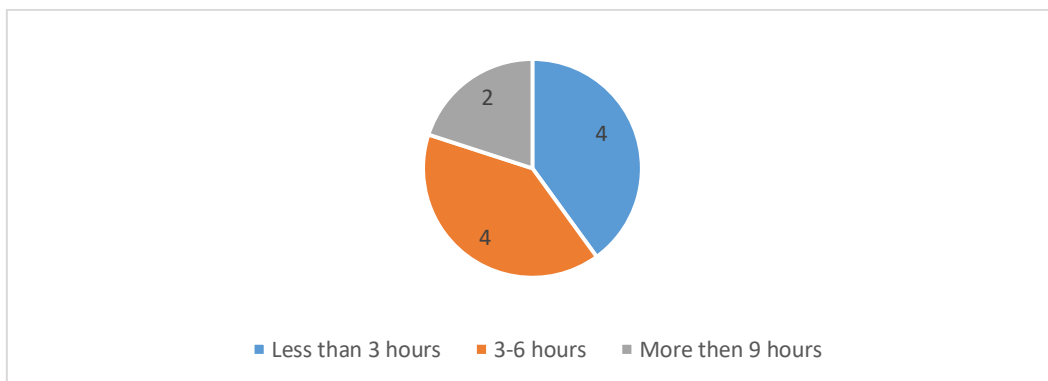
Figure 3.6 Participants' Smartphone Use for Educational Purposes on a Weekly Basis in Qualitative Phase

Additionally, smartphones were used 3-6 hours a week for learning English by four of the participants. While three of the participants spent less than three hours, three of them allocated more than nine hours on a weekly basis for learning English using their smartphones as shown in Figure 3.7 below.
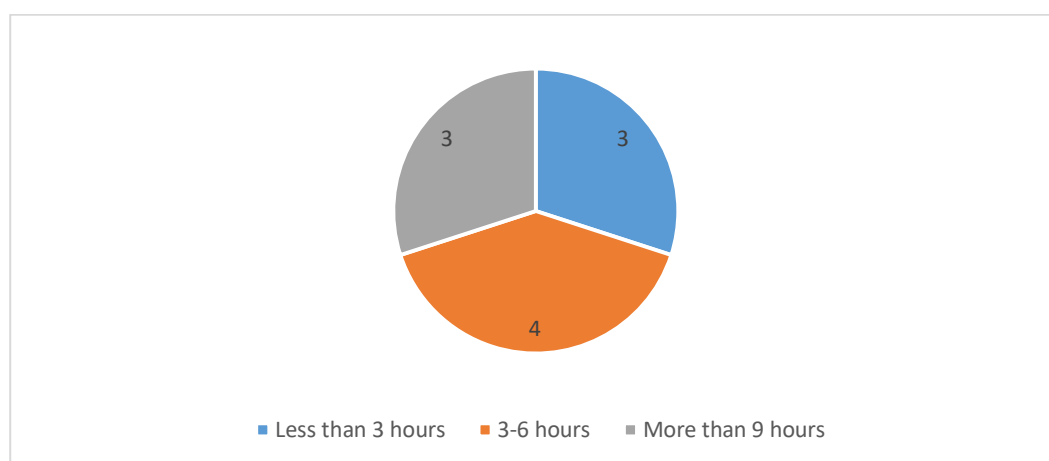
Figure 3.7 Participants' Smartphone Use for Learning English on a Weekly Basis in Qualitative Phase

Table 3.8 Participants' Tablet Use on a Daily, for Educational and Language Learning Purposes on a Weekly Basis in Qualitative Phase

Tablet	Variable	Number
Daily use	Less than 2 hours	2
Educational purposes on a weekly basis	Never	1
	Less than 3 hours	1
Language learning purposes on a weekly basis	Never	1
	Less than 3 hours	1

As it was mentioned before, only two of the participants had tablets. As it was inferred from the Table 3.8 above, summarizing the participants' tablet use on a daily, for educational and language learning purposes on a weekly basis, two of them spent less than two hours on a day on tablets. While one of the participants never used this mobile device for educational purposed, the other one used it less than three hours a week in this regard. Additionally, it was used less than three hours by one of the participants, and never used for learning English by the other one on a weekly basis.

3.5. Data Collection Instruments

This study employed both quantitative and qualitative data gathered by means of a questionnaire and an interview schedule. The details regarding the data collection instruments were summarized below.

3.5.1. Questionnaire

Conducting questionnaires for gathering quantitative data has lots of advantages. As stated in the literature, "they are easy to construct, extremely versatile, and uniquely capable of gathering a large amount of information quickly in a form that is readily processable" (Dörnyei, 2003, p.1). Additionally, they are cost-effective (Krathwohl, 1998). Therefore, this study employed a questionnaire for investigating the pre-service EFL teachers' current practices and perceptions of MALL.

The questionnaire used for collecting data for the quantitative phase of the study was developed by the researcher by taking the relevant literature into consideration. It was developed in English language.

Internal consistency of the questionnaire was evaluated by carrying out reliability test using Cronbach's Alpha Coefficient Model via SPSS 24 (Statistical Package for Social Sciences). Cronbach's Alpha coefficient was .871 which indicated that the instrument was reliable.

The questionnaire (see Appendix A) composed of 5 main parts; "Demographic Information", "Current Practices of MALL", "Effectiveness of MALL", "Possible Pedagogical Affordances and Constraints of MALL", and "Classroom Implications of MALL" respectively.

As the name suggests, the "Demographic Information" part of the questionnaire aimed at gathering data about the participants' demographics; namely, age, gender and year of the study at the university. Additionally, there were three main questions for revealing the frequencies of participants' mobile device use for general purposes, educational purposes, and language learning purposes.

The first part of the questionnaire, "Current Practices of MALL", aimed at collecting data on the pre-service EFL teachers' current practices of MALL. It included nine items using 5-point Likert-type scale on which "1" means "Never", "2" means "Rarely", "3" means "Sometimes", "4" means "Frequently", and "5" means "Always".

As for the second part of the questionnaire, namely "Effectiveness of MALL", it involved seven items which had 4-point Likert-type scale on which "1" means "Strongly Disagree", "2" means "Disagree", "3" means "Agree", and "4" means "Strongly Agree", tailored to collect data on the participants' perceptions about the effectiveness of MALL.

The third part intended to delve further into the pre-service EFL teachers' perceptions of the possible pedagogical affordances and constraints of MALL and had 21 items using 4-point Likert-type scale on which "1" means "Strongly Disagree", "2" means "Disagree", "3" means "Agree", and "4" means "Strongly Agree".

As for the last part, it had 14 items for probing the participants' perceptions about the classroom implications of MALL. It contained 14 items which had 4-point Likert-type scale on which "1" means "Strongly Disagree", "2" means "Disagree", "3" means "Agree", and "4" means "Strongly Agree".

3.5.2. Interview Schedule

Conducting interviews is powerful tool for obtaining the relevant data, "probably not accessible using techniques such as questionnaires and observations" (Blaxter et al., 2006, p. 172). It additionally serves for providing "in-depth information" (Barbour and Schostak, 2006, p. 54) on a phenomenon, by means of "participants' inner values and beliefs" (Ho, 2006, p.11). Among three types of interviews, unstructured, semi-structured, and structured, semi-structured interviews were conducted with the pre-service EFL teachers for investigating their current practices and perceptions of MALL since it "allows for in-depth probing while permitting the interviewer to keep the interview within the parameters traced out by the aim of the study" (Berg, 2007, p. 39). Thus, on the basis of the relevant literature and research questions of the current study, an interview schedule (see Appendix B) was developed by the researcher.

It consisted of two parts. The initial part aimed at collecting data about the demographics of the participants; namely, age, gender and year of the study at the university. Moreover, there existed three main questions for revealing the frequencies of participants' mobile device use for general purposes, educational purposes, and language learning purposes.

The second part included seven main semi-structured interview questions for the pre-service EFL teachers.

The first question aimed at collecting data on their current practices of MALL. The second question asked the participants about the effectiveness of mobile device use in learning English. The third question was employed for revealing the participant's perceptions about the classroom implications of MALL. The fourth and fifth interview questions were used to address the pre-service EFL teachers' suggestions for both EFL learner to increase the effectiveness of mobile devices in their learning practices and EFL teachers to increase the effectiveness of integration of mobile devices in their teaching practices, respectively. As for the

sixth question, it delved further into their expectations from the lecturers offering courses in the ELT program and the ELT program itself to promoting their proficiency. Lastly, the participants were asked whether they have any other comments, suggestions, or questions related to the topic. The interview schedule was developed in Turkish, native language of the participants.

3.6. Data Collection Procedures

The current study was conducted in the 2018-2019 acedemic year at a public university in Turkey. The Figure 3.8 below demonstrates the overall data collection procedures.
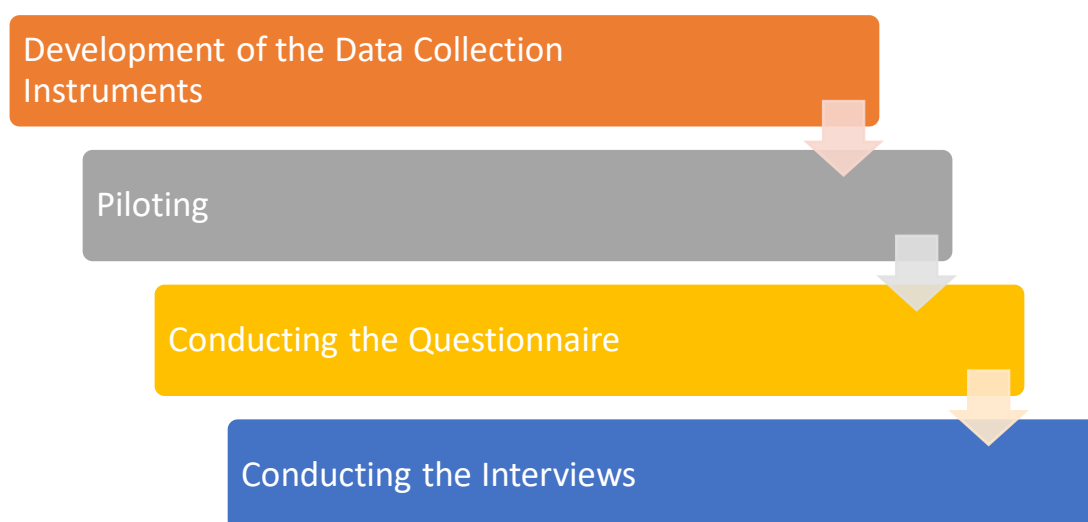
Figure 3.8 Overall Data Collection Procedure

Accordingly, in the first step, the data collection instruments, the questionnaire and the interview schedule, were developed. In the second step, the instruments were piloted. In the third step, the quantitative phase of the study was conducted by using the questionnaire. In the last step, the qualitative data was collected by employing the interview schedule.

3.6.1. Development of the Data Collection Instruments

Based on the relevant literature, the researcher developed a questionnaire and an interview schedule under the supervision of the researcher's thesis advisor.

For establishing the content and face validity of the questionnaire, the researcher took opinions from three experts, two of whom were from the Department of ELT, and one of whom was from the Department of CEIT at a public university in Turkey, by presenting them the questionnaire, the definition of the term "MALL", and a summary on the purpose of the study, population and the participants. In accordance with the feedback given by the experts, the items on questionnaire were revised. Irrelevant items were omitted and ambiguous items were clarified. The format of the questionnaire was revised. Then, the questionnaire was put into the final form under the supervision of the researcher's thesis advisor.

For establishing the content validity of the interview schedule, the researcher took opinions from two experts, two of whom were from the Department of ELT. On the basis of their suggestions, the interview schedule was revised and finalized under the supervision of the researcher's thesis advisor.

3.6.2. Piloting

The finalized version of the questionnaire was piloted with 15 pre-service EFL teachers.

Two of the participants were 17-18 years old. Four of them were 19-20 and eight of them were 21-22 years old. There was only one pre-service EFL teacher who rated the 23-24 option in the age segment. The majority of the participants were 21-22 years old. The frequencies and percentages of the participants' ages were demonstrated in Table 3.9 on the next page.

Table 3.9 Participants' Ages in the Piloting of the Questionnaire

Age Range	Number	Percentage
17-18	2	13.3
19-20	4	26.7
21-22	8	53.3
23-24	1	6.7
Total	15	100.0

While eight of the participants were female and the other seven were male (N=15). Three of the participants were attending to preparatory classes. Additionally, there included three freshmen, three sophomores, three juniors, and three seniors. The details on the participants' gender and year of the study were presented below in the Figure 3.9 and Figure 3.10, respectively.
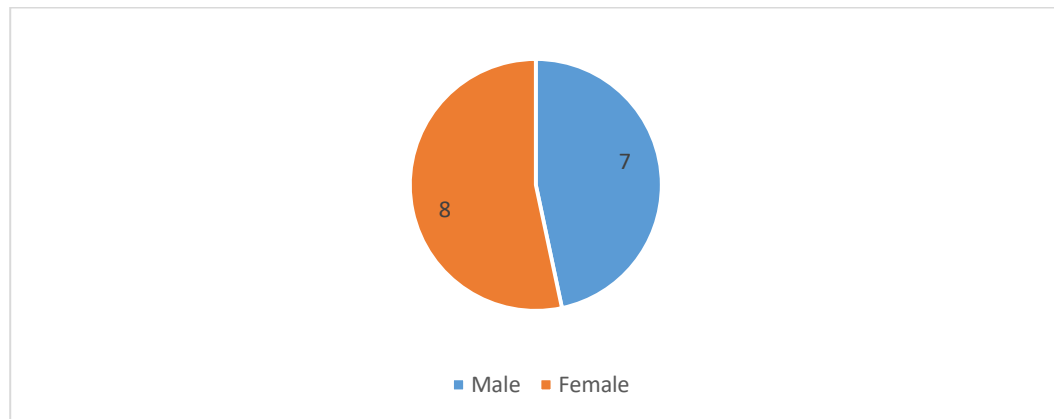
Figure 3.9 Participants' Gender in the Piloting of the Questionnaire
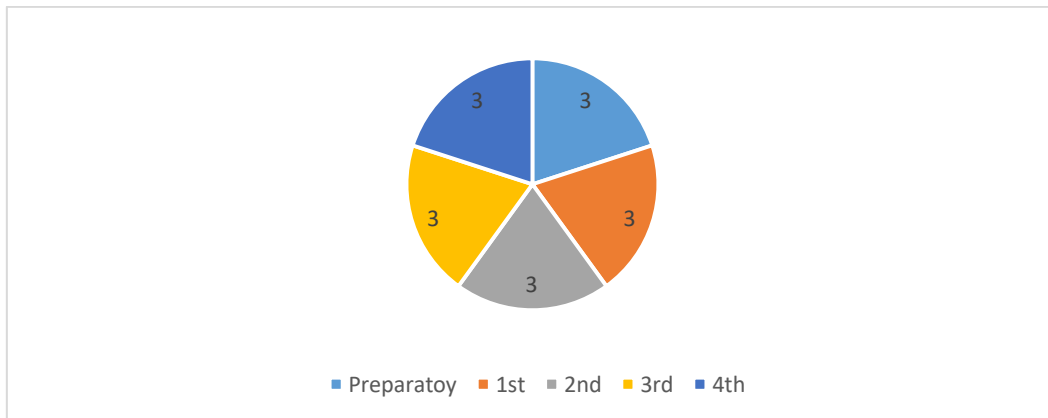
Figure 3.10 Participants' Year of the Study in the Piloting of the Questionnaire

The researcher did not survey all the participants concurrently in a place. It took three days to complete the pilot test. The researcher surveyed the participants in groups in her office.

During the implementation, the participants were asked whether the items on the questionnaire were meaningful to them, if there were any ambiguity in the expressions, if the instructions were clear, and the format of the questionnaire was neat. The participants of the pilot study confirmed that items and the relevant instructions on the questionnaire were meaningful and clear, and the layout was neat.

Internal consistency of the questionnaire was evaluated by carrying out reliability test using Cronbach's Alpha Coefficient Model via SPSS 24 (Statistical Package for Social Sciences). Cronbach's Alpha coefficient was found to be .832 in the pilot study, which indicated that the instrument was reliable.

The final version of the interview schedule was piloted with two female pre-service EFL teachers, attending to preparatory class on the same day in the researcher's office. They assured that the interview questions were clear to understand and did not contain any ambiguity.

3.6.3. Conducting the Questionnaire

The researcher got in contact with the responsible instructors offering courses for the pre-service EFL teachers, who were attending to preparatory classes, or who were in their 1st, 2nd, 3rd, and 4th year of the study in the ELT program. They were informed about the research study and asked for their permission for the researcher for conducting the questionnaires in their course time. Then, a schedule was prepared for collecting the quantitative data of the study and the researcher stuck to the schedule and attended to the courses.

Firstly, the researcher introduced herself and briefly mentioned the purpose of the study to the pre-service EFL teachers. Secondly, the researcher informed them that the participation in the study was on a voluntary basis, the responses of the participants would be kept strictly confidential, and the obtained data would be used only for scientific purposes. Additionally, she mentioned that rating the statements in the questionnaire would take just 20-25 minutes. Thirdly, the researcher asked for the volunteers and distributed the paper-and-pencil questionnaires to the volunteer pre-service EFL teachers. Fourthly, the researcher asked if there were any volunteers for participating in the qualitative phase of the study. She took the contact information of the pre-service EFL teachers who willingly accepted participating in the qualitative phase of the study. Lastly, the researcher thanked the participants and the responsible instructor for their contributions to the study.

3.6.4. Conducting the Interviews

The researcher got in contact with the pre-service EFL teachers who willingly accepted participating in the qualitative phase of the study. The researcher and the interviewees decided where and when to meet for the interview.

Before conducting the interview, the researcher assured each interviewee that the participation in the study was on a voluntary basis, the responses of the participants would be kept strictly confidential, and the obtained data would be used only for

scientific purposes. Additionally, the researcher informed each interviewee that the interview would be recorded by a voice-recorder and would be conducted in Turkish, in his/her native language.

According to Mackay and Gass (2005), "…depending on the research questions and resources available, interviews can be conducted in the interviewee's L1, thus removing the concerns about the proficiency of the [interviewer] impacting quality and quantity of the data provided" (p. 174).

Table 3. 10 Age, Gender, Year of Study, Interview Durations and Locations

Interviewee	Age	Gender	Year of Study	Interview Duration (Minutes: Seconds)	Interview Location
1	20	Female	Preparatory	18:51	On Campus
2	18	Female	Preparatory	16:46	On Campus
3	19	Female	1st	21:09	Off Campus
4	19	Female	1st	23:37	Off Campus
5	19	Female	2nd	18:01	Off Campus
6	20	Male	2nd	22:28	Off Campus
7	21	Male	3rd	16:36	Off Campus
8	21	Female	3rd	17:22	Off Campus
9	23	Female	4th	26:24	Off Campus
10	22	Male	4th	15:44	Off Campus
				Mean: 19:50	

The researcher conducted the interviews and thanked the interviewees for their contributions to the study. The detailed information on each interviewees' age, gender, year of study, interview duration, and location were presented in Table 3.10.

3.7. Data Analysis

The current study employed both qualitative and quantitative data for investigating the pre-service EFL teachers' current practices and perceptions of MALL.

For the first, second and fifth research questions, both quantitative and qualitative data was collected by employing the questionnaire and the interview schedule.

For the third research question, only quantitative data was gathered by means of the questionnaire.

As for the fourth, sixth, seventh, and eighth research questions, the interview schedule was utilized for collecting qualitative data.

Descriptive statistics were performed to analyze the quantitative data via SPSS 24 (Statistical Package for Social Sciences) and findings reported using means, standard deviations, frequencies and percentages.

The qualitative data was analyzed by using constant comparative analysis method. Cohen, Manion, and Morrison (2007) mentions that "In constant comparison method, the researcher compares the new data with existing data and categories, so that the categories achieve a perfect fit with the data."(p. 493).

The researcher can employ open, axial, and selective coding procedures in this analysis method. Strauss and Corbin (1990) define these coding procedures as it follows:

- Open coding is "the process of breaking down, examining, comparing, conceptualizing, and categorizing data" (p. 61).

- Axial coding is "a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilizing a coding paradigm involving conditions, context, action/interactional strategies and consequences" (p. 96).
- Selective coding is "the process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development" (p. 116).

In the current study, the researcher analyzed the qualitative data, collected by conducting interviews with 10 voluntary pre-service EFL teachers, by employing open coding and axial coding. In this regard, the interviewees' responses to each interview question were constantly compared to figure out the relevant categories "until saturation is reached" (Cohen, Manion, and Morrison, 2007, p. 493). Then, codes were constructed by employing axial coding. Lastly, the researcher calculated the frequency distributions for each category and code. Table 3.11 on the following page illustrates the research questions, data collection instruments, methods, and data analysis procedures.

Table 3.11 Research Questions, Data Collection Instruments, Methods, and Data Analyses Procedures

RESEARCH QUESTIONS	INSTRUMENT	METHOD	ANALYSIS
1. What are the pre-service EFL teachers' current practices of MALL?	The Questionnaire The Interview Schedule	Quantitative Qualitative	Descriptive Statistics Constant Comparative Analysis
2. What are the pre-service EFL teachers' perceptions about the effectiveness of MALL?	The Questionnaire The Interview Schedule	Quantitative Qualitative	Descriptive Statistics Constant Comparative Analysis
3. What are the pre-service EFL teachers' perceptions about the affordances and constraints of MALL?	The Questionnaire	Quantitative	Descriptive Statistics
4. What are the pre-service EFL teachers' recommendations to EFL learners about increasing the effectiveness of MALL?	The Interview Schedule	Qualitative	Constant Comparative Analysis
5. What are the pre-service EFL teachers' perceptions about the classroom implications of MALL?	The Questionnaire The Interview Schedule	Quantitative Qualitative	Descriptive Statistics Constant Comparative Analysis
6. What are the pre-service EFL teachers' recommendations to EFL teachers about the classroom implications of MALL?	The Interview Schedule	Qualitative	Constant Comparative Analysis
7. What are the pre-service EFL teachers' expectations from the lecturers offering courses in ELT programs for promoting their pedagogical skills to integrate MALL into their curriculum in the future?	The Interview Schedule	Qualitative	Constant Comparative Analysis
8. What are the pre-service EFL teachers' expectations from the ELT program for promoting their pedagogical skills to integrate MALL into their curriculum in the future?	The Interview Schedule	Qualitative	Constant Comparative Analysis

3.8. Assumptions of the Study

The assumptions of the current study are as it follows:

- The questionnaire and the interview schedule employed for gathering both quantitative and qualitative data ensure validity and reliability.
- The pre-service EFL teachers participating into the quantitative phase of the study rated the items sincerely and the participants of the qualitative phase of the study answered the interview questions genuinely.
- The participants sufficiently represented the population.

3.9. Limitations of the Study

The main limitations of the current study are as it follows:

- The quantitative phase of the study was carried out with 142 pre-service EFL teachers; and the qualitative phase of the study was carried out with 10 pre-service EFL teachers selected by employing convenience sampling method. This connotes two main limitations. First of all, the sample size both for the quantitative and qualitative phase of the study might not be enough to make inferences about the general characteristics of population. Secondly, as the convenience sampling method was employed in the selecting of the participants, the findings of the study might not present and unbiased representation of the population.
- The participants were the pre-service EFL teachers studying at a public university offering B.A. program in ELT which implied that generalizability of the findings obtained both from the quantitative and qualitative phases of the study were restricted with the pre-service EFL teachers studying at a public university, offering B.A. program in ELT, in Turkey.

CHAPTER 4

RESULTS

4.1. Introduction

This chapter presents the findings of the study under eight main sections. The first section which is composed of two sub-sections introduces the results in relation to the pre-service EFL teachers' current practices of MALL. The second section includes two sub-sections presenting the results in relation to the pre-service EFL teachers' perceptions about the effectiveness of MALL. Results in relation to the pre-service EFL teachers' perceptions about the affordances and constraints of MALL and recommendations to EFL learners on increasing the effectiveness of MALL are put forward in the third and fourth section respectively. The fifth section consisting of two sub-sections declares the pre-service EFL teachers' perceptions about the classroom implications of MALL and the sixth one goes over their recommendations to EFL teachers about increasing the effectiveness of the integration of mobile devices into their teaching practices in the classroom context. Results in relation to the pre-service EFL teachers' expectations from both the lecturers offering courses in the ELT program and the ELT program itself for promoting their pedagogical skills to integrate MALL into their curriculum in the future are presented in the last two sections.

4.2. Results in Relation to the Pre-service EFL Teachers' Current Practices of MALL

The first research question of the conducted study inquired into the pre-service EFL teachers' current practices of MALL. Accordingly, both quantitative and qualitative data was collected by means of the questionnaire and the interview

schedule respectively. The results of the analysis of both quantitative and qualitative data were summarized below.

4.2.1. Quantitative Data Analysis Results

Quantitative data on the pre-service EFL teachers' current practices of MALL was collected by means of the first part of the questionnaire which included a total of nine items. The pre-service EFL teachers' responses to these items were illustrated in Table 4.1 using descriptive statistics through means, standard deviations, frequencies, and percentages.

As can be seen in the Table 4.1, the mean scores of the items related to pre-service EFL teachers' current practices of MALL ranged between 2.0 and 3.82.

Both the first item on the questionnaire, "I use my mobile device for educational purposes." and the second item, "I am enthusiastic about using my mobile device for learning English." had the mean score of 3.44 (SD = .78; 1.01 respectively). This indicated that the pre-service EFL teachers benefitted from their mobile devices both for educational purposes and learning English almost at the same frequency.

The item 3, "I use my mobile device for learning English vocabulary." had the highest mean score (M = 3.82, SD = .97). The second highest mean score (M = 3.63, SD = 1.01) was observed on the item 5, "I use my mobile device for developing my listening skills in English.". Thirdly, the item 8, "I use my mobile device for learning the culture of the English speaking countries." had the highest mean score (M = 3.15, SD = 1.18) which was followed by the mean score (M = 3.06, SD = 1.07) of the item 6, "I use my mobile device for developing my reading skills in English."

Table 4.1 Descriptive Statistics Reporting the Pre-service EFL Teachers' Current Practices of MALL

Items	M	SD	Never		Rarely		Sometimes		Frequently		Always	
			N	%	N	%	N	%	N	%	N	%
1	3.44	.78	1	0,7	12	8,5	62	43,7	57	40,1	10	7
2	3.44	1.01	4	2,8	19	13,4	52	36,6	44	31	23	16,2
3	3.82	.97	1	0,7	12	8,5	39	27,5	49	34,5	41	28,9
4	2.49	.86	11	7,7	72	50,7	40	28,2	17	12	2	1,4
5	3.63	1.01	7	4,9	10	7	37	26,1	63	44,4	25	17,6
6	3.06	1.07	10	7	33	23,2	50	35,2	36	25,4	13	9,2
7	2.00	.95	50	35,2	52	36,6	33	23,2	4	2,8	3	2,1
8	3.15	1.18	11	7,7	32	22,5	47	33,1	28	19,7	24	16,9
9	2.70	.92	5	3,5	65	45,8	48	33,8	16	11,3	8	5,6

The lowest mean score ($M = 2.00$, $SD = .95$) was observed on the item 7, "I use my mobile device for developing my writing skills in English.". Secondly, the item 4, "I use my mobile device for learning English grammar." had the lowest mean score ($M = 2.49$, $SD = .86$). The third lowest mean score ($M = 2.70$, $SD = .92$) was observed on the item 9, "I use my mobile device for developing my speaking skills in English.".

These results highlighted that in terms of learning English, the pre-service EFL teachers most frequently used their mobile devices for learning English vocabulary and improving their listening skills in English. They least frequently benefitted from their mobile devices for facilitating their writing skills and expanding their grammar knowledge in English. Figure 4.1 summarizes the mean scores of the pre-service EFL teachers' mobile device use for English language skills and knowledge.
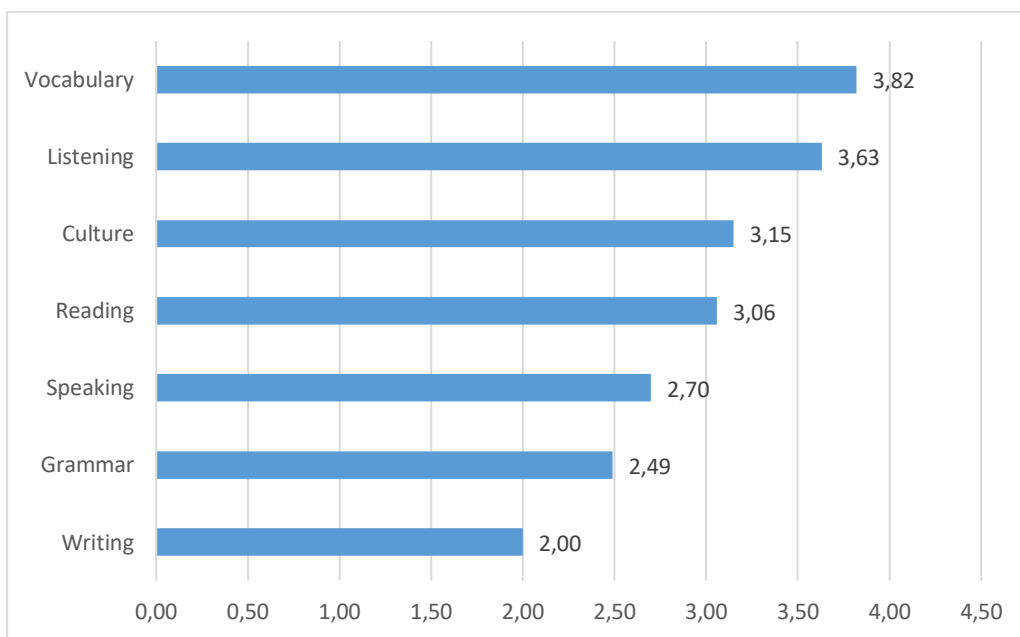
Figure 4.1 Summary of the Mean Scores in Relation to the Pre-service EFL Teachers' Current Practices of MALL

Additionally, the mean score of the items from 3 to 9, aiming at gathering data about how often the pre-service EFL teachers used their mobile devices for

improving their English language skills and knowledge was 2.98 (*SD* = .63). This denoted that they sometimes preferred taking advantage of their mobile devices in their learning practices.

4.2.2. Qualitative Data Analysis Results

Qualitative data on the pre-service EFL teachers' current practices of MALL was gathered by means of the first question on the interview schedule.

Table 4.2 Results in Relation to the Sub-questions of Interview Question I

Sub-questions of the Interview Question 1	Answers	
	Yes (Frequency)	No (Frequency)
Do you use your mobile devices for learning English grammar?	6	4
Do you use your mobile devices for learning English vocabulary?	10	0
Do you use your mobile devices for improving your reading skills in English?	10	0
Do you use your mobile devices for improving your writing skills in English?	5	5
Do you use your mobile devices for improving your listening skills in English?	10	0
Do you use your mobile devices for improving your speaking skills in English?	9	1
Do you use your mobile devices for learning the culture of the English speaking countries?	10	0

The very first question addressed to the interviewees was "Do you use your mobile devices for learning English?" and all of them answered it with a "Yes". Subsequently, seven sub-questions were posed to the interview participants for understanding for which language skills and knowledge they used their mobile devices. It was found out that all of them benefitted from their mobile devices for learning English vocabulary, improving their reading and listening skills in English, and, learning the culture of the English-speaking countries. While 6 of them took advantage of their mobile devices for learning English grammar, 4 of them did not. As for improving their writing skills in English, half of the interview participants stated that they made use of their mobile devices, the other half mentioned they did not. Additionally, mobile devices were utilized by all prospective teachers of English except one for improving their speaking skills in English. Table 4.2 illustrates the frequencies of the interview participants' responses as "Yes" and "No", for sub-questions of Interview Question 1.

These 7 sub-questions were followed by 7 another relevant sub-questions requiring the pre-service EFL teachers to explain how they used their mobile devices for facilitating their English language skills and knowledge by providing some specific examples and/or application names. Findings are summarized below.

4.2.2.1. Mobile Device Use for Improving Listening Skills in English

The results of data analysis revealed that the pre-service EFL teachers used various kinds of mobile applications for improving their listening skills in English. These were, Rosetta Stone, Listen Audiobooks, Listen English Stories, BBC Learning, VOA Learning English, IELTS Listening, TED, Voscreen, and YouTube as demonstrated in Table 4.3.

Table 4.3 Mobile Applications Interview Participants Used for Improving Listening Skills in English

Application Names	Frequency
YouTube	5
VOA Learning English	3
TED	3
Voscreen	3
Rosetta Stone	2
BBC Learning	2
IELTS Listening	1
Listen AudioBooks	1
Listen English Stories	1

The interview participants remarked that they listened to music and watched films, TV series, TV shows, documentaries, and cartoons in English by using their mobile devices. As it was figured out, for improving their listening skills the pre-service EFL teachers especially preferred mobile applications enabling them authentic language learning experience.

> As I just mentioned about, Voscreen is my best since it enables the listener to watch and listen several shots of series or movies simultaneously. Additionally, you can hear the pronunciations of native speakers with different accents [Participant 1].

> Actually, I mostly employ my mobile phone to do some listening activities. I have downloaded TED Talks to my mobile phone and am using it now. I watch a talk each week as we cannot be exposed to English Language outside the classroom. Indeed, I consider that we have to employ our

mobile devices or technologies to improve our English proficiency. [Participant 9]

All in all, it was found out that the pre-service EFL teachers preferred mobile applications which enabled them authentic language learning experiences for fostering their listening skills in English.

4.2.2.2. Mobile Device Use for Improving Grammar Skills in English

The applications used for improving grammar skills in English were YouTube, Grammarly, Duolingo, Engvid, English Grammar, and Rosetta Stone besides mobile search engines and dictionary apps as listed in Table 4.4 below.

Table 4.4 Mobile Applications Interview Participants Used for Improving Grammar Skills in English

Application Names	Frequency
Youtube	3
Mobile Search Engines	3
Grammarly	1
Duolingo	1
Engvid	1
English Grammar	1
Rosetta Stone	1

On the basis of the pre-service EFL teachers' statements, it was seen that only the applications, Rosetta Stone, and Duolingo used inductive approach to teaching grammar.

Other applications, namely, Engvid and English grammar used deductive approach to teaching grammar. The interview participants mentioned that thanks to these

mobile applications, they could read documents and watch videos explaining and presenting grammar rules of English.

> I search for information on grammar topics that I want to figure out in some applications. For example, Engvid application includes both videos and written documents. I can learn from these sources. [Participant 4]

Additionally, the pre-service EFL teachers stated that they preferred watching videos on YouTube presenting grammatical rules of English which revealed that they preferred learning grammar deductively again by using YouTube.

> I don't use any application as I cannot find a suitable one to learn English Grammar. On the other hand, I reckon that I can learn better from reference books. I only benefit from Youtube to watch explanations on grammar topics [Participant 5]

The interview participants articulated that they especially took advantage of mobile search engines when they wanted to recall a grammatical point.

> I don't use a special application to learn grammar. However, I apply for internet when I cannot fully grasp a topic or face something unknown to me. Said another way, I write the keywords on google and make a search. On the other hand, I mostly use books to learn the topic as it is more useful to learn from books. [Participant 8]

Besides, the interview participants mentioned that they used a grammar checker, named Grammarly for revising and editing their essays in English. In this regard, they believed that thanks to mobile-assisted feedback they improved their grammar skills in English.

> There is an application called 'Grammarly'. I check my possible grammatical mistakes. Thus, I can learn from my mistakes since it gives the correct usages. [Participant 1]

As is seen from the excerpts, although the pre-service EFL teachers stated that they used these mobile applications for facilitating their grammar skills in English, they approached the issue cautiously. Grammar books were found to be more effective

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than mobile applications which signaled their preferences once more for learning grammar deductively.

All of these denoted that deductive approach to grammar learning was found to be more effective by the interview participants. Thus, they preferred using mobile applications which followed more traditional paths or grammar books, traditional in nature for improving their grammar skills in English.

4.2.2.3. Mobile Device Use for Expanding English Vocabulary

The data analysis results revealed that the pre-service EFL teachers used various kinds of mobile applications for expanding their English vocabulary. These were Tureng, Sesli Sözlük, Cambridge Dictionary, Rosetta Stone, Voscreen, Duolingo, WordBit, WordBooster, Drops, Memrise, English Exam Center, and Youtube. Additionally, they mentioned that they took advantage of mobile search engines as demonstrated in Table 4.5.

Table 4.5 Mobile Applications Interview Participants Used for Expanding English Vocabulary

Application names	Frequency
Tureng	5
Duolingo	4
Sesli Sözlük	3
Voscreen	2
Cambridge Dictionary	1
Rosetta Stone	1
WordBit	1
WordBooster	1
Drops	1
Memrise	1
English Exam Center	1
YouTube	1
Mobile Search Engines	1

By taking the interview participants' preferences for mobile dictionaries, namely, Tureng and Sesli Sözlük, into consideration, it was seen that bilingual dictionaries were used for the unknown vocabulary.

> For instance, when I have an unknown word, I employ such dictionary applications as Tureng and Sesli Sözlük that I have downloaded to my mobile phone. I use them to check the meanings of the words. [Participant 8]

Some of the applications used by the participants employed contextualized vocabulary teaching techniques.

> I use an application called Word Booster to learn English words. This application includes some articles on different topic, and each article presents target words to be learned. I don't use any application except it. [Participant 6]

> I use an application named as Voscreen. It gives some shots from series and movies and requires its users to find how the expressions are restated. You get some points as you give the right answers. It really motivates me in that I encounter different words and their contextual usages. [Participant 1]

However, it was figured out that the interview participants' mostly preferred mobile applications offering semi-contextualized vocabulary learning experience.

> I can say that I use Drops, Memrise and Dualingo. These applications provide me with both meanings and pronounciations of the words. After listening to the pronounciations of the words, I try to repeat them. If I am correct, the applicatons confirm me. [Participant 7]

All in all, it was found out that the pre-service EFL teachers preferred bilingual dictionaries and they were fond of the mobile applicatiions providing them with semi-contextualized vocabulary learning experiences.

4.2.2.4. Mobile Device Use for Improving Speaking Skills in English

The mobile applications used for facilitating speaking skills in English were WhatsApp, YouTube, Duolingo, English Ninjas, English Conversations, and Rosetta Stone besides social media platforms as listed in Table 4.6.

Table 4.6 Mobile Applications Interview Participants Used for Improving Speaking Skills in English

Application names	Frequency
Social Media	4
WhatsApp	4
YouTube	2
Duolingo	2
English Ninjas	1
English Conversations	1
Rosetta Stone	1

YouTube was one of the applications used for improving speaking skills in English by means of which the videos on strategies serving this purpose were searched.

> I watch videos on how to improve English speaking skills on Youtube. It is mentioned in these videos that it would be beneficial to make practice in front of a mirror. I focus my efforts on these recommendations. I sometimes imitate people in the videos while watching Youtube. I also record myself while speaking through the front camera of my mobile. I speak about the topics I define or give answers to the questions I write. [Participant 3]

As is seen, YouTube was used for improving pronunciation skills in English as well with the help of the camera phones which allowed users to record themselves during speaking and watch the recording for self-evaluation afterwards.

Duolingo and Rosetta Stone both of which used speech recognition technology were also utilized for improving pronunciation skills in English.

> I employ an application called as Duolingo that provides pronounciations of the words, as well. First you listen to a word, then you say it. If you pronounce it correctly, a green check mark occurs. [Participant 10]

The interview participants emphasized the importance of interacting with other learners and native speakers of English for facilitating speaking skills. They preferred mobile applications by means of which they could immerse themselves in English language by meeting conversation partners and using language as a tool for communication. Social media platforms and WhatsApp came into prominence in this regard.

> I meet people in instagram, and we have live talks on WhatsApp. There is also another application called as English Ninjas. I employed this application. It provides its members with live talks with foreign instructors. Additionally, I have some friends from Facebook Erasmus group. We have live talks on WhatsApp. [Participant 4]

Another application used for improving speaking skills in English was English Conversation which offered topics and relevant dialogs for the users for practicing English conversations. Although it was found functional, two-way communication with a real conversation partner was found to be more fruitful.

> I use an application named as English Conversations to improve my speaking skills. There are different topics in this application, such as Holiday and Breakfast. When you choose a topic, a dialogue of two people appears. First of all, you are supposed to listen, then you can choose whoever you want, and you can engage in dialogue instead of the person you choose. You can also record your voice and listen to it later. Even though the application doesn't give you

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feedback, you can make self-evaluation by listening your own record. This application is a good one, but it is not useful as much as speaking with a native. It is necessary to practice but not with robots. [Participant 6]

All in all, it was found out that the pre-service EFL teachers preferred mobile appliations which provide them with the necessary tools for using English as a tool for communication.

4.2.2.5. Mobile Device Use for Improving Writing Skills in English

Table 4.7 below demonstrates the applications used by the pre-service EFL teachers. These were Grammarly, Word Booster, Essay Advanced, Drops, and Duolingo.

Table 4.7 Mobile Applications Interview Participants Used for Improving Writing Skills in English

Application names	Frequency
Duolingo	2
Grammarly	1
Social Media	1
Word Booster	1
Essay Advanced	1
Drops	1

One of the applications used for improving writing skills in English was Grammarly by means of which the pre-service EFL teachers received mobile-assisted feedback on their writings in English. The interview participants mentioned that thanks to that grammar checker, they improved their writing proficiency.

> As I just mentioned, there is Grammarly. This application corrects grammatical errors and develops both grammar and writing skills. For example, I can see my mistakes in a text written by me. It gives information about the usages of the grammatical patterns and words and provided feedback. It sometimes corrects the whole words or misspellings. [Participant 1]

The pre-service EFL teachers stated that they interacted with other EFL/ESL learners, teachers, and native speakers of English through social media and as it was figured out social media was perceived as an effective tool for enhancing writing skills in English.

> I don't use any application to improve my writing skills, but I have written communication with my friends on social media. For example, I meet people who learn English or teachers who teach English through different applications such as Engvid. Following this, we communicate on Instagram. I try to improve my writing skills. [Participant 4]

Other applications used for improving writing skills in English were Word Booster and Essay Advanced thanks to which the pre-service EFL teachers could both read different genres of articles in English and learn how to write them.

> Word Booster helps me develop my reading skills as I read articles in this application. I also read articles on internet. There is also Essay Advanced application. It includes some articles and make important contributions to the development of writing skills. Thanks to these applications, I can read articles on different topics and see how they are written. [Participant 6]

On the basis of the interviewees' statements, it was understood that the applications, Drops and Duolingo offered activities in which learners were required to write the vocabulary just presented and to make translations from one language to another, respectively.

> There is a simple activity in the applications that I employ while learning vocabulary. It must be in Drops and Duolingo applications. You write the words you have learned. I haven't used any applications except them. [Participant 7]

> There are some activities in Duolingo applications to practice writing skills. They are mostly translation activities and you can translate sentences in either language Turkish and English. I don't use any application. [Participant 9]

All in all, it was found out that the pre-service EFL teachers preferred the mobile applications by means of which they coud take mobile generated feedback for fostering their writing skills in English. Additionally, they were in favour of the applications through which they could interact with the native speakers of English or other ESL/EFL learners and learn how to write different genres in English.

4.2.2.6. Mobile Device Use for Improving Reading Skills in English

Flipboard, New York Times, BBC News, Listen AudioBooks, IELTS Listening, and Word Booster were the applications used by the interviewees. Besides, the pre-service EFL teachers mentioned that they used mobile search engines and social media for developing their reading skills in English as indicated in Table 4.8.

Table 4.8 Mobile Applications Interview Participants Used for Improving Reading Skills in English

Application names	Frequency
Social Media	3
Flipboard	1
New York Times	1
BBC News	1
Listen AudioBooks	1
IELTS Listening	1
Word Booster	1
Mobile Search Engines	1

The interviewees preferred following news, namely reading articles on the current affairs for developing their reading skills in English by using the applications, Flipboard, New York Times, and BBC News.

> There is an application named as Flipboard that includes some articles and newspapers. You can not only follow the latest news but read lots of reading materials, as well. [Participant 1]

> Social media platforms were perceived as powerful tools for reading news articles by the interviewees. Additionally, the interview participants indicated that there were some pages that they follow for developing their reading skills in English.

> I follow the news on social media. I browse the website if something appeals to me. I especially use Instagram and Facebook. [Participant 9]

> Even though there isn't any certain application that I use, there are some pages on social media I follow. I read texts on Instagram and Facebook. There are also webpages related to English teaching whose members also include teachers. I read texts shared on these pages. [Participant 8]

> I mostly follow pages on social media, including Facebook, Twitter and Instagram. I read texts shared on these platforms. [Participant 10]

While the mobile applications, Essay Advanced, Word Booster and IELTS Listening besides mobile search engines were used for reading articles, the application, Listen AudioBooks was used for reading books by the interview participants.

> Word Booster helps me develop my reading skills as I read articles in this application. I also read articles on internet. There is also Essay Advanced application. It includes some articles. I can read articles on different topics…. [Participant 6]

These findings denote that the pre-service EFL teachers were mostly in favor of benefittng from the mobile applications which offered them authentic language learning content for improving their reading skills in English.

4.2.2.7. Mobile Device Use for Learning the Culture of the English-speaking Countries

The interview participants highlighted that watching films, TV series, documentaries, reading newspapers, articles and books, and interacting with native speakers of English by using their mobile devices enabled them to learn the culture of the English-speaking countries.

As shown in Table 4.9, Voscreen, Kahoot!, New York Times, and BBC News were the applications used by the pre-service EFL teachers. Moreover, they expressed that they took advantage of social media platforms and mobile search engines in this respect.

Table 4.9 Mobile Applications Interview Participants Used for Learning Culture

Application names	Frequency
Mobile Search Engines	4
New York Times	3
Social Media	2
BBC News	2
Voscreen	1
Kahoot!	1

The applications, namely BBC News and New York Times were used for following the current affairs in English-speaking countries and the application Voscreen was used for watching video clips from various movies and series.

For example, BBC News. Since I love following current news on what happened, what problems people have, what they are discussing. Voscreen, on the other hand, presents some shots from series and movies and gives information about culture. [Participant 9]

As it was stated by the interview participants, one of the most effective ways of learning the culture of the English-speaking countries was to experience it. In this respect, mobile devices were believed to make it possible since it offered various channels of interaction with the foreign culture.

Unfortunately, I don't have the opportunity to live in a foreign country to practice language, but I can communicate with others on my social networking sites and have live talks with people I meet. I also learn from my friends, discussing our similarities and differences. I can learn thanks to this. [Participant 4]

As for the Kahoot, it was used for creating and playing quiz games on any subject. One of the interview participants using that application mentioned that he could be informed about the cultural events all around the world thanks to the notifications related to quizzes.

There is an application named as Kahoot. You can have tests with your friends. For example, they must be celebrating Halloween now because I always get notifications about it. The application offers several tests on this topic. [Participant 6]

These findings indicate that the pre-service EFL teachers mostly preferred mobile applications which offered them authentic language learning experience by means of delivering contents about current affairs and cultural events.

4.3. Results in Relation to the Pre-service EFL Teachers' Perceptions about the Effectiveness of MALL

The second research question investigated the pre-service EFL teachers' perceptions about the effectiveness of MALL. Both quantitative and qualitative data was collected by means of the questionnaire and the interview schedule respectively on this account. The results of the analysis of both quantitative and qualitative data were summarized below.

4.3.1. Quantitative Data Analysis Results

Quantitative data on the pre-service EFL teachers' perceptions about the effectiveness of MALL was collected by means of the second part of the questionnaire which included a total of seven items. The participants' responses to these items were illustrated in the Table 4.10 using descriptive statistics through means, standard deviations, frequencies, and percentages.

The mean scores of the items related to the pre-service EFL teachers' perceptions about the effectiveness of MALL ranged between 2.39 and 3.58.

The highest mean score ($M = 3.58$, $SD = .59$) was observed on the item 3, "Using my mobile device for developing my listening skills in English is effective.". Secondly, the item 1, "Using my mobile device for learning English vocabulary is effective." had the highest mean score ($M = 3.38$, $SD = .57$). Thirdly, the item 6, "Using my mobile device for learning the culture of the English speaking countries is effective." had the highest mean score ($M = 3.29$, $SD = .74$). It was followed by the mean score ($M = 3.06$, $SD = .75$) of the item 4, "Using my mobile device for developing my reading skills in English is effective.".

Table 4.10 Descriptive Statistics Reporting the Pre-service EFL Teachers' Perceptions about the Effectiveness of MALL

Items	M	SD	Strongly Disagree		Disagree		Agree		Strongly Agree	
			N	%	N	%	N	%	N	%
1	3.38	.57	1	0,7	3	2,1	79	55,6	59	41,5
2	2.67	.71	7	4,9	46	32,4	76	53,5	13	9,2
3	3.58	.59	2	1,4	1	0,7	51	35,9	88	62
4	3.06	.75	5	3,5	21	14,8	77	54,2	39	27,5
5	2.39	.78	17	12	62	43,7	54	38	9	6,3
6	3.29	.74	5	3,5	9	6,3	68	47,9	60	42,3
7	2.86	.68	3	2,1	35	24,6	83	58,5	21	14,8

The lowest mean score ($M = 2.39$, $SD = .78$) was observed on the item 5, "Using my mobile device for developing my writing skills in English is effective.". The item 2, "Using my mobile device for learning English grammar is effective." had the second lowest mean score ($M = 2.67$, $SD = .71$). As for the third lowest mean score ($M = 2.86$, $SD = .68$), it was noted on the item 7, "Using my mobile device for developing my speaking skills in English is effective."

As can be seen in the Figure 4.2 below, the pre-service EFL teachers found it most effective to use their mobile devices for facilitating their listening skills and expanding their vocabulary in English. They found it least effective to use their mobile devices for improving their speaking and grammar skills in English. However, mobile device use was not found effective in enhancing writing skills.
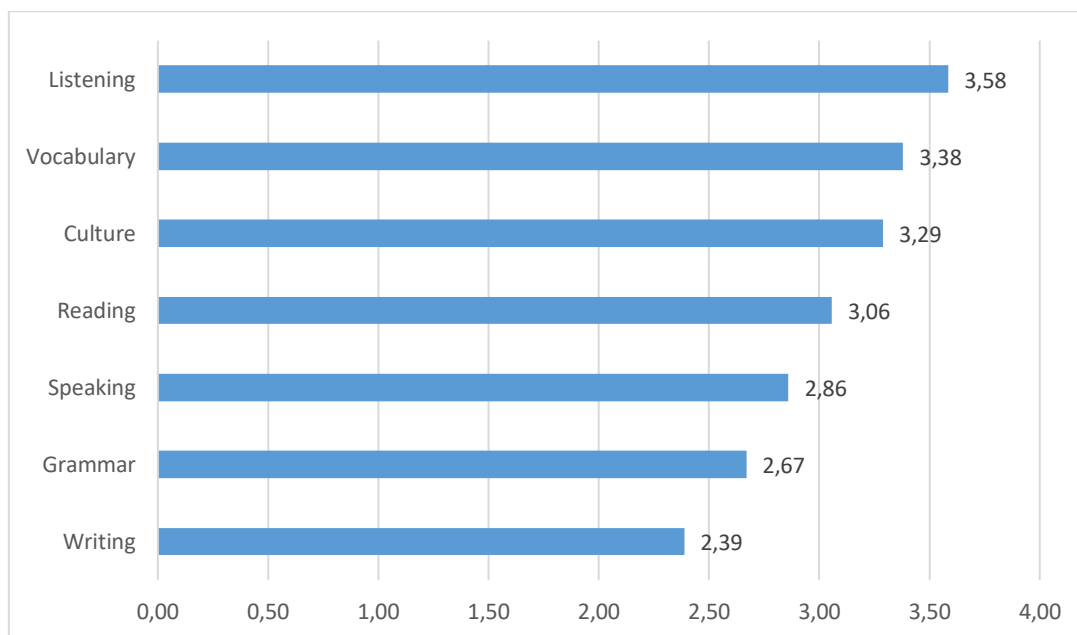
Figure 4.2 Summary of the Mean Scores in Relation to the Pre-service EFL Teachers' Perceptions about the Effectiveness of MALL

All in all, the mean score of all the items in the second part of the questionnaire was found 3.03 ($SD = .42$). Namely, the participants rated the statements related to the effectiveness of MALL in the questionnaire positively which indicated that they perceive it effective to use their mobile devices for language learning.

4.3.2. Qualitative Data Analysis Results

Qualitative data on the pre-service EFL teachers' perceptions about the effectiveness of MALL was gathered by employing the second interview question asking whether mobile device use was found to be effective in learning English or not. Results (See Table 4.11) indicated that 3 of the interviewees found it effective while 7 of them found it both effective and ineffective.

Table 4.11 Results in Relation to the Interview Question 2

Interview Question 2	Answers	Frequency
Is it effective to use your mobile devices for learning English?	Effective	3
	Both effective and ineffective	7

Additionally, two sub-questions were posed to the interviewees for delving further into the reasons why MALL is effective and not effective. Results of the analysis of relevant qualitative data were summarized below.

4.3.2.1. Reasons Why MALL is Effective

There emerged 10 main categories regarding the reasons why the pre-service EFL teachers found it effective to use their mobile devices for learning English. These are immediacy, authenticity, interaction, ubiquity, enjoyability, time-efficiency, cost-effectiveness, self-confidence, individuality, and ease of use as demonstrated in Table 4.12.

Table 4.12 Results in Relation to Reasons Why MALL is Effective

Categories	Frequency
Immediacy	8
Authenticity	5
Interaction	5
Ubiquity	5
Enjoyability	2
Cost-effectiveness	1
Self-confidence	1
Individuality	1
Ease of use	1

Firstly, the pre-service EFL teachers highlighted the importance of portability of mobile devices.

> I don't have any English books and a dictionary now, but I have my mobile phone. People may not carry their grammar books, vocabulary cards or pocket dictionaries, but they always have their mobile phones. [Participant 2]

According to the pre-service EFL teachers, using mobile devices for learning English was effective since they could immediately access to information they needed thanks to the portability of mobile devices.

> You can get instant information thanks to your mobile phone. For example, I use the application "English Grammar" for this reason. I sometimes forget some grammatical points and need to apply for a reference, so I can access to the application and watch video on the topic that I need to learn. I find it useful. [Participant 6]

> I waste a great deal of time when I use a traditional dictionary, but my mobile phone quickens the process. I can quickly find the meanings of the words. [Participant 2]

As it was indicated, looking up in a print dictionary was found to be more time-consuming then using a mobile dictionary for unknown vocabulary. In this respect, it could be inferred that they could use their time more effectively for learning English due to the immediacy of these devices.

Another point made by the interviewees was they learnt English as a foreign language and their exposure to the language was restricted with the classroom instruction. Besides, their instructors were not the native speakers of English. In this regard, they believed that they could immerse themselves in English thanks to their mobile devices and experience authentic language learning.

> Unfortunately, there isn't any environment in which we can be exposed to English Language. However, we need to practice English outside the classroom. On the other hand, our lecturers speak Turkish as their first language. They may have some missing points, so we need to communicate with native speakers. We can improve our language skills by using mobile devices. [Participant 9]

> There isn't anybody who can speak English as a first language. We cannot find natural language learning environment outside the classroom. Therefore, I think that we can benefit from the opportunity to talk with native speakers thanks to our mobile phones. [Participant 8]

> Additionally, mobile devices were found to be effective since they offered various tools for interaction in English language. The interview participants pointed out that they could get in touch with native speakers of English and use English as a medium of communication which was perceived to be vital for language learning.

> Everybody may not have the chance to visit a foreign country to learn a second language. However, mobile phones present great convenience. We can talk with others and practice language. [Participant 4]

According to the interviewees, mobile devices provided them with ubiquitous language learning opportunities. They could have the chance of learning English whenever and wherever they wanted, even when they were travelling to somewhere by bus.

> For example, let's say that I am on the bus and have five minutes spare time. We can practice while going from somewhere to somewhere. [Participant 1]

> Additionally, it was stated that mobile devices fostered language learning since it provided learners with enjoyable language learning experience.

> Because I learn through things that I enjoy according to my preferences. Thus, I can improve my English language skills while entertaining. [Participant 1]

Moreover, using mobile devices for language learning was found to be effective by the interview participants due to some issues related to cost effectiveness. They mentioned that they could access to various kinds of language learning materials free of charge.

> As a matter of fact, we cannot afford buying English newspaper forever, but we can easily access those newspapers through internet. [Participant 2]

As it was indicated by the interview participants, mobile devices addressed individual learner differences in language learning thanks to the various mobile applications. EFL learners could choose the best one which meets their own individual language learning needs which in return facilitates their language learning.

> There are great applications. Everybody can find a suitable one for themselves. I can also choose my best application, so I can benefit from it effectively". [Participant 6]

It was found to be easy to use mobile devices for language learning by the interviewees.

> Mobile phones are used by almost everybody in their daily lives and they are easy to use. I don't have difficulty in using my mobile phone to learn English. [Participant 3]

Lastly, mobile device use for language learning was found to be effective since it fostered self-confidence in language learning.

> I can have communication with those who are native speakers of English and improve my language skills. Thanks to this technology, I can develop my self-confidence as I have the chance to talk to others whom I cannot meet in my country. [Participant 9]

All in all, the pre-service EFL teachers found MALL effective due to some factors related to immediacy, authenticity, interactivity, ubiquity, enjoyability, time-efficiency, cost-effectiveness, self-confidence, individuality, and ease of use.

4.3.2.2. Reasons Why MALL is Not Effective

There emerged 7 main codes regarding the reasons why the pre-service EFL teachers found it not effective to use their mobile devices for learning English. These are distraction, ineligibility for improving some language skills, battery life, and Internet connection, being not as comfortable as computers, lack of awareness of MALL, and lack of digital literacy skills as demonstrated in Table 4.13.

Table 4.13 Results in Relation to Why MALL is Not Effective

Codes	Frequency
Distraction	5
Ineligibility for improving some language skills	3
Battery life	2
Internet connection	2
Being not as comfortable as computers	2
Lack of awareness of MALL	1
Lack of digital literacy skills	1

According to the interview participants, using mobile devices for learning English was disadvantageous since the notifications, calls, and messages received interrupted the learning process by distracting learners' attention. Additionally, they indicated that this might be more disadvantageous for young learners.

> They are not effective since there may occur an advertisement or a notification while using an application or watching a video on Youtube. If the advertisement appeals to me, I may lose my concentration and focus on it instead of the learning material. [Participant 3]

> Let's say that I use an application. I check it and lose my concentration when a notification occurs on the screen. This may adverselt affect young learners. [Participant 9]

Another point made by the pre-service EFL teachers was that mobile device use was not effective for learning grammar and developing writing skills. Additionally, they criticized the mobile applications which could be used for learning grammar as they were not reliable.

> I don't think that there is an effective applicatio that can be used to learn grammar or improve writing skills. I once used an application called as Grammarly, but I didn't like it since it didn't correct the mistake I made on a paragraph. I sometimes do mistakes intentionally to check if it will correct me. [Participant 3]

As stated by the interviewees, using mobile devices for learning English drained the batteries quickly and required constant Internet connection. These were perceived as other disadvantages of MALL.

> There is a battery problem. The battery gets empty if the application is used for longer periods. [Participant 8]

> You need to have internet connection to use the application. This is a barrier for me. [Participant 8]

Although mobile devices were not found to be as comfortable as computers due to small screen size and some additional factors such as the lack of a physical

keyboard and a mouse by some of the interview participants, there were some others who believed the vice versa.

> I sometimes need a computer, but there may be problem when you have to carry the keyboard or mouse. On the other hand, you can have all of them in a mobile device. It may sometimes to take more time to write in mobile phone. There is a powerpoint application, but it isn't functional. The screen is small, and this is a challenge for me. [Participant 9]

> Thanks to the applications, we can do almost everything that once could be done only through computers. For example, I had to carry my computer with me while going to the library two years ago. However, there is even an application of Word processor. I can write my reports on my mobile. I can even use Powerpoint. [Participant 9]

As indicated by the pre-service EFL teachers, it was essential for EFL learners to be aware of using mobile devices for learning English. They mentioned that students attending to secondary schools were distributed tablets within the scope of a project conducted nationwide in Turkey. If they did not have the awareness of using those devices for learning English, it would not be effective.

> Yes, it may be functional, but it is essential to use the language effectively. For example, tablet devices are distritbuted in schools, but it is not certain that how students use their devices. Since they are not conscious, they don't become effective. [Participant 10]

Lastly, it was indicated by the interview participants that mobile device use could be ineffective if the EFL learners did not have the required digital literacy skills for choosing the best applications for catering their individual needs and expectations regarding language learning since there existed many mobile applications.

> There are a wide range of applications, and some of them are really waste of time. It is important to choose the best applications, and this may need extra effort. [Participant 10]

All in all, the pre-service EFL teachers found MALL not effective due to some factors related to ineligibility for improving some language skills, battery life,

Internet connection, absence of awareness of MALL, and absence of digital literacy skills. Additionally, the mobile devices were not found to be as comfortable as computers and it was believed that using mobile devices for fostering langague skills and knowledge distracted learners' attention.

4.4. Results in Relation to the Pre-service EFL Teachers' Perceptions about the Affordances and Constraints of MALL

This study investigated the pre-service EFL teachers' perceptions about the affordances and constraints of MALL within the scope of the third research question. To this end, the third part of the questionnaire including 21 items was employed for using the relevant quantitative data. The participants' responses to these items were summarized in Table 4.14 using descriptive statistics through means, standard deviations, frequencies, and percentages.

Table 4.14 Descriptive Statistics Reporting the Pre-service EFL Teachers' Perceptions about the Affordances and Constraints of MALL

	M	SD	Strongly Disagree		Disagree		Agree		Strongly Agree	
			N	%	N	%	N	%	N	%
1	3.24	.59	2	1,4	6	4,2	90	63,4	44	31
2	3.25	.65	1	0,7	13	9,2	77	54,2	51	35,9
3	3.46	.60	1	0,7	5	3,5	64	45,1	72	50,7
4	3.33	.62	1	0,7	8	5,6	76	53,5	57	40,1
5	3.49	.60	0	0	8	5,6	57	40,1	77	54,2
6	2.99	.70	5	3,5	21	14,8	87	61,3	29	20,4
7	3.43	.56	0	0	5	3,5	71	50	66	46,5
8	2.61	.79	9	6,3	55	38,7	60	42,3	18	12,7
9	2.99	.67	2	1,4	26	18,3	85	59,9	29	20,4
10	3.30	.62	1	0,7	9	6,3	78	54,9	54	38
11	2.76	.75	3	2,1	52	36,6	63	44,4	24	16,9
12	2.76	.67	3	2,1	44	31	79	55,6	16	11,3
13	2.96	.60	1	0,7	25	17,6	94	66,2	22	15,5
14	2.93	.72	4	2,8	30	21,1	80	56,3	28	19,7
15	2.99	.55	1	0,7	19	13,4	102	71,8	20	14,1
16	3.07	.59	0	0	20	14,1	92	64,8	30	21,1
17	3.03	.53	1	0,7	15	10,6	105	73,9	21	14,8
18	2.50	.94	17	12	63	44,4	37	26,1	24	16,9
19	2.51	.83	11	7,7	66	46,5	47	33,1	17	12
20	2.31	.77	19	13,4	68	47,9	47	33,1	8	5,6
21	2.58	.93	19	13,4	46	32,4	53	37,3	24	16,9

As can be seen in the Table 4.14, the mean scores of the items from 1 to 17 on the pre-service EFL teachers' perceptions about the affordances of MALL ranged between 2.61 and 3.49.

The highest mean score ($M = 3.49$, $SD = .60$) was observed on the item 5, "EFL learners can learn English language whenever and wherever they want thanks to the mobile devices.". The second highest mean score ($M = 3.46$, $SD = .60$) was observed on the item 3, "EFL learners can have more opportunities for practice in English language thanks to the mobile devices.". As for the third highest mean score ($M = 3.43$, $SD = .56$), it was observed on the item 7, "It is easy to use mobile devices for learning English.".

The item 8, "EFL learners study more regularly for learning English thanks to the mobile devices." had the lowest mean score ($M = 2.61$, $SD = .79$). The item 11, "Using mobile devices for learning English increases EFL learners' self-confidence." ($M = 2.76$, $SD = .75$), and the item 12, "Using mobile devices for learning English reduces EFL learners' level of language learning anxiety." ($M = 2.76$, $SD = .67$) had the second lowest mean scores. The third lowest mean score ($M = 2.93$, $SD = .72$) was observed on the item 14, "EFL learners become more creative in learning English thanks to the mobile devices.".

The pre-service EFL teachers participating into the quantitative phase of the study agreed that amount of time allocated for mastering English language skills increased thanks to the mobile devices ($M = 3.24$, $SD = .59$). While they strongly agreed that using mobile devices provided EFL learners with more opportunities for practice in English ($M = 3.46$, $SD = .60$), they agreed that thanks to the mobile devices, EFL learners could get more exposure to English ($M = 3.25$, $SD = .65$). Moreover, they thought that using mobile devices offered authentic language learning experience ($M = 3.33$, $SD = .62$).

The participants strongly agreed that EFL learners could learn English whenever and wherever they wanted ($M = 3.49$, $SD = .60$) and they agreed that they could

learn English at any pace (*M* =3.07, *SD* = .59). Besides, they thought that mobile device use addressed individual learner differences in language learning (*M* = 3.03, *SD* = .53).

According to the participants, using mobile devices for language learning fostered EFL learners' motivation for (*M* = 2.99, *SD* = .67), engagement (*M* = 2.61, *SD* = .79), interests (*M* = 2.99, *SD* = .67), creativity (*M* = 2.93, *SD* = .72), autonomy (*M* = 2.99, *SD* = .55) and self-confidence (*M* = 2.76, *SD* = .75) in learning English and reduced their language learning anxiety (*M* = 2.76, *SD* = .67).

Moreover, the pre-service EFL teachers thought that using mobile devices for learning English was easy (*M* = 3.43, *SD* = .56), enjoyable (*M* = 3.30, *SD* = .62) and encouraging (*M* = 2.96, *SD* = .60).

All in all, the mean score of all the items from 1 to 17 on the third part of the questionnaire was found 3.09 (*SD* = .37). Namely, the participants rated the statements related to the affordances of MALL in the questionnaire positively which indicated that they perceive it advantageous to use their mobile devices for language learning.

Considering the mean scores of the items from 18 to 21 ranging between 2.31 and 2.58 on the pre-service EFL teachers' perceptions about the constraints of MALL, it was figured out that the participants disagreed that it was disadvantageous to use mobile devices for learning English due to the problems related to Internet connectivity (*M* = 2.51, *SD* = .83), and small screen size (*M* = 2.31, *SD* = .77). Moreover, they disagreed that they preferred their personal computers rather than their mobile devices for learning English (M = 2.5, *SD* = .94). However, they found it disadventagous to use mobile devices for learning English due to the problems related to battery life (*M* = 2.58, *SD* = .93).

As to the mean score of all the items from 18 to 21 on the third part of the questionnaire was found 2.48 (*SD* = .62). Namely, the participants rated the statements related to the constraints of MALL in the questionnaire negatively

which indicated that they did not agree with the disadvantages of using mobile devices for language learning.

4.5. Results in Relation to the Pre-service EFL Teachers' Recommendations to EFL Learners on Increasing the Effectiveness of MALL

The current study examined the pre-service EFL teachers' recommendations for EFL learners about increasing the effectiveness of mobile devices in their learning. In line with this purpose, the fourth question on the interview schedule was employed to gather the relevant qualitative data. The analysis results yielded five main categories for the pre-service EFL teachers' recommendations for EFL learners about "application choice", "self-regulation", "self-discipline", "awareness of MALL", and "Interaction" as demonstrated in Table 4.15 below.

Table 4.15 Results in Relation to the Pre-service EFL Teachers' Recommendations for EFL Learners

Categories	Codes	Codes	Frequency
Application choice	Individuality	Learning needs	4
		Personal interests	4
		Learning styles	2
		Level of language proficiency	1
	Being enjoyable		2
	Popularity		1
Self-regulation			4
Self-discipline			4
Awareness of MALL			4
Interaction			3

The first category namely application choice included three codes; "individuality", "being enjoyable", and "popularity" and the code "individuality" included 4 concepts; "learning needs", "personal interests", "learning styles", and "level of

language proficiency". The categories, codes, and relevant concepts were additionally illustrated in Figure 4.3.
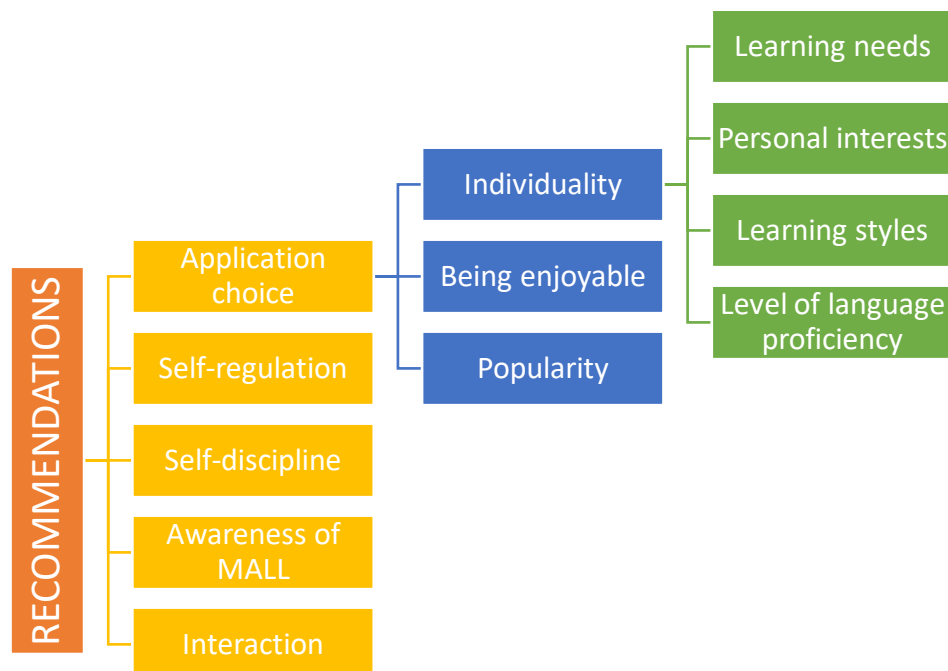
Figure 4.3 Results in Relation to the Pre-service EFL Teachers' Recommendations for EFL Learners

As it can be inferred from the Table 4.15, the most critical factor for increasing the effectiveness of MALL in the classroom settings was related to application choice according to the pre-service EFL teachers.

4.5.1. Application Choice

The pre-service EFL teachers indicated that there existed many mobile applications for learning English which made it more difficult to choose among them. Thus, EFL learners were recommended to follow some guidelines for choosing a mobile application in order to increase the effectiveness of MALL.

EFL learners should take their language learning needs, personal interests, learning styles, and level of language proficiency into consideration when they choose a mobile application.

It isn't logical to download every application you find. There are a great number of applications. Said another way, users must be conscious about selecting the most suitable one for themselves. I may like an application that is not favored by others. Since interests of people may differ, the applications are likely to show variances in terms of people's interests. Therefore, learners should use the applications that appeal to them. They use it regularly thanks to this. [Participant 1]

There are a wide range of applications, and students should use the most suitable one for themselves. If they dislike or don''t think that it is useful for them, they should give up using it. Some people learn better through visual images, whereas others don't need any images. Everybody should be inclined to the applications that suit well with their needs and interests [Participant 6]

They need to find the applications that are suitable for their levels. It must be neither high nor low level according to their current levels. If they use an application which is not suitable for their levels, they may have difficulty in using it and their self-confidence may be adversely affected. It must be also appealing to their interests. [Participant 8]

As it can be figured out, individuality of a mobile application was found to be the most important criterion increasing the effectiveness of MALL. Additionally, it was highlighted that a mobile application should provide language learners with enjoyable learning experience.

Students must begin with selecting the most convenient applications for them. The number of people using the application and their scores as well as its safety are important considerations. If an application is really effective, it is used by lots of people. Said another way, it is regarded as a popular one. [Participant 9]

On the basis of the excerpt given above, another factor aiding the effectiveness of MALL is choosing a mobile application by considering its popularity. In this regard the number of users and ratings of the mobile application were perceived as the indicators of the effectiveness of a mobile application since the pre-service

EFL teachers believe that commonly used applications are reliable and successful in enhancing English language skills and knowledge.

4.5.2. Self-regulation

For increasing the effectiveness of MALL, EFL learners are advised to regulate their learnings in an effective way. They should define which language skills and knowledge they want to improve, how they will use their mobile devices, and how much time they will allocate for studying.

> Students should be able to learn how to manage their own learning process. The usage duration of the application is also important. Students need to decide how time they will allocate to use this program. [Participant 10]

> First of all, they must decide which application they use and what for. They must be clear with their objectives. [Participant 5]

As it was found out, the EFL learners should regulate their own learning if they want to effectively foster their language skills and knowledge by using their mobile devices.

4.5.3. Self-discipline

It was pointed out that self-discipline is vital for increasing the effectiveness of MALL. EFL learners are recommended to study on a regular basis and engage in language learning by making daily or weekly plans.

> They need to employ the applications they download to have full benefits. If you really want to learn a language, a regular usage is advised. I once downloaded an application to learn German, but I couldn't benefit since I didn't use it continuously." [Participant 9]

As it was found out, regular engagement is vital for success in MALL pratices according to the pre-service EFL taechers participating in the qualitative phase of the study.

4.5.4. Awareness of MALL

Another point highlighted by the pre-service EFL teachers was the awareness of MALL. EFL learners should be aware of the fact that mobile devices can be used for learning English. Additionally, they should become conscious that MALL has both advantages and disadvantages. Thus they will have the chance of benefitting from the affordances of mobile devices and developing strategies in order to eliminate the possible constraints of them.

> They also must be aware of how they can benefit from the applications. [Participant 6]

> They should know how to use them effectively as there may be pros and cons of these devices. They should act accordingly. [Participant 10]

As it was indicated, EFL learners should be aware of the advantages and disadvantages of using mobile devices for language learning purposes if they want to effectively enhance their language skills and knowledge.

4.5.5. Interaction

The pre-service EFL teachers mentioned that there are lots of mobile applications which can be used for learning English. Additionally, all of them are at our fingertips thanks to the mobile devices. EFL learners should take full advantage of them by especially interacting with native speakers of English and authentic language through social media. Thus they will receive authentic language input and practice their language skills in the real life context. Additionally, interaction in English will provide EFL learners with learning culture in an indirect way.

> They don't need to necessarily use an application. I think they can communicate with foreigners thanks to social media and practice. On the other hand, there are some social networking sites, such as Instagram in which people have discussions on a certain topic and each person makes comments from their own perspectives. They can write comments on these platforms and have interactions with others. [Participant 4]

As it was pointed out by the pre-service EFL teachers participating in the qualitative phase of the study, EFL learners should get in touch with other learners or native speakers by means of mobile technologies.

4.6. Results in Relation to the Pre-service EFL Teachers' Perceptions about the Classroom Implications of MALL

What are the pre-service EFL teachers' perceptions about the classroom implications of MALL?" was the fifth research question of the current study. To that end, the questionnaire and the interview schedule were used to gather both quantitative and qualitative data. The results of the analysis of both quantitative and qualitative data were summarized below.

4.6.1. Quantitative Data Analysis Results

Quantitative data on the pre-service EFL teachers' perceptions about the classroom implication of MALL was collected by means of the last part of the questionnaire which includes a total of fourteen items. The pre-service EFL teachers' responses to these items were presented in the Table 4.16 using descriptive statistics through means, standard deviations, frequencies, and percentages.

Table 4.16 Descriptive Statistics Reporting the Pre-service EFL Teachers' Perceptions about the Classroom

Implications of MALL

Items	M	SD	Strongly Disagree		Disagree		Agree		Strongly Agree	
			N	%	N	%	N	%	N	%
1	2.51	.67	7	4,9	62	43,7	66	46,5	7	4,9
2	2.28	.72	12	8,5	88	62	32	22,5	10	7
3	3.00	.60	2	1,4	19	13,4	98	69	23	16,2
4	3.01	.60	1	0,7	22	15,5	94	66,2	25	17,6
5	2.60	.91	17	12	47	33,1	54	38	24	16,9
6	2.87	.67	4	2,8	30	21,1	89	62,7	19	13,4
7	2.56	.73	8	5,6	59	41,5	63	44,4	12	8,5
8	2.46	.70	9	6,3	66	46,5	59	41,5	8	5,6
9	3.03	.68	3	2,1	22	15,5	85	59,9	32	22,5
10	3.26	.64	1	0,7	12	8,5	78	54,9	51	35,9
11	2.26	.78	21	14,8	71	50	42	29,6	8	5,6
12	3.08	.73	4	2,8	20	14,1	78	54,9	40	28,2
13	2.94	.69	3	2,1	29	20,4	83	58,5	27	19
14	2.20	.66	14	9,9	90	63,4	33	23,2	5	3,5

The mean scores of the items related to the pre-service EFL teachers' perceptions about the classroom implications of MALL ranged between 2.00 and 3.26.

The highest mean score ($M = 3.26$, $SD = .64$) was observed on the item 10, "EFL teachers can effectively use mobile devices in the classroom for teaching English if they know how to use technology in their teaching practices.". The item 12, "I want to use mobile devices for teaching English in the classroom in the future." had the second highest mean score ($M = 3.08$, $SD = .73$). As for the third highest mean score ($M = 3.03$, $SD = .68$), it was observed on the item 9, "The administration should allow EFL teachers to use mobile devices in the classroom for teaching English.".

The item 14, "EFL teachers' using mobile devices in the classroom for teaching English is not economical." had the lowest mean score ($M = 2.2$, $SD = .66$). The second lowest mean score ($M = 2.26$, $SD = .78$) was observed on the item 11, "EFL teachers are not qualified enough to use mobile devices for teaching English in the classroom.". As for the third lowest mean score ($M = 2.28$, $SD = .72$), it was observed on the item 2, "EFL learners' using their mobile devices for learning English in the classroom affects the teaching-learning process in a negative way.".

The pre-service EFL teachers participating into the quantitative phase of the study agreed that using their mobile devices for learning English in the classroom distracted EFL learners' attention ($M = 2.51$, $SD = .67$). However, they disagreed that it affected the teaching-learning process in a negative way ($M = 2.28$, $SD = .72$)

Moreover, they agreed that mobile devices could provide EFL learners with collaborative language learning environment ($M = 3.01$, $SD = .60$) and opportunities for interaction with their teachers and peers ($M = 3.00$, $SD = .60$).

Although the participants agreed that EFL teachers should allow EFL learners to use their mobile devices freely in the classroom for learning English ($M = 2.60$, SD

= .91), they believed that EFL teachers should allocate restricted amount of time for using mobile devices in the classroom context ($M = 2.87$, $SD = .67$).

Additionally, the participants agreed that it was technologically challenging for EFL teachers to use mobile devices in the classroom for teaching English ($M = 2.56$, $SD = .73$). Nevertheless, they did not believe that it was pedagogically challenging for them ($M = 2.46$, $SD = .70$).

The participants thought that the administration should allow EFL teachers to use mobile devices in the classroom for teaching English ($M = 3.03$, $SD = .68$) and they agreed that EFL teachers could effectively use mobile devices in the classroom for teaching English if they know how to use technology in their teaching practices ($M = 3.26$, $SD = .64$). Besides, the participants disagree with item stating that EFL teachers were not qualified enough to use mobile devices for teaching English in the classroom.

It was figured out that the pre-service EFL teachers wanted to use mobile devices for teaching English in the classroom in the future ($M = 3.08$, $SD = .73$) and they found themselves proficient in this regard ($M = 2.94$, $SD = .69$).

Lastly, they disagreed with the item stating that EFL teachers' using mobile devices in the classroom for teaching English was not economical ($M = 2.20$, $SD = .66$).

All in all, the mean score of all the items from 1 to 14 on the last part of the questionnaire was found 2.83 ($SD = .26$). Namely, the participants rated the statements related to the classroom implications of MALL in the questionnaire moderately positively which indicated that they mostly found it beneficial to use mobile devices for teaching English in the classroom context.

4.6.2. Qualitative Data Analysis Results

The third question on the interview schedule was employed for gathering qualitative data on the pre-service EFL teachers' perceptions about the classroom implications of MALL. The data analysis results yielded 10 codes for the benefits

of using mobile devices for teaching English in the classroom context and 6 codes for the challenges of it as it was demonstrated in Table 4.17.

Table 4.17 Results in Relation to the Pre-service EFL Teachers' Perceptions about the Classroom Implications of MALL

Categories	Codes	Frequencies
Benefits of using mobile devices for teaching English in the classroom context	Enjoyability	4
	Collaboration	3
	Eligibility for teaching listening and pronunciation skills in English	3
	Eligibility for assessment and evaluation	3
	Immediacy	2
	Cost-effectiveness	2
	Addressing learner differences	2
	Meeting the digital natives' language learning needs	1
	Authenticity	1
	Time-efficiency	1
Challenges of using mobile devices for teaching English in the classroom context	Causing distractions	8
	Issues related to learner readiness and acceptance	3
	Requirements for advance Internet and Communication Technology skills	3
	Administraive issues	2
	Ineligibility for teaching writing and grammar skills in English	2
	Unaffordability for some students	1

The codes for the category of "Benefits of using mobile devices for teaching English in the classroom context" are enjoyability, collaboration, eligibility for teaching listening and pronunciation skills in English, eligibility for assessment and evaluation, immediacy, cost-effectiveness, addressing learner differences, meeting the digital natives' language learning needs, authenticity, and time-efficiency.

The codes for the category of "Challenges of using mobile devices for teaching English in the classroom context" are causing distractions, issues related to learner readiness and acceptance, requirements for advance Internet and Communication Technology skills, administraive issues, ineligibility for teaching writing and grammar skills in English, and unaffordability for some students.

4.6.2.1. Benefits of Using Mobile Devices for Teaching English in the Classroom Context

According to the pre-service EFL teachers, using mobile devices for teaching English in the classroom context had some benefits. These were as it follows:

The pre-service EFL teachers indicated that the new generation masters in information and communication technology skills which creates different learning needs. In this respect, the pre-service EFL teachers believe that the traditional methods and techniques for teaching English in the classroom context will not meet the new generation of EFL learners' language learning needs which makes it necessary for EFL teachers to integrate technology into the teaching practices in the classroom context.

> We are in a technological era and the new generation has more knowledge on technology more than us. Traditional methods and techniques may not be appealing to them. [Participant 8]

The pre-service EFL teachers emphasized the importance of authentic language learning experience. They mentioned that EFL teachers were not native speakers

of English and using mobile devices for teaching English would enable them to provide learners with authentic language in the classroom.

> I am not a native speaker. I want my students to learn English more effectively, and I think that mobile phones can help them on this issue. [Participant 9]

The pre-service EFL teachers indicated that in language classrooms, EFL learners' use of print dictionaries took a lot of time. Using mobile devices could save the class time since it provides learners with immediate access to the information.

> The fact that students can check the meanings of unknown words through applications they have downloaded quickens the process. We can save time. [Participant 1]

Another point made by the pre-service EFL teachers was that mobile devices were commonly used by people of nearly all ages and socio-economic status. Almost everyone had a mobile phone and knew how to use it. Thus, integrating those commonly used and known technological devices into the teaching-learning practices in the classroom context would be reasonable for enhancing the quality of language teaching and learning in a cost-effective way.

> All people have smartphones today. It would be very beneficial since all students have a technological device in the classroom. [Participant 3]

The interviewees demonstrated that there existed many mobile applications by means of which EFL teachers could design collaborative language learning activities in the classroom. In this respect, they believed that using mobile devices in the classroom context would foster collaboration among learners.

> There are some applications that all students can use simultaneously in the classroom. I also want to employ them in future classes. I think that they can be useful for group works. Students can have group discussions. [Participant 3]

The participants mentioned that using mobile devices in the classroom context would help learners improve especially their listening and pronunciation skills thanks to the authentic language materials accessed through mobile devices.

> I try to use the applications that help students improve their listening skills and pronunciations in the classroom. I also inform them about the applications they can benefit from outside the classroom as extracurricular activities. However, I don't use any program for grammar and writing skills. I use traditional methods while teaching grammar and writing. [Participant 3]
>
> There is also an application called as Voscreen that I also use. It gives some shots from series and movies. It would be useful to use them in the classroom to improve listening skills. [Participant 6]

Additionally, the participants of the study pointed out some mobile applications that can be used in the classroom context both for delivering the content of the language courses and designing various kinds of quizzes. In this respect, they believed that mobile devices provided EFL teachers with relevant tools for assessment and evaluation in language teaching.

> I will certainly use Kahoot application that I have just mentioned. Tablet devices are distributed to students in schools, so this application can be included while teaching. It is a nice application that enables its users to add colorful questions with pictures. A test examination can be conducted after the instruction. [Participant 6]
>
> There are also some applications such as Kahoot and Plickers which we can use in the classroom to prepare some quizzes for students. We can see the answers given by each student. It is also enjoyable process. [Participant 8]
>
> For example, there is an application called as Edmodo. This application can be used not only by students themselves to submit their assignments, but also by teachers to assign a task to students in the classroom activities. [Participant 5]
>
> Use of mobile devices for teaching English in the classroom context was believed to be an effective way of addressing the learner differences by the pre-service EFL teachers.

> Using mobile devices in the classroom can address students with different language levels, and students can practice according to their levels. [Participant 6]

According to the pre-service EFL teachers, thanks to the mobile devices integrated into classroom teaching, EFL teachers could create a learning environment in which learners could learn English in an enjoyable way.

> There are also some applications such as Kahoot and Plickers which we can use in the classroom to prepare some quizzes for students. We can see the answers given by each student. It is also enjoyable process. [Participant 9]

All in all, the pre-service EFL teachers mentioned that integrating the mobile technology into teaching practices in the classroom settings is enjoyable. It fosters collaboration among learners and their taechers. It is eligible for enchancing listening and pronunciation skills in English and for making assessment and evaluation. It provides learners with immediate information in a cost-effective way. It addresses learner differences and meets the digital natives' language learning needs. It saves time and offers authentic language learning experience.

4.6.2.2. Challenges of Using Mobile Devices for Teaching English in the Classroom Context

Although the pre-service EFL teachers emphasized that mobile devices should be used for both learning and teaching languages in and out of the classroom context, they articulated their due concerns about the classroom implications of MALL.

Mobile devices were seen to be as distractions by most of the participants, especially in the crowded language classes. They remarked that EFL teachers might not be successful in controlling their students' intentions for using their mobile devices in the classroom. Some of them might use them for different purposes other than learning English. Additionally, while they were dealing with the course-related activities, a notification might appear on the top of the screen or learners might receive phone calls all of which interrupt teaching-learning process in the classroom context.

We cannot completely control the actions of individuals in a crowded classroom. So, there is always a question if the students really engage with the course or give their interest to something else. This is a real problem. It would be easier to control them if there were less people. [Participant 8]

In this regard, some of the participants even backed their ideas up by sharing their own negative experiences of MALL as EFL learners in the classroom context.

However, they start to lose their concentration after a certain period of time. They receive a text message or a call, so they may focus on that message or call. As a teacher, I cannot manage this. It is very difficult to follow what individuals do in a crowded classroom. So, I cannot say that students employ these devices onlu for educational purposes. [Participant 1]

On the other hand, although some of the participants agreed with the point that using mobile devices in the classroom context might distracts learners' attention, they did not agree that EFL teachers had the responsibility of minimizing or managing distractions or interruptions caused by mobile device use.

They may lose their concentrations, but I don't mind this as a teacher. Said another way, I don't mind if they look an unknown word up in a dictionary or engage with something different. I cannot control this and don't need to do so. I don't consider it as responsilibity of the teacher. [Participant 5]

The pre-service EFL teachers did not believe the effectiveness of using mobile devices for enhancing learners' grammar knowledge and writing skills in English in the classroom context. In this respect, it was seen as constrain to use mobile devices in the classroom for boosting aforementioned language skills.

I mostly prefer to use applications that help my students improve their listening skills and pronounciations and encourage them to use some others to employ during their self learning activities. However, I don't use any application in grammar and writing courses. I employ traditional methods during these courses. [Participant 3]

Although it was assumed that all the students would have mobile devices which would make it cost-effective to integrate mobile devices into the classroom practices, the pre-service EFL teachers mentioned that mobile devices might not be always affordable to all the students. In this regard, it could not be always advantageous to benefit from the mobile devices for teaching and learning practices.

> There may be some students who cannot afford the mobile devices. Said another way, they may not have smart phones. [Participant 8]

Additionally, classroom implications might be disadvantageous due to the factors related to learners' acceptance and readiness of using mobile devices for language learning purposes in the classroom.

> I think the most imporant thing that should be considered while planning the instructional activities is whether the learners are willing to learn English or not. [Participant 7]

The pre-service EFL teachers indicated that EFL teachers and learners were required to have advanced Internet and communication technology skills in order to use mobile devices for teaching and learning purposes in the language classrooms. It was emphasized that lack of those skills might cause loosing classroom time.

> Teachers and students should have some information on how to use the application used in the classroom. If not, they may have to deal with the problems caused by this lack of knowledge on utilisation of the application and waste the instructional time. [Participant 7]

Administrative factors might constrain on the classroom implication of MALL as stated by the participants. Accordingly, none of the students were allowed to take their mobile devices with them while they were attending to classes. Besides, the authorities might not permit EFL teachers to use mobile devices in the classroom context even the students might bring their mobile devices with them.

There is also an issue that should be mentioned. Students aren't allowed to enter the school and classroom with their mobile phones. This may be considered as a barrier in integrating mobile devices into instructional activities. [Participant 5]

All in all, the pre-service EFL taechers pointed out that using their mobile devices for teaching English in the classroom context proposes some challenges. It distracts learners' attention. It is ineligible for teaching writing and grammar skills and might not be affordable for some students. It might requires for advance Inernet and communication technology skills. Furthermore, it is possible to face some critical issues pertaining to learner readiness and acceptance of MALL and administration.

4.7. Results in Relation to the Pre-service EFL Teachers' Recommendations to EFL Teachers about the Classroom Implications of MALL

The sixth research question of the current study aimed for investigating the pre-service EFL teachers' recommendations for EFL teachers about increasing the effectiveness of integration of mobile devices into their teaching practices in the classroom context. To that end, the relevant qualitative data was collected by means of the fifth question on the interview schedule. The analysis results highlighted three main categories for recommendations; before a MALL implementation, during a MALL implementation, and after a MALL implementation as illustrated in Table 4.18.

Table 4.18 Results in Relation to the Pre-service EFL Teachers' Recommendations to EFL Teachers about the Classroom Implications of MALL

Categories	Codes	Frequency
Recommendations before a MALL implementation	Learner profile	8
	Application choice	4
	Language learning tasks	4
Recommendations during a MALL implementation	Intended purpose	3
	Amount of time	2
	Instructions	1
	Alternatives	1
Recommendations after a MALL implementation	Revising the MALL implementation	1
	Awareness-raising on MALL implementations	1
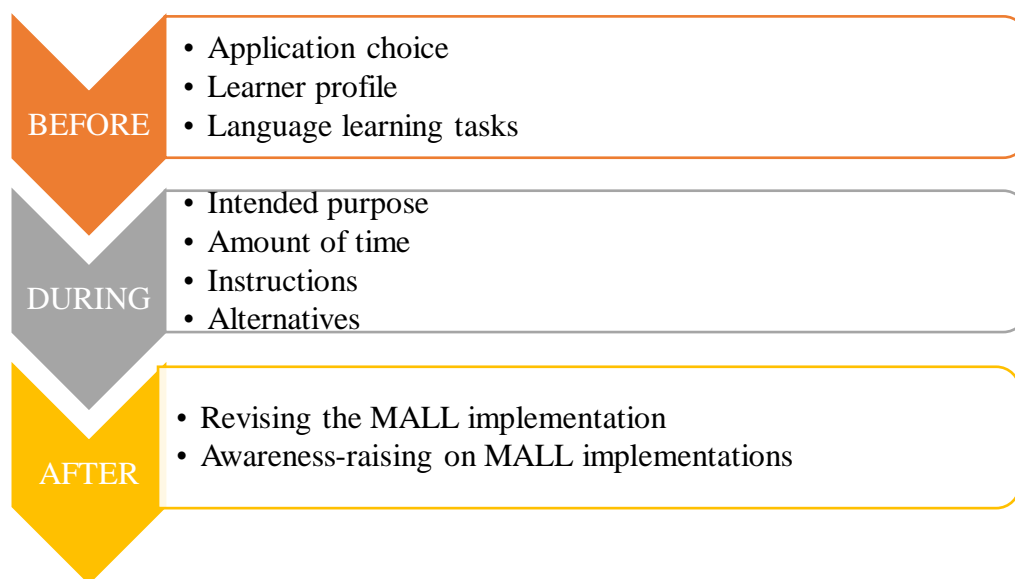
Figure 4.4 Results in Relation to the Pre-service EFL Teachers' Recommendations to EFL Teachers about the Classroom Implications of MALL

The first category, namely recommendations before a MALL implementation, included 3 codes; application choice, learner profile, and language learning tasks. The second category namely recommendations during a MALL implementation consisted of four codes; intended purpose, amount of time, instructions, and alternatives. As for the third category namely recommendations after a MALL implementation, it had two codes; revising the MALL implementation and awareness-raising on MALL implementations. The categories and relevant codes were additionally summarized in Figure 4.4 above.

4.7.1. Recommendations before a MALL implementation

The pre-service EFL teachers pointed out three main issues that EFL teachers should give due consideration before a MALL implementation.

First of all, they should carefully select the mobile applications that they will use in their teaching practices.

> Teachers should determine the applications they intend to
> use in the classroom with utmost care. Complex applications

shouldn't be employed during instruction. They should be in line with the topic and objectives of the course. [Participant 6]

Or the application may not function properly. If the teacher insists on using it, problems may occur. [Participant 3]

As it was highlighted by the participants, the mobile applications should be user-friendly and work properly. Additionally, they should correspond to the intended instructional objectives.

Secondly, EFL teachers should carefully define the learners' profile and they should take their interests and language learning needs into consideration before a MALL implementation. Additionally, they should pay sufficient attention to learner readiness and acceptance of MALL.

All applications shouldn't be brought into the classroom. Before employing an application during instruction, the concenience and effectiveness of a program should be evaluated. Applications should be selected according to the needs of the students. For example, if students have difficulty in speaking skills, an application should be employed to improve their speaking skills. [Participant 2]

Students may dislike an application, so they may prefer not to use it. Teachers should act with some sympathy towards students on this issue. Students are generally opt for applications that appeal to them or they need [Participant 4]

The application that is intended to be used in the classroom should be appealing for students. To put it differently, it shouldn't feel like as if students were doing an activity in 1990s. This doesn't attract them. Teachers should attach importance to have updated applications. [Participant 8]

Thirdly, the MALL tasks designed by the EFL teachers should foster collaboration and create enjoyable learning environment.

Teachers should prefer applications that can engage all students in the classroom simultaneously so that they can collaborate while learning. [Participant 8]

> I think that the most important thing is that activities that can involve all students in the classroom should be planned. Thus, those who are unwilling to engafe with the course may perform better when they are included. [Participant 9]

> First of all, mobile devices should be used to build an enyojable learning environment. [Participant 6]

All in all, EFL teachers should carefully define the learners' profile, carefully choose the mobile application, and design collaborative language learning tasks.

4.7.2. Recommendation during a MALL implementation

EFL teachers were advised to follow some steps during a MALL implementation in the classroom context for increasing the effectiveness of the integration.

Firstly, they should not forget about the fact that mobile devices are multifunctional. Thus, when they integrated those multifunctional devices into their teaching practices, they should have control over the learners in terms of their purposes of using those devices in the classroom context. They may have the tendency of using these devices for other purposes rather than learning English.

> Teachers should control what for students employ mobile devices and ensure that students benefit from them to learn English. [Participant 9]

Secondly, EFL teachers are suggested that they should not allow learners to freely use their mobile devices in the classroom context. Restricted amount of time should be allocated for using mobile devices for learning English if they want to gain the utmost benefit from the integration of mobile devices into their teaching practices.

> Students shouldn't use mobile devices through the lesson, but they should be allowed to use them in certain time intervals. [Participant 2]

Thirdly, EFL teachers should give clear and specific instructions on what the intended purposes are, what the learners are required to do, how they will learn

English by using mobile devices for learning English, and how they will use mobile devices.

> Lecturers should set the rules clearly if they employ mobile devices during their instructions. Said another way, students should be informed about how, how long, what for the application will be used. Students should know the process from the beginning. [Participant 5]

Lastly, EFL teachers should not be strict with an application which learners are not enthusiastic about using it in the classroom context for facilitating their English language skills and knowledge. They should always offer alternatives among which learners can choose the best one.

> The application that will be used by a lecturer should be welcomed by students. It should be able to satisfy students' needs, as well. Lecturers should present alternatives and students should be able to decide what to use. [Participant 5]

All in all, EFL teachers should be clear about the intended purpose and insructions during MALL implementations in the classroom settings. Additionally, they should allocate restricted amount of time in this respect and always should offer alternatives.

4.7.3. Recommendations after a MALL implementation

After a MALL implementation, it is recommended that learners should be asked about their opinions about the strengths and weaknesses of the implementation and on the basis of the feedback received from the learners, EFL teachers should revise the implementation for further improvement.

> For example, our lecturer prompts us to use an application, but that application sometimes may not be convenient. I, myself, may not get satisfaction from it, or it doesn't work properly. There will be conflicts if the lecturer insists us to use it. Our preferences aren't taken into consideration, but I think that students should engage with decision process, and necessary regulations should be made if necessary. [Participant 3]

Additionally, EFL teachers should inform learners about the possible pedagogical affordances and constraints of MALL. Thus, learners can become more conscious about gaining the utmost benefit from and overcoming the disadvantages of MALL.

> Is it advantageous or disadvantegeous? How can they discover the applications? Students should be informed on these issues? [Participant 10]

All in all, after a MALL implementation, EFL teachers are recommended to ask for learners' feedback. Thus, they will have a chance for improving their teaching practices. Furthermore, they should raise the laerners' awareness of MALL for increasing the effectiveness of integration of mobile devices into teaching practices in the classroom settings.

4.8. Results in Relation to the Pre-service EFL Teachers' Expectations from the Lecturers Offering Courses in the ELT Program

"What are the pre-service EFL teachers' expectations from the lecturers offering courses in the ELT program for promoting their pedagogical skills to integrate MALL into their curriculum in the future?" was the seventh research question of the present study. For answering this question, relevant qualitative data was gathered by means of the sixth question on the interview schedule. In this respect, six main categories regarding the pre-service EFL teachers' expectations from their lecturers in the ELT program were listed below in the Table 4.19.

Table 4.19 Results in Relation to the Pre-service EFL Teachers' Expectations from the Lecturers Offering Courses in the ELT Program

Codes	Frequency
being role models	8
integrating theory and practice	6
raising awareness	2
sharing experiences	1
keeping up with changing technology trends	1
helping EFL learners to develop digital literacy and technology skills	1

The pre-service EFL teachers believed that the lecturers offering courses in the ELT program had some roles and responsibilities for their students' professional developments. Accordingly, they were of the opinion that the lecturers had to bear some liabilities for helping their students become proficient in integrating not only mobile devices but also in broad terms, technology into their teaching practices when they became professional teachers of English in the near future.

It was seen that primarily the pre-service EFL teachers expected their lecturers to integrate technology into their own teaching practices and be role models for their students. Thus, the students would have the chance of experiencing both the positive and negative aspects of an implementation and learning the pedagogy from their experiences as students.

> My lecturers, themselves, should integrate technology into their instructions and made good practices. Thanks to this, I can learn through observations. [Participant 2]

> Lectures who teach students in preparatory language classrooms as well as in ELT department should benefit from mobile devices frequently. They should be able to integrate mobile devices into their instructions. Thus, we can observe the good and bad practices with these devices and applications. They should be role models. [Participant 5]

However, some interviewees pointed out that the lecturers' current practices contradicted the common expectations. Most of the lecturers offering courses in the ELT program abstained from integrating technology into their curriculums. Besides, the ones who took advantage of technology in the classroom context could not do effective implementations.

> I always pay attention to improper practices of my lecturers. They mostly open a presentation and we just read. To my opinion, lecturers should attach utmost importance to students' reactions. Students should be encouraged to engage with the lesson. Additionally, we should be provided more opportunities to make practice in the classroom. They also must be able to perform well. [Participant 6]

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> We should include applications frequently in courses and our lecturers should inform us which applications can be used while teaching different age groups. However, we haven't had this kind of lesson yet. After all, lecturers, themselves, don't employ them while instructing. We also don't have the opportunity to use them. Thus, we don't think we are competent enough to use these applications. [Participant 7]

Other criticism levelled at the lecturers was relevant to their roles as facilitators who provided students with both theoretical knowledge and practical experience in the teaching-learning process. Accordingly, it was mentioned that although their lecturers provided theoretical knowledge necessary for promoting their pedagogical skills to integrate technology into their curriculum, they did not provide them with the opportunity to gain relevant practical experience. They were expected to give equal priority to practice as well as theory in the classroom context in which the pre-service EFL teachers would have the chance of practicing in that regard.

> Lecturers should provide us with necessary theoretical knowledge so that we can employ these devices in classroom effectively. We should also be able to observe how lectures use them while teaching in an effective way. Then, we must be provided opportunities, but we mostly get theoretical knowledge. [Participant 1]

Additionally, the-pre-service EFL teachers needed to gain necessary skills and knowledge of how to consider technology from different aspects. Within this context, the lecturers were assigned a role in raising awareness of technology use to enhance classroom instruction for teaching English.

> Our generation is often familiar with technology, but there may be some missing points in terms of employing technology for educational purposes. Lecturers must focus on this issue and create awareness. Then, we, students, can find convenient applications. [Participant 4]

Another issue emphasized during the interviews was related to lecturers' sharing their teaching experiences with their students. It was stated that the lecturers had

the tendency of focusing exclusively on the affordances of implementations of technology into language classrooms and turning a blind eye to the constraints of them while sharing their teaching experiences with the pre-service EFL teachers. They were expected to share their teaching experiences by showing the whole picture of technology and language teaching.

> Almost every teacher has good or bad experiences, but teachers only share the bad ones. For example, they always talk about the good sides of their overseas experiences. I wonder if they haven't had any bad experience in abroad. I am also curious about whether they have had any diseases or problems with cuisine. They should transmit their experiences in terms of good experiences as well as bad ones. This should be available for technological issues, as well. Let's imagine they used some applications. They should talk about their good and bad sides. However, we mostly listen to good sides and they insist us to embrace them while our learning and teaching. [Participant 3]

The pre-service EFL teachers expected their lecturers offering courses in the ELT program to keep up to date with current trends in educational technology and use them in the classroom context as a tool for promoting the teacher candidates' pedagogical skills for integrating MALL in broader terms technology into their curriculum in the future.

> We should develop our skills on being able to keep up with the new technological advancements. How can we employ different current technologies while teaching English in an effective way? We should do more practices on this issue. We must be provided these opportunities by our instructors. [Participant 8]

Moreover, as stated above, lecturers offering courses in the ELT program were expected to help the pre-service EFL teachers develop digital literacy and technology skills.

4.9. Results in Relation to the Pre-service EFL Teachers' Expectations from the ELT Program

This study examined the pre-service EFL teachers' expectations from the ELT program for promoting their pedagogical skills to integrate MALL into the curriculum in the future in accordance with the eighth research question. Three main categories, namely, "courses on technology integration", "courses on technology use", and "courses on school experience and practice teaching" emerged at the end of the analysis results of the relevant qualitative data, collected utilizing the sixth question on the interview schedule.

Table 4.20 Results in Relation to the Pre-service EFL Teachers' Expectations from the ELT Program

Categories	Codes	Frequency
Courses on technology integration	Number of courses	6
	Content of the courses	3
Courses on technology use	Number of courses	5
	Content of the courses	3
Courses on school experience and practice teaching	Content of the courses	2

The first category courses on technology integration contains 2 codes, "number of the courses" and "content of the courses". The second category courses on technology use includes 2 codes, "number of the courses" and "content of the courses". As for the third category, "courses on school experience and practice teaching", it has a code, "Content of the courses".
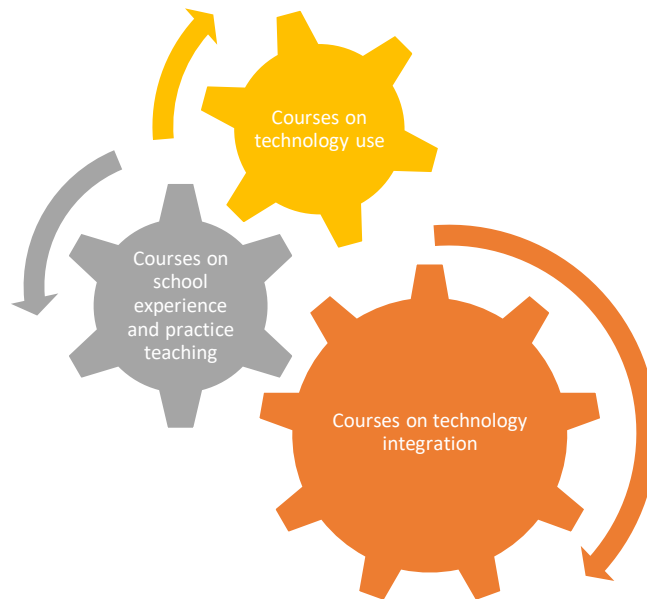
Figure 4.5 Results in Relation to the Pre-service EFL Teachers' Expectations from the ELT Program

The pre-service EFL teachers indicated that there were some courses offered in the ELT program covering the issues related to the use of technology for language teaching. Notwithstanding, they did not meet the pre-service EFL teachers' expectations in some respects.

First and foremost, the number of these courses were found to be insufficient. In this respect, the pre-service teachers mentioned that various courses on technology integration should be added to the ELT program.

> I think there must be courses on employing technology in language teaching effectively. Actually, there are some courses, but the number of them aren't enough."
> [Participant 1]

Secondly, the interviewees pointed out two main problems pertaining to the content of the courses. One of them is about the imbalance between the theoretical knowledge and practice experience. While the theoretical knowledge always ranked in priority, practice experience became of the secondary importance. The

pre-service EFL teachers mentioned that they were even most of the time presented with only theoretical knowledge. In this respect, they wanted to gain both theoretical knowledge and practical experience necessary for integrating technology into their teaching practices in the future.

> There shouldn't be just theoretical content in the courses, but practical applications and good practices. We should be provided opportunities to learn while practising. [Participant 4]

As for the other problem, the content of the available courses on technology integration was found to be out-of-date and mostly restricted to computer-assisted language learning. The pre-service EFL teachers mentioned that on-going technological advancements impact upon language teaching and learning practices and they want to learn current trends in technology and language learning and teaching.

> In this program, we learn about how to teach English, but don't learn how to achieve this in todays' conditions. Current students are different, as well. I question myself about if we can address them through our existing knowledge and skills. We have only two courses which we can learn about these issues. I think the number of courses isn't enough, and the contents of the existing ones are insufficient. [Participant 8]

> The content of these courses isn't enough to make us gain some skills. In other words, we have learned some information related to computer, but there wasn't any content about mobile devices and their applications. [Participant 9]

The pre-service EFL teachers put forward two main controversial issues regarding both the number and the content of the courses on how to use technology currently available in the ELT program.

Firstly, some participants mentioned that they had to begin with learning how to use technology before learning how use technology for language teaching in the classroom context. They rationalized their viewpoints by sharing their experiences

related to the must courses, named Computer 1 and Computer 2, offered successively in fall and spring semesters respectively in the first year of the ELT program. They argued that those courses enabled them to gain relevant skills and knowledge on how to use computers. In this regard, a group of students expected that the number of these courses should be increased.

> For example, we have compulsory computer course. We learn how to use programmes in this course, but there may be a wide range of issues which we don't know. There must be courses on how to use technological devices, particularly mobile phones. First, we must learn how to use them by ourselves, then we can employ them our instructional practices. These courses even must be compulsory rather then elective ones. [Participant 3]

As is seen, they additionally remarked that there should be some other courses in which they can learn how to use other technologies, such as mobile devices, in addition to computers.

On the other hand, some other interviewees signified that they have already known how to use technology and the aforementioned courses on computer use are not necessary since the knowledge and skill of how to use a computer did not changed dramatically. Thus, they found the content of the courses out-of-date and stated that these courses should be replaced by other courses which provide the pre-service EFL teachers with the required skills and knowledge of integrating technology into their teaching practices effectively in the future.

> In fact, there are some courses on technology in our curriculum, but I don't think they are enough. There are also some problems with the contents of the courses. Instead of learning how to use a computer, it would be better to focus on how we can include technology in language classroom and our instructional processes. After all, we are all familiar with computers and use them continuously. I think current applications are at very simple level [Participant 5].

However, the majority of the participants mentioned that there should be more courses which would help the pre-service EFL teachers to gain both ICT (Information Communication Technology) and digital literacy skills.

> I think that the duration of school experience and practice teaching is insufficient, so this period isn't effective for us. We observe lessons, teach some topics and our mentors evaluate us. As pre-service teachers, can we integrate technology into instructional practices while teaching English? We must approach the issue from this perspective. [Participant 9]

The pre-service EFL teachers mentioned that there existed two courses on school experience and practice teaching in the current curriculum of the ELT program. In those courses, they were expected to observe their mentors, namely the responsible English teachers, during the English courses in the classroom context. While observing, they had to focus on some points about the pedagogy of language teaching and then they had to report about their observations. Additionally, they planned courses on how to teach English language skills and knowledge and they were given chances of practicing teaching English in a real classroom atmosphere. Although they found those courses crucial for their professional development, they stated that they should do more observations on technology-integrated English courses and should prepare technology-integrated lesson plans in those courses.

4.10. Merging the Analyses Results of Quantitative and Qualitative Data

In this part, researcher merges quantitative and qualitative data analyses results in order to get a more complete picture of the research topic.

This study using mixed methods research design employed both quantitative and qualitative data in order to investigate the pre-service EFL teachers' current practices and perceptions of MALL. In this regard, both qualitative and quantitative data was gathered and analyzed for understanding the pre-service EFL teachers' current practices of MALL, their perceptions about the effectiveness of MALL,

and their perceptions about the classroom implications of MALL. For examining the pre-service EFL teachers' perceptions about the affordances and constraints of MALL, only quantitative data was utilized. As for investigating the pre-service EFL teachers' suggestions both to EFL learners for increasing the effectiveness of mobile devices in their learning practices and to EFL teachers for increasing the effectiveness of the integration of mobile device in their teaching practices, only qualitative data was used. Lastly, pre-service EFL teachers' expectations from the lecturers offering courses in the ELT program and from the ELT program itself for promoting their pedagogical skills to integrate MALL into their curriculum in the future were revealed by means of qualitative data.

4.10.1. The Pre-service EFL Teachers' Current Practices of MALL

The pre-service EFL learners sometimes ($M=2.98$, $SD=.63$) used their mobile devices for mastering their English language skills.

In this regard, they most frequently used their mobile devices for learning English vocabulary ($M = 3.82$, $SD = .97$). Although some of the applications used by the participants employed contextualized vocabulary teaching techniques, it was figured out that most of them offered semi-contextualized vocabulary learning experience. Additionally, for learning the meaning of the unknown vocabulary, they preferred bilingual dictionaries.

Secondly, the pre-service EFL teachers benefitted from their mobile devices in order to improve their listening skills in English ($M = 3.63$, $SD = 1.01$) and they especially preferred mobile applications enabling them authentic language learning experience.

Thirdly, the pre-service EFL teachers benefitted from their mobile devices for learning the culture of the English-speaking countries ($M = 3.15$, $SD = 1.18$). In this respect, mobile devices were seen as powerful tools offering various channels of interaction with the foreign culture even without visiting the English-speaking countries. The pre-service EFL teachers mostly preferred mobile applications

which offered them authentic language learning experience by means of delivering contents about current affairs and cultural events.

Mobile device use for facilitating reading skills in English ranked in the fourth order ($M = 3.06$, $SD = 1.07$) and the pre-service EFL teachers especially preferred mobile applications which enabled them the relevant authentic language learning content.

Mobile device use for mastering speaking skills ranked in the fifth order ($M = 2.70$, $SD = .92$). In this regard, they preferred mobile applications by means of which they could immerse themselves in English language by meeting conversation partners and using language as a tool for two-way communication. Additionally, they benefitted from their mobile devices for improve their pronunciation skills in English with the help of the camera phones which allowed users to record themselves during speaking and watch the recording for self-evaluation afterwards which indicated that the pre-service EFL teachers focused on fluency, accuracy, and pronunciation thanks to the mobile devices.

Sixthly, the pre-service EFL teachers benefitted from their mobile devices for expanding their grammar knowledge in English ($M = 2.49$, $SD = .86$). Taking their preferences for mobile application they used in this respect, it concluded that they were in favor of deductive approach to grammar learning and thought traditional approaches worked better in this respect. Thus, they approached the issue of using mobile devices for improving their English grammar skills cautiously.

The pre-service EFL teachers least frequently benefitted from their mobile devices for facilitating their writing skills in English ($M = 2.00$, $SD = .95$). In this regard, they preferred mobile applications which offered them mobile assisted feedback for improving their writing accuracy, and used genre-based approach to develop competency in writing. Additionally, they preferred mobile applications by means of which they could use the language as a tool for communication in the real life context for improving their writing skills.

4.10.2. The Pre-service EFL Teachers' Perceptions about the Effectiveness of MALL

The pre-service EFL teachers had positive perceptions about the effectiveness of MALL ($M = 3.03$, $SD = .42$). They found it most effective to use their mobile devices for facilitating their listening skills ($M = 3.58$, $SD = .59$) and expanding their vocabulary in English ($M = 3.38$, $SD = .57$). They found it least effective to use their mobile devices for improving their speaking ($M = 2.86$, $SD = .68$) and grammar skills in English ($M = 2.67$, $SD = .71$). However, mobile device use was not found effective in enhancing writing skills ($M = 2.39$, $SD = .78$). These findings obtained from the analysis of the quantitative data slightly differed from the findings obtained from the analysis of the qualitative data. While 3 of the interviewees found it effective, 7 of them found it both effective and ineffective which indicated that they approached the issue cautiously.

The pre-service EFL teachers believed that using mobile devices for learning English was effective for some reasons. These reasons were summarized below:

- Thanks to the portability of these hand-held devices, EFL learners can immediately access to information they needed.
- Mobile devices provide EFL learners with authentic language learning experience.
- Mobile devices offer various tools for interacting with native speakers of English which is vital for improving language skills and knowledge.
- Mobile devices provide EFL learners with ubiquitous language learning opportunities. Thus, they can have the chance of learning English whenever and wherever they want.
- Mobile devices provide EFL learners with enjoyable language learning experience.
- Using mobile devices for learning English is cost-effective.
- Using mobile devices addresses individual learner differences in learning English thanks to the various mobile applications.

- Mobile devices are easy to use.
- Using mobile devices for improving language skills fosters EFL learners' self-confidence.

On the other hand, the pre-service EFL teachers highlighted some other reasons why using mobile devices for mastering language skills were not effective, all of which were summarized below:

- Using mobile devices distracts EFL learners' attention.
- Using mobile devices for learning English grammar and developing writing skills in English is ineffective.
- Using mobile devices for learning English drains the batteries quickly.
- Most of the time, it requires constant Internet connection to use mobile devices for learning English.
- Mobile devices are not as comfortable as computers due to small screen size and some additional factors such as the lack of a physical keyboard and a mouse.
- Most of the EFL learners are not aware of the potential of using mobile devices for learning English.
- It requires some digital literacy skills.

Examining the findings in relation to the reasons why MALL was effective and ineffective from the perspectives of pre-service EFL teachers, it was figured out that there was a disagreement on the ease of use of mobile devices, which were smartphones in this case. The pre-service EFL teachers both articulated that it was easy to use mobile devices for developing English language skills and mentioned that using mobile devices for developing English language skills required digital literacy skills.

4.10.3. The Pre-service EFL Teachers' Perceptions about the Affordances and Constraints of MALL

It was figured out that the pre-service EFL teachers had positive perceptions about MALL (M = 3.09, SD = .37).

Possible affordances of EFL learners' using mobile devices in their English language learning practices upon which the pre-service EFL teachers agreed are as it follows:

- EFL learners can allocate more time for mastering English language skills.
- EFL learners can have more opportunities for practice in English.
- EFL learners can get more exposure to English.
- Using mobile devices for learning English offers EFL learners authentic language learning experience.
- EFL learners can learn English whenever and wherever they want.
- EFL learners can learn English can learn English at any pace.
- Using mobile devices for learning English addresses individual learner differences in English language learning.
- Using mobile devices for learning English fosters EFL learners' motivation for learning English.
- Using mobile devices for learning English fosters EFL learners' engagement in learning English.
- Using mobile devices for learning English fosters EFL learners' interests.
- Using mobile devices for learning English fosters EFL learners' creativity.
- EFL learners become more autonomous thanks to the mobile devices.
- Using mobile devices for learning English fosters EFL learners' self-confidence in learning English.
- Using mobile devices for learning English reduces EFL learners' language learning anxiety.
- It is easy to use mobile devices for learning English.

- It is enjoyable to use mobile devices for learning English.
- Using mobile devices for learning English encourages EFL learners.

From the perspectives of the pre-service EFL teachers, the only constraint of using mobile devices in English language learning practices was that it drained the batteries quickly. They did not agree that using mobile devices for learning English had some drawbacks due to the problems related to constant Internet connectivity, and small screen sizes of these devices. Additionally, they did not prefer their personal computers rather than their mobile devices for learning English.

4.10.4. The Pre-service EFL Teachers' Recommendations to EFL Learners on Increasing the Effectiveness of MALL

The pre-service EFL teachers' recommendations for EFL learners about increasing the effectiveness of mobile devices in their English language learning practices are as it follows:

- EFL learners should take some critical issues into consideration when they decide which mobile application they will use for learning English. Firstly, EFL learners should take their language learning needs, personal interests, learning styles, and level of language proficiency into consideration. Secondly, a mobile application should provide language learners with enjoyable learning experience. Thirdly, it should be commonly used by other learners.
- EFL learners should regulate their learnings in an effective way. They should define which language skills and knowledge they want to improve, how they will use their mobile devices, and how much time they will allocate for studying.
- EFL learners should study on a regular basis and stick to their schedule.
- EFL learners should raise their awareness of the advantages and disadvantages of MALL. Thus, they can benefit from the affordances of

mobile devices and develop strategies in order to eliminate the possible constraints of them.

- EFL learners should do their bests to interact with native speakers of English and use language as a communication tool for developing their English language skills by using mobile devices.

4.10.5. The Pre-service EFL Teachers' Perceptions about the Classroom Implications of MALL

The pre-service EFL teachers had moderately positive perceptions about using mobile devices for teaching English as a Foreign Language in the classroom context (M =2.83, SD = .26). Their perceptions about the classroom implications of MALL were summarized as it follows:

- Although EFL learners' mobile device use in their learning practices in the classroom context does not affect the teaching-learning process in a negative way, it distracts their attention.
- EFL learners' mobile device use in their learning practices in the classroom context provides them with a collaborative language learning environment and fosters interaction with their teacher and peers.
- EFL teachers should allow EFL learners to use their mobile devices freely in the classroom for learning English, however they should give them a restricted amount of time.
- It is not pedagogically challenging for EFL teachers to use mobile devices for teaching English in the classroom context although technologically it is.
- The administration should allow EFL teachers to use mobile devices in the classroom for teaching English.
- EFL teachers are qualified enough to use mobile devices for teaching English in the classroom. They can effectively use mobile devices in the classroom for teaching English if they know how to use technology in their teaching practices.

- Using mobile devices in the classroom for teaching English is cost-effective.

Additionally, it was figured out that the participants of the study wanted to use mobile devices for teaching English in the classroom in the future and they found themselves proficient in this regard.

The pre-service EFL teachers' believed that there were some benefits of using mobile devices for teaching English in the classroom context. These are:

- It will meet the new generation of EFL learners' language learning needs which cannot be addressed by the traditional methods and techniques.
- It provides learners with authentic language experience in the classroom context.
- It saves the class time since it provides learners with immediate access to the information.
- As mobile devices are commonly used by people of nearly all ages and socio-economic status, it is a cost-effective way to use them for teaching English in the classroom context.
- It fosters collaboration among EFL learners in the classroom context.
- It is effective for enhancing their listening and pronunciation skills.
- The mobile devices can provide EFL teachers with relevant tools for assessment and evaluation in the classroom context since there exist various applications for delivering the content of the language courses and designing various kinds of quizzes.
- It addresses learner differences in language learning.
- It creates an enjoyable learning environment in which EFL learners can learn English.

Although the pre-service EFL teachers emphasized that mobile devices should be used for both learning and teaching languages in and out of the classroom context,

they articulated their due concerns about the classroom implications of MALL. These are as it follows:

- Using Mobile Devices for Teaching English in the Classroom Context distracts EFL learners' attention.
- It is not effective to use mobile devices for improving grammar and writing skills in English.
- Mobile devices might not always be affordable to all the students in the classroom.
- EFL learners' acceptance and readiness of using mobile devices for language learning purposes in the classroom are crucial for effective implementations.
- Both EFL teachers and learners are required to have advanced Internet and communication technology skills in order to use mobile devices for teaching and learning purposes in the language classrooms. The lack of those skills might cause loosing classroom time.
- Administration might not permit EFL teachers to use mobile devices in the classroom context for teaching English in the classroom context. They even might not permit students to bring their mobile devices with them.

The pre-service EFL teachers had some due concerns in relation to the classroom implications of MALL, they had positive perceptions about integrating mobile devices into language courses.

The findings obtained from the analyses results of both qualitative and qualitative data especially overlapped in three main points: Integrating mobile devices into teaching-learning practices fosters collaboration among EFL teacher and learners in the classroom context. However, it distracts learners' attention. Moreover, administrative issues play crucial role in the integration of mobile devices into teaching-learning practices.

While the findings obtained from the analysis results of quantitative data suggested that the integration of mobile devices into teaching-learning practices was cost-effective, findings obtained from the analysis results of qualitative data revealed that it depended on the unique case of teaching context. Namely, most of the time it was cost-effective, but it did not mean always.

4.10.6. The Pre-service EFL Teachers' Recommendations to EFL Teachers about the Classroom Implications of MALL

The pre-service EFL teachers' recommendations for EFL teachers about increasing the effectiveness of integration of mobile devices into their teaching practices in the classroom context are as it follows:

- EFL teachers should carefully select the mobile applications that they will use in their teaching practices.
- EFL teachers should carefully define the learners' profile and they should take their interests and language learning needs into consideration. Additionally, they should pay sufficient attention to learner readiness and acceptance of MALL.
- EFL teachers should design MALL tasks which foster collaboration among EFL learners and create enjoyable learning environment.
- EFL teachers should do their bests for eliminating the distractions caused by mobile devices used in the classroom context for learning English.
- EFL teachers should give EFL learners restricted amount of time for benefitting from their mobile devices for learning English in the classroom context.
- EFL teachers should give clear and specific instructions for MALL and teaching implementations in the classroom context.
- EFL teachers should not insist on using the applications which EFL learners are not enthusiastic about. They should always offer alternatives among which learners can choose the best one.

- After each MALL and teaching implementation in the classroom context, EFL teachers should take EFL learners' feedback on the strengths and weaknesses of the implementation and revise the implementation for further improvement.
- EFL teachers should raise EFL learners' awareness of the possible pedagogical affordances and constraints of MALL.

4.10.7. The Pre-service EFL Teachers' Expectations from the Lecturers Offering Courses in the ELT Program

The pre-service EFL teachers' expectations from the lecturers offering courses in the ELT program for promoting their pedagogical skills to integrate MALL into their teaching practices were as it follows:

- The lecturers should effectively integrate technology into their own teaching practices and be role models for their students.
- The lecturers should provide their students with both theoretical knowledge necessary for promoting their pedagogical skills to integrate technology into their curriculum and relevant practical experience in this respect.
- The lecturers should raise their students' awareness of the pedagogical affordances and constraints of integrating technology into foreign language learning and teaching practices.
- The lecturers should share their own technology-integrated teaching experiences in EFL context with their students by not turning a blind eye to the disadvantages or weaknesses of the implementations.
- The lecturers should keep up to date with the current trends in educational technology.
- The lecturers should help their students to develop digital literacy and technology skills.

4.10.8. The Pre-service EFL Teachers' Expectations from the ELT Program

The pre-service EFL teachers' expectations from the ELT program for promoting their pedagogical skills to integrate MALL into their teaching practices were as it follows:

- There should be more courses which help the pre-service EFL teachers togain both theoretical knowledge and practical experience necessary for integrating technology into their foreign language teaching practices in the future. Additionally, the content of those courses should be up-to-date and inform the pre-service EFL teachers about the current trends in technological advancements and their impacts upon language learning and teaching practices.
- There should be more courses which help the pre-service EFL teachers to gain both ICT (Information Communication Technology) and digital literacy skills.
- In the courses on school experience and practice teaching, the pre-service EFL teachers should do should do more observations on technology-integrated English courses and should prepare more technology-integrated lesson plans as the course requirements.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1. Introduction

This chapter presents the discussion of the results with reference to previous research studies, implications for practice, and recommendations for further research under three sections.

5.2. Discussion of the Results

The results of the current study were discussed under eight main sections. These are The Pre-service EFL Teachers' Current Practices of MALL, The Pre-service EFL Teachers' Perceptions about the Effectiveness of MALL, The Pre-service EFL Teachers' Perceptions about the Pedagogical Affordances and Constraints of MALL, The Pre-service EFL Teachers' Recommendations to EFL Learners on Increasing the Effectiveness of MALL, The Pre-service EFL Teachers' Perceptions about the Classroom Implications of MALL, The Pre-service EFL Teachers' Recommendations to EFL Teachers about the Classroom Implications of MALL, The Pre-service EFL Teachers' Expectations from the Lecturers Offering Courses in the ELT Program, and The Pre-service EFL Teachers' Expectations from the ELT Program.

5.2.1. The Pre-service EFL Teachers' Current Practices of MALL

Do pre-service EFL teachers, as EFL learners at the same time, use their mobile devices for mastering their language skills in English? If so, how do they use mobile devices in this regard? Are they enthusiastic about it? The results of the current study indicated that Turkish pre-service EFL teachers, as EFL learners at the same time, used their mobile devices for improving their English language

skills out of the classroom context. In this regard, they used their mobile devices most frequently for learning English vocabulary and improving their listening skills in English and least frequently for improving their writing skills and expanding their grammar knowledge in English. Taking the path, they followed into consideration, they preferred using mobile applications which offered them authentic language learning experience and channels for interaction in English, vital for gaining communicative competence. Moreover, they were enthusiastic about using their mobile devices for mastering their language skills in English.

In a very similar study, conducted in Turkish EFL context, Öz (2014) found out that a great majority of language learners, benefitted from their mobile devices for improving their language skills in English. In that study, the participants wereTurkish pre-service EFL teachers as they were in the current study. Although their research studies informed the relevant literature about the practices of MALL in ESL context, Nino (2015) and Wrigglesworth and Harvor (2017) put forward very similar findings. According to Nino (2015), ESL learners frequently used their mobile devices for language learning purposes out of the classroom context. As for Wrigglesworth and Harvor (2017), they suggested that ESL learners benefitted from their mobile devices on a daily basis for improving their language skills in English.

However, there exist some research studies whose findings differ from the findings of the current study. In a study conducted in Turkish EFL context as in the current study, found out that Turkish EFL learners didn't have a tendency to benefit from their mobile phones for fostering their language skills out of the classroom context, they used them for translating and looking up in the dictionaries in the classroom settings (Bezircilioğlu, 2016). In another study carried out in Iranian context, it was suggested that EFL learners rarely used mobile devices for language learning purposes (Dashtestani, 2016).

As it was stated previously, the pre-service EFL teachers participating in the current study preferred using mobile applications which offered them authentic

language learning experience and channels for interaction in English, vital for gaining communicative competence. This was the path they followed in MALL.

Lai, Hu, and Lyu (2018) examined the nature of EFL learners' experience with technology-enhanced language learning experience out of the classroom context and defined three types of language learning experience with technology; instruction-oriented technological experience, information-oriented technological experience, and social-oriented technological experience. If the learners applied to the relevant technological tools in accordance with their language learning needs, this kind of experience was referred as instruction-oriented technological experience. If the learners developed their language skills with a technological tool by means of which they dealt with the issues related to daily life routines in the target language, this kind of experience was defined as entertainment and information-oriented technological experience. Lastly, if the learners used technological tools for interacting with native speakers or other language learners to enhance their language learning, this kind of experience was referred as social-oriented technological experience. On the basis of these definitions, it can be inferred that the current study informs the literature about both instruction-oriented technological experience and social-oriented technological experience by taking the pre-service EFL teachers' preferences of mobile application for developing their language skills in English into consideration.

Furthermore, by taking the pre-service EFL teachers' MALL praxis into consideration, it can be additionally inferred that they are active-aware learners according to Wrigglesworth and Harvor (2017). The researchers defined three different types of language learners: passive-unaware, passive-aware, and active aware learners. Passive-unaware learners used their mobile phones in their daily routines and acquired English as the second language by benefitting from the potential of their mobile phones in an unconscious way. Although passive-aware learners were aware of the potential of mobile phones for fostering language skills, they benefitted from it when they were under the guidance of an instructor. As for the active-aware learners, they were both aware of affordances of MALL and

actively involved in MALL activities. Although the typology suggested by the researchers seems applicable for making inferences about the Turkish pre-service EFL teachers' MALL praxis, it should not be ignored that it was borrowed from a study examining the nature of Korean ESL learners' language learning experience with mobile phones in seamless language learning context.

It was concluded that the pre-service EFL teachers were enthusiastic about using their mobile devices for mastering their language skills in English. On the basis of this conclusion, current study supports the findings of another study which suggested that the language learners were eager to use their mobile devices in order to develop their language skills and knowledge out of the classroom context (Park and Slater, 2014) although it was carried out in ESL context.

5.2.2. The Pre-service EFL Teachers' Perceptions about the Effectiveness of MALL

The pre-service EFL teachers had positive perceptions about the effectiveness of MALL. They found it most effective to use their mobile devices for facilitating their listening skills and expanding their vocabulary in English. They found it least effective to use their mobile devices for improving their speaking and grammar skills in English. However, mobile device use was not found effective in enhancing writing skills.

There existed other studies (Dashtestani, 2016; Almekhlafy and Alzubi, 2016), informing the literature about EFL learners' perceptions about the effectiveness of MALL in general and suggesting very similar results to the one put forward in the current study.

As for each specific language skills and knowledge, this study indicated that the pre-service EFLteachers found it effective to use their mobile devices for expanding their vocabulary knowledge in English. Relevant literature additionally supports the positive effects of using mobile devices on EFL learners' vocabulary learning outcomes. In this regard, in a study conducted in Turkish EFL context

(Sarıçoban and Özturan, 2013), it was suggested that using SMS (short message service) facilitated Turkish EFL learners' vocabulary learning outcomes. In the same vein, Hayati, Jalilifar, and Mashhadi (2013) additionally assured the effectiveness of using SMS in learning English idioms in EFL context. In Chinese EFL context, Wu (2014) remarked the effectiveness of using the mobile application on vocabulary learning. In another study (Kurt and Bensen, 2017), EFL learners used a mobile application for vocabulary learning which enabled them to freely create maximum six-second vocabulary video clips and shared them with the other users on the platform and findings suggested that using a mobile application for learning English vocabulary was effective. In Japanese EFL context, Sato, Murase, and Burden (2015) declared the effectiveness of mobile assisted vocabulary learning. Furthermore, mobile assisted vocabulary learning was found to be effective in Canadian EFL context (Li, Cummins, and Deng, 2017) and Taiwanese EFL context (Wu and Huang (2017).

Another finding suggested that the pre-service EFLteachers found it effective to use their mobile devices for improving their listening skills in English. In this respect, while findings of a study conducted in Iranian EFL context (Azar and Nasiri, 2014) pointed out the effectiveness of using mobile phones for developing listening skills in English, another study carried out in Taiwanese EFL context (Hwang, Shih, Ma, Shadiev, and Chen, 2016) indicated that in terms of improvement in listening skills, there was no significant difference between the both groups, one of which receiving traditional instruction and the other one using a mobile platform for receiving the same instruction.

Using mobile devices for improving reading skills was additionally found to be effective by the participants of the current study. Similarly, Wang (2017) remarked the effectiveness of using iPads in improving reading comprehension skills in English in EFL context and Gheytasi, Azizifar, and Gowhary (2015) assured the effectiveness of using mobile phones for facilitating Iranian EFL learners' reading comprehension skills. However, it should not be ignored that the latter study differs from the current study in terms of the age of the EFL learners who were attending

to a high school. In terms of the effectiveness of MALL, Lin (2014) carried the debate one step further by suggesting that mobile-assisted reading instruction was more effective than computer-assisted reading instruction.

The results of the study indicated that the pre-service EFL learners found it effective to use their mobile devices for learning the culture of the English-speaking countries. In this regard, using ecological constructivism as a theoretical framework, Ducate and Lomicka (2013) referred to effectiveness of using mobile devices in learning the culture of the target language.

The pre-service EFL teachers participating in the current study found it effective to use their mobile devices for improving their speaking skills in English. Relevant literature additionally supports the positive effects of using mobile devices on developing speaking skills in English. In this regard, in a study conducted in Turkish EFL context, Saran, Seferoğlu, and Çağıltay (2009) concluded that learners improved their pronunciation skills in English by using their mobile phones. In another study conducted in Chinese EFL context, Sun, Lin, You, Shen, Qi, and Luo (2017) suggested that using a mobile SNS (social networking service) improved learners' fluency. However, the participants were 6 years old. Similarly, Hwang and Chen (2013) and Hwang, Shih, Ma, Shadiev, and Chen (2016) carried out research studies in Taiwanese EFL context and pointed out the effectiveness of using mobile devices in improving speaking skills. While the participants were elementary school students in the former, were high school students in the latter, both of which differed from the current study in terms of participants' age.

Another finding denoted that the pre-service EFL teachers found it least effective to use their mobile devices for improving their grammar skills and it could be inferred that they approached the issue very cautiously. In this regard, in Iranian EFL context, Khodabandeh, Alian, and Soleimani (2017) and Moghart and Marandi (2017) remarked the effectiveness of benefitting from mobile devices for expanding grammar knowledge. However, it is noteworthy to indicate that participants of those studies are EFL learners attending to high school.

According to the pre-service EFL teachers participating in the current study, using mobile devices for facilitating writing skills in English was not effective. However, in a study conducted in Iranian EFL context, Khodi (2015) indicated that using mobile phones for improving writing skills was effective. Similarly, Andujar (2016) pointed out that using a mobile application enabling the language learners with instant messaging service contributed to their writing accuracy by helping them to decrease the number of grammatical, lexical, and mechanical errors in their writings. However, it is important to emphasize that, the latter study was conducted in ESL context, which differed from the current study. Moreover, Eubanks, Yeh, and Tseng (2017) denoted that using iPads in a mobile assisted writing workshop for improving language learners writing skills in Mandarin Chinese fostered writing skills. Again it should be taken into consideration that the participants of the study were learning Chinese as a foreign language and attending to an immersion elementary school.

5.2.3. The Pre-service EFL Teachers' Perceptions about the Pedagogical Affordances and Constraints of MALL

The current study concluded that the pre-service EFL teachers had positive perceptions about MALL as the other studies informing the relevant literature about EFL and ESL learners' perceptions about MALL (Li, Cummins, and Deng, 2017; Bezircilioğlu, 2016; Saudouni and Bahloul, 2016; Ahn and Lee, 2016; Hwang and Chen, 2013; Shih, Lee, and Cheng, 2015; Saran, Seferoğlu, and Çağıltay, 2009; Hwang, Shih, Ma, Shadiev, and Chen, 2016; Sarıçoban and Özturan, 2013; Nino, 2015).

In this regard, the pre-service EFL teachers agreed that EFL learners can spend more time for developing their English language skills thanks to the mobile devices. Similarly, Ducate and Lomicka (2013) and Lin (2014) concluded that EFL learners could allocate more time for mastering their English language skills thanks to the portability of mobile devices. Furthermore, as Ducate and Lomicka (2013) pointed out, the participants in the current study agreed that EFL learners could

exposed to the target language more and they had more opportunities for meaningful language production in the real-world context, namely they had opportunities for experience authentic language learning.

Additionally, the pre-service EFL teachers agreed that thanks to the mobile devices, they could master their language skills in English at any time, and at any place. In the literature, there existed some other research studies suggesting that using mobile devices facilitated language learning by offering ubiquitous language learning opportunities for EFL learners (Ko, 2017; Dashtestani, 2016; Dashtestani, 2013; Ducate and Lomicka, 2013; Moghart and Marandi, 2017; Azar and Nasiri, 2014)

According to the participants, using mobile devices for language learning fostered EFL learners' motivation for, engagement, interests, creativity, autonomy and self-confidence in language learning and reduced their language learning anxiety.

As it was indicated by the current study, other studies conducted in both EFL (Khodabandeh, Alian, and Soleimani, 2017; Moghart and Marandi, 2017; Ahn and Lee, 2016; Almekhlafy and Alzubi, 2016; Kurt and Bensen, 2017) and ESL (Eubanks, Yeh, and Tseng, 2017) contexts, similarly concluded that using mobile devices motivated EFL learners to learn English language.

In the same vein, Saran, Seferoğlu, and Çağıltay (2009) and Hayati, Jalilifar, and Mashhadi (2013) remarked that "push aspect of mobile technology" (Saran, Seferoğlu, and Çağıltay, 2009, p.108) encouraged regular involvement in language learning activities. Although its context was different from the current study, Eubanks, Yeh, and Tseng (2017) additionally found out very similar result to the one remarked in the currents study. They denoted that the participants who were learning Chinese as a foreign language studied more regularly for learning English thanks to the mobile devices and it fostered their interests in language learning, as this study indicated.

Very similar to the current study, Kurt and Bensen (2017) highlighted that EFL learners become more creative in learning English thanks to the mobile devices, which is unique for learning.

As for the impact of MALL on learner autonomy, while Kondo, et. al. (2012) verified the positive relationships between the two strands, Sato, Murase, and Burden (2015) found no significant difference between the control group and experimental group in terms of these strands in their study investigating the impact of mobile assisted vocabulary learning on Japanese EFL learners' autonomy in language learning. As the former study pointed out a similar finding to the one pointed out in the current study, the latter remarked another perspective.

As it was concluded in the current study, similarly Almekhlafy and Alzubi (2016) denoted that using mobile devices for learning English increased EFL learners' self-confidence and reduced EFL learners' level of language learning anxiety.

Moreover, the pre-service EFL teachers thought that using mobile devices for learning English was easy, enjoyable, and encouraging.

In terms of ease of use, the current study and the study conducted by Azar and Nasiri (2014) in Iranian EFL context found similar results. However, Dashtestani (2016) indicated that using a mobile application might sometimes require more advanced internet and communication technology (ICT) skills, which is different from both the current study and the other study (Azar and Nasiri, 2014).

As it was indicated in the current study, Hwang and Chen (2013) figured out that EFL learners found it encouraging and enjoyable to use mobile devices for mastering their language skills. In the same vein, Kurt and Bensen (2017) and Cavus (2016) additionally referred to MALL as enjoyable in their studies.

The participants thought that using mobile devices addressed individual learner differences in English language learning. In this regard, Hsu, Hwang, and Chang (2013) proved the positive effects of individuality on Chinese EFL learners'

reading proficiency levels. In the same vein, Yang and Wu (2017) underlined the importance of taking learners' individual differences into consideration in the process of developing mobile applications for language teaching and learning and they drew attention to the scarcity of the research studies conducted for developing context-aware learner support systems for applications in the contexts of MALL.

As for the constraints of MALL, the participants disagreed that it was disadvantageous to use mobile devices for learning English due to the problems related to Internet connectivity, and small screen size. However, they found it disadvantageous to use mobile devices for learning English due to the problems related to battery life. In this regard, the relevant literature pointed out that problems related to connectivity, small screen size, and battery life fell under the category of technological constraints of mobile learning (Shudong and Higgins, 2006). While the current study found similar results to the literature in terms of the problems related to battery life, it differed from the relevant literature in terms of the factors related to bandwidth connection and small screen size.

Moreover, the relevant literature pointed out that MALL was more effective than computer assisted language learning (Lin, 2014; Saran, Seferoğlu, Çağıltay, 2009), due to the "push aspect of mobile technology" (Saran, Seferoğlu, Çağıltay, 2009, p.108). However, learners preferred personal computers rather than their mobile devices for fostering their language skills out of the classroom context (Stockwell, 2008; Stockwell, 2013) since they found personal computers more comfortable than mobile devices (Ko, 2017). Different from these findings, in the current study, the pre-service EFL teachers disagreed that they preferred their personal computers rather than their mobile devices for learning English.

5.2.4. The Pre-service EFL Teachers' Recommendations to EFL Learners on Increasing the Effectiveness of MALL

The current study investigated the pre-service EFL teachers' recommendations to EFL learners on increasing the effectiveness of MALL. In this regard, it was found

out that the preminent issue was related to the application choice. Namely, EFL learners are recommended to take some critical issues into consideration when they decide which mobile application they will use for learning English. Their own language learning needs, personal interests, learning styles, and level of language proficiency are the critical factors. Furthermore, a mobile application should be commonly used by other learners and provide an enjoyable learning experience.

Another recommendation was related to self-regulation. Namely, EFL learners should regulate their learnings in an effective way. They should define which language skills and knowledge they want to improve, how they will use their mobile devices, and how much time they will allocate for studying. Moreover, EFL learners should study on a regular basis and stick to their schedule.

EFL learners were additionally suggested to raise their awareness of the advantages and disadvantages of MALL. Thus, they can benefit from the affordances of mobile devices and develop strategies in order to eliminate the possible constraints of them.

Lastly, the pre-service EFL teachers suggested that EFL learners should do their bests to interact with native speakers of English and use language as a communication tool for developing their English language skills by using mobile devices.

5.2.5. The Pre-service EFL Teachers' Perceptions about the Classroom Implications of MALL

The current study indicated that the pre-service EFL teachers had moderately positive perceptions about using mobile devices for teaching English as a Foreign Language in the classroom context. In this respect, there existed many studies on perceptions about integrating MALL into classroom instruction from both EFL and ESL contexts and from both learners and teachers.

In Turkish EFL context, Bezircilioğlu (2016); in Algerian EFL context, Saudouni and Bahloul (2016); and in Iranian EFL context, Moghart and Marandi (2017) concluded that learners had positive perceptions about integration of MALL into the regular curriculum. Very similarly, Wang (2017) suggested that EFL learners had quite positive perceptions about a MALL implementation in the classroom context. Although those studies were conducted in EFL context and informed the relevant literature about perceptions about classroom implications of MALL, they pointed out different results from the one current study suggested.

Again different from the current study, Nino (2015) found out that language learnershad positive perceptions about integration of mobile assisted language in ESL context.

As from the perspective of EFL teachers, very similarly to the current study, in Iranian context, Dashtestani (2013) found out that EFL teachers had moderately positive perceptions about the integration of MALL into the curriculum. In the same context, Golshan and Tafazoli (2014) investigated Iranian EFL teachers' perceptions about using technological tools in the classroom settings for instructional purposes and suggested that the participants had positive perceptions about it which was additionally different from both the current study and the other study (Dashtestani, 2013) conducted in the same context.

Unlike the current study conducted with pre-service EFL teachers in Turkey, Şad and Göktaş (2014) remarked that Turkish pre-service teachers' perceptions were not satisfactory both for using mobile phones and personal computers in the educational context and furthermore, they had more negative attitudes towards using mobile phones than using computers. Additionally, department didn't explain the difference in perceptions.

The pre-service EFL teachers in the current study believed that using mobile devices for learning English in the classroom context distracted EFL learners' attention. Similarly, Gheytasi, Azizifar, and Gowhary (2015) denoted the same

results from the perspective of Iranian EFL learners. In this regard, while the pre-service EFL teachers in the current study believed that although it distracted EFL learners' attention, it did not affect the teaching-learning process in a negative way, the Iranian EFL learners believed that it hampered the teaching-learning process (Gheytasi, Azizifar, and Gowhary, 2015).

According to the pre-service EFL teachers, EFL learners' mobile device use in their learning practices in the classroom context provided them with a collaborative language learning environment and fostered interaction with their teachers and peers. In this regard, Azar and Nasiri (2014) pointed out the same results from the perspective of EFL learners. Similarly, Kurt and Bensen (2017) mentioned that integrating MALL into the classroom teaching fostered interaction among the peers.

The participants believed that EFL teachers should allow EFL learners to use their mobile devices for a limited amount of time in the classroom for learning English. In this respect, Khodi (2015) asserted that restricted access to mobile phones in the classroom context was found as the best method of integration in EFL context.

According to the pre-service EFL teachers, it was not pedagogically challenging for EFL teachers to use mobile devices for teaching English in the classroom context although technologically it was. Different from the current study, Park and Slater (2014) pointed out that ESL teachers found it both pedagogically and technologically challenging to integrate MALL into the curriculum.

Another point indicated in the currents study was very similar to the one denoted in the study (Golshan and Tafazoli, 2014) suggesting that school administration played an important role in MALL implementations in the classroom context.

The participants believed that EFL teachers were qualified enough to use mobile devices for teaching English in the classroom in Turkey. Differently, Dashtestani (2016) pointed out that Iranian EFL learners thought that their EFL teachers were

not qualified enough to integrate mobile devices into the curriculum for instructional purposes.

According to the results of the current study, the pre-service EFL teachers wanted to use mobile devices for teaching English in the classroom in the future. Very similarly, Öz (2014) concluded that Turkish pre-service EFL teachers wanted to benefit from the potential of mobile devices for teaching English in the classroom settings in the future. In this regard, the participants of the current study found themselves proficient. Differently, Dashtestani (2013) indicated that Iranian EFL teachers did not found themselves qualified enough to integrate MALL into their teaching practices in the classroom settings.

As for another point, the current study put forward some controversial stands in terms of the cost-efficiency of classroom implications of MALL. While the findings obtained from the analysis results of quantitative data suggested that the integration of mobile devices into teaching-learning practices was cost-effective, findings obtained from the analysis results of qualitative data revealed that it depended on the unique case of teaching context. Namely, most of the time it was cost-effective, but it did not mean always. In this regard, classroom implications of MALL were found not to be cost-effective by most of the studies conducted in EFL context (Ko, 2017; Dashtestani, 2016; Dashtestani, 2013; Moghart and Marandi, 2017).

5.2.6. The Pre-service EFL Teachers' Recommendations to EFL Teachers about the Classroom Implications of MALL

The pre-service EFL teachers had some recommendations for EFL teachers about increasing the effectiveness of integration of mobile devices into their teaching practices in the classroom context. In this regard, EFL teachers should carefully select the mobile applications that they will use in their teaching practices and they should carefully define the learners' profile and they should take their interests and

language learning needs into consideration. Additionally, they should pay sufficient attention to learner readiness and acceptance of MALL.

EFL teachers should design MALL tasks which foster collaboration among EFL learners and create enjoyable learning environment. Meanwhile, they should do their bests for eliminating the distractions caused by mobile devices used in the classroom context for learning English.

EFL teachers should give EFL learners restricted amount of time for benefitting from their mobile devices for learning English in the classroom context. Moreover, they should give clear and specific instructions for MALL and teaching implementations in the classroom context.

EFL teachers should not insist on using the applications which EFL learners are not enthusiastic about. They should always offer alternatives among which learners can choose the best one.

After each MALL and teaching implementation in the classroom context, EFL teachers should take EFL learners' feedback on the strengths and weaknesses of the implementation and revise the implementation for further improvement. Lastly, EFL teachers should raise EFL learners' awareness of the possible pedagogical affordances and constraints of MALL.

5.2.7. The Pre-service EFL Teachers' Expectations from the Lecturers Offering Courses in the ELT Program

The pre-service EFL teachers had some expectations from the lecturers offering courses in the ELT program for promoting their pedagogical skills to integrate MALL into their teaching practices. In this respect, the lecturers should effectively integrate technology into their own teaching practices and be role models for their students. They should provide their students with both theoretical knowledge necessary for promoting their pedagogical skills to integrate technology into their curriculum and relevant practical experience in this respect.

The lecturers should raise their students' awareness of the pedagogical affordances and constraints of integrating technology into foreign language learning and teaching practices. Moreover, they should share their own technology-integrated teaching experiences in EFL context with their students by not turning a blind eye to the disadvantages or weaknesses of the implementations.

The lecturers should keep up to date with the current trends in educational technology and they should help their students to develop digital literacy and technology skills.

5.2.8. The Pre-service EFL Teachers' Expectations from the ELT Program

The pre-service EFL teachers had some expectations from the ELT program for promoting their pedagogical skills to integrate MALL into their teaching practices. In this respect, there should be more courses which help the pre-service EFL teachers togain both theoretical knowledge and practical experience necessary for integrating technology into their foreign language teaching practices in the future. Additionally, the content of those courses should be up-to-date and inform the pre-service EFL teachers about the current trends in technological advancements and their impacts upon language learning and teaching practices. Moreover, there should be more courses which help the pre-service EFL teachers to gain both ICT (Information Communication Technology) and digital literacy skills. Lastly, in the courses on school experience and practice teaching, the pre-service EFL teachers should do should do more observations on technology-integrated English courses and should prepare more technology-integrated lesson plans as the course requirements.

5.3. Implications for Practice

On the basis of the findings of the study, following recommendations were made for mobile application developers, curriculum developers, and lecturers offering courses in the ELT programs.

- The findings of the study suggested that the pre-service EFL teachers benefitted from their mobile devices for improving their language skills and knowledge in English. In this respect, for learning English vocabulary, they mostly prefer the mobile applications offering semisemi-contextualized vocabulary learning experience; for improving their listening and reading skills, they especially preferred mobile applications enabling them authentic language learning experience; for learning the culture of the English-speaking countries, they mostly preferred mobile applications which offered them authentic language learning experience by means of delivering contents about current affairs and cultural events. For improving their speaking skills in English, they preferred mobile applications by means of which they could immerse themselves in English language by meeting conversation partners and using language as a tool for two-way communication. It was seen that the pre-service EFL teachers benefitted from their mobile devices for expanding their grammar knowledge in English and they were in favor of deductive approach to grammar learning and thought traditional approaches worked better in this respect. They least frequently benefitted from their mobile devices for facilitating their writing skills in English. In this regard, they preferred mobile applications which offered them mobile assisted feedback for improving their writing accuracy, and used genre-based approach to develop competency in writing. Additionally, they preferred mobile applications by means of which they could use the language as a tool for communication in the real life context for improving their writing skills. Mobile application developers should take the EFL learners' learning needs and expectations into consideration for designing and developing mobile applications.

- The findings of the study suggested that there should be more courses which help the pre-service EFL teachers to gain both theoretical knowledge and practical experience necessary for integrating technology into their foreign language teaching practices in the future. Additionally, the content of those courses should be up-to-date and inform the pre-service EFL

teachers about the current trends in technological advancements and their impacts upon language learning and teaching practices. In this regard, curriculum developers should take the pre-service EFL teachers' learning needs and expectations into consideration and to be informed about those needs and expectations.

- The lecturers should effectively integrate technology into their own teaching practices and be role models for their students. They should provide their students with both theoretical knowledge necessary for promoting their pedagogical skills to integrate technology into their curriculum and relevant practical experience in this respect. Moreover, they should keep up to date with the current trends in educational technology. In this respect, some in-service training activities can be design and implemented.

5.4. Recommendations for Further Research

Following suggestions for further studies were made regarding the findings and limitations of the current study.

- This study, investigating the pre-service EFL teachers' current practices and perceptions of MALL, used mixed methods research design. Thus, both quantitative and qualitative data were gathered respectively. In this respect, the quantitative phase of the study was carried out with 142 pre-service EFL teachers; and the qualitative phase of the study was carried out with 10 pre-service EFL teachers selected by employing convenience sampling method. This connotes two main limitations. First of all, the sample size both for the quantitative and qualitative phase of the study might not be enough to make inferences about the general characteristics of population. Secondly, as the convenience sampling method was employed in the selecting of the participants, the findings of the study might not present and unbiased representation of the population. Thus, there is a need for further research studies to be conducted with a larger sample size and using random

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sampling method in order to present a more complete understanding of the phenomenon.

- The participants were the pre-service EFL teachers studying at a public university offering B.A. program in ELT which implied that generalizability of the findings obtained both from the quantitative and qualitative phases of the study were restricted with the pre-service EFL teachers studying at a public university, offering B.A. program in ELT, in Turkey. In this regard, further studies are needed to be carried out with pre-service EFL teachers studying at various universities offering B.A. programs in ELT in Turkey.

- Relevant literature suggests that cultural background of a learner is a non-negligible variable in research studies investigating learners' perceptions of MALL. In this respect, there is a need for further cross-cultural studies comparing the Turkish EFL learners' perceptions of MALL with other EFL learners from different countries.

- Further research studies examining the factors affecting EFL teachers' and learners' perceptions of MALL are needed.

- The questionnaire employed in the quantitative phase of the current study was developed by the researcher based on the relevant literature. In this respect, further studies are needed to be conducted in order to revise and improve it.

- Relevant literature suggests that there is discrepancy between the EFL teachers' and EFL learners' perceptions about integrating mobile devices into language teaching-learning processes and practices in the classroom context. In this respect, further studies are needed in order to compare Turkish EFL teachers' and learners' perceptions about the classroom implications of MALL.

- Most of the participants in the current study were 19-20 years old. There is a need for further research studies examining the older adult EFL learners' current practices and perceptions of MALL.

- Further research studies examining the young EFL learners' current practices and perceptions of MALL are needed.

- There is a need for further research studies investigating the best practices of MALL and teaching both from the perspectives of EFL learners and teachers.

- Further research studies should be carried out in order to investigate EFL learners' and teachers' expectations from an effective mobile application used for improving language skills and knowledge.

- Further research studies should be carried out in order to investigate the perceptions of the lecturers offering courses in the ELT programs about mobile assisted language learning.

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APPENDICES

A. APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE

06 MART 2019

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Doç.Dr. Perihan SAVAŞ

Danışmanlığını yaptığınız Serap Özge AYDIN'ın "İngilizce Öğretmen Adaylarının Mobil Destekli Dil Öğrenme Pratikleri ve Mobil Destekli Öğrenmeye İlişkin Algıları" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve 105-ODTÜ-2019 protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Prof. Dr. Tülin GENÇÖZ
Başkan

Prof. Dr. Ayhan SOL
Üye

Prof. Dr. Ayhan Gürbüz DEMİR (4.)
Üye

Prof. Dr. Yaşar KONDAKÇI
Üye

Doç. Dr. Emre SELÇUK
Üye

Doç. Dr. Pınar KAYGAN
Üye

Dr. Öğr. Üyesi Ali Emre TURGUT
Üye

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B. THE QUESTIONNAIRE

PRE-SERVICE EFL TEACHERS' CURRENT PRACTICES AND PERCEPTIONS OF MOBILE-ASSISTED LANGUAGE LEARNING

Dear participant,

This study aims to investigate the pre-service EFL teachers' current practices and perceptions of mobile-assisted language learning.

Participation in the study is on a voluntary basis. No personal identification information is required in the questionnaire. Your answers will be kept strictly confidential and evaluated only by the researcher; the obtained data will be used for scientific purposes only.

The questionnaire does not contain any questions that may cause discomfort in the participants. However, during participation, for any reason, if you feel uncomfortable, you are free to quit at any time.

I would like to thank you in advance for your participation in this study. For further information about the study, please write your e-mail address below:

Your e-mail address: ………………………………………..

I am participating in this study totally on my own will and am aware that I can quit participating at any time I want. I give my consent for the use of the information I provide for scientific purposes.

Name Surname   Date   Signature

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Dear participant,

The term of *"mobile device"* can be defined as any hand-held sized portable device that is used to access to the Internet. Typical examples are tablets, smartphones, e-readers, and portable music players. Using these devices, the mobile technology, for language learning is referred as MALL (**M**obile-**A**ssisted **L**anguage **L**earning).

DEMOGRAPHIC INFORMATION

Age: ☐ 17-18 ☐ 19-20 ☐ 21-22 ☐ 23-24 ☐ 25 and above

Gender: ☐ Male ☐ Female

Year: ☐ Preparatory ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th

Which mobile devices do you have?

☐ Smartphone ☐ Portable music player ☐ Tablet ☐ E-reader ☐ Other(s): (Please specify.) ……………

How often do you use your mobile device(s) *on a daily basis*?

Smartphone	☐ less than 2 hours	☐ 2-4 hours	☐ 4-6 hours	☐ more than 6 hours
Portable music player	☐ less than 2 hours	☐ 2-4 hours	☐ 4-6 hours	☐ more than 6 hours
Tablet	☐ less than 2 hours	☐ 2-4 hours	☐ 4-6 hours	☐ more than 6 hours
E-reader	☐ less than 2 hours	☐ 2-4 hours	☐ 4-6 hours	☐ more than 6 hours
Other(s): ………………	☐ less than 2 hours	☐ 2-4 hours	☐ 4-6 hours	☐ more than 6 hours

How often do you use your mobile device(s) for educational purposes *on a weekly basis*?

Smartphone	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
Portable music player	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
Tablet	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
E-reader	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
Other(s): ………………	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours

How often do you use your mobile device(s) for learning English *on a weekly basis*?

Smartphone	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
Portable music player	☐Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
Tablet	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
E-reader	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours
Other(s): ………………	☐ Never	☐ less than 3 hours	☐ 3-6 hours	☐ 6-9 hours	☐ more than 9 hours

CURRENT PRACTICES OF MALL (Mobile-Assisted Language Learning)

	Items	Never	Rarely	Sometimes	Frequently	Always
1.	I use my mobile device for educational purposes.	(1)	(2)	(3)	(4)	(5)
2.	I am enthusiastic about using my mobile device for learning English.	(1)	(2)	(3)	(4)	(5)
3.	I use my mobile device for learning English vocabulary.	(1)	(2)	(3)	(4)	(5)
4.	I use my mobile device for learning English grammar.	(1)	(2)	(3)	(4)	(5)
5.	I use my mobile device for developing my listening skills in English.	(1)	(2)	(3)	(4)	(5)
6.	I use my mobile device for developing my reading skills in English.	(1)	(2)	(3)	(4)	(5)
7.	I use my mobile device for developing my writing skills in English.	(1)	(2)	(3)	(4)	(5)
8.	I use my mobile device for learning the culture of the English speaking countries.	(1)	(2)	(3)	(4)	(5)
9.	I use my mobile device for developing my speaking skills in English.	(1)	(2)	(3)	(4)	(5)

EFFECTIVENESS OF MALL (Mobile-Assisted Language Learning)

	Items	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	Using my mobile device for learning English vocabulary is effective.	(1)	(2)	(3)	(4)
2.	Using my mobile device for learning English grammar is effective.	(1)	(2)	(3)	(4)
3.	Using my mobile device for developing my listening skills in English is effective.	(1)	(2)	(3)	(4)
4.	Using my mobile device for developing my reading skills in English is effective.	(1)	(2)	(3)	(4)
5.	Using my mobile device for developing my writing skills in English is effective.	(1)	(2)	(3)	(4)
6.	Using my mobile device for learning the culture of the English speaking countries is effective.	(1)	(2)	(3)	(4)
7.	Using my mobile device for developing my speaking skills in English is effective.	(1)	(2)	(3)	(4)

POSSIBLE PEDAGOGICAL AFFORDANCES AND CONSTRAINTS OF MALL (Mobile-Assisted Language Learning)

	Items	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	EFL learners can spend more time for developing their English language skills thanks to the mobile devices.	(1)	(2)	(3)	(4)
2.	EFL learners can get more exposure to the English language thanks to the mobile devices.	(1)	(2)	(3)	(4)
3.	EFL learners can have more opportunities for practice in English language thanks to the mobile devices.	(1)	(2)	(3)	(4)
4.	EFL learners can easily access to authentic materials for learning English thanks to the mobile devices.	(1)	(2)	(3)	(4)
5.	EFL learners can learn English language whenever and wherever they want thanks to the mobile devices.	(1)	(2)	(3)	(4)
6.	Using mobile devices motivates EFL learners to learn English language.	(1)	(2)	(3)	(4)
7.	It is easy to use mobile devices for learning English.	(1)	(2)	(3)	(4)
8.	EFL learners study more regularly for learning English thanks to the mobile devices.	(1)	(2)	(3)	(4)
9.	EFL learners become more interested in learning English thanks to the mobile devices.	(1)	(2)	(3)	(4)
10.	Using mobile devices for learning English is enjoyable.	(1)	(2)	(3)	(4)
11.	Using mobile devices for learning English increases EFL learners' self-confidence.	(1)	(2)	(3)	(4)
12.	Using mobile devices for learning English reduces EFL learners' level of language learning anxiety.	(1)	(2)	(3)	(4)
13.	Using mobile devices for learning English is encouraging for EFL learners.	(1)	(2)	(3)	(4)
14.	EFL learners become more creative in learning English thanks to the mobile devices.	(1)	(2)	(3)	(4)
15.	EFL learners become more autonomous in learning English thanks to the mobile devices.	(1)	(2)	(3)	(4)
16.	EFL learners can learn English at any pace thanks to the mobile devices.	(1)	(2)	(3)	(4)
17.	Using mobile devices addresses individual learner differences in English language learning.	(1)	(2)	(3)	(4)
18.	I prefer my personal computer rather than my mobile device(s) for learning English.	(1)	(2)	(3)	(4)
19.	It is disadvantageous to use mobile devices for learning English due to the problems related to Internet connectivity.	(1)	(2)	(3)	(4)
20.	It is disadvantageous to use mobile devices for learning English due to their small screen sizes.	(1)	(2)	(3)	(4)
21.	It is disadvantageous to use mobile devices for learning English due to the problems related to battery life.	(1)	(2)	(3)	(4)

CLASSROOM IMPLICATIONS OF MALL (Mobile-Assisted Language Learning)

	Items	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	Using their mobile devices for learning English in the classroom distracts EFL learners' attention.	(1)	(2)	(3)	(4)
2.	EFL learners' using their mobile devices for learning English in the classroom affects the teaching-learning process in a negative way.	(1)	(2)	(3)	(4)
3.	EFL learners can interact with their teachers and peers by using their mobile devices for learning English.	(1)	(2)	(3)	(4)
4.	Mobile devices can provide EFL learners with collaborative language learning environment.	(1)	(2)	(3)	(4)
5.	EFL teachers should allow EFL learners to use their mobile devices freely in the classroom for learning English.	(1)	(2)	(3)	(4)
6.	EFL teachers should allow EFL learners to use their mobile devices for a limited amount of time in the classroom for learning English.	(1)	(2)	(3)	(4)
7.	It is technologically challenging for EFL teachers to use mobile devices in the classroom for teaching English.	(1)	(2)	(3)	(4)
8.	It is pedagogically challenging for EFL teachers to use mobile devices in the classroom for teaching English.	(1)	(2)	(3)	(4)
9.	The administration should allow EFL teachers to use mobile devices in the classroom for teaching English.	(1)	(2)	(3)	(4)
10.	EFL teachers can effectively use mobile devices in the classroom for teaching English if they know how to use technology in their teaching practices.	(1)	(2)	(3)	(4)
11.	EFL teachers are not qualified enough to use mobile devices for teaching English in the classroom.	(1)	(2)	(3)	(4)
12.	I want to use mobile devices for teaching English in the classroom in the future.	(1)	(2)	(3)	(4)
13.	I am proficient enough to use mobile devices for teaching English in the classroom.	(1)	(2)	(3)	(4)
14.	EFL teachers' using mobile devices in the classroom for teaching English is not economical.	(1)	(2)	(3)	(4)

C. THE INTERVIEW SCHEDULE IN ENGLISH

PRE-SERVICE EFL TEACHERS' CURRENT PRACTICES AND PERCEPTIONS OF MOBILE-ASSISTED LANGUAGE LEARNING

Dear participant,

This study aims to investigate the pre-service EFL teachers' current practices and perceptions of mobile-assisted language learning.

Participation in the study is on a voluntary basis. Your answers to the questions will be recorded by a voice recorder, will be kept strictly confidential, will be transcribed and evaluated only by the researcher; the obtained data will be used for scientific purposes only.

The interview schedule does not contain any questions that may cause discomfort in the participants. However, during participation, for any reason, if you feel uncomfortable, you are free to quit at any time.

I would like to thank you in advance for your participation in this study. For further information about the study, please write your e-mail address below:

Your e-mail address: ……………………………………..

I am participating in this study totally on my own will and am aware that I can quit participating at any time I want. I give my consent for the use of the information I provide for scientific purposes.

Name Surname   Date   Signature

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THE INTERVIEW SCHEDULE

Interview number **:** …………………………………………………

Interview date **:** …………………………………………………

Interview time **:** …………………………………………………

Interview place **:** …………………………………………………

Interviewee

Name & Surname **:** …………………………………………………

Age: ☐ 17-18   ☐ 19-20   ☐ 21-22   ☐ 23-24   ☐ 25 and above

Gender: ☐ Male   ☐ Female

Year: ☐ Preparatory   ☐ 1st year   ☐ 2nd year   ☐ 3rd year   ☐ 4th year

Dear participant,

The term of *"mobile device"* can be defined as any hand-held sized portable device that is used to access to the Internet. Typical examples are tablets, smartphones, e-readers, and portable music players. Using these devices, namely the mobile technology, for language learning is referred as Mobile-Assisted Language Learning **(MALL).**

Which mobile devices do you have?

◻ Smartphone ◻ Portable music player ◻ Tablet ◻ E-reader ◻ Other(s): (Please specify.) ………………

How often do you use your mobile device(s) on a daily basis?

Smartphone	◻ less than 2 hours	◻ 2-4 hours	◻ 4-6 hours	◻ more than 6 hours
Portable music player	◻ less than 2 hours	◻ 2-4 hours	◻ 4-6 hours	◻ more than 6 hours
Tablet	◻ less than 2 hours	◻ 2-4 hours	◻ 4-6 hours	◻ more than 6 hours
E-reader	◻ less than 2 hours	◻ 2-4 hours	◻ 4-6 hours	◻ more than 6 hours
Other(s): (Please specify.) ………………	◻ less than 2 hours	◻ 2-4 hours	◻ 4-6 hours	◻ more than 6 hours

How often do you use your mobile device(s) for educational purposes on a weekly basis?

Smartphone	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
Portable music player	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
Tablet	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
E-reader	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
Other(s): (Please specify.)	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours

How often do you use your mobile device(s) for learning English on a weekly basis?

Smartphone	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
Portable music player	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
Tablet	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
E-reader	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours
Other(s): (Please specify.) ………………	◻ less than 3 hours	◻ 3-6 hours	◻ 6-9 hours	◻ more than 9 hours

The Interview Questions for the Pre-service EFL teachers

1. Do you use your mobile devices for learning English?

    a. If yes:

- Do you use your mobile devices for learning English grammar?
- How do you use your mobile devices for learning English grammar? Please, provide some specific examples and/or application names.

- Do you use your mobile devices for learning English vocabulary?
- How do you use your mobile devices for learning English vocabulary? Please, provide some specific examples and/or application names.

- Do you use your mobile devices for improving your reading skills in English?
- How do you use your mobile devices for improving your reading skills in English? Please, provide some specific examples and/or application names.

• Do you use your mobile devices for improving your writing skills in English?

• How do you use your mobile devices for improving your writing skills in English? Please, provide some specific examples and/or application names.

• Do you use your mobile devices for improving your listening skills in English?

• How do you use your mobile devices for improving your listening skills in English? Please, provide some specific examples and/or application names.

• Do you use your mobile devices for improving your speaking skills in English?

• How do you use your mobile devices for improving your speaking skills in English? Please, provide some specific examples and/or application names.

• Do you use your mobile devices for learning the culture of the English speaking countries?

• How do you use your mobile devices for learning the culture of the English speaking countries? Please, provide some specific examples and/or application names.

b. If no: What are the main reasons for your not using your mobile devices for learning English?

2. Is it effective to use your mobile devices for learning English?

a. If yes: In what ways it is effective to use your mobile devices for learning English?

b. If no: In what ways it is not effective to use your mobile devices for learning English?

3. Do you want to use mobile devices for teaching English in the classroom settings in the future?

    a. If yes: What are the possible benefits of it?

    b. If no: What are the possible challenges of it?

4. What would you suggest EFL learners to increase the effectiveness of mobile devices in their learning?

5. What would you suggest EFL teachers to increase the effectiveness of the integration of mobile devices in their teaching and/or classes?

6. Are you proficient enough to benefit from the affordances mobile devices could offer for teaching English in the classroom settings in the future?

    a. If yes:

        • What are your expectations from your lecturers offering courses in ELT program to promote it?

        • What are your expectations from the ELT program to promote it?

    b. If no:

        • What are your expectations from your lecturers offering courses in ELT program in this regard?

        • What are your expectations from the ELT program in this regard?

7. Do you have any other comments, suggestions, or questions related to the topic?

D. THE INTERVIEW SCHEDULE IN TURKISH

Görüşme numarası :…………………………………………………

Görüşme tarihi :…………………………………………………

Görüşme saati :…………………………………………………

Görüşme yeri :…………………………………………………

Katılımcı

Adı& Soyadı :…………………………………………………

Yaş: ☐ 17-18 ☐ 19-20 ☐ 21-22 ☐ 23-24 ☐ 25 ve üzeri

Cinsiyet: ☐ Erkek ☐ Kadın

Yıl: ☐ Hazırlık ☐ 1. yıl ☐ 2. yıl ☐ 3. yıl ☐ 4. Yıl

Değerli katılımcı,

"Mobil cihaz" kavramı, internete erişmek için kullanılan, elle tutulabilecek boyutta ve taşınabilir olan cihaz olarak tanımlanabilir. Tabletler, akıllı telefonlar, e-okuyucular ve taşınabilir müzik çalar tipik örneklerdir. Bu cihazları, yani mobil teknolojiyi, dil öğrenimi için kullanmak Mobil-Destekli Dil Öğrenimi (**MALL**) olarak adlandırılır.

Hangi mobil cihazlara sahipsiniz?

☐ Akıllı telefon ☐ Taşınabilir müzik çalar ☐ Tablet ☐ E-okuyucu ☐Diğer: (Lütfen belirtiniz.) ………………

Mobil cihazlarınızı günlük ne sıklıkta kullanıyorsunuz?

Akıllı telefon	☐ 2 saatten az	☐ 2-4 saat	☐ 4-6 saat	☐ 6 saatten fazla
Taşınabilir müzik çalar	☐ 2 saatten az	☐ 2-4 saat	☐ 4-6 saat	☐ 6 saatten fazla
Tablet	☐ 2 saatten az	☐ 2-4 saat	☐ 4-6 saat	☐ 6 saatten fazla
E-okuyucu	☐ 2 saatten az	☐ 2-4 saat	☐ 4-6 saat	☐ 6 saatten fazla
Diğer: (Lütfen belirtiniz.) ………………	☐ 2 saatten az	☐ 2-4 saat	☐ 4-6 saat	☐ 6 saatten fazla

Mobil cihazlarınızı eğitim amaçlı haftalık ne sıklıkta kullanıyorsunuz?

Akıllı telefon	☐ 3 saatten az	☐ 3-6 saat	☐ 6-9 saat	☐ 9 saatten fazla
Taşınabilir müzik çalar	☐ 3 saatten az	☐ 3-6 saat	☐ 6-9 saat	☐ 9 saatten fazla
Tablet	☐ 3 saatten az	☐ 3-6 saat	☐ 6-9 saat	☐ 9 saatten fazla
E-okuyucu	☐ 3 saatten az	☐ 3-6 saat	☐ 6-9 saat	☐ 9 saatten fazla
Diğer: (Lütfen belirtiniz.) ………………	☐ 3 saatten az	☐ 3-6 saat	☐ 6-9 saat	☐ 9 saatten fazla

Mobil cihazlarınızı İngilizce öğrenmek için haftalık ne sıklıkta kullanıyorsunuz?

Akıllı telefon	❑ 3 saatten az	❑ 3-6 saat	❑ 6-9 saat	❑ 9 saatten fazla
Taşınabilir müzik çalar	❑ 3 saatten az	❑ 3-6 saat	❑ 6-9 saat	❑ 9 saatten fazla
Tablet	❑ 3 saatten az	❑ 3-6 saat	❑ 6-9 saat	❑ 9 saatten fazla
E-okuyucu	❑ 3 saatten az	❑ 3-6 saat	❑ 6-9 saat	❑ 9 saatten fazla
Diğer: (Lütfen belirtiniz.) ………………	❑ 3 saatten az	❑ 3-6 saat	❑ 6-9 saat	❑ 9 saatten fazla

İngilizce Öğretmen Adayları için Mülakat Soruları

1. Mobil cihazlarınızı İngilizce öğrenmek için kullanıyor musunuz?
   a. Evetse:

      • Mobil cihazlarınızı İngilizce dil bilgisini öğrenmek için kullanıyor musunuz?

      • Mobil cihazlarınızı İngilizce dil bilgisini öğrenmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

      • Mobil cihazlarınızı İngilizce kelimeler öğrenmek için kullanıyor musunuz?

      • Mobil cihazlarınızı İngilizce kelimeler öğrenmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

      • Mobil cihazlarınızı İngilizce okuma becerilerinizi geliştirmek için kullanıyor musunuz?

• Mobil cihazlarınızı İngilizce okuma becerilerinizi geliştirmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

• Mobil cihazlarınızı İngilizce yazma becerilerinizi geliştirmek için kullanıyor musunuz?

• Mobil cihazlarınızı İngilizce yazma becerilerinizi geliştirmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

• Mobil cihazlarınızı İngilizce dinleme becerilerinizi geliştirmek için kullanıyor musunuz?

• Mobil cihazlarınızı İngilizce dinleme becerilerinizi geliştirmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

• Mobil cihazlarınızı İngilizce konuşma becerilerinizi geliştirmek için kullanıyor musunuz?

• Mobil cihazlarınızı İngilizce konuşma becerilerinizi geliştirmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

• Mobil cihazlarınızı İngilizce konuşan ülkelerin kültürünü öğrenmek için kullanıyor musunuz?

• Mobil cihazlarınızı İngilizce konuşan ülkelerin kültürünü öğrenmek için nasıl kullanıyorsunuz? Lütfen örnekler ve/ya da uygulama isimleri vererek, açıklayınız.

b. Hayırsa:Mobil cihazlarınızı İngilizce öğrenmek için kullanmamanızın başlıca nedenleri nelerdir?

2. Mobil cihazlarınızı İngilizce öğrenmek için kullanmanız etkili midir?

   a. Evetse: Mobil cihazlarınızı İngilizce öğrenmek için kullanmanız hangi yönlerden etkilidir?

   b. Hayırsa: Mobil cihazlarınızı İngilizce öğrenmek için kullanmanız hangi yönlerden etkili değildir?

3. Mobil cihazları gelecekte sınıf ortamında İngilizce öğretmek için kullanmak ister misiniz?

   a. Evetse: Bunun olası avantajları nelerdir?

   b. Hayırsa: Bunun olası dezavantajları nelerdir?

4. İngilizce öğrenen öğrenicilere, öğrenmelerinde mobil cihazların etkinliğini artırmaları için ne önerirsiniz?

5. İngilizce öğretmenlerine, mobil cihazların öğretimlerine ve/veya sınıflarına entegrasyonunun etkinliğini artırmaları için ne önerirsiniz?

6. Gelecekte sınıf ortamında İngilizce öğretmek için mobil cihazların sunabileceği avantajlardan yararlanacak kadar yetkin misiniz?

   a. Evetse:

   • Yetkinliğinizi artırmak için İngilizce Öğretmenliği programında ders veren öğretim üyelerinizden beklentileriniz nelerdir?

   • Yetkinliğinizi artırmak için İngilizce Öğretmenliği programından beklentileriniz nelerdir?

   b. Hayırsa:

   • Bu konuda İngilizce Öğretmenliği programında ders veren öğretim üyelerinizden beklentileriniz nelerdir?

   • Bu konuda İngilizce Öğretmenliği programından beklentileriniz nelerdir?

7. Konuyla ilgili başka yorumlarınız, önerileriniz veya sorularınız var mı?

E. LIST OF EXCERPTS IN QUALITATIVE DATA ANALYSIS RESULTS

Voscreen, demin bahsetmiştim. Dizi ve filmlerden kesitler sunduğu için, hem görüyorsun hem de duyuyorsun. Farklı aksanlar karşına çıkıyor. Hem de ana dili İngilizce olan insanların konuşmalarını dinlemiş oluyorsun. [Participant 1]

As I just mentioned about, Voscreen is my best since it enables the listener to watch and listen several shots of series or movies simultaneously. Additionally, you can hear the pronounciations of native speakers with different accents [Participant 1].

Aslında çoğunlukla dinleme yapmak için kullanıyorum telefonumu. TED konuşmalarının uygulamasını indirmiştim, kullanıyorum. Her hafta düzenli olarak bir konuşma izliyorum. Çünkü sınıf dışında İngilizce' ye maruz kalmıyoruz. Açıkçası İngilizcemizi geliştirmek için mobil cihazları ya da teknolojiyi kullanmaya mecburuz. [Participant 9]

Actually, I mostly employ my mobile phone to do some listening activities. I have downloaded TED Talks to my mobile phone and am using it now. I watch a talk each week as we cannot be exposed to English Language outside the classroom. Indeed, I consider that we have to employ our mobile devices or technologies to improve our English proficiency. [Participant 9]

Bazı uygulamalarda öğrenmek istediğim dil bilgisi konularına bakıyorum ve araştırıyorum. Engvid var mesela. Hem videolar var, hem de yazılı dokümanlar var. Dil bilgisini bu kaynaklardan öğrenebiliyorum. [Participant 4]

I search for information on grammar topics that I want to figure out in some applications. For example, Engvid application includes both videos and written documents. I can learn from these sources. [Participant 4]

İngilizce dil bilgisini öğrenmek için bir uygulama bulamadığımdan kullanmıyorum. Kitaplardan daha iyi öğrenebileceğimi düşünüyorum bir de. Sadece konu anlatımında Youtube'u kullanıyorum. [Participant 5]

I don't use any application as I cannot find a suitable one to learn English Grammar. On the other hand, I reckon that I can learn better from reference books. I only benefit from Youtube to watch explanations on grammar topics [Participant 5]

Dil bilgisi öğrenmek için özellikle bir uygulama kullanmıyorum. Fakat dil bilgisi ile ilgili bir konuda takıldığımda telefonumdan internete girer ve araştırırım. Yani Google'a konuyu yazıyorum ve araştırıyorum. Ama konuyu öğreneceksem kitapları tercih ediyorum. Kitaplardan öğrenmek daha etkili oluyor. [Participant 8]

I don't use a special application to learn grammar. However, I apply for internet when I cannot fully grasp a topic or face something unknown to me. Said another way, I write the keywords on google and make a search. On the other hand, I mostly use books to learn the topic as it is more useful to learn from books. [Participant 8]

Grammarly diye bir uygulama var. O uygulamayı kullanarak yaptığım dil bilgisi hatalarına bakıyorum. Böylece hatalarımdan öğrenebiliyorum. Düzeltiyor çünkü hataları. [Participant 1]

There is an application called 'Grammarly'. I check my possible grammatical mistakes. Thus, I can learn from my mistakes since it gives the correct usages. [Participant 1]

Mesela diyelim ki bir kelimeyle ilk kez karşılaştım. Telefonuma indirdiğim sözlük uygulamaları var. Mesela Tureng, Sesli Sözlük... Kelimelerin anlamlarını öğrenmek için kullanıyorum bunları. [Participant 8]

For instance, when I have an unknown word, I employ such dictionary applications as Tureng and Sesli Sözlük that I have downloaded to my mobile phone. I use them to check the meanings of the words. [Participant 8]

İngilizce kelime öğrenmek için Word Booster diye bir uygulama var onu kullanıyorum. Bu uygulamada makaleler var farklı konular üzerine. Ve her bir makalede öğrenilmesi hedeflenen kelimeler var. Bunun dışında herhangi bir uygulama kullanmıyorum kelime öğrenmek için. [Participant 6]

I use an application called Word Booster to learn English words. This application includes some articles on different topic, and each article presents target words to be learned. I don't use any application except it. [Participant 6]

Voscreen diye bir uygulama kullanıyorum. Dizi ve filmlerden kesitler veriyor ve konuşma daha farklı şekilde nasıl ifade edilebilir, onu soruyor. Doğru bildikçe de puan alıyorsun. Beni gerçekten motive ediyor. Hem de karşıma farklı kelimeler çıkabiliyor ve cümle içinde nasıl kullanıldığını da görmüş oluyorum. [Participant 1]

I use an application named as Voscreen. It gives some shots from series and movies and requires its users to find how the expressions are restated. You get some points as you give the right answers. It really motivates me in that I encounter different words and their contextual usages. [Participant 1]

Kullandığım ugulamalar… Drops var. Memrise var. Bir de Duolingo var. Bu üç uygulamayı kullandım, hala kullanıyorum. Bu uygulamalarla kelimelerin hem anlamlarını hem de nasıl telaffuz edildiğini öğreniyorum. Telaffuzu dinleyip, kendim telaffuz ediyorum. Eğer doruysa onay veriyor bu uygulamalar. [Participant 7]

I can say that I use Drops, Memrise and Dualingo. These applications provide me with both meanings and pronounciations of the words. After listening to the pronounciations of the words, I try to repeat them. If I am correct, the applicatons confirm me. [Participant 7]

Youtube da İngilizce konuşma becerilerinin nasıl geliştirilebileceği ile ilgili videolar izliyorum. Bu videolarda ayna karşısında pratik yapmanın faydalı olacağından bahsediliyor. Bu önerileri uygulamaya çalışıyorum. Bazen de Youtube dan videoları izliyorum, izlerken de taklit ediyorum. Telefonumun ön kamerasını açıp kendimi videoya çekiyorum konuşurken. Belirlediğim konular üzerinde konuşuyorum ya da belirlediğim sorulara cevaplar veriyorum. [Participant 3]

I watch videos on how to improve English speaking skills on Youtube. It is mentioned in these videos that it would be beneficial to make practice in front of a mirror. I focus my efforts on these recommendations. I sometimes imitate people in the videos while watching Youtube. I also record myself while speaking through the front camera of my mobile. I speak about the topics I define or give answers to the questions I write. [Participant 3]

Kelime öğrenmek için kullandığım Duolingo adlı uygulama, kelimelerin nasıl telaffuz edildiğini de öğretiyor. Önce kelimeyi dinliyorsun, sonra da sen telaffuz ediyorsun. Doğru telaffuz edince yeşil tik oluyor. [Participant 10]

I employ an application called as Duolingo that provides pronounciations of the words, as well. First you listen to a word, then you say it. If you pronounce it correctly, a green check mark occurs. [Participant 10]

Instagram üzerinden tanıştığım insanlar oluyor. Onlarla Whatsup üzerinden görüntülü konuşuyoruz. Bir de English Ninjas diye bir uygulama var. Bu uygulamayı da kullandım. Yabancı hocalarla da görüntülü aramalar yaparak

konuşuyordum. Bir de Facebook Erasmus grubundan tanıştığım arkadaşlarım var. Onlarla da yine aynı şekilde Whatsup üzerinden görüntülü konuşuyoruz. [Participant 4]

I meet people in instagram, and we have live talks on WhatsApp. There is also another application called as English Ninjas. I employed this application. It provides its members with live talks with foreign instructors. Additionally, I have some friends from Facebook Erasmus group. We have live talks on WhatsApp. [Participant 4]

Konuşma becerilerimi geliştirmek için kullandığım English Conversations diye bir uygulama var. Bu uygulamada farklı konu başlıkları var, mesala Holiday, Breakfast gibi. Konu seçiyorsun. Konu ile alakalı iki kişinin konuşması karşına çıkıyor. Dinliyorsun öncelikle. Daha sonra istediğin karakteri seçiyorsun bu konuşanlardan ve diğer karakterin konuşmalarına sen karşılık veriyorsun. Sesini kaydedebiliyorsun. Sonradan kendin dinliyorsun. Geri dönüt vermiyor ama. Kendi kaydını dinleyerek, konuşmanı yine sen kendin değerlendiriyorsun. Bu uygulama iyi fakat ana dili İngilizce olan biriyle birebir konuşmak gibi olmuyor. Pratik yapmak lazım ama robota karşı konuşmak gibi değil. [Participant 6]

I use an application named as English Conversations to improve my speaking skills. There are different topics in this application, such as Holiday and Breakfast. When you choose a topic, a dialogue of two people appears. First of all, you are supposed to listen, then you can choose whoever you want, and you can engage in dialogue instead of the person you choose. You can also record your voice and listen to it later. Even though the application doesn't give you feedback, you can make self-evaluation by listening your own record. This application is a good one, but it is not useful as much as speaking with a native. It is necessary to practice but not with robots. [Participant 6]

Grammarly var az önce bahsettiğim. Dil bilgisi hatalarını düzeltiyor ya. Hem dil bilgisini, hem de yazma becerilerini geliştiriyor. Mesela yazdığım bir metindeki hatalarımı görüyorum. Nerde, nasıl, ne kullanmam gerekiyor? Bunlarla alakalı geri dönüt veriyor. Bazen kelimeleri düzeltiyor, bazen yazım yanlışlarını düzeltiyor. [Participant 1]

As I just mentioned, there is Grammarly. This application corrects grammatical errors and develops both grammar and writing skills. For example, I can see my mistakes in a text written by me. It gives information about the usages of the grammatical patterns and words and provided feedback. It sometimes corrects the whole words or misspellings. [Participant 1]

Yazma becerilerimi geliştirmek için herhangi bir uygulama kullanmıyorum ama sosyal medya üzerinden arkadaşlarımla yazışıyorum. Mesela İngilizce öğrenen insanlarla ya da İngilizce öğreten öğretmenlerle farklı uygulamalar üzerinden, Engvid gibi tanışıyorum. Daha sonra onlarla Instagram üzerinden iletişim kuruyoruz. Bu şekilde yazma becerilerim gelişiyor. [Participant 4]

I don't use any application to improve my writing skills, but I have written communication with my friends on social media. For example, I meet people who learn English or teachers who teach English through different applications such as Engvid. Following this, we communicate on Instagram. I try to improve my writing skills. [Participant 4]

Word Booster, okuma becerilerimi geliştirmemde de faydalı oluyor. Oradan makale okuyorum sonuçta. Yine internetten de makaleler okuyorum. Bir de Essay Advanced var. Bu uygulamada da makaleler var ve yazma becerilerimi geliştirmek için çok faydalı oluyor. Bu uygulamalar sayesinde farklı türdeki makaleleri okuyorum ve aslında nasıl yazılır bunu görüyorum aynı zamanda. [Participant 6]

Word Booster helps me develop my reading skills as I read articles in this application. I also read articles on internet. There is also Essay Advanced application. It includes some articles and make important contributions to the development of writing skills. Thanks to these applications, I can read articles on different topics and see how they are written. [Participant 6]

Kelime öğrenmek için kullandığım uygulamalarda küçük bir aktivite var. Drops'da vardı sanırım bir de Duolingo'da da olması lazım. Öğrendiğin kelimeleri yazıyorsun. Bunun dışında bir uygulama kullanmadım. [Participant 7]

There is a simple activity in the applications that I employ while learning vocabulary. It must be in Drops and Duolingo applications. You write the words you have learned. I haven't used any applications except them. [Participant 7]

Duolingo uygulamasında yazma becerilerini geliştirmek için aktiviteler oluyor. Genelde çeviri aktiviteleri. İngilizce cümlenin Türkçe karşılığı ya da Türkçe cümlenin İngilizce karşılığı gibi. Bunun dışında herhangi bir uygulama kullanmıyorum. [Participant 9]

There are some activities in Duolingo applications to practice writing skills. They are mostly translation activities and you can translate sentences in either language Turkish and English. I don't use any application. [Participant 9]

Flipboard diye bir uygulama var. Makaleler falan oluyor. Gazeteler falan. Hem gündemi takip etmiş oluyoruz hem de makale okumuş oluyoruz. [Participant 1]

There is an application named as Flipboard that includes some articles and newspapers. You can not only follow the latest news but read lots of reading materials, as well. [Participant 1]

Sosyal medyadan da haber sitelerinin sayfalarını takip ediyorum. Dikkatimi çeken bir şey olduğunda sitesine girip okuyorum. Özellikle Instagram ve Facebook'tan takip ediyorum. [Participant 9]

I follow the news on social media. I browse the website if something appeals to me. I especially use Instagram and Facebook. [Participant 9]

Belirli bir uygulama yok kullandığım ama sosyal medyada takip ettiğim bazı sayfalar var. Oradaki sayfaları okuyorum. Özellikle Instagram ve Facebook. İngilizce öğretimi ile ilgili sayfalar var öğretmenlerin olduğu. Orada paylaşılan makaleleri de okuyorum. [Participant 8]

Even though there isn't any certain application that I use, there are some pages on social media I follow. I read texts on Instagram and Facebook. There are also webpages related to English teaching whose members also include teachers. I read texts shared on these pages. [Participant 8]

Genelde sosyal medya üzerinden takip ettiğim sayfalar var; Facebook'tan, Twitter'dan, ve Instagram'dan. Buralardan okuma yapıyorum çoğunlukla. [Participant 10]

I mostly follow pages on social media, including Facebook, Twitter and Instagram. I read texts shared on these platforms. [Participant 10]

Word Booster okuma becerilerimi geliştirmemde de faydalı oluyor. Oradan makale okuyorum sonuçta. Yine internetten de makaleler okuyorum. Bir de Essay Advanced var. Bu uygulamada da makaleler var. Farklı türdeki makaleleri okuyorum bu uygulama sayesinde. [Participant 6]

Word Booster helps me develop my reading skills as I read articles in this application. I also read articles on internet. There is also Essay Advanced

application. It includes some articles. I can read articles on different topics. [Participant 6]

BBC News mesela. Güncel haberleri takip ettiğim için, ne olmuş, ne bitmiş, insanların genel sorunları ne, neyi tartışıyorlar, bir fikrim olmuş oluyor. Voscreen de dizi ve filmlerden kesitler sunarak kültüre dair bir fikir veriyor. [Participant 9]

For example, BBC News. Since I love following current news on what happened, what problems people have, what they are discussing. Voscreen, on the other hand, presents some shots from series and movies and gives information about culture. [Participant 9]

Gidip o ülkede yaşayarak öğrenme fırsatım yok maalesef. Ama telefonumdan sosyal medya hesaplarıma her an ulaşabiliyorum ve tanıştığım insanlarla görüntülü konuşuyorum. Arkadaşlarımdan öğreniyorum. Şaşırıyoruz bazen. Farklı ve benzer yönlerimizi tartışıyoruz. Bu şekilde öğreniyorum. [Participant 4]

Unfortunately, I don't have the opportunity to live in a foreign country to practice language, but I can communicate with others on my social networking sites and have live talks with people I meet. I also learn from my friends, discussing our similarities and differences. I can learn thanks to this. [Participant 4]

Kahoot! diye bir uygulama var. Arkadaşlarınla bağlanıp test çözebiliyorsun. Mesela şu aralar onlar Cadılar Bayramı'nı kutluyorlar sanırım. Sürekli bununla ilgili test bildirimleri geliyor. Şu testi çözmek ister misin, bu testi çözmek ister misin diye. [Participant 6]

There is an application named as Kahoot. You can have tests with your friends. For example, they must be celebrating Halloween now because I always get notifications about it. The application offers several tests on this topic. [Participant 6]

Şuan yanımda İngilizce kitap yok, sözlük yok. Ama telefon var. İnsanlar yanlarında bir gramer kitabı taşımıyorlar, kelime çalışırım deyip yanlarında kelime kartları ya da cep sözlükleri taşımıyorlar. Ama cep telefonlarını her zaman yanlarında taşıyorlar. [Participant 2]

I don't have any English books and a dictionary now, but I have my mobile phone. People may not carry their grammar books, vocabulary cards or pocket dictionaries, but they always have their mobile phones. [Participant 2]

Bilgiye anında ulaşabiliyorsun. Cebinde. Mesela ben English Grammar adlı uygulamayı o yüzden kullanıyorum. Bazen İngilizce dil bilgisi ile ilgili unuttuğum bir şey oluyor, bu uygulamaya hemen erişebiliyorum ve ilgili konunun videosunu izliyorum. Bu bakımdan etkili olduğunu düşünüyorum. [Participant 6]

You can get instant information thanks to your mobile phone. For example, I use the application "English Grammar" for this reason. I sometimes forget some grammatical points and need to apply for a reference, so I can access to the application and watch video on the topic that I need to learn. I find it useful. [Participant 6]

Bir kere basılı bir sözlük kullandığımda çok zaman kaybı yaşıyorum. Ama telefondan baktığımda hemen bulabiliyorum. Çok da hızlı bir şekilde karşıma geliyor. [Participant 2]

I waste a great deal of time when I use a traditional dictionary, but my mobile phone quickens the process. I can quickly find the meanings of the words. [Participant 2]

İngilizceye maruz kalabileceğimiz herhangi bir ortam yok maalesef. Ama bir şekilde maruz kalmak zorundayız sınıf dışında. Bir de hocalarımızın ana dili Türkçe. Onların da belki yanlış öğrettikleri şeyler olabilir. Ana dili İngilizce olan

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insanlarla etkileşim kurmamız da gerekiyor. Mobil cihazları kullanarak İngilizcemizi geliştirebiliriz. [Participant 9]

Unfortunately, there isn't any environment in which we can be exposed to English Language. However, we need to practice English outside the classroom. On the other hand, our lecturers speak Turkish as their first language. They may have some missing points, so we need to communicate with native speakers. We can improve our language skills by using mobile devices. [Participant 9]

Çevremizde ana dili İngilizce olan insanlar yok neticede. Biz bu dile maruz kalamıyoruz sınıf ortamı dışında. Kendi çabalarımızla telefonlar sayesinde bu imkânı elde ettiğimizi düşünüyorum. [Participant 8]

There isn't anybody who can speak English as a first language. We cannot find natural language learning environment outside the classroom. Therefore, I think that we can benefit from the opportunity to talk with native speakers thanks to our mobile phones. [Participant 8]

Sonuçta herkesin yabancı bir ülkeye gidip de dil öğrenme imkânı olamayabilir. Ama telefonlar sayesinde gitmiş kadar olabiliyorsunuz. Etkili bir yol. İnsanlarla konuşabiliyorsun, her bakımdan dilini geliştirebiliyorsun. [Participant 4]

Everybody may not have the chance to visit a foreign country to learn a second language. However, mobile phones present great convenience. We can talk with others and practice language. [Participant 4]

Mesela otobüste gidiyorum diyelim, 5 dakikalık bir boşluğum var, değerlendirebiliyorum. Yani otobüsle bir yerden bir yere giderken bile İngilizce öğrenmeye devam edebiliyoruz. [Participant 1]

For example, let's say that I am on the bus and have five minutes spare time. We can practice while going from somewhere to somewhere. [Participant 1]

Çünkü sevdiğim şeylerle, sevdiğim şekilde öğreniyorum. Böylece eğlenerek İngilizcemi geliştirebiliyorum. Eğlenceli oluyor. [Participant 1]

Because I learn through things that I enjoy according to my preferences. Thus, I can improve my English language skills while entertaining. [Participant 1]

Bir de işin aslı, İngilizce gazeteleri sürekli satın alamayız ama internetten ulaşabiliriz. Bu kaynaklara erişimimiz kolaylaşır. [Participant 2]

As a matter of fact, we cannot afford buying English newspaper forever, but we can easily access those newspapers through internet. [Participant 2]

Çok güzel uygulamalar var. Herkes kendine uygun bir uygulama bulabilir. Ben de kendi ilgi alanıma ve ihtiyaçlarıma göre seçiyorum uygulamaları zaten. Bu yüzden etkili. [Participant 6]

There are great applications. Everybody can find a suitable one for themselves. I can also choose my best application, so I can benefit from it effectively". [Participant 6]

Telefon gündelik hayatımızda zaten kullandığımız bir araç. Kullanması gayet kolay. İngilizce öğrenmek için kullandığımda zorlanmıyorum. [Participant 3]

Mobile phones are used by almost everybody in their daily lives and they are easy to use. I don't have difficulty in using my mobile phone to learn English. [Participant 3]

Ana dili Türkçe olmayan insanlarla iletişim kurabiliyorum. İngilizcemi iletişim kurarak geliştiriyorum. Bunu teknoloji sayesinde yapıyorum, sonuçta bu insanlarla içinde bulunduğum ortamda karşılaşma ihtimalim yok. İletişim kurabilmek insana özgüven sağlıyor. [Participant 9]

I can have communication with those who are native speakers of English and improve my language skills. Thanks to this technology, I can develop my self-confidence as I have the chance to talk to others whom I cannot meet in my country. [Participant 9]

Etkili değil, çünkü bir uygulamayı kullanırken ya da Youtube'dan bir video izlerken bir anda karşıma reklam çıkabiliyor. İlgi çekici bir reklamsa, reklama yönelebiliyorum. Dikkatim dağılıyor. [Participant 3]

They are not effective since there may occur an advertisement or a notification while using an application or watching a video on Youtube. If the advertisement appeals to me, I may lose my concentration and focus on it instead of the learning material. [Participant 3]

Bir de diyelim ki bir uygulamayı kullanıyorum. O anda bildirim yukarıda belirdi. İstemesem bile bakıyorum ve dikkatim dağılıyor. Bu durum küçük yaştaki öğrenciler için daha bile kötü olur. [Participant 9]

Let's say that I use an application. I check it and lose my concentration when a notification occurs on the screen. This may adverselt affect young learners. [Participant 9]

Dil bilgisini öğrenmek ve yazma becerilerini geliştirmek için etkili bir uygulamanın olduğunu düşünmüyorum. Grammarly diye bir uygulama kullanmıştım fakat hiç memnun kalmadım. Çünkü yazdığım paragrafta yaptığım gramer hatalarını düzeltmiyordu. Bilerek hata yaptığım oluyordu düzeltip düzeltmediğini test etmek için. [Participant 3]

I don't think that there is an effective applicatio that can be used to learn grammar or improve writing skills. I once used an application called as Grammarly, but I

didn't like it since it didn't correct the mistake I made on a paragraph. I sometimes do mistakes intentionally to check if it will correct me. [Participant 3]

Şarj problemi var. Hemen bitiyor uzun süreli kullanınca. [Participant 8]

There is a battery problem. The battery gets empty if the application is used for longer periods. [Participant 8]

Bir de uygulamaları kullanmak için internet bağlantısının sürekli olması gerekiyor. Bu bana göre engel mesela. [Participant 8]

You need to have internet connection to use the application. This is a barrier for me. [Participant 8]

Bazen bilgisayar gerekli oluyor. Klavye ayrı, fare ayrı. Ama telefonda hepsi bir arada. Daha fazla zaman alıyor bazen telefonda bir şeyleri yazmak. Bir de mesela PowerPoint' in de uygulaması var ama çok kullanışlı değil. Ekran küçük, zor oluyor. [Participant 9]

I sometimes need a computer, but there may be problem when you have to carry the keyboard or mouse. On the other hand, you can have all of them in a mobile device. It may sometimes to take more time to write in mobile phone. There is a powerpoint application, but it isn't functional. The screen is small, and this is a challenge for me. [Participant 9]

Artık bilgisayarla yapabileceğimiz hemen hemen her şeyi mobil cihazlarla da yapabiliyoruz uygulamalar sayesinde. Mesela ben bundan iki yıl önce ders çalışmak için kütüphaneye giderken bilgisayarımı yanımda taşımak zorunda kalıyordum. Ama şimdi Word'ün bile uygulaması var. İndirdim telefonuma. Raporlarımı telefondan yazıyorum. PowerPoint bile var. [Participant 9]

Thanks to the applications, we can do almost everything that once could be done only through computers. For example, I had to carry my computer with me while going to the library two years ago. However, there is even an application of Word processor. I can write my reports on my mobile. I can even use Powerpoint. [Participant 9]

Evet etkili olabilir. Ama gerçekten etkili kullanmak gerekiyor. Mesela okullarda öğrencilere tablet dağıtılıyor ama onların tabletleri ne amaçla kullandıkları meçhul. Öğrenciler bilinçli değil. Böyle olunca da etkili olmuyor. [Participant 10]

Yes, it may be functional, but it is essential to use the language effectively. For example, tablet devices are distritbuted in schools, but it is not certain that how students use their devices. Since they are not conscious, they don't become effective. [Participant 10]

Bir de çok fazla uygulama var. bazıları tamamen bilgi kirliliği. Etkili uygulamaları seçebilmek de ayrı bir kabiliyet olsa gerek. [Participant 10]

There are a wide range of applications, and some of them are really waste of time. It is important to choose the best applications, and this may need extra effort. [Participant 10]

Bir de her uygulamayı indirmeye gerek yok. Çok fazla uygulama var. Yani seçici olmak gerekiyor. Birisinin beğenmediği uygulamayı ben beğenebiliyorum. Her insanın eksiği farklı olduğundan, onu tamamlayabilecek uygulamalar da farklı olabiliyor. Benim için iyi olan bir program, bir başkası için iyi olmayabilir. O yüzden keyif aldıkları, eğlenerek kullandıkları, kendileri için faydalı olduğuna inandıkları uygulamaları seçsinler. Böylece daha düzenli kullanırlar. [Participant 1]

It isn't logical to download every application you find. There are a great number of applications. Said another way, users must be conscious about selecting the most suitable one for themselves. I may like an application that is not favored by others. Since interests of people may differ, the applications are likely to show variances in terms of people's interests. Therefore, learners should use the applications that appeal to them. They use it regularly thanks to this. [Participant 1]

Birçok uygulama var ve öğrenciler kesinlikle kendilerine uygun olan uygulamaları kullanmalı. Sevmedilerse ya da faydalı olduğunu düşünmüyorlarsa ısrarla kullanmaya devam etmemeliler. Kimisi görsellerle öğrenmeyi sever, kimisi de resimlere ihtiyaç duymaz. Herkes kendi ihtiyaçları ve istekleri doğrultusunda farklı uygulamalara yönelmeli. [Participant 6]

There are a wide range of applications, and students should use the most suitable one for themselves. If they dislike or don''t think that it is useful for them, they should give up using it. Some people learn better through visual images, whereas others don't need any images. Everybody should be inclined to the applications that suit well with their needs and interests [Participant 6]

Seviyelerine uygun uygulamaları bulmaları gerekiyor. Ne seviyelerinden düşük ne de yüksek olmalı. Yüksek olursa zorlanırlar, özgüvenleri olumsuz yönde etkilenir. Bir de kendi ilgilerine hitap edebilecek bir uygulama olmalı. [Participant 8]

They need to find the applications that are suitable for their levels. It must be neither high nor low level according to their current levels. If they use an application which is not suitable for their levels, they may have difficulty in using it and their self-confidence may be adversely affected. It must be also appealing to their interests. [Participant 8]

Öğrenciler öncelikle işe iyi uygulamalar seçerek başlamalılar. Uygulama kaç kişi tarafından kullanılıyor? Kullanıcılar kaç puan vermiş? Güvenli mi? Eğer

gerçekten etkili bir uygulama ise yaygın olarak kullanılır. Yani popularitesi vardır. [Participant 9]

Students must begin with selecting the most convenient applications for them. The number of people using the application and their scores as well as its safety are important considerations. If an application is really effective, it is used by lots of people. Said another way, it is regarded as a popular one. [Participant 9]

Öğrenciler kendi öğrenmelerini yine kendileri etkin bir şekilde yönetebilmeyi öğrenmeliler. Uygulamayı kullandıkları süre de önemli. Öğrenciler ne kadar çalışacaklarına karar vermeliler. [Participant 10]

Students should be able to learn how to manage their own learning process. The usage duration of the application is also important. Students need to decide how time they will allocate to use this program. [Participant 10]

Hangi uygulamayı ne amaçla kullanacaklar bu süreçte, bunun kararını vermeliler öncelikle. Net olmalılar. [Participant 5]

First of all, they must decide which application they use and what for. They must be clear with their objectives. [Participant 5]

İndirdikleri uygulamaları da düzenli olarak kullanmaları gerekiyor. Dil gerçekten öğrenmek istiyorsanız, düzenli kullanmak şart. Ben bir uygulama indirmiştim Almanca öğrenmek için. Düzenli kullanmadığım için etkili olmadı. [Participant 9]

They need to employ the applications they download to have full benefits. If you really want to learn a language, a regular usage is advised. I once downloaded an application to learn German, but I couldn't benefit since I didn't use it continuously." [Participant 9]

Bir de farkında ve bilincinde olmalılar uygulamalardan nasıl faydalanılabileceğinin. [Participant 6]

They also must be aware of how they can benefit from the applications. [Participant 6]

Etkili nasıl kullanacaklarının bilincinde olarak hareket etmeleri gerekiyor. Sonuçta iyi ve kötü yanları var bu işin. Buna uygun davranmalılar. [Participant 10]

They should know how to use them effectively as there may be pros and cons of these devices. They should act accordingly. [Participant 10]

İlla bir uygulama bulup kullanmalarına gerek yok. Bence sosyal medya üzerinden yabancı insanlarla irtibata geçip tanışabilir ve onlarla konuşabilirler. Instagram da hesaplar var mesela. Belirli bir konuda insanlar tartışıyorlar ve herkes olayı kendi kültürüne göre yorumluyor. Bu sayfalarda yorumlar yapabilirler. Yine insanlarla etkileşime geçebilirler. [Participant 4]

They don't need to necessarily use an application. I think they can communicate with foreigners thanks to social media and practice. On the other hand, there are some social networking sites, such as Instagram in which people have discussions on a certain topic and each person makes comments from their own perspectives. They can write comments on these platforms and have interactions with others. [Participant 4]

Teknoloji çağındayız ve yeni nesil teknolojiye bizden daha fazla hâkim. Geleneksel yöntem ve metotlar ilgilerini çekmeyecektir. [Participant 8]

We are in a technological era and the new generation has more knowledge on technology more than us. Traditional methods and techniques may not be appealing to them. [Participant 8]

Ben native speaker değilim. Öğrencilerimin İngilizceyi daha etkili bir şekilde öğrenmelerini isterim ve telefonların bu konuda işe yarayacağını düşünüyorum. [Participant 9]

I am not a native speaker. I want my students to learn English more effectively, and I think that mobile phones can help them on this issue. [Participant 9]

Öğrencilerin bilmedikleri kelimelere telefonlarına indirdikleri uygulamalardan bakmaları süreci hızlandırıyor. Zamandan kazanıyorsun. [Participant 1]

The fact that students can check the meanings of unknown words through applications they have downloaded quickens the process. We can save time. [Participant 1]

Herkesin akıllı telefonu var günümüzde. Sınıfta herkesin sahip olduğu bir teknolojik cihaz olduğundan, kullanılması oldukça faydalı olabilir. [Participant 3]

All people have smartphones today. It would be very beneficial since all students have a technological device in the classroom. [Participant 3]

Sınıftaki herkesin ortak bir şekilde kullanabileceği uygulamalar var, onları ilerde sınıfta kullanmak isterim. Özellikle grup çalışmalarında etkili olabileceğini düşünüyorum bu uygulamaların. Grup tartışmaları yapabilirler. [Participant 3]

There are some applications that all students can use simultaneously in the classroom. I also want to employ them in future classes. I think that they can be useful for group works. Students can have group discussions. [Participant 3]

Özellikle öğrencilerimin dinleme becerilerini geliştirmelerine ve telaffuzlarını düzeltmelerine yardımcı olabilecek uygulamaları sınıf içinde kullanırım ve sınıf dışında da kullanabilecekleri uygulamaları kullanmaları konusunda

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yönlendiririm. Fakat gramer ve yazma becerileri için kullanmam. Geleneksel yöntemlerle öğretirim bunları. [Participant 3]

I try to use the applications that help students improve their listening skills and pronunciations in the classroom. I also inform them about the applications they can benefit from outside the classroom as extracurricular activities. However, I don't use any program for grammar and writing skills. I use traditional methods while teaching grammar and writing. [Participant 3]

Bir de benim de kullandığım Voscreen diye bir uygulama var. Film ve dizilerden kesitler oluyor. Dinleme becerilerini geliştirmek için oldukça faydalı olur sınıfta kullanmak. [Participant 6]

There is also an application called as Voscreen that I also use. It gives some shots from series and movies. It would be useful to use them in the classroom to improve listening skills. [Participant 6]

Az önce bahsettiğim Kahoot uygulamasını kesinlikle kullanacağım. Öğrencilere okullarda tablet de dağıtılıyor. Bu uygulama kullanılabilir sınıfta. Gerçekten çok güzel bir uygulama. Çok renkli, resimli sorular da ekleyebiliyorsunuz. Konuyu anlattıktan sonra test yapılabilir. [Participant 6]

I will certainly use Kahoot application that I have just mentioned. Tablet devices are distributed to students in schools, so this application can be included while teaching. It is a nice application that enables its users to add colorful questions with pictures. A test examination can be conducted after the instruction. [Participant 6]

Bir de bazı uygulamalar var sınıfta quiz yapmak için kullanabileceğimiz Kahoot ve Plickers gibi. Hangi öğrenci ne cevap vermiş görebiliyoruz. Çok eğlenceli de oluyor. [Participant 8]

There are also some applications such as Kahoot and Plickers which we can use in the classroom to prepare some quizzes for students. We can see the answers given by each student. It is also enjoyable process. [Participant 8]

Mesela bir tane uygulama var mesela Edmodo diye. Bu uygulamayı hem sınıf dışında öğrenciler ödevlerini teslim etmek için kullanabilirler, hem de sınıf içinde görevlendirmeler yapmak için ben kullanabilirim. Yani sınıf içi etkinlikler için. [Participant 5]

For example, there is an application called as Edmodo. This application can be used not only by students themselves to submit their assignments, but also by teachers to assign a task to students in the classroom activities. [Participant 5]

Farklı seviyelere hitap edebiliyor. Öğrencilerim seviyelerine göre ayarlama yapabilirler. [Participant 6]

Using mobile devices in the classroom can address students with different language levels, and students can practice according to their levels. [Participant 6]

Bir de bazı uygulamalar var sınıfta quiz yapmak için kullanabileceğimiz. Hangi öğrenci ne cevap vermiş görebiliyoruz. Çok eğlenceli de oluyor. [Participant 9]

There are also some applications which we can use in the classroom to prepare some quizzes for students. We can see the answers given by each student. It is also enjoyable process. [Participant 9]

Kalabalık bir sınıfta kim gerçekten neyle ilgileniyor, bunun kontrolünü sağlayamayız. Öğrenciler gerçekten dersle alakalı aktiviteyi mi yapıyorlar ya da telefonda farklı bir şeyle mi meşgul oluyorlar? Bu bir problem. Daha az kişi olsa, belki daha rahat kontrol sağlanabilir. [Participant 8]

We cannot completely control the actions of individuals in a crowded classroom. So, there is always a question if the students really engage with the course or give their interest to something else. This is a real problem. It would be easier to control them if there were less people. [Participant 8]

Ama bir yerden sonra dikkatin dağılıyor. Birinden mesaj geliyor, bir arama geliyor. İster istemez ilgin o yöne kayıyor. Ben öğretmen olarak, bunu yönetemem. Kalabalık bir sınıfta, kimin ne yaptığını takip edemezsin. Ben de şuanda derste sadece eğitim amaçlı kullanamıyorum. [Participant 1]

However, they start to lose their concentration after a certain period of time. They receive a text message or a call, so they may focus on that message or call. As a teacher, I cannot manage this. It is very difficult to follow what individuals do in a crowded classroom. So, I cannot say that students employ these devices onlu for educational purposes. [Participant 1]

Belki dikkatleri dağılabilir fakat bu beni bir öğretmen olarak çok ilgilendirmez. Yani gerçekten sözlüğe mi bakıyorlar ya da başka şeylerle mi ilgileniyorlar. Bunun kontrolünü ben yapamam ve gerek de duymuyorum. Öğretmenin sorumluluğu olarak görmüyorum. [Participant 5]

They may lose their concentrations, but I don't mind this as a teacher. Said another way, I don't mind if they look an unknown word up in a dictionary or engage with something different. I cannot control this and don't need to do so. I don't consider it as responsilibity of the teacher. [Participant 5]

Özellikle öğrencilerimin dinleme becerilerini geliştirmelerine ve telaffuzlarını düzeltmelerine yardımcı olabilecek uygulamaları sınıf içinde kullanırım ve sınıf dışında da kullanabilecekleri uygulamaları kullanmaları konusunda yönlendiririm. Fakat gramer ve yazma becerileri için kullanmam. Geleneksel yöntemlerle öğretirim bunları. [Participant 3]

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I mostly prefer to use applications that help my students improve their listening skills and pronounciations and encourage them to use some others to employ during their self learning activities. However, I don't use any application in grammar and writing courses. I employ traditional methods during these courses. [Participant 3]

Maddi durumu iyi olmayan öğrenciler olabilir sınıfta. Telefonları olmayabilir. [Participant 8]

There may be some students who cannot afford the mobile devices. Said another way, they may not have smart phones. [Participant 8]

Sınıfiçi uygulamalar planlanırken düşünülmesi gereken en önemli şey bence İngilizce öğrenmek için kullanma konusunda öğrencilerin istekli olup olmadığıdır. [Participant 7]

I think the most imporant thing that should be considered while planning the instructional activities is whether the learners are willing to learn English or not. [Participant 7]

Bir de öğretmen ve öğrenciler sınıf içinde kullanılacak olan bir uygulamanın nasıl kullanılacağını biliyor olmalı. Bilmiyorlarsa, ders süresince bir yandan da bu durumdan kaynaklı problemleri çözmeye çalışmaları zaman kaybına yol açar. [Participant 7]

Teachers and students should have some information on how to use the application used in the classroom. If not, they may have to deal with the problems caused by this lack of knowledge on utilisation of the application and waste the instructional time. [Participant 7]

Bir de aslında şöyle bir durum var. Okullarda öğrencilerin cep telefonları ile sınıfa girmelerine izin verilmiyor. Bu durum da benim mobil cihazları İngilizce öğretmek

*için sınıfta kullanmamı olumsuz yönde etkileyecek bir faktördür diyebilirim.
[Participant 5]*

There is also an issue that should be mentioned. Students aren't allowed to enter the school and classroom with their mobile phones. This may be considered as a barrier in integrating mobile devices into instructional activities. [Participant 5]

İngilizce öğretmek için sınıfta kullanacakları uygulamaları da özenle seçmeliler. Kullanımı karmaşık olmayan uygulamalar olmalı. Konuya ve amaca da uygun olmalı. [Participant 6]

Teachers should determine the applications they intend to use in the classroom with utmost care. Complex applications shouldn't be employed during instruction. They should be in line with the topic and objectives of the course. [Participant 6]

Ya da mesela uygulama düzgün çalışmıyor. Eğer hoca ısrarla kullanmaya devam ederse sorun oluyor. [Participant 3]

Or the application may not function properly. If the teacher insists on using it, problems may occur. [Participant 3]

Bir de sınıfa her türlü uygulama getirmemeli. Öğrenciye hangi uygulama faydalı olur diye üzerinde düşünmeli. Mesela diyelim ki konuşma konusunda sıkıntı yaşıyoruz, ona yönelik uygulamalar yapmalı. [Participant 2]

All applications shouldn't be brought into the classroom. Before employing an application during instruction, the concenience and effectiveness of a program should be evaluated. Applications should be selected according to the needs of the students. For example, it students have difficulty in speaking skills, an application should be employed to improve their speaking skills. [Participant 2]

Öğrenciler bir uygulamayı beğenmeyebilirler. Kullanmak istemeyebilirler. Bu konuda anlayışlı olabilirler. Biz ihtiyacımız olan ve ilgimizi çeken uygulamaları kullanmak isteriz. [Participant 4]

Students may dislike an application, so they may prefer not to use it. Teachers should act with some sympathy towards students on this issue. Students are generally opt for applications that appeal to them or they need [Participant 4]

Bir de öğrencilerin ilgilerini çekmeli öğretmenin sınıfta kullanmak istediği uygulama. Yani öğrencilere 90'lı yıllardaymış gibi içerik sunan bir uygulama olmamalı. Bu ilgilerini çekmez. Bu konularda dikkatli olmalılar. [Participant 8]

The application that is intended to be used in the classroom should be appealing for students. To put it differently, it shouldn't feel like as if students were doing an activity in 1990s. This doesn't attract them. Teachers should attach importance to have updated applications. [Participant 8]

Bütün öğrencilerin aynı anda birlikte dâhil olabileceği, birlikte öğrenebilecekleri uygulamaları seçmeliler sınıf ortamında kullanmak için. [Participant 8]

Teachers should prefer applications that can engage all students in the classroom simultaneously so that they can collaborate while learning. [Participant 8]

Bence en önemlisi, sınıftaki herkesin katılabileceği etkinlikler planlamalılar mobil cihazları kullanarak. Bu tarz etkinlikler sayesinde derse katılmak istemeyen öğrenciler bile derse katılmak zorunda kalır. [Participant 9]

I think that the most important thing is that activities that can involve all students in the classroom should be planned. Thus, those who are unwilling to engafe with the course may perform better when they are included. [Participant 9]

Öncelikle eğlenceli bir öğrenme ortamı oluşturmak için faydalanmalılar mobil cihazlardan. [Participant 6]

First of all, mobile devices should be used to build an enyojable learning environment. [Participant 6]

Öğrencilerin mobil cihazları ne amaçla kullandıklarını kontrol etmeliler ve İngilizce öğrenmek amacıyla kullandıklarından emin olmalılar. [Participant 9]

Teachers should control what for students employ mobile devices and ensure that students benefit from them to learn English. [Participant 9]

Bir de öğrenciler ders boyunca uygulama kullanmamalı. Belirli zaman aralıklarında kullanmalarına izin vermeli. [Participant 2]

Students shouldn't use mobile devices through the lesson, but they should be allowed to use them in certain time intervals. [Participant 2]

Öğretmenler sınıf içinde mobil cihazları kullanacaklarsa öncelikle kuralları çok net bir şekilde belirlemeliler. Yani uygulamanın nasıl, ne kadar sürede, ne amaçla kullanılacağının bilgisi öğrenciye net bir şekilde verilmeli. Yani nasıl kullanılacak, bu öğrenciye net bir şekilde aktarılmalı. [Participant 5]

Lecturers should set the rules clearly if they employ mobile devices during their instructions. Said another way, students should be informed about how, how long, what for the application will be used. Students should know the process from the beginning. [Participant 5]

Bir de öğretmenin kullanacağı uygulamanın öğrenciler tarafından da kabul görmesi gerekiyor. Öğrencinin de ihtiyaçlarına hitap etmesi gerekiyor. Öğretmenler bu durum öğrenciye farklı uygulamalar sunmalı ve öğrenci hangisini kullanacağını belirlemeli. Alternatifler her zaman olmalı. [Participant 5]

The application that will be used by a lecturer should be welcomed by students. It should be able to satisfy students' needs, as well. Lecturers should present alternatives and students should be able to decide what to use. [Participant 5]

Bazen mesela hoca bir uygulama kullanmamızı söylüyor derste. Ama o uygulama sınıf için uygun olmuyor. Ben öğrenci olarak memnun kalmayabiliyorum. Ya da mesela uygulama düzgün çalışmıyor. Eğer hoca ısrarla kullanmaya devam ederse sorun oluyor. Bize sormuyor. Bu yüzden öğrenciye fikri sorulmalı. Eğer sevmedilerse yeniden düzenlemeler yapılmalı. [Participant 3]

For example, our lecturer prompts us to use an application, but that application sometimes may not be convenient. I, myself, may not get satisfaction from it, or it doesn't work properly. There will be conflicts if the lecturer insists us to use it. Our preferences aren't taken into consideration, but I think that students should engage with decision process, and necessary regulations should be made if necessary. [Participant 3]

Avantajlı mı, dezavantajlı mı? Uygulamaları nasıl keşfedecekler? Bu konularda bilgilendirilmeli öğrenciler. [Participant 10]

Is it advantageous or disadvantegeous? How can they discover the applications? Students should be informed on these issues? [Participant 10]

Öğretmenlerimin kendileri sınıfta kullanmalı. Etkili uygulamalar yapmalı. Ben de böylece nasıl etkili bir şekilde kullanılır, görerek öğreneyim. [Participant 2]

My lecturers, themselves, should integrate technology into their instructions and made good practices. Thanks to this, I can learn through observations. [Participant 2]

Hazırlık sınıfında ve bölümde ders veren hocalar derslerinde mobil cihazlardan daha fazla faydalanmalı. Mobil cihazları kendi öğretme süreçlerine entegre

etmeliler. Biz de onların uygulamalarının olumlu ve olumsuz yanlarını görebiliriz. Bize rol model olmaları gerekiyor. [Participant 5]

Lectures who teach students in preparatory language classrooms as well as in ELT department should benefit from mobile devices frequently. They should be able to integrate mobile devices into their instructions. Thus, we can observe the good and bad practices with these devices and applications. They should be role models. [Participant 5]

Öğretmenlerimin sınıftaki yanlış uygulamaları hep dikkatimi çekmiştir. Hep sunumu açıyorlar ve okuyoruz. Bence öğretmenler öğrencilerin tepkilerine dikkat etmeliler. İlgilerini çekebilecek şekilde entegre etmeliler. Bir de bize de uygulama yapmamız için daha fazla fırsat tanımalılar derslerde. Tabi ki kendileri de etkili uygulamalar yapabilmeli. [Participant 6]

I always pay attention to improper practices of my lecturers. They mostly open a presentation and we just read. To my opinion, lecturers should attach utmost importance to students' reactions. Students should be encouraged to engage with the lesson. Additionally, we should be provided more opportunities to make practice in the classroom. They also must be able to perform well. [Participant 6]

Derslerde uygulamaları sıklıkla kullanmalıyız ve hocalarımız hangi yaş gruplarıyla nasıl uygulamalar kullanabileceğimiz konusunda bizlere yol göstermeliler. Fakat bu hiç olmadı. Derslerde kendileri kullanmıyorlar ve bize de kullanmamız için fırsat vermiyorlar. Bu yüzden zaten yetkin hissetmiyorum. [Participant 7]

We should include applications frequently in courses and our lecturers should inform us which applications can be used while teaching different age groups. However, we haven't had this kind of lesson yet. After all, lecturers, themselves, don't employ them while instructing. We also don't have the opportunity to use

them. Thus, we don't think we are competent enough to use these applications. [Participant 7]

Öğretmenler sınıfta bu cihazları etkili bir şekilde kullanabilmemiz için bize gerekli teorik bilgiyi sunmalılar ama uygulama daha önemli. Uygulamalı olarak öğretmenlerin sınıfta etkili bir şekilde nasıl kullandıklarını görmeliyiz. Sonra bize de uygulama yapmamız için fırsat sunulmalı. Sadece bilgi sunuyorlar ama. [Participant 1]

Lecturers should provide us with necessary theoretical knowledge so that we can employ these devices in classroom effectively. We should also be able to observe how lectures use them while teaching in an effective way. Then, we must be provided opportunities, but we mostly get theoretical knowledge. [Participant 1]

Bizim nesil teknolojiye hâkim genelde. Ama eğitim amaçlı nasıl kullanılır, bu konuda eksikleri olabiliyor. Hoca öğrencilere bu konuda bir kapı açmalı. Bir farkındalık oluşturmalı. Biz zaten buluruz uygulama sonrasında. [Participant 4]

Our generation is often familiar with technology, but there may be some missing points in terms of employing technology for educational purposes. Lecturers must focus on this issue and create awareness. Then, we, students, can find convenient applications. [Participant 4]

Her öğretmenin iyi ve kötü deneyimleri vardır. Ama öğretmenler sadece iyi olanları paylaşıyorlar. Mesela yurtdışı deneyimlerini anlatırken hep olumlu yönlerini anlatıyorlar. Bunlar yurt dışında hiç mi kötü bir şey yaşamadılar? Mesela hiç mi hasta olmadılar ya da yemek problemi yaşamadılar. Deneyimlerini bize her bakımdan tam olarak anlatmalılar. Teknoloji konusunda da bu şekilde olmalı. Diyelim ki bir uygulama kullandı. Avantajlarının yanında aksaklıkları da aktarmalı. Ama sadece avantajlarından bahsediyorlar ve kullanmamız konusunda ısrarcı oluyorlar. [Participant 3]

Almost every teacher has good or bad experiences, but teachers only share the bad ones. For example, they always talk about the good sides of their overseas experiences. I wonder if they haven't had any bad experience in abroad. I am also curious about whether they have had any diseases or problems with cuisine. They should transmit their experiences in terms of good experiences as well as bad ones. This should be available for technological issues, as well. Let's imagine they used some applications. They should talk about their good and bad sides. However, we mostly listen to good sides and they insist us to embrace them while our learning and teaching. [Participant 3]

Teknolojik gelişmeleri takip edebilme yeteneğimizi de geliştirmeliyiz. İngilizce öğretmek için farklı güncel teknolojileri nasıl daha etkili bir şekilde kullanabiliriz? Bu konuda da daha çok uygulamalar yapmalıyız. Hocalarımız bize bu fırsatı sunmalılar. [Participant 8]

We should develop our skills on being able to keep up with the new technological advancements. How can we employ different current technologies while teaching English in an effective way? We should do more practices on this issue. We must be provided these opportunities by our instructors. [Participant 8]

Bence teknolojinin dil öğretiminde etkili bir şekilde kullanılmasıyla ilgili çeşitli dersler olmalı. Var ama az sayıda bence. [Participant 1]

I think there must be courses on employing technology in language teaching effectively. Actually, there are some courses, but the number of them aren't enough." [Participant 1]

Sadece teorik bilgi sunulmamalı, uygulamalar yapabileceğimiz dersler olmalı ve bize uygulayarak öğrenmemiz konusunda fırsat verilmeli. [Participant 4]

There shouldn't be just theoretical content in the courses, but practical applications and good practices. We should be provided opportunities to learn while practising. [Participant 4]

Bu programda İngilizce öğretmeyi öğreniyoruz ama günümüz koşullarında nasıl öğreteceğimizi öğrenmiyoruz. Günümüz öğrencileri de farklı ayrıca. Onlara hitap edebilecek miyiz güncel olmayan bilgilerimizle. Şuana kadar iki dersimiz oldu bunları öğrenebileceğimiz. Bence hem sayıca az, hem de içerik olarak yetersiz bu dersler. [Participant 8]

In this program, we learn about how to teach English, but don't learn how to achieve this in todays' conditions. Current students are different, as well. I question myself about if we can address them through our existing knowledge and skills. We have only two courses which we can learn about these issues. I think the number of courses isn't enough, and the contents of the existing ones are insufficient. [Participant 8]

Bu derslerin içerikleri de bize beceri kazandırma konusunda yetersiz. Bu derslerde bu arada bilgisayarla alakalı şeyler öğrendik. Mobil cihazlarla alakalı hiçbir şeye değinmedik mesela. [Participant 9]

The content of these courses isn't enough to make us gain some skills. In other words, we have learned some information related to computer, but there wasn't any content about mobile devices and their applications. [Participant 9]

Bir de zorunlu bilgisayar dersi var mesela. Bu derste programları nasıl kullanabileceğimizi öğreniyoruz. Bilmediğimiz birçok şey oluyor. Böyle teknolojik cihazları, mesela mobile cihazları kullanmayı öğreneceğimiz zorunlu dersler de olmalı. Biz bunları öncelikle nasıl kullanacağımızı bilelim, sonra da derste İngilizce öğretmek amacıyla nasıl etkili kullanabiliriz bunları öğrenelim. Bu dersler seçmeli değil, zorunlu olmalı. [Participant 3]

For example, we have compulsory computer course. We learn how to use programmes in this course, but there may be a wide range of issues which we don't know. There must be courses on how to use technological devices, particularly mobile phones. First, we must learn how to use them by ourselves, then we can employ them our instructional practices. These courses even must be compulsory rather then elective ones. [Participant 3]

Aslında programda teknoloji ile ilgili dersler var fakat yeterli olduğunu düşünmüyorum. Bir de içeriği ile alakalı sıkıntı var bence. Bilgisayarın nasıl kullanılacağını öğrenmek yerine, daha çok İngilizce öğrenmek ve öğretmek için nasıl kullanılacağını öğrenmek daha faydalı olabilir. Çünkü zaten biz bilgisayarla iç içeyiz ve sürekli kullanıyoruz. Bazen çok basit böyle derslerde geliyor öğretilenler. [Participant 5]

In fact, there are some courses on technology in our curriculum, but I don't think they are enough. There are also some problems with the contents of the courses. Instead of learning how to use a computer, it would be better to focus on how we can include technology in language classroom and our instructional processes. After all, we are all familiar with computers and use them continuously. I think current applications are at very simple level [Participant 5].

Staja ayrılan sürenin yetersiz olduğunu ve etkili değerlendirilemediğini düşünüyorum. Stajlarda dersleri gözlemliyoruz, dersler anlatıyoruz ve hocalarımız bizi değerlendiriliyor. Biz öğretmen adayları olarak İngilizce öğretmek için derslerimize teknolojiyi etkili bir şekilde entegre edebiliyor muyuz? Bu açıdan da değerlendirilmeliyiz stajlarımızda. [Participant 9]

I think that the duration of school experience and practice teaching is insufficient, so this period isn't effective for us. We observe lessons, teach some topics and our mentors evaluate us. As pre-service teachers, can we integrate technology into

instructional practices while teaching English? We must approach the issue from this perspective. [Participant 9]

F. SAMPLE PAGE OF CODED TRANSCRIPTIONS

Mobil cihazlarınızı İngilizce öğrenmek için kullanmanız etkili midir?

Participant 1 (Female, 20; Preparatory)

Evet. Etkili olduğunu düşünüyorum. Sürekli elimin altında. Aklıma bir şey takıldığında hemen bakabiliyorum. Ya da mesela otobüste gidiyorum, 5 dakikalık bir boşluğum var, değerlendirebiliyorum. Böylece eğlenerek İngilizcemi geliştirebiliyorum. Çünkü sevdiğim şeylerle, sevdiğim şekilde öğreniyorum. Eğlenceli oluyor.

Immediacy (+)*

Ubiquity (+)*

Enjoyability (+)*

Participant 2 (Female, 18; Preparatory)

Evet. Bir kere basılı bir sözlük kullandığımda çok zaman kaybı yaşıyorum. Ama telefondan baktığımda hemen bulabiliyorum. Çok da hızlı bir şekilde karşıma geliyor. Bir de telefonum elimin altında. İstediğim zaman bakabiliyorum. Bir de işin aslı, İngilizce gazeteleri sürekli satın alamayız ama internetten ulaşabiliriz. Bu kaynaklara erişimimiz kolaylaşır.

Immediacy (+)*

Ubiquity (+)*

Cost-effectiveness (+)*

Participant 3 (Female, 19; 1st)

Hem evet hem hayır. Etkili, çünkü her an elimizin altında. Şuan yanımda İngilizce kitap yok, sözlük yok. Ama telefon var. İnsanlar

Immediacy (+)*

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yanlarında bir gramer kitabı taşımıyorlar, kelime çalışırım deyip yanlarında kelime kartları ya da cep sözlükleri taşımıyorlar. Ama cep telefonlarını her zaman yanlarında taşıyorlar. Etkili değil, çünkü bir uygulamayı kullanırken ya da Youtube'dan bir video izlerken bir anda karşıma reklam çıkabiliyor. İlgi çekici bir reklamsa, reklama yönelebiliyorum. Dikkatim dağılıyor. Dil bilgisini öğrenmek ve yazma becerilerini geliştirmek için etkili bir uygulamanın olduğunu düşünmüyorum. Grammarly diye bir uygulama kullanmıştım fakat hiç memnun kalmadım. Çünkü yazdığım paragrafta yaptığım gramer hatalarını düzeltmiyordu. Bilerek hata yaptığım oluyordu düzeltip düzeltmediğini test etmek için.

> Distraction (-)**

> Ineligibility for some language skills and knowledge (-)**

*Reasons for effectiveness

**Reasons for ineffectiveness

G. TURKISH SUMMARY / TÜRKÇE ÖZET

İNGİLİZCE ÖĞRETMEN ADAYLARININ
MOBİL DESTEKLİ DİL ÖĞRENME PRATİKLERİ VE
MOBİL DESTEKLİ DİL ÖĞRENMEYE İLİŞKİN ALGILARI

1. GİRİŞ

Mobil teknolojilerdeki gelişmeler günlük yaşamımızda hızlı ve köklü değişikliklere neden olmuş ve mobil cihazlar günlük yaşamımızın vazgeçilmez bir parçası haline gelmiştir. Hem yurt dışında (Deloitte, 2016) hem de yurt içinde (TÜİK, 2018) yürütülen çalışmalar, mobil cihazlara sahiplik oranın gün geçtikçe artmakta olduğunu ve mobil cihazların günlük hayatta aktif olarak kullanıldığını (Deloitte, 2017) kanıtlar niteliktedir. Beklenen bir sonuç olarak, mobil teknolojiler ve mobil cihazlar çeşitli alanlardaki dönüşümlerde başrol oynamaktadır. Bu alanlardan biri de eğitimdir ve bu değişim ve dönüşüm ilgili alanyazında mobil öğrenme olarak kavramsallaştırılmıştır.

Winters (2006)'a göre, mobil öğrenme kavramını farklı açılardan ele alarak tanımlanmaktadır. Bazı araştırmacılar, bu kavramı teknolojinin hareketliliğine vurgu yaparak, bazıları ise öğrenenin hareketliliğine vurgu yaparak tanımlamaktadır. Bazı çalışmalarda e-öğrenme ile ilişkilendirilerek tanımlanmaya çalışan bu kavram, bazı çalışmalarda geleneksel sınıf içi öğrenme-öğretme pratiklerini tamamlayan bir araç olarak ele alınmaktadır. Traxler (2005) ve Ally (2009)'ye göre mobil öğrenme, mobil teknolojilerin ve cihazların eğitim amaçlı kullanılmasıdır.

Mobil teknolojilerin ve mobil cihazların dil öğrenmek amacıyla kullanılması ise mobil destekli dil öğrenme (MDDÖ) olarak kavramsallaştırılmaktadır (Wagner ve diğerleri, 2016; Bezircioğlu, 2016).

Mobil destekli dil öğrenmenin dil öğrenenlerin hedef dilde dinleme becerilerini (Azar ve Nasiri, 2014; Hwang ve Chen, 2013), okuma becerilerini (Wang, 2017; Gheytasi, Azizifar ve Gowhary, 2015; Hsu, Hwang ve Chang, 2013; Lin, 2014), konuşma becerilerini (Saran, Seferoğlu ve Çağıltay, 2009; Ahn ve Lee, 2016; Cheng, 2015; Almekhlafy ve Alzubi, 2016; Sun, Lin, Sen, Shen, Qi ve Luo, 2017) ve yazma becerilerini (Khodi, 2015; Andujar, 2016; Eubanks, Yeh ve Tseng, 2017), gramer bilgilerini (Khodabandeh, Alian ve Soleimani, 2017; Moghart ve Marandi, 2017) ve kelime bilgilerini (Hayati, Jalilifar ve Mashhadi, 2013; Wu, 2014; Wu ve Huang, 2017; Kurt ve Bensen, 2017; Sarıçoban ve Özturan, 2013) geliştirmelerinde etkilidir. Ayrıca, mobil teknoloji ve cihazlar sayesinde hedef dilin kültürü de etkili bir şekilde öğrenilmektedir (Ducate ve Lomicka, 2013). Yang (2013), mobil destekli dil öğrenmenin etkililiğine rağmen hak ettiği ilgiyi göremediğine işaret etmiştir. İlgili alanyazında da bu bağlamda farklı pratikler olduğu görülmektedir. İkinci bir dil olarak İngilizce bağlamında yürütülen MDDÖ çalışmalarına göre (Park ve Slater, 2014; Nino, 2015; Wrigglesworth ve Harvor, 2017) öğrenenlerin öğrenme pratiklerinde mobil cihazlarından faydalanmaktadırlar. Yabancı bir dil olarak İngilizce bağlamında yürütülen çalışmalarda ise bazı öğrenenler dil öğrenme pratiklerinde nadiren mobil cihazlardan faydalanmaktadır (Dashtestani, 2013; Dashtestani, 2016). Kimi çalışmalar öğrenenlerin sınıf içinde mobil cihazlardan faydalandıklarını (Bezircioğlu, 2016), kimi çalışmalar ise öğrenenlerin sınıf dışında dil öğrenme pratiklerine mobil cihazları dahil ettiklerini (Öz, 2014) işaret etmektedir. Görüldüğü üzere, MDDÖ pratiklerine ilişkin yürütülen çalışmalar sayıca azdır ve her ne kadar İngilizce öğretmenlerinin ve öğrencilerinin perspektifleirini ortaya koysalar da, İngilizce öğretmen adaylarının perspektifini ortaya koyma koyma konusunda sınırlıdırlar. Bununla birlikte, bahsi geçen çalışmalar her ne kadar ilgili alan

yazını mobil teknolojilerin ve mobil cihazların öğrenme-öğretme pratikleirine dahil edilip edilmediği ile alakalı bilgi sunsalar da, nasıl dahil edildiği konusunda muğlaktırlar.

Ayrıca, farklı bağlamlardaki dil öğrenenleri MDDÖ'ye ilişkin farklı algılara sahiptir. ESL bağlamında Nino (2015), dil öğrenenlerin hem MDDÖ'ye, hem de sınıf içi eğitime entegrasyonu konusunda olumlu algılara sahip olduklarının altını çizmektedir. Benzer şekilde, Li, Cummins ve Deng (2017), İngilizceyi yabancı bir dil olarak öğrenen öğrencilerin mobil cihazların dil öğrenmek amacıyla kullanılmasının etkili olduğuna inandıklarını ve bu sebeple bu bağlamda olumlu algılara sahip olduklarını belirtmektedir. Öte yandan, yabancı bir dil olarak ingilizce bağlamında yapılan farklı bir çalışmada, Dashtestani (2016), dil öğrenenlerinin dil öğrenmek amacıyla mobil cihazlarından yararlanma konusunda bazı endişelerinin olduğuna dikkat çekmiştir.

Benzer bir şekilde, İngilizceyi yabancı bir dil olarak öğreten öğretmenlerin de MDDÖ'ye ilişkin farklı algıları bulunmaktadır. Örneğin, Golshan ve Tafazoli (2014) İranlı İngilizce öğretmenlerin sınıf içi öğretme pratiklerine mobil teknolojileri entegre etme hususunda olumlu algıları olduğunu öne sürerken, Dashtestani (2013) yine İranlı İngilizce öğretmenlerinin aynı hususta temkinli olduğunu ileri sürmektedir. Yani, aynı bağlamda yürütülen çalışmaların bulguları da farklılık gösterebilmektedir.

Bunlara ek olarak, ilgili alanyazında İngilizce öğretmenlerinin ve öğrenenlerin MDDÖ'ye ilişkin algılarını mukayese eden çalışmalar da mevcuttur. Park ve Slater (2014) tarafından ikinci bir dil olarak ingilizce bağlamında yürütülen çalışmanın bulgularına göre, İngilizce öğrenenler MDDÖ'ye ilişkin olumlu algılara sahipken, İngilizce öğretmenlerinin MDDÖ'nün potansiyeli ile ilgili tereddütleri bulunmaktadır ve bu nedenle MDDÖ'yü sınıf içi öğretme pratiklerine dahil etmemektedirler. Yabancı bir dil olarak İngilizce bağlamında yürütülen benzer bir çalışmalarda da (Saudouni ve Bahloul, 2016; Bezircioğlu, 2016) da MDDÖ'nün sınıf içi öğrenme-öğretme pratiklerine dâhil edilmesi hususunda öğrenenlerin olumlu algılara sahip olduğunu, öğretmenlerin ise

çekinceleri olduğu dile getirilmektedir. Bahsi geçen bulgular ışığında, öğretmen ve öğrenenlerin MDDÖ'ye ilişkin algılarının farklı olduğu çıkarılabilir.

Görüldüğü üzere, ilgili alanyazında her ne kadar öğretmenlerin, öğrencilerin MDDÖ'ye ilişkin algılarını ortaya koyan, ya da her iki paydaşın algılarını kıyaslayan çalışmalar bulunsa da; İngilizceyi yabancı bir dil olarak öğrenen hem de öğretecek olan İngilizce öğretmen adaylarının algılarına yönelik çalışmalar sayıca azdır. Bu hususta yürütülecek çalışmalara ihtiyaç bulunmaktadır. Çünkü Lai (2016)'ya göre, dil öğrenenlerin MDDÖ'ye ilişkin algıları onların MDDÖ pratiklerini ve öğrenme çıktılarını etkilemektedir. Richards (1996)' a göre ise, öğretmenlerin kişisel görüş, düşünce, inanış ve algılarının öğretme pratiklerine yön verdiğini ileri sürmektedir. İngilizce öğretmen adaylarının MDDÖ'ye ilişkin algılarını incelemek amacıyla yürütülecek olan çalışma, dolayısıyla hem onların MDDÖ pratiklerini etkileyen faktörleri ortaya koymaya yardımcı olacak, hem de onların gelecekteki olası sınıf içi dil öğretme pratikleri konusunda bilgi verecektir.

Tüm bu veriler ışığında bu çalışma, İngilizce öğretmen adaylarının mobil destekli dil öğrenme pratiklerini ve mobil destekli dil öğrenmeye ilişkin algılarını incelemek amacıyla yürütülmüştür. Çalışma kapsamında aşağıdaki sorulara cevap aranmıştır:

1. İngilizce öğretmen adaylarının MDDÖ'ye ilişkin pratikleri nelerdir?

2. İngilizce öğretmen adaylarının MDDÖ'nün etkililiğine ilişkin algıları nelerdir?

3. İngilizce öğretmen adaylarının MDDÖ'nün avantajları ve dezavantajlarına ilişkin algıları nelerdir?

4. İngilizce öğretmen adaylarının MDDÖ'nün etkililiğinin artırılmasına yönelik yabancı bir dil olarak İngilizceyi öğrenenlere tavsiyeleri nelerdir?

5. İngilizce öğretmen adaylarının MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna ilişkin algıları nelerdir?

6. İngilizce öğretmen adaylarının MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonun etkililiğinin artırılmasına yönelik İngilizceyi yabancı bir dil olarak öğreten öğretmenlere tavsiyeleri nelerdir?

7. Gelecekte MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna yönelik pedagojik becerilerin kazanılmasında, İngilizce öğretmen adaylarının, İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanlarından beklentileri nelerdir?

8. Gelecekte MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna yönelik pedagojik becerilerin kazanılmasında, İngilizce öğretmen adaylarının, İngilizce Öğretmenliği lisans programlarından beklentileri nelerdir?

2. YÖNTEM

Bu çalışma, Creswell ve Plano Clark tarafından tanımlanan, karma yöntem araştırma desenlerinden biri olan sıralı açıklayıcı tasarım kullanılarak yürütülmüştür.

Çalışmanın evreni, Türkiye'deki devlet ve özel üniversitelerin İngilizce Öğretmenliği programlarında okumakta olan İngilizce öğretmen adaylarıdır. Çalışma grubunun belirlenmesinde uygun örnekleme yöntemi kullanılmıştır. Bu bağlamda, çalışma grubunu 2018-2019 eğitim-öğretim yılında, bir devlet üniversitesinde İngilizce Öğretmenliği lisans programında okumakta olan İngilizce öğretmen adayları oluşturmaktadır.

Çalışmanın nicel aşamasına 142 gönüllü İngilizce öğretmen adayı katılmıştır. Katılımcıların çoğu birinci sınıfta okumakta, 19-20 yaşlarında, kadındır.

Çalışmanın nitel aşamasına ise 10 gönüllü İngilizce öğretmen adayı katılmıştır. Katılımcıların yaşı 18-27 arasında değişiklik göstermektedir ve çoğu kadındır. Hazırlık programı, birinci, ikinci, üçüncü ve dördüncü sınıfların her birinden ikişer öğrenci dâhil edilmiştir.

Çalışmanın nicel aşamasında, araştırmacı tarafından ilgili alanyazın dikkate alınarak, İngilizce dilinde geliştirilen bir anket kullanılmıştır. Beş bölümden

oluşan anketin ilk bölümünde katılımcıların demografik bilgilerinin toplanılması amaçlanmıştır. İkinci bölüm, İngilizce öğretmen adaylarının MDDÖ pratiklerini, üçüncü bölüm MDDÖ'nün etkiliğine ilişkin algılarını, dördüncü bölüm MDDÖ'nün avantajları ve dezavantajlarına ilişkin algılarını ve son bölüm MDDÖ'nün sınıf içi öğrenme-öğretme pratiklerine entegrasyonuna ilişkin algılarını ortaya koymayı amaçlamaktadır. Anketin kapsam ve görünüş geçerliğinin sağlanması amacıyla uzman görüşü alınmış ve son haline getirilen ölçek kullanılarak15 İngilizce öğretmen adayının katılımıyla pilot uygulama gerçekleştirilmiştir.

Çalışmanın nitel aşamasında, araştırmacı tarafından ilgili alan yazın dikkate alınarak geliştirilen bir görüşme ölçeği kullanılmıştır. İki bölümden oluşan görüşme ölçeğinin ilk bölümünde katılımcıların demografik bilgilerinin toplanılması amaçlanmıştır. İkinci bölümde ise yedi soru bulunmaktadır. Görüşme ölçeğinin kapsam geçerliğinin sağlanması amacıyla uzman görüşü alınmış ve iki İngilizce öğretmen adayının katılımıyla pilot uygulama gerçekleştirilmiştir.

Pilot uygulamalar sonrasında ise, İngilizce öğretmenliği lisans programında ders vermekte olan öğretim elemanları ile iletişime geçilerek, çalışma hakkında bilgi verilmiştir. Ders saatlerinde anketin uygulanması için izinleri alınmıştır ve anketler belirlenen ders saatlerinde uygulanmıştır. Uygulama sonrası çalışmanın nitel aşamasına katılmak üzere gönüllü olan İngilizce öğretmen adaylarının iletişim bilgileri alınmıştır. Gönüllü İngilizce öğretmen adaylarıyla iletişime geçilerek, uygun gün, saat ve mekân belirlenmiştir ve belirlenen zaman ve mekânlarda katılımcılardan yarı yapılandırılmış mülakat yöntemi ile nitel veriler toplanmıştır. Mülakat, katılımcıların İngilizce dil yeterlik konusundaki kaygılarını önleyerek toplanacak olan verilerin niceliğini ve niteliğini artırmak amacıyla (Mackay and Gass, 2005), Türkçe olarak gerçekleştirilmiştir.

Çalışmada toplanan nicel verilerin analizinde, SPSS 24 (Statistical Package for Social Sciences) programında yürütülen betimleyici istatistikler kullanılmıştır. Nitel verilerin analizinde ise sabit karşılaştırmalı analiz yöntemi kullanılmıştır.

3. BULGULAR

İngilizce öğretmen adayları mobil cihazlarını İngilizce öğrenmek amacıyla kullanmaktadır (M = 3.44; SD = 1.01). Bu bağlamda en sık İngilizce kelime öğrenmek (M = 3.82, SD = .97), ikinci en sık İngilizce dinleme becerilerini geliştirmek (M = 3.63, SD = 1.01), üçüncü en sık İngilizce konuşan ülkerin kültürünü öğrenmek (M = 3.15, SD = 1.18) ve dördüncü en sık ise İngilizce okuma becerilerini geliştirmek (M = 3.06, SD = 1.07) amacıyla kullanmaktadırlar.

İngilizce öğretmen adayları mobil cihazlarını en az sıklıkta İngilizce yazma becerilerinin geliştirilmesinde (M = 2.00, SD = .95) kullanmaktadır. İkinci en az sıklıkta İngilizce dil bilgisi becerilerini geliştirmek (M = 2.49, SD = .86) ve üçüncü en az sıklıkta ise İngilizce konuşma becerilerini geliştirmek (M = 2.70, SD = .92) amacıyla kullanmaktadır.

İngilizce dinleme becerilerini ve okuma becerilerini geliştirmek amacıyla en çok otantik dil öğrenme deneyimi sunan mobil uygulamaları tercih etmektedirler. İngilizce dil bilgisi becerilerini geliştirmek için ise daha çok tümdengelim yaklaşıma sahip uygulamaları tercih etmektedirler. İngilizce kelime öğrenmek amacıyla daha çok iki dilli sözlük uygulamalarını ve yarı-bağlamsal kelime öğrenme deneyimi sunan uygulamaları tercih etmektedirler. İngilizce konuşma becerilerinin geliştirilmesinde, dili iletişim aracı olarak kullanabilmelerine ve konuşma partneri bulabilmelerine olanak sağlayan uygulamaları kullanmaktadırlar. İngilizce yazma becerilerini geliştimek amacıyla kullandıkları uygulamalardaki en önemli özellik mobil destekli geri dönüt sağlamasıdır. İngilizcenin konuşulduğu ülkelerin kültürlerinin öğrenilmesinde ise yine otantik içerikler sunan uygulamalardan faydalanılmaktadır.

İngilizce öğretmen adayları MDDÖ'nün etkili olduğunu düşünmektedirler (M = 3.03; SD = .42). Bu bağlamda MDDÖ'yü en çok İngilizce dinleme becerilerini geliştirmede etkili bulmaktadır. İkinci sırada İngilizce kelimelerin öğrenilmesinde (M = 3.38, SD = .57), üçüncü sırada İngilizce konuşulan ülkelerin kültürlerinin öğrenilmesinde (M = 3.29, SD = .74) ve dördüncü sırada ise İngilizce okuma becerilerinin geliştirilmesinde (M = 3.06, SD = .75) etkili bulmaktadırlar.

MDDÖ'nün en az İngilizce yazma becerilerinin geliştirilmesinde etkili olduğu düşünülmektedir (M = 2.39, SD = .78). İkinci sırada İngilizce dil bilgisi becerilerinin geliştirilmesinde (M = 2.67, SD = .71) ve üçüncü sırada ise İngilizce konuşma becerilerinin geliştirilmesinde en az etkili olduğu düşünülmektedir.

Mobil cihazların dil bilgi ve becerilerinin geliştirilmesindeki etkililiğinin nedenleri ise İngilizce öğretmen adayları tarafından şu şekilde sıralanmıştır:

- Mobil cihazlar, öğrenenlerin bilgiye anında ulaşmalarını sağlar.
- Mobil cihazlar, öğrenenlere otantik dil öğrenme deneyimi sunmaktadır.
- Mobil cihazlar, öğrenenlere ana dili İngilizce olan kişilerle ya da diğer öğrenenlerle etkileşim kurmalarına yönelik çeşitli araçlar sunar.
- Mobil cihazlar sayesinde öğrenenler İngilizceyi zaman ve mekandan bağımsız olarak öğrenme imkanına sahip olurlar.
- MDDÖ eğlencelidir.
- MDDÖ uygun maaliyetlidir.
- MDDÖ bireysel öğrenme farklılıklarına hitap eder.
- Mobil cihazların dil öğrenmek amacıyla kullanılması kolaydır.
- MDDÖ, öğrenenlerin dil öğrenme süreçlerinde özgüven kazanmalarında etkilidir.

Mobil cihazların dil bilgi ve becerilerinin geliştirilmesindeki etkili olmamasının nedenleri ise İngilizce öğretmen adayları tarafından şu şekilde sıralanmıştır:

- Dil öğrenme sürecinde mobil cihazların kullanılması, öğrenenlerin dikkatlerinin dağılmasına sebep olur.
- MDDÖ, İngilizce dil bilgisi ve yazma becerilerinin geliştirilmesi için uygun değildir.
- Mobil cihazların dil öğrenmek amacıyla kullanılması şarjın çabuk bitmesine sebep olmaktadır.
- Mobil cihazların dil öğrenmek amacıyla kullanılması için sürekli internet bağlantısına ihtiyaç duyulmaktadır.
- Mobil cihazlar bilgisayarlar kadar konforlu değildir.
- Öğrenenler MDDÖ'nün potansiyelinden bihaberdir.
- MDDÖ, dijital okuryazarlık becerilerine sahip olmayı gerektirmektedir.

İngilizce öğretmen adayları MDDÖ'nün avantajlarına ilişkin olumlu algılara sahiptirler (*M* = 3.09, *SD* = .37). İngilizce öğretmen adaylarına göre mobil cihazların dil öğrenmek amacıyla kullanılmasının tek dezavantajı şarjın çabuk bitmesine sebep olmasıdır.

İngilizce öğretmen adaylarının MDDÖ'nün etkililiğinin artırılmasına yönelik öğrenenlere tavsiyeleri şu şekildedir:

- Uygulama seçiminde dikkatli olmalılar.
- Öğrenme süreçlerini iyi yönetebilmeliler.
- Öz-disiplini sağlamalılar.
- MDDÖ'nün avantajları ve dezavantajları ile ilgili farkındalık geliştirmeliler.
- Mobil cihazları ana dili İngilizce olan insanlarla ya da diğer öğrenenlerle etkileşim kurmak için en iyi şekilde kullanmalılar.

İngilizce öğretmen adayları mobil cihazların sınıf içinde öğretme-öğrenme pratiklerine entegrasyonuna ilişkin ise orta derecede olumlu algıya sahiptirler (*M* =2.83; *SD* = .26).

İngilizce öğretmen adaylarının mobil cihazların sınıf içinde öğretme-öğrenme pratiklerine entegrasyonun etkililiğinin artırılmasına yönelik İngilizce öğretmenlerine tavsiyeleri ise şunlardır:

- Uygulama seçiminde dikkatli olmalılar.
- Öğrenen profilini iyi tanımlamalı ve öğrenenlerin MDDÖ'ye ilişkin hazırbulunuşluk düzeyleri ve kabulleri konusunda duyarlı olmalılar.
- Öğrenenlerin işbirliği yapabileceği MDDÖ etkinlikleri tasarlamalılar.
- MDDÖ uygulamalarında zaman kısıtı koymalılar.
- MDDÖ uygulamalarında öğrenenlerin dikkatlerinin dağılmasına sebebiyet verebilecek faktörleri kotrol altına almalılar.
- MDDÖ uygulamalarında talimatları öğrenenlere açık ve net bir şekilde vermeliler.
- MDDÖ uygulamalarında öğrenenlere farklı alternatifler sunmalılar. Tek bir uygulamanın kullanılması noktasında ısrarcı olmamalılar.
- MDDÖ uygulamaları sorasında öğrenenlerden uygulamanın etkililiğine yönelik geri dönütler almalı ve öğretme pratiklerini dönütler doğrultusunda yeniden gözden geçirmeliler.
- MDDÖ'nün avantajları ve dezavantajlarına ilişkin öğrenenlerde farkındalık oluşturmalılar.

MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna yönelik pedagojik becerilerin kazanılmasında, İngilizce öğretmen adaylarının, İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanlarından beklentileri aşağıdaki gibidir:

- İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanları kendi öğretme pratiklerine teknolojiyi entegre etmeli ve İngilizce öğretmen adaylarına bu bağlamda rol model olmalılardır.
- İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanları İngilizce öğretmen adaylarının teknolojinin

öğrenme-öğretme pratiklerine entegrasyonuna yönelik hem teorik hem de pratik açılardan gelişmelerinde yardımcı olmalıdırlar.

- İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanları teknolojinin öğrenme-öğretme pratiklerine entegrasyonunun avantajları ve dezavantajları hakkında İngilizce öğretmen adaylarında farkındalık oluşturmalıdır.

- İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanları İngilizce öğretmen adaylarının dijital okuryazarlık becerileri geliştirmelerine yardımcı olmalıdırlar.

- İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanları eğitim teknolojileri alanındaki güncel gelişmeleri yakından takip etmelidirler.

MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna yönelik pedagojik becerilerin kazanılmasında, İngilizce öğretmen adaylarının, İngilizce Öğretmenliği lisans programlarından beklentileri ise şu şekildedir:

- Teknolojinin öğrenme-öğretme pratiklerine entegrasyonu ile ilgili derslerin sayısı artırılmalıdır. Ders içerikleri ise eğitim teknolojileri alanındaki güncel eğilimleri kapsayacak şekilde güncellenmelidir.

- İngilizce öğretmen adaylarının dijital okuryazarlık becerilerini geliştirmelerine yardımcı olacak nitelikteki derslerin sayısı artırılmalıdır. Ders içerikleri ise farklı teknolojilerin kullanılmasına yönelik becerilerin geliştirilmesini sağlayacak şekilde güncellenmelidir.

- İngilizce öğretmen adaylarına Okul Deneyimi dersinde teknolojinin öğrenme-öğretme pratiklerine entegrasyonuna yönelik daha fazla gözlem yapma imkanı sunulmalıdır. Öğretmenlik Uygulaması dersinde ise teknolojinin öğrenme-öğretme pratiklerine entegrasyonuna yönelik daha fazla uygulama yapma imkanı sunularak deneyim kazanmaları sağlanmalıdır.

4. TARTIŞMA VE SONUÇ

Çalışmada elde edilen bulgular, İngilizce öğretmen adaylarının dil öğrenme pratiklerinde mobil cihazlardan faydalandıklarını göstermektedir. İlgili alanyazında MDDÖ pratiklerine ilişkin farklı bağlamlarda yürütülen çalışmalarda da (Öz, 2014; Nino, 2015; Wrigglesworth ve Harvor, 2017; Park ve Slater, 2014) benzer sonuçlar işaret edilmiştir. Çalışmanın bir diğer bulgusu ise İngilizce öğretmen adaylarının MDDÖ'yü etkili bulduğudur. İlgili alanyazın da MDDÖ'nün öğrenenlerin İngilizce dinleme becerilerini (Azar ve Nasiri, 2014; Hwang ve Chen, 2013), okuma becerilerini (Wang, 2017; Gheytasi, Azizifar, ve Gowhary, 2015; Hsu, Hwang, ve Chang, 2013; Lin, 2014), konuşma becerilerini (Saran, Seferoğlu, ve Çağıltay, 2009; Ahn ve Lee, 2016; Cheng, 2015; Almekhlafy ve Alzubi, 2016; Sun, Lin, You, Shen, Qi, ve Luo, 2017), yazma becerilerini (Khodi, 2015; Andujar, 2016; Eubanks, Yeh, ve Tseng, 2017), dil bilgisi becerilerini (Khodabandeh, Alian, ve Soleimani, 2017; Moghart ve Marandi, 2017) ve kelime bilgilerini (Hayati, Jalilifar, ve Mashhadi, 2013; Wu, 2014; Wu ve Huang, 2017; Kurt ve Bensen, 2017; Sarıçoban ve Özturan, 2013) geliştirmelerinde etkili olduğuna işaret etmektedir. Bununla birlikte bu çalışmada bulunduğu gibi ilgili alanyazında da MDDÖ'nün öğrenenlerin İngilizce konuşulan ülkelerin kültürlerini öğrenmelerinde etkili olduğunun altı çizilmektedir (Ducate and Lomicka, 2013). Dashtestani (2016) ve Almekhlafy ve Alzubi (2016) de benzer bir şekilde öğrenenlerin MDDÖ'yü etkili bulduklarına değinmişlerdir.

Bununla birlikte, İngilizce öğretmen adaylarının MDDÖ'nün avantajlarına yönelik olumlu algılara sahip oldukları görülmektedir. Bu sonuç ise ilgili çalışmaların bulgularını destekler niteliktedir (Li, Cummins, ve Deng, 2017; Bezircilioğlu, 2016; Saudouni ve Bahloul, 2016; Ahn ve Lee, 2016; Hwang ve Chen, 2013; Shih, Lee, ve Cheng, 2015; Saran, Seferoğlu, ve Çağıltay, 2009; Hwang, Shih, Ma, Shadiev, ve Chen, 2016; Sarıçoban ve Özturan, 2013; Nino, 2015).

İngilizce öğretmen adaylarının mobil cihazların sınıf içinde öğretme-öğrenme pratiklerine entegrasyonuna ilişkin orta derecede olumlu algıya sahip oldukları bulunmuştur. Bu bağlamda, çalışma bulguları, ilgili alanyazını MDDÖ'nün sınıf

içi öğretme-öğrenme pratiklerine entegrasyonuna ilişkin olumlu algılar konusunda bilgilendiren çalışmaların bulgularından (Bezircilioğlu, 2016; Saudouni ve Bahloul, 2016; Moghart ve Marandi, 2017; Wang, 2017; Nino, 2015) farklılık göstermektedir.

İngilizce öğretmen adaylarının MDDÖ'nün etkililiğinin artırılmasına yönelik öğrenenlere verdikleri en önemli tavsiye uygulama seçimi ile ilgilidir. Ayrıca, MDDÖ ratiklerinde öğrenenler kendi öz-denetimlerini ve öz-disiplinlerini sağlayabilmeliler ve MDDÖ'nün avantajları ve dezavantajları hakkında bilinçli hareket etmeliler.

İngilizce öğretmen adaylarının mobil cihazların sınıf içinde öğretme-öğrenme pratiklerine entegrasyonun etkililiğinin artırılmasına yönelik İngilizce öğretmenlerine en önemli tavsiyeleri ise yine uygulamanın seçimi ve öğrenen profilinin tanımlanması ile ilgilidir. Bununla birlikte İngilizce öğretmenleri, sınıf içinde öğrenenler arasındaki işbirliğini artıracak etkinlikler tasarlamalılar. MDDÖ uygulamalarında hedeflenen amaçları ve uygulama talimatlarını açık ve net bir şekilde öğrenenlere aktarmalılar. MDDÖ uygulamalarına kısıtlı süre ayırarak öğrenenlerin dikkatlerinin dağılmasını engellemeliler. MDDÖ uygulamalarında kullanılması planlanan uygulama veya uygulamalara alternatif başka uygulama ya da uygulamalar sunmalılar. Öğrenenlerin kendileri için en uygun olan uygulama ya da uygulamaları seçmelerine olanak tanımalılar. Ayrıca her MDDÖ uygulaması sonrasında öğrenenlerden uygulamanın güçlü ve zayıf yönlerine ilişkin geri dönüt almalılar. Böylece kendi öğretme pratiklerini gözden geçirme imkanı bulur ve geliştirebilirler.

MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna yönelik pedagojik becerilerin kazanılmasında, İngilizce öğretmen adaylarının, İngilizce Öğretmenliği lisans programlarında ders veren sorumlu öğretim elemanlarından öncelikli beklentileri, onların kendi öğretme pratiklerine teknolojiyi entegre etmeleri ve İngilizce öğretmen adaylarına bu bağlamda rol model olmalarıdır.

MDDÖ'nün sınıf içi öğretme pratiklerine entegrasyonuna yönelik pedagojik becerilerin kazanılmasında, İngilizce öğretmen adaylarının, İngilizce Öğretmenliği lisans programlarından öncelikli beklentileri ise teknolojinin öğrenme-öğretme pratiklerine entegrasyonu ile ilgili derslerin sayısının artırılması ve ders içeriklerinin eğitim teknolojileri alanındaki güncel eğilimleri kapsayacak şekilde güncellenmesidir.

İngilizce öğretmen adaylarının MDDÖ pratikleri ve MDDÖ'ye ilişkin algılarına yönelik detaylı bir resim sunan bu çalışma, İngilizce öğrenme-öğretme süreçleri için mobil uygulama geliştirenlere bu bağlamda bir ihtiyaç analizi sunmaktadır. Mobil uygulama geliştirme süreçlerinde, sunulan bu ihtiyaç analizinden faydalanılabilir. İngilizce öğretmen adaylarının İngilizce Öğretmenliği programından teknolojinin dil öğrenme-öğretme pratiklerine entegrasyonunda pedagojik becerilerinin geliştirilmesine yönelik beklentilerini ortaya koyan bulgular, müfredat geliştirenler için bu bağlamda yönlendirici olabilir. İngilizce öğretmen adaylarının İngilizce Öğretmenliği programında ders veren sorumlu öğretim elemanlarından, teknolojinin dil öğrenme-öğretme pratiklerine entegrasyonunda pedagojik becerilerinin geliştirilmesine yönelik beklentilerini ortaya koyan bulgular ise sorumlu öğretim elemanlarının kendi öğretme pratiklerini hangi noktalarda yeniden gözden geçirmeleri gerektiğine dair yol gösterebilir.

Bununla birlikte bu çalışmanın bazı sınırlılıkları bulunmaktadır. Çalışmanın nicel aşaması 142, nitel aşaması ise 10 gönüllü katılımcı ile yürütülmüştür ve çalışma grubunun belirlenmesinde uygun örnekleme yöntemi kullanılmıştır. Çalışma grubu, sadece bir devlet üniversitesi ile sınırlıdır. Hem katılımcı sayısından hem de örnekleme yönteminden dolayı bulgular evrenin tarafsız resmini ortaya koyamayabilir.

Çalışmanın bulguları ve sınırlılıkları dikkate alındığında, benzer bir çalışmanın daha fazla katılımcıyla, rastgele örnekleme yöntemi kullanılarak yapılmasına ihtiyaç vardır. Bununla birlikte, İngilizce Öğretmenliği programlarında ders veren sorumlu öğretim elemanlarının MDDÖ'ye ilişkin algıları araştırılmalıdır. İlgili

alanyazında, İngilizce öğretmenlerinin ve öğrencilerinin MDDÖ'ye ilişkin algılarını kıyaslayan ve bir ayrılığa işaret eden çalışmalar bulunmaktadır. Türkiye bağlamında yürütülecek çalışmalara ihtiyaç duyulmaktadır. Ayrıca, çocukların ve yetişkinlerin MDDÖ pratikleri ve MDDÖ'ye ilişkin algıları da araştırılmalıdır.

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<u>TEZİN ADI /</u> <u>TITLE OF THE THESIS</u> (**İngilizce** / English) :
İngilizce Öğretmen Adaylarinin Mobil Destekli Dil Öğrenme Pratikleri Ve Mobil Destekli Dil Öğrenmeye İlişkin Algilari / Pre-Service EFL Teachers' Current Practices and Perceptions of Mobile Assisted Language Learning

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