REPUBLIC OF TURKEY
ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF ENGLISH LANGUAGE TEACHING

EXAMINING THE DIGITAL LITERACY LEVELS OF TURKISH EFL TEACHERS

Selma ÇELİK

MASTER OF ARTS

ADANA / 2024

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MASTER OF ARTS

ADANA / 2024

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Selma ÇELİK

ÖZET

TÜRK İNGİLİZCE ÖĞRETMENLERİNİN DİJİTAL OKURYAZARLIK SEVİYELERİNİN İNCELENMESİ

Selma ÇELİK

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Anabilim Dalı
Danışman: Dr. Öğr. Üyesi Ebru ŞİRE KAYA
Şubat 2024, 133 sayfa

Günümüzde dijital teknolojinin gerekliliği, bireyler, aileler ve arkadaşlar arasındaki sürekli iletişimin sağlanması açısından dijital teknolojinin gerekliliği inkâr edilemez bir gerçektir. Dijital okuryazarlık (DO), 21. yüzyılda hem mesleki hem de günlük yaşam için temel bir gereksinim haline gelmiştir. Gelişmiş dijital araçların eğitime hızlı bir şekilde dahil edilmesi, İngilizce öğretmenlerine zorlukları aşma ve başarılı öğretim sonuçları elde etme fırsatları sunmaktadır. İngilizce öğretmenlerinin, dijital ortamdaki önemli rolleri nedeniyle, öğretimleriyle ilgili çeşitli güncel dijital araçları etkili bir şekilde kullanmaları gerekmektedir. Bu nedenle, dijital teknoloji becerilerini edinmek, sürdürmek ve geliştirmek, özellikle İngilizce öğretmenleri olmak üzere herkes için oldukça önemlidir. Bu çalışma, İngilizceyi yabancı dil olarak öğreten öğretmenlerin dijital okuryazarlık seviyelerini belirlemeyi ve seviyeleri ile cinsiyet, yaş, öğretim deneyimleri arasında bir fark olup olmadığını incelemeyi amaçlamaktadır. Çalışma bunun yanı sıra, İngilizce öğretmenlerinin dijital okuryazarlık seviyelerine ilişkin algılarını, hangi dijital araçları ve sosyal medya platformlarını kullandıklarını, ayrıca dijital araçları kullanırken karşılaştıkları olası sorunları ve zorlukları ile dijital okuryazarlıklarını geliştirme yönündeki önerilerini ortaya koymayı amaçlamaktadır.

Bu araştırma, karma araştırma yöntemlerinden açıklayıcı sıralı araştırma deseni kullanılarak tasarlanmıştır. Araştırmanın amaçları kapsamında, Türkiye'nin Gaziantep şehrine bağlı Şahinbey ilçesinde 2021-2022 akademik yılında görev yapan 250 İngilizce Öğretmeni, uygun örneklem seçimi ile anket çalışmasına katılmıştır. Nicel veriler, Bayrakcı & Narmanlıoğlu (2021) tarafından geliştirilen 5'li likert ölçeği olan Dijital Okuryazarlık Ölçeği aracılığıyla toplanmıştır. Nitel verilerin bir kısmı çalışmada kullanılan ankete eklenen açık uçlu maddeler yolu ile elde edilmiş olup, araştırmanın

diğer nitel veri toplama aşaması olan yarı yapılandırılmış görüşmeler için amaçlı örnekleme yöntemi ile 17 İngilizce Öğretmeni seçilmiştir. Çalışmada, iki veri toplama aracı kullandığı için iki aşamalı bir veri toplama ve analiz prosedürü uygulanmıştır. Nicel verilerin analizi için Lisrel 8.80 ve SPSS 24 programları kullanılmış, nitel verilerin analizi için ise içerik analizi yöntemi benimsenmiştir. Nicel veri sonuçlarına göre, İngilizce öğretmenlerinin dijital okuryazarlık düzeyinin orta seviyede olduğu bulunmuştur. İngilizce öğretmenlerinin dijital okuryazarlık düzeyi ile yaş ve cinsiyetleri arasında anlamlı bir ilişki bulunurken, dijital okuryazarlık düzeyleri ile öğretim deneyimi arasında anlamlı bir ilişki bulunmamıştır. Ayrıca nitel veriler, İngilizce öğretmenlerinin dijital okuryazarlık konusunda kısmi bilgiye sahip olduklarını ancak dijital okuryazarlığın diğer yönlerini yeterince bilmediklerini gösterdi. Bunun yanı sıra, İngilizce öğretmenlerinin öğretimde ve günlük hayatta farklı amaçlarla çeşitli dijital araçları ve sosyal medya platformlarını kullanabildiklerini ortaya koymuştur.

Bu çalışmada ortaya çıkan dijital araçları kullanma konusundaki olası sıkıntıların ve zorlukların genellikle zaman, motivasyon ve Milli Eğitim Bakanlığı'ndan (MEB) destek eksikliğinden kaynaklandığı görülmüştür. Bunun yanı sıra, İngilizce Öğretmenleri, dijital okuryazarlık seviyelerini geliştirmek için seminerlere, kurslara veya eğitimlere katılma, araştırma yapma ve sosyal medya platformlarını takip etme gibi önerilerde bulunmuşlardır. Bu bulgular, dijital becerilerin İngilizce öğretmeni yetiştirme programlarının müfredatına entegre edilebileceğini ve hizmet içi öğretmenlerinin de dijital okuryazarlık becerileri üzerine eğitimlere katılmaya teşvik edilebileceğini ortaya koymaktadır. Özellikle İngilizce öğretmenlerinin önerilerine dayalı olarak, uygulamalı deneyim ve İngilizce öğretmenlerinin etkin katılımını sağlayan eğitimler düzenlenebilir. Son olarak, bu çalışma, İngilizce öğretmenlerinin öğretim amacıyla sosyal medya platformlarından faydalandığını belirtmektedir. Bu sebeple, İngilizce dilinin ögretimi bağlamında, sosyal medya platformlarının etkili ve mantıklı kullanımına yönelik yönergeler geliştirmek İngilizce öğretmenleri arasında destekleyici ve işbirlikçi çevrimiçi topluluklarının oluşmasına ve İngilizce derslerine katkıda bulunacaktır.

Anahtar Kelimeler: İngilizceyi yabancı dil olarak öğreten öğretmenler, Dijital okuryazarlık seviyesi, Dijital okuryazarlık becerileri, Dijital araçlar, Sosyal medya platformları

ABSTRACT

EXAMINING THE DIGITAL LITERACY LEVELS OF TURKISH EFL TEACHERS

Selma ÇELİK

Master Thesis, Department of English Language Teaching
Supervisor: Asst. Prof. Ebru ŞİRE KAYA
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Today, the necessity of digital technologies for ongoing communication among individuals, families, and friends is undeniable. Digital literacy (DL) has become a fundamental requirement for both professional and daily life in the 21st century. The swift integration of advanced digital tools into education offers EFL teachers chances to handle challenges and attain successful instructional results. Due to their crucial position in the digital environment, it is imperative for EFL teachers to proficiently employ a variety of contemporary digital tools relevant to their teaching. Consequently, acquiring, sustaining, and enhancing digital technology skills are vital for everyone, particularly EFL teachers. The present study aims to determine the DL levels of EFL teachers and examine whether there are any differences among their DL levels and gender, age, and years of teaching experience. It also aims to explore EFL teachers' views regarding their levels of DL, what digital tools and social media platforms they use, to portray the possible drawbacks and challenges they face while using digital tools, and to explore their suggestions to promote DL.

The study is structured using the explanatory sequential research design, a mixed-method research design. Based on the purposes, 250 EFL teachers working in the Şahinbey district of Gaziantep, Turkey, during the 2021-2022 academic year and selected by convenience sampling participate in the questionnaire. The quantitative data was gathered through the Digital Literacy Scale, a 5-point Likert scale developed by Bayrakcı & Narmanlıoğlu (2021). For the qualitative data, some open-ended items were added to the questionnaire, and 17 EFL teachers were selected by purposive sampling to conduct semi-structured interviews, which is the other qualitative data collection stage of the

research. As the study utilized two data collection tools, a two-phase data collection and analysis procedure was implemented. Lisrel 8.80 and SPSS 24 programs were used to analyze the quantitative data, while the content analysis was used to analyze the qualitative data. According to the results of quantitative data, it was found that the EFL teachers had a moderate level of DL. Also, there was a significant relationship between EFL teachers' DL level and their age and gender, while there was no meaningful relationship between their DL level and teaching experience. Moreover, the qualitative data showed that the EFL teachers were knowledgeable about some aspects of DL, but they were still not competent enough to know the other aspects of DL. In addition, it was revealed that EFL teachers utilize various digital tools and social media platforms for different purposes in teaching and their daily lives.

The possible drawbacks and challenges in using digital tools as reported by the EFL teachers, were mainly problems with time, motivation, and lack of support from the Ministry of National Education (MoNE). In addition, the EFL teachers suggested that they should participate in seminars, courses, or training sessions, research, or follow social media platforms to promote their DL skills. These findings imply that DL skills can be integrated into the curriculum of pre-service EFL teacher training programs, and in-service teachers might be encouraged to participate in teacher training courses on DL skills. In particular, a training, including hands-on experience and active participation of EFL teachers, might be conducted depending on the suggestions of the EFL teachers about how to promote DL skills. Lastly, the present study also implies that EFL teachers use social media platforms for teaching purposes. In that sense, establishing guidelines for the effective and responsible use of social media in educational contexts would contribute to fostering a supportive and collaborative online community among EFL teachers.

Keywords: EFL teachers, Digital literacy level, Digital literacy skills, Digital tools, Social media platforms

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Adana / 2024

DEDICATION

This thesis is dedicated to the memory of my beloved grandparents, whose love and support shaped who I am today.

TABLE OF CONTENTS

Page

ÖZET ..... **iv**
ABSTRACT ..... **vi**
ACKNOWLEDGMENTS ..... **viii**
LIST OF ABBREVIATIONS ..... **xv**
LIST OF TABLES ..... **xvi**
LIST OF FIGURES ..... **xviii**
LIST OF APPENDICES ..... **xix**

CHAPTER I
INTRODUCTION

1.1. Background of the Study 1
1.2. Statement of the Problem 2
1.3. Purpose of the Study 4
1.4. Research Questions 5
1.5. Significance of the Study 5
1.6. Assumptions 6
1.7. Limitations 7
1.8. Definitions 7

CHAPTER II
LITERATURE REVIEW

2.1. Literacy 9
2.2. Digital Literacy 9
2.3. Digital Literacy Frameworks 12
2.4. Digital Competence 15
2.5. Digital Competency Areas 16
2.6. Digitally Literate Teachers 18
2.7. Digital Immigrants vs Digital Natives 20
2.8. Digital Literacy in EFL Classes 21

2.9. Digital Literacy of the EFL Teachers 23
2.10. Digital Education in Turkey 24
2.11. Review of Related Research about Digital Literacy in EFL Classes 25
2.11.1. Digital Literacy of EFL Teachers in the Turkish Context 26
2.11.2. Digital Literacy of EFL Teachers in the International Context 28

CHAPTER III

METHODOLOGY

3.1. Research Design 31
3.2. Participants 31
3.3. Data Collection Tools 35
3.3.1. The Questionnaire 36
3.3.2. The Semi-structured Interview 37
3.4. Data Collection Procedure 38
3.5. Data Analysis 39
3.6. Trustworthiness and Ethical Considerations 46

CHAPTER IV

FINDINGS

4.1. The Findings of the Questionnaire 48
4.1.1. The Quantitative Part of the Questionnaire 48
4.1.1.1. The Digital Literacy Level of the EFL Teachers 48
4.1.1.2. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Gender 50
4.1.1.3. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Age 51
4.1.1.4. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Teaching Experience 52
4.1.2. The Qualitative Part of the Questionnaire 54
4.1.2.1. The Analysis of the Item 7 in the Questionnaire 54
4.1.2.2. The Analysis of the Item 8 in the Questionnaire 55
4.1.2.3. The Analysis of the Item 9 in the Questionnaire 56

4.1.2.4. The Analysis of the Item 10 in the Questionnaire 57
4.1.2.5. The Analysis of the Item 11 in the Questionnaire 59
4.1.2.6. The Analysis of the Item 12 in the Questionnaire 61
4.1.2.7. The Analysis of the Item 13 in the Questionnaire 61
4.2. The Findings of the Semi-structured Interview 63
4.2.1. The EFL Teachers' Understanding the Concept of Digital Literacy 63
4.2.2. The EFL Teachers' Views about their Digital Literacy Levels 66
4.2.3. The EFL Teachers' Purposes of Using Digital Tools 68
4.2.4. The EFL Teachers' Use of Digital Tools and Websites for Teaching English 71
4.2.5. The EFL Teachers' Use of Social Media Platforms and their Purposes 77
4.2.7. The EFL Teachers' Suggestions to Promote Digital Literacy 85

CHAPTER V

DISCUSSION

5.1. Discussion of the Quantitative Findings 90
5.1.1. The Digital Literacy Level of The EFL Teachers 90
5.1.1.1. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Gender 92
5.1.1.2. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Age 93
5.1.1.3. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Teaching Experience 94
5.2. Discussion of the Qualitative Findings 95
5.2.1. The EFL Teachers' Understanding the Concept of Digital Literacy 95
5.2.2. The EFL Teachers' Views about their Digital Literacy Levels 96
5.2.3. The EFL Teachers' Purposes of Using Digital Tools 97
5.2.4. The EFL Teachers' Use of Digital Tools and Websites for Teaching English 98
5.2.5. The EFL Teachers' Use of Social Media Platforms and Their Purposes 99
5.2.6. The EFL Teachers' Drawbacks in Using Digital Tools 100
5.2.7. The EFL Teachers' Suggestions to Promote Digital Literacy 101

CHAPTER VI

CONCLUSION

6.1. Overview 104
6.2. Conclusions 104
6.3. Implications 107
6.4. Limitations and Suggestions for Further Research 108

REFERENCES 110
APPENDICES 123
CURRICULUM VITAE 133

LIST OF ABBREVIATIONS

CFA: Confirmatory Factor Analysis

DL: Digital Literacy

DO: Dijital Okuryazarlık

EBA: Eğitim Bilişim Ağı

EFL: English as a Foreign Language

EIN: Educational Informatics Network

ELT: English Language Teaching

FATIH Project: Movement of Enhancing Opportunities and Improving Technology Project

ICT: Information and Communication Technology

MEB: Milli Eğitim Bakanlığı

MoNE: Ministry of National Education in Turkey

PD: Professional Development

LIST OF TABLES

Page

Table 1. Participants and Data Collection Tools 32
Table 2. Teachers' Demographic Features in the Questionnaire (n=250) 34
Table 3. The Cronbach's Alpha Internal Consistency of the Scale 36
Table 4. Confirmatory Factor Analysis T-Values for Items 40
Table 5. Model Fit Index 43
Table 6. Reliability of Scale and Dimensions 44
Table 7. Descriptive Statistics for Scale and Dimensions 49
Table 8. Independent Sample T-Test Table for the Scores of Teachers on the Digital Literacy Scale and its Sub-dimensions Based on Gender 50
Table 9. ANOVA Table for the Scores of Teachers on the Digital Literacy Scale and its Sub-dimensions Based on Age 51
Table 10. ANOVA Table for the Scores of Teachers on the Digital Literacy Scale and its Sub-dimensions Based on Teaching Experience 53
Table 11. The Purposes of Using Digital Tools 54
Table 12. The Way That EFL Teachers Deal with Problems in Digital Settings 55
Table 13. The EFL Teachers' Status of Receiving any Digital Literacy Training and Certificate 56
Table 14. EFL Teachers' Opinions about the Integration of Digital Literacy Skills into ELT Pre-Service Teacher Training Programs 57
Table 15. The Reasons and Suggestions of the EFL Teachers for Topics to Be Included in the Curriculum 58
Table 16. EFL Teachers' Opinions about Taking a Training Course on Digital Literacy Skills 59
Table 17. The EFL Teachers' Suggestions for Training Courses 60
Table 18. The EFL Teachers' Evaluation of their Knowledge about Digital Literacy 61
Table 19. The EFL Teachers' Digital-Related Problems in the Class 62
Table 20. The EFL Teachers' Understanding the Concept of Digital Literacy 64
Table 21. The Digital Literacy Levels of the EFL Teachers 66
Table 22. The EFL Teachers' Purposes of Using Digital Tools 69
Table 23. Digital Tools and Websites for Teaching English 72
Table 24. The EFL Teachers' Use of Social Media Platforms and their Purposes 77

Table 25. The EFL Teachers' Drawbacks in Using Digital Tools 80
Table 26. The EFL Teachers' Suggestions to Promote Digital Literacy 85

LIST OF FIGURES

Page

Figure 1. Digital literacy framework 13
Figure 2. Components of Digital Literacy 14
Figure 3. The DigComp 2.2 framework..... 16
Figure 4. Source: Web of Science, the keyword DL 26
Figure 5. Standard Values Graph for the Digital Literacy Scale 42

LIST OF APPENDICES

Page

Appendix 1. Digital Literacy Scale (DLS) 123
Appendix 2. Semi-Structured Interview 128
Appendix 3. Digital Literacy Scale Score Ranges and Competence 129
Appendix 4. Institution Approval from Cukurova University..... 130
Appendix 5. Permission from the Directorate of National Education 131
Appendix 6. Permission for Digital Literacy Scale 132

CHAPTER I

INTRODUCTION

The introductory chapter gives general information on the present study about EFL teachers' digital literacy (DL). In particular, this chapter consists of seven parts, including the background of the study, statement of the problem, the purpose of the study, the significance of the study, assumptions of the study, the limitations of the study, and definitions of related terms.

1.1. Background of the Study

The use of technology has become an intrinsic part of our lives in many settings, including educational institutions, workplaces, and houses. It is so involved in every walk of our lives that it has become an indispensable thing that we use even in simple daily routines. People use digital tools to accomplish several daily tasks, such as communicating, shopping online, paying bills, reading e-books, and finding information in seconds. We now live in a time when it is almost difficult to remember how we could live without technology. People must utilize information communication technologies (ICT), in addition to the internet and computers, to explore and enhance their DL in today's digital environment. Therefore, being digitally literate is a must for all people. In practice, DL has indeed been recognized as a fundamental learning priority for everyone.

Moreover, education is one of the fields affected by technological developments. As for Turkey, it has been mentioned that the Ministry of Education in Turkey (MoNE) has taken major steps to give a place for educational technology and made huge investments in the usage of digital tools in education (Milli Eğitim Bakanlığı, 2018). The aim is to contribute to teachers' professional development so that they could acquire the required skills of the 21st century and adapt their teaching according to recent changes and developments in education. Thus, there has been a growing interest in the practical use and implementation of technology in the EFL context in Turkey, especially with the FATIH Project, which was administered by the Ministry of National Education in 2011 (FATIH Project, 2019). As a result of this project, almost all schools have started to be equipped with smartboards and tablets. In addition, The Educational Informatics Network (EIN/EBA) has also been introduced within the scope of the FATIH project. EIN/EBA is an online social education platform that provides a number of digital course materials to

use technology for using, sharing, and digitally creating lesson content. Consequently, providing schools with such technology-enhanced facilities and letting teachers and students adopt technology in their lessons have become a vital policy of the Ministry of Education for the digitalized era in the 21st century (FATIH Project, 2019). Furthermore, the FATIH Project and designing media literacy courses as elective courses at schools can be regarded as important implementations of DL skills (Çubukcu & Bayzan, 2013).

Especially today's students are different from the students of the past generation in terms of being aware of technology and benefiting from it a lot in their lives (Prensky, 2001). These student**s** have different points of view on learning, creating, and sharing information since they were born in the area of advanced technologies (Prensky, 2001). Hence, teachers need to arrange their teaching depending on this generation's conditions and come to the class with the necessary knowledge and skills to properly use technology in lessons. In a study about teachers' views on digital educational tools by Çelik & Aytın (2014), teachers stated that they were able to increase their students' motivation and improve their learning as well as long-term retention with the help of digital tools.

There are plenty of websites, applications, and digital tools and platforms for EFL teachers to use in language teaching. Teachers are expected to be familiar with digital settings and have enough competency to be able to adjust their instruction accordingly (Çakıcı, 2017)**.** Today, new technologies, including digital applications on tablets and mobile phones, are being employed in the realm of education, particularly in the instruction of language classes (Kukulska-Hulme, Lee, & Nurris, 2017). As a result, educators are anticipated to be acquainted with the latest technological tools and adeptly explore their functionalities. In that sense, the DL of language teachers is quite important in terms of being effective instructors and managing their language instruction in line with digital teaching and learning. In the digital age of the 21st century, EFL instructors must be knowledgeable about modern technologies (Peachey, 2017). As regards, it is essential to study the DL levels of Turkish EFL teachers and their opinions concerning their DL levels.

1.2. Statement of the Problem

With the COVID-19 pandemic, education is one of the fields that has changed dramatically. The COVID-19 pandemic has led teaching and learning to move away from face-to-face lessons to the online learning environment. Educators, school

administrations, and teachers have found themselves in a totally different and challenging situation. As the pandemic issue has stressed the urgent need for both instructors and students to upgrade their former literacy abilities for needed DL skills, DL skills have been a focus in the field of online learning (Akayoğlu, Satar, Dikilitaş, Cirit, & Korkmazgil, 2020). The abrupt shift in teaching methods has compelled teachers to utilize various digital tools and online platforms for which they were not adequately trained or prepared (Affouneh, Salha, & Khlaif, 2020). It is increasingly clear that teacher proficiency and professional competencies in utilizing digital platforms to enhance instruction are crucial for success in distant online education (Starkey, 2020). They need to be precious and swift to find the best way for teaching and learning digitally. However, since teachers are used to teaching face-to-face and using traditional techniques, they are not competent enough to use digital tools. Therefore, they have had some difficulties to be able to adapt themselves to this new platform. As being digitally literate is essential today, as seen by the widespread improvement and use of current ICTs, EFL instructors should be more knowledgeable about advanced technologies in the digital age of the 21st century (Peachey, 2017). In recent years, the integration of technology into education has been especially vital by providing pedagogical opportunities for both teachers and learners (Teo, Lee, & Chai, 2007). Especially if language teachers adopt technology and use digital tools in their teaching, they can enhance the quality of foreign language teaching, especially in which they have a limited course duration (Arslan & Şahin-Kızıl, 2010).

In addition, information and communication technologies are a field that is developing and changing day by day (Akayoğlu et al., 2020). Because of these rapid developments in technology, teachers, as well as language programs, need to move forward with their current knowledge and skills to be able to adapt to new changes in education (Dashtestani, 2014). However, only knowing how to adapt and use digital tools and platforms for teachers is not enough, and they also need to be digitally literate to judge their safety and use them wisely (Akayoğlu et al., 2020). Therefore, DL is a crucial skill that teachers need to gain. Teachers first need to catch up with those changes and then accommodate themselves as well as their teaching. They need to be digitally literate enough to improve their teaching in 21st-century conditions. The term ‘being digitally literate’ covers having enough information and a range of skills to be able to understand, manage, create, and share information via digital tools or platforms with different aims, people, and also contexts (Dudeney, Hockly, & Pegrum, 2013). Thus, EFL teachers need

to be digitally literate enough to use and adapt developing technology in their teaching. For these reasons, this present study aims to find out the levels of DL of EFL teachers and their opinions concerning their levels.

There is a gap in the literature on the DL levels of EFL teachers. In a recent master thesis written by Ahmed & Akyıldız (2022), two databases were searched, which are Web of Science and SCOPUS, with the aim of indexing related articles published throughout the last 10 years about the DL of EFL teachers. The publication years from SCOPUS over the past decade until 2020, obtained through a search using the keywords "EFL teachers' DL" (Digital Literacy) and the publication years from SCOPUS starting in 2010, reveal that there are merely three studies with the title "EFL teachers' DL" (Digital Literacy). This investigation showed that there were only a few studies (Cote & Milliner, 2018; Juurakko-Paavola et al., 2018; Saud, 2021) about the level of EFL teachers' DL , and this did not see enough attention in the literature (Ahmed & Akyıldız, 2022). Although some research has been carried out in other branches, few studies (Şahin & Han, 2020; Üstündağ et al., 2017; Yılmaz et al., 2017) have addressed the DL of EFL teachers. Therefore, this makes this study significant by contributing to the current literature.

1.3. Purpose of the Study

This study has a mixed-method design by collecting qualitative and quantitative data. With the main purpose of examining the DL levels of EFL teachers, the present study adopts an explanatory-sequential research design. In this research design, the researcher first collects quantitative data and then collects qualitative data after analyzing them.

The study has several objectives. Firstly, the main objective is to determine the DL levels of EFL teachers working in the Şahinbey district of Gaziantep/Turkey and to examine whether there is any difference in DL levels of EFL teachers in terms of gender, age, and years of teaching experience. Secondly, it aims to explore the views of EFL teachers regarding their levels of DL , to explore what digital tools and social media platforms EFL teachers use, and for what purposes. Lastly, it aims to portray the possible drawbacks and challenges that EFL teachers face while using digital tools and also to explore their suggestions to promote DL.

1.4. Research Questions

The study aims to address the following research questions:

1. What do EFL teachers understand from the concept of digital literacy?
2. What is the digital literacy level of EFL teachers?
   - **2a.** Is there a difference among the digital literacy levels of EFL teachers regarding their gender?
   - **2b.** Is there a difference among the digital literacy levels of EFL teachers regarding their age?
   - **2c.** Is there a difference among the digital literacy levels of EFL teachers regarding their teaching experience?
3. What digital tools and social media platforms do EFL teachers use, and for what purposes do they use them?
4. What are the EFL teachers' opinions regarding possible drawbacks and challenges in using digital tools?
5. What do EFL teachers suggest to promote their digital literacy skills?

1.5. Significance of the Study

This study is significant in revealing the findings on the DL levels of EFL teachers and their opinions about their level of DL through a mixed-method research design. DL is considered "an essential requirement for life in a digital age" (Bawden, 2008, p. 30). In light of this, individuals equipped with DL skills gain the capability to navigate and leverage technology effectively. People who have DL skills can benefit from technology appropriately and safely (Hague & Payton, 2010). If people are digitally literate enough, they can probably know how to judge the information on the internet or how to communicate and socialize via digital tools (Hamutoğlu, Canan Güngören, Kaya Uyanık, & Gür Erdoğan, 2017). A few studies (Ahmed & Akyıldız, 2022; Benali, Kaddouri, & Azzimani, 2018; Cote & Milliner, 2018; Juurakko-Paavola et al., 2018; Machmud, 2011; Pratolo & Solikhati, 2020; Saud, 2021; Soifah, Jana, & Pratolo, 2021) have focused on English teachers' DL and their DL levels because there is a lack of instruments to measure the level of DL, and previous scales are not current anymore, so they need to be revised according to today's digital changes (Bayrakcı, 2019). In the relevant literature, it was seen that most of the previous studies (Aslan, 2021; Dedebali, 2020; Hamutoğlu &

Savaşçi, 2019) used the scale, ‘Digital Literacy Scale,’ which was developed by Ng (2012) and adapted into Turkish by Hamutoğlu et al. (as cited in Hamutoğlu, 2017). However, there are some deficiencies in this scale and other existing scales in their development process because they have almost been out of date due to the digital technologies developing day by day (Bayrakcı, 2019). Therefore, this study is significant in determining the DL levels of EFL teachers since it will adopt a recently developed Digital Literacy Scale (DLS) by Bayrakcı (2019). This scale aims to fill the need to update the existing scales and develop a new one after examining DL models and scales in literature (Bayrakcı, 2019). Another significance of the study is that it also yields qualitative data to reinforce and support the quantitative findings, which provides a more comprehensive and subtle understanding the concept of DL among the EFL teachers.

Furthermore, Ahmed & Akyıldız (2022) searched two different databases with the aim of indexing related articles published throughout the last 10 years about the DL of EFL teachers and found out that there is a gap in the literature about the DL levels of EFL teachers. It has been stated that this topic has taken little attention in the literature, and more studies need to be conducted in order to contribute to the current literature (Ahmed & Akyıldız, 2022). As there has been insufficient exploration of DL among in-service secondary school (SS) and high school (HS) Turkish EFL teachers, this study is expected to address this gap and make a valuable contribution to the existing literature. Additionally, it is aimed that EFL teachers' opinions about the concept of DL and their level of DL can provide more in-depth data about the phenomena. The findings of this research can effectively determine the DL levels of EFL teachers.

In summary, exploring the DL levels and perceptions of EFL teachers is a crucial aspect in the literature to address the requirements of English language teaching in the 21st century within the context of a digitalized world. EFL teachers need to be able to use today’s digital tools in order to adapt their teaching to the demands of the 21st century, and they are also required to modify and incorporate the courses into a recent digital context (Kress, 2003; Luzón, 2002; Schmar-Dobler, 2003).

1.6. Assumptions

In this study, it is assumed that the sampling, consisting of 250 EFL teachers, adequately represents the population, and all the participants who took part in the study voluntarily gave sincere and objective answers to the data collection tools used. Additionally, the study's sample comprised EFL teachers working in different types of

schools with considerable experience in utilizing digital tools. Also, they responded to the interview questions based on their expertise and knowledge. Thus, their answers are assumed to reflect their opinions on DL and technological tools, providing insights derived from their thoughts and experiences.

1.7. Limitations

The present study is not without limitations, and it has certain limitations that should be acknowledged. First of all, the study is limited to 250 EFL teachers who voluntarily participated in the study. The participants who responded to the questionnaire were limited to the EFL teachers involved in the study. Since participation in the interviews was voluntary, the interview had a small number of participants as well. Secondly, this study investigates the DL levels of EFL teachers, and it does not involve teachers working in other branches. Hence, the data includes only the opinions of EFL teachers about DL, and the study findings are not generalizable to other teachers from different fields. In addition, the scope of this study is limited to the 2021-2022 academic year, during which the pandemic took place, and teachers had to become more familiar with digital technologies and use digital tools because of online teaching. Therefore, this situation might have affected the responses of the participants throughout the study. Moreover, the number of participants is limited to the context of a number of schools located in the Şahinbey district of Gaziantep. Therefore, the results cannot be generalized to all EFL teachers across Turkey. It means that if this study were carried out in another city in Turkey, the results might have been different, and the reflections of teachers may vary. Lastly, the findings are also limited to the two data collection tools used in the study, which are a questionnaire and semi-structured interviews.

1.8. Definitions

The operational definitions and explanations for each in this study are listed below:

Digital Literacy (DL): Digital literacy is “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers” (Gilster, 1997, p. 1). It goes beyond simply knowing how to use software or operate a digital device, and it encompasses a wide range of complex skills, such as cognitive,

motoric, social, and emotional skills, that users need to acquire in order to use digital environments effectively (Eshet-Alkalai, 2012).

Digital Literacy Skills: They can be defined as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (Digital Literacy Taskforce, 2011).

Digital Tool: It is characterized as any software application designed to create, interpret, or communicate digital resources (Zorich, 2008).

English as a Foreign Language (EFL): The teaching of English to people whose first language is not English (Cambridge Dictionary).

EFL Teacher: A person who teaches English as a foreign language. In the context of this thesis, the phrase refers to English instructors who are employed in a city in Turkey.

The research consists of six chapters, and in this chapter, background information of the study, statement of the problem, the purpose of the study, the significance of the study, assumptions, limitations, and definitions were given. In the next chapter, fundamental concepts, a review of previous studies, and their findings will be summarized.

CHAPTER II

LITERATURE REVIEW

This chapter starts by reviewing the literature on digital literacy (DL). It introduces the fundamental concepts and a review of the literature with a top-down approach, starting from literacy and ending with the DL of EFL teachers in the international context.

2.1. Literacy

The meaning of the term 'literacy' that first comes to mind is probably to know how to read, write, listen, or speak. The word "literacy" is defined in the Turkish Language Association's Contemporary Turkish Dictionary as "the state of being literate" (TDK, 2021). However, literacy is a general term and not limited to simple definitions**.** A report by UNESCO (Unesco, 2006) claims that literacy can be defined with simpler words and in the same way among people. Still, beyond this, as a very complicated and evolving concept, it continues to be defined and interpreted in many ways (UNESCO, 2006). Mcclure (1994) defines literacy as a skill that helps a person read, write, listen, and speak in their mother tongue, as well as how to express themselves, solve problems, reach their goals, develop their existing knowledge, and exceed their potential.

2.2. Digital Literacy

In a broad sense, DL is often discussed in connection with its predecessor, media literacy. The origins of media literacy can be traced back to the 1930s and 1960s in the UK and US, respectively, primarily as a response to wartime propaganda and the growing concerns associated with advertising during that period (Ahmed & Akyıldız, 2022). Subsequently, educators began to enhance media literacy education, aiming to teach individuals how to perceive and interpret the messages they received from the media (Boyd, 2014). Also, individuals were required to enhance their digital and media literacy competence to assess digital and media messages proficiently. Furthermore, Boyd (2014) explains the importance of fundamental media literacy, particularly for teenagers, and also states that people need to have the necessary abilities to develop media literacy. Therefore, they can be aware of some biases that they may recognize in media information, whether conveyed through digital or printed advertisements (Boyd, 2014).

In light of this, individuals possessing technological experience and understanding of computer applications may contribute to assessing information both for themselves and others. However, challenges in acquiring technological proficiency and computer literacy hinder an individual's capacity to participate fully in the digital age (Boyd, 2014).

DL has recently been widespread in the 21st century. It has evolved through time, and its modern form is distinguished by complexity and a concentration on both cognitive and attitudinal aspects of the personality as well as technological abilities. Building on how digital competence is explicitly listed as one of the essential skills for lifelong learning (European Communities, 2007). Understanding and learning how to use digital technology is a part of literacy and is seen as one of the required skills in the 21st century (Godwin-Jones, 2000). Thus, DL can be considered a "survival skill in the digital era" (Eshet-Alkalai, 2004, p. 102). Moreover, DL encompasses the skills required to understand and utilize information presented in various formats when delivered through computers (Jones & Flannigan, 2006). However, there might be occasional confusion between two terms—digital literacy and technological competence—requiring a clear understanding of each. Tang and Chaw (2016) delineate the distinction between these terms in their paper. In their study, Tang and Chaw (2016) revealed that technological competence involves the capability to retrieve information from the internet, whereas DL goes a step further by encompassing the knowledge of recognizing and synthesizing that information whenever and wherever it is needed.

When it comes to defining DL, there are a great number of different definitions, and the precise definition has not been established yet (Akayoğlu et al., 2020; Cote & Milliner, 2018). Gilster (1997) was the first researcher to introduce the idea of DL. DL, recognized as a developing concept, was initially introduced in Gilster's (1997) seminal work, "Definitions of Digital Literacy," where he elaborates on its connection with education. Gilster defines DL as "the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers" (Gilster, 1997, p. 1). Gilster (1997) further emphasized the capacity for critical thought more than IT abilities. However, Bawden (2001) emphasized that the term DL was used to explain the changing nature of reading and writing through the Internet. Bawden (2008) also characterizes DL as an individual's proficiency in searching, finding, evaluating, and generating clear information through typing, writing, tapping, and utilizing other mediums (such as multimedia videos, video calling, and messaging) on diverse digital platforms, which necessitates a fundamental level of computer competency.

In addition, the literature provides many definitions inconsistently changing among scholars (Calvani, Cartelli, Fini, & Ranieri, 2008; Eshet-Alkalai, 2004). UNESCO (2005) defines literacy as:

> the ability to identify, understand, interpret, create, communicate and compute using printed and written materials associated with varying contexts. Literacy involves a continuum of learning that enables individuals to achieve their goals, develop their knowledge and potential, and participate fully in the community and wider society (p. 21).

Furthermore, DL is defined as 'the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills' (Digital Literacy Task Force, 2013, p. 2). In another study, DL is defined as an awareness of digital settings. Dudeney and Hockly (2016) define DL as "an awareness of the social practices that surround the appropriate use of new technologies" (p. 115). In another study, the aspects of DL such as identification, utilization, adaptation, evaluation, and digital creation, are highlighted. Martin (2006) defines DL as being able to identify, use, adapt, and evaluate the existing digital tools and share and digitally create new information. Martin (2006) provides a comprehensive definition that emphasizes the role of electronic media in digital literacies, stating:

> “Digital literacy is the awareness, attitude, and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action and to reflect upon this process” (p. 16).

This comprehensive definition was crafted for the project known as A European Framework for Digital Literacy – DigEuLit (Martin, 2005). It primarily centers around critical thinking, a component of 21st-century skills, by highlighting aspects such as access, integration, evaluation, analysis, and synthesis of information. Additionally, it underscores the importance of producing one's own content and engaging within a social circle to be considered a digitally literate individual (Martin, 2005).

In another study, DL is defined as the ability to use digital tools. Son, Park, & Park (2017) define the concept as "the ability to use computers at an adequate level for

creation, communication, and collaboration in a literate society" (p. 27). The definition of DL is extremely broad, according to Bawden (2008), and can range from very specialized abilities and competencies to general awareness and attitudes.

Therefore, one can deduct from these definitions that DL is a complex and multi-faceted feature with profound cognitive and social dimensions. It encompasses much more than just possessing a certain level of technical knowledge about today's technological devices alone (Bawden, 2008).

2.3. Digital Literacy Frameworks

The definition of DL is a subject of ongoing debate among scholars. Thus, the measurement of DL, as well as the procedures and steps required in developing literacies, remains open to debate due to these disagreements. There are various studies providing frameworks for both scholars and also educators who aim to cultivate digitally literate learners (Bawden, 2008; Belshaw, 2011; Calvani et al., 2008; Eshet-Alkalai, 2004; Ferrari, 2013; Hague & Payton, 2010; Jisc, 2014; Ng, 2012; Son, 2015)

The key points have been proposed and contested by numerous scholars (Bawden, 2008; Belshaw, 2011; Calvani et al., 2008; Eshet-Alkalai, 2004; Ferrari, 2013; Hague & Payton, 2010; Jisc, 2014; Ng, 2012; Son, 2015). First of all, Eshet-Alkalai (2004) proposed a framework including five types of DL, which may help to find out how users of digital tools benefit from different types of digital skills: (a) photo-visual literacy, (b) reproduction literacy, (c) branching literacy (d) information literacy, and lastly, (e) socioemotional literacy. Firstly, photo-visual literacy refers to the capacity to analyze and comprehend visual elements, like images and graphics, within a digital framework, which encompasses abilities associated with understanding and communicating visually (Eshet-Alkalai, 2004). Secondly, reproduction literacy refers to the ability to generate and replicate digital materials, involving proficiency in producing digital artifacts, documents, or multimedia content through the utilization of diverse tools and platforms (Eshet-Alkalai, 2004). Thirdly, branching literacy is regarded as a skill in navigating non-linear structures within digital environments, which entails comprehending and adeptly utilizing elements like hyperlinks, multimedia paths, or branching scenarios commonly present in digital content (Eshet-Alkalai, 2004). Information literacy also includes the competencies necessary for proficiently finding, assessing, and employing digital information, requiring critical thinking to determine the reliability and relevance of digital sources

(Eshet-Alkalai, 2004). Lastly, socioemotional literacy centers around grasping and handling emotions within the digital sphere, which entails proficiency in online communication, collaboration, and social interaction, with a particular emphasis on applying emotional intelligence in digital environments (Eshet-Alkalai, 2004). This framework is designed to connect technical skills with cognitive and socio-emotional skills.

Ng (2012) established another framework based on the work of Eshet-Alkalai (2004).

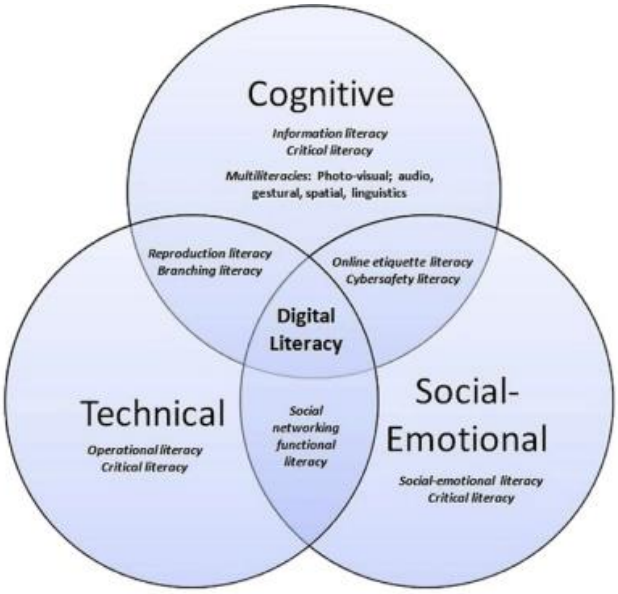

Figure 1. Digital literacy framework
Source: Ng (2012)

As seen in Figure 1, Ng (2012) divided DL into three different sub-dimensions, which are the technical dimension, cognitive dimension, and social-emotional value dimension. These skills are interconnected at certain points and share common elements (Figure 1). The technical dimension symbolizes competence in using information and communication technologies, so it represents the operational skills required to work with a computer or laptop. The cognitive dimension covers the ability to evaluate and judge incoming information in the digital platform. Hence, individuals are necessitated to read and comprehend information utilizing various literacies, including photo-visual, audio, gestural, spatial, and linguistic skills. Lastly, the social-emotional dimension includes collaborative and communicative aspects of the Internet. In this context, the Social-Emotional dimension and Cognitive dimension overlap in the literacies of online etiquette

and cyber safety. Thus, DL is also linked to being critical of digital platforms' safety and protecting oneself regarding possible threats. It means that everyone knows how to behave in digital environments and also how to protect their privacy (Ng, 2012).

Calvani et al. (2008) make another classification in which DL includes four dimensions that are technological, cognitive, ethical, and integration between the three dimensions. Digital literacy or competence results from a complex integration of cognitive processes and dimensions as well as methodological and ethical awareness rather than simple elements of skill or instrumental knowledge (Calvani et al., 2008).

Another researcher, Bawden (2008), classified DL as having four elements, which are attitudes & perspectives (the capacity for independent learning and proper conduct in a digital setting), central competencies (the capacity to compile information from several sources), underpinnings (the capacity to operate computers and software programs as well as to read and write), and background knowledge (an awareness of the creation, communication, and dissemination of both digital and non-digital information from a variety of sources).

Hague and Payton (2010) also identified DL with eight components.

Figure 2. Components of Digital Literacy

Source: Hague & Payton, 2010

Figure 2 illustrates the eight components, including creativity, critical thinking and evaluation, cultural and social understanding, collaboration, the ability to find and select information, effective communication, e-safety, and functional skills (Hague & Payton, 2010).

In another study, Belshaw (2011) created a DL framework and presented eight crucial components, including cultural, cognitive, constructive, communicative,

confident, creative, critical, and civic. Moreover, Ferrari (2013) presented the following five areas with 21 sub-competencies in his Digital Competence Project (DIGCOMP): information, communication, content creation, safety, and problem-solving. It was described as the latest and most comprehensive DL framework. In addition, another study highlighted that DL is context-dependent (Jisc, 2014). Jisc (2014) recommended seven elements of DL, which are media literacy, communications and collaboration, career & identity management, ICT literacy, learning skills, digital scholarship, and information literacy. Another researcher, Son (2015), suggested five components of DL: information search and evaluation, creation, communication, collaboration, and online safety. DL continues to play a crucial role in facilitating personal, social, and professional engagement in public spaces in the contemporary era of the 21st century. The objective of DL frameworks was to assist English and other language teachers in preparing their learners to adeptly navigate the communicative, constructive, and innovative demands and opportunities of this modern age (Dudeney et al., 2013). DL is being employed to revise numerous European language learning programs (Pegrum, Dudeney, & Hockly, 2018).

2.4. Digital Competence

Technology-related abilities like problem-solving, critical thinking, computational thinking, creativity, cooperation, and self-regulation have all been categorized under the term "digital competence" (Kirschner & Stoyanov, 2018). The ability to use technologies, such as technological skills, information technology skills, 21st-century skills, information literacy, digital literacy, media literacy, and internet literacy, is referred to as digital competence in many scholarly discussions (Ilomäki & Lakkala as cited in Khan, & Vuopala, 2019). Similarly, in the field of education, teachers use digital competence to help students develop their 21st-century skills and to give the students the tools they need to use digital tools and technology (Hatlevik & Christophersen, 2013).

Furthermore, the European Commission introduced the digital competence framework, “DigComp,” in 2013 (Redecker, 2017). It aimed to enhance the population's digital competence, assist lawmakers in creating policies, and design education and training initiatives for specific groups. The framework provided a common language for identifying key areas of digital competence, offering a joint European-level framework.

The framework also established the digital competence for educators, which is “DigCompEdu” (Redecker, 2017). The latest version of this framework, which is the "DigComp" 2.2 framework, categorizes digital competencies into five distinct areas.

2.5. Digital Competency Areas

A framework for diagnosing and enhancing teachers' online abilities is the Common Framework for Teaching Digital Competence (Vuorikari, Kluzer, & Punie, 2022). The competencies that have been identified for teachers in the 21st century are critical to improving teaching methods and supporting continuous professional development. The Common Framework for teaching Digital Competence as shown in Figure 3, there are 21 structured competencies and 5 competence areas in the Common Framework for Teaching Digital Competence (Vuorikari et al., 2022).

Figure 3. The DigComp 2.2 framework
Source: Vuorikari, Kluzer, & Punie, 2022, p.67

In Figure 3, the DigComp 2.2 framework presents digital competence, which comprises five dimensions: “information and data literacy, communication and collaboration, digital content creation, security, and problem-solving” (Vuorikari et al., 2022, p.7)

As for the first category in the DigComp 2.2 framework, information and data literacy encompasses managing, storing, and organizing digital content, data, and information and also expressing information needs, and locating and retrieving data to assess the suitability of the source and content. The skills of browsing, searching, and

filtering digital content, expressing information needs, and developing and maintaining customized search strategies are all part of information and data literacy. It also entails assessing the validity and dependability of the data sources and interpreting, analyzing, and critically assessing the content. In summary, information and data literacy encompasses the processes of organizing, storing, retrieving, and processing information in digital environments within a structured environment (Vuorikari et al., 2022).

Secondly, for communication and collaboration competence, one must use digital technologies to interact with others, manage one's online personal identity and reputation, participate in public and private digital services, and be conscious of cultural diversity (Vuorikari et al., 2022). Communication and collaboration competence include working together online, sharing information, and using digital services. It's also crucial to understand how to behave online (netiquette), adjust communication for different audiences, and consider cultural differences. Also, individuals need to manage their online identity, protect their reputation, and handle data from various digital sources. These skills are important for people to use digital technology and become part of society.

Additionally, digital content involves editing and creating digital content, integrating information into existing knowledge with an understanding of copyrights and licenses, and furnishing clear instructions to computer systems. Creating digital content means making and editing digital stuff to express yourself (Vuorikari et al., 2022). Thus, it's about using information to create something new and meaningful. Also, knowing about copyrights and licenses is important for using data and information properly. These skills are crucial for making and sharing digital content effectively (Vuorikari et al., 2022).

In addition, safety content includes some necessary components such as the ability to protect personal information and privacy, preserving one's physical and mental health, understanding the role that digital technologies play in social inclusion, and being conscious of how digital technologies use and affect the environment (Vuorikari et al., 2022). Shortly, understanding risks, using safety measures, respecting privacy, being cautious with personal information, and considering the environmental impact are all important parts of staying safe in the digital world (Vuorikari et al., 2022).

Finally, problem-solving in Figure 3 includes the ability to solve technical and conceptual problems with digital tools, use technology productively, and make deliberate decisions based on the users' needs or purposes (Vuorikari et al., 2022). Problem-solving in digital environments involves recognizing technical issues, using digital tools

creatively, and understanding conceptual challenges. It includes identifying competency gaps, improving personal skills, and supporting others. It also encourages continuous self-development and staying updated with evolving digital trends, emphasizing adept navigation of digital challenges.

2.6. Digitally Literate Teachers

Teachers with DL exhibit a variety of skills and competencies, empowering them to seamlessly incorporate technology into their teaching methods. Building upon the current theoretical framework in the existing literature, Eshet-Alkalai (2012) outlines these characteristics in connection with Digital Literacies (DLs) as “photo-visual skills, reproduction skills, branching skills, information skills, socio-emotional skills, and real-time digital skills” (p. 268).

Photo-visual skills assist users in intuitively and easily comprehending instructions and messages presented in a visual-graphical format (Eshet-Alkalai, 2012). Also, information is conveyed visually through symbols and icons in the graphical user interfaces (GUIs) of digital software (Opperman, 2002). These skills involve possessing a strong visual memory and proficient divergent thinking skills, enabling individuals to function as visual-spatial ICT performers, and this proficiency allows them to adeptly navigate diverse electronic software used for educational purposes. In addition, Photo-visual skills are increasingly crucial for both efficient professionals and scholars (Eshet-Alkalai, 2012). Proficient photo-visual users typically possess a robust visual memory and strong intuitive-associative thinking, attributes that prove valuable in comprehending visual messages (Nielsen as cited in Eshet-Alkalai, 2012).

Secondly, modern scholars need to master a specific set of cognitive skills to effectively navigate digital reproduction technologies, which is known as reproduction skills. These skills involve the synthesis and interpretation of information accessed through digital channels (Gilster, 1997). That means teachers need to reconstruct and reorganize the digital information they have acquired and then effectively present it in their teaching environments. By doing this, they also need to take into consideration their learners' intelligence, needs, and interests (Gilster, 1997).

The third skill in Figure 3 that digitally literate teachers must have is branching skills, also known as hypermedia skills, which can be defined as the capacity to manage dynamic (non-linear) and interlinked (branching) digital information on the web (Eshet-

Alkalai, 2012). It involves composing knowledge from distinct fragments of information obtained in a hypertextual manner on digital platforms (Balcytiene, 2003). Therefore, teachers need to have the ability to stay focused by avoiding getting lost while searching for something or obtaining information via the web or other digital platforms.

Furthermore, digitally literate teachers must also have information-literacy skills, especially in today's life where the growth of information is quite fast and extent. Information-literacy skills are linked to the ability to investigate the reliability of the acquired information in digital settings. Those skills can be regarded as filters that help individuals recognize any kind of information that is false, irrelevant, or biased, and then they try to prevent its infiltration into their cognition (Eshet-Alkalai, 2012). People who have these skills can be regarded as critical thinkers who consistently question information and never believe it without investigation (Paul & Elder, as cited in Eshet-Alkalai, 2012).

Socio-emotional skills are another characteristic of digitally literate teachers in the 21st century. Socio-emotional skills, as the recent and the most intricate ones, are vitally important to acquire for digital communication, as well as participating in some online discussions held by several digital networks (Boyd, 2007). Socio-emotional-skilled users in digital environments can be characterized as individuals who are willing to share their own data and knowledge with others (Wang & Noe, as cited in Eshet-Alkalai, 2012). Consequently, it can be understood that digitally literate teachers are supposed to appropriately communicate, share the knowledge they have, or collaborate through virtual channels such as online discussions, any digital platform for chatting, or social networks like Facebook or Twitter.

Lastly, real-time digital skills are related to people's ability to cope with various or different tasks simultaneously, which can also be regarded as multi-tasking or task-switching (Monsell, 2003). Currently, scenarios demanding real-time and high-speed processing of simultaneous large volumes of information have become prevalent in our lives, and this necessitates that users in today's digital environments acquire a specific type of thinking skill, referred to here as "real-time thinking" (Eshet-Alkalai, 2012). Therefore, individuals need to move quickly to give responses to the feedback in real-time. Today, digitally literate teachers need to be capable of attending to more than one digital stimulus simultaneously to process the information that is quickly transmitted.

After the basic characteristics of digitally literate teachers are examined, the teachers are expected to adeptly employ digital tools to communicate, organize, and share

information as well as use them in various stages of a lesson such as planning, presentation, or evaluation. Experienced teachers proficient in digital teaching view ICT-related activities not merely as duplications of existing traditional teaching methods but also as tools to enhance and improve them (Lagarto & Lopes, 2018). Also, today's learners are born in the digitalized world, and they need more learner-centered approaches rather than traditional teaching methods by teacher-centered approach, so teachers are now expected to embrace new teaching strategies integrated with technology (Brown, 2005). Also, as a crucial point to note, today's learners require support from their teachers in their learning environments to develop and enhance their DL, which is important to help learners acquire these skills in their future professional lives (Maher, 2019).

2.7. Digital Immigrants vs Digital Natives

Prensky (2001) puts forwards two related terms: firstly, digital natives who were born and grew up with technology, and secondly, digital immigrants who were not born in the technological world but had to learn it later in their lives. The first group is regarded as digital natives since they are born and also grow up in 21st-century technologies. They are involved in using computers or smartphones, computer games, the Internet, videos, or many digital tools and platforms. Consequently, Prensky (2001) states that "today's students think and process information fundamentally differently from their predecessors" (p.1). It can be said that today's learners are pretty much different, and they have different needs. For this reason, the assumption that students are the same in every term and teachers can teach in the way they have been taught before is not valid anymore in the digitalized world we live in right now (Prensky, 2001). 21st-century education requires a great deal of understanding of the needs of students with technological proficiency, and digital immigrants can close the gap with commitment, practice, enhancing teaching, and other educational initiatives (Strause & Tan, 2017). Additionally, since the effect of technology has a crucial role in language learning and teaching, many investments in teacher training programs regarding technology use in education have become much more common for boosting teaching and learning across the world (Hockly, 2012).

Furthermore, there is the term 'generation,' which can be defined as the typical amount of time that passes between a parent's birth and their child's birth. The people who were born between 1946 and 1964 are called "baby boomers" (Brown, 2011 & Prensky,

2001). In general, those born between the middle of the 1960s and the beginning of the 1980s are referred to as “Generation X,” while “Generation Y” includes individuals born between 1982 and 1994 (Brown, 2011). Generation X asserts that their proficiency with media, digital technologies, and communications, as well as the frequency and skill with which they employ, set Generation X apart from the preceding generation (Brown, 2011). The term “Generation Z,” also known as the “Net Generation,” was created to refer to the generation of individuals born in the early 1990s and early 2000s (McCrindle, 2006). With a large number of members having used media and communication technologies their entire lives—including the Internet, text messaging, MP3 players, Facebook, Twitter, Skype, mobile phones, and YouTube—Gen Z is a highly networked and connected generation, sometimes known as “digital natives” (Prensky, 2001). Digital immigrants are the people “who migrate to the latest technology” (McCrindle, 2006, p.15). These people, who adopted advanced ICTs and the internet considerably later than generations Y or Z, are considered "foreigners" to the modern era. Maybe they weren’t born in a digital world where technology is in the foreground; they have started to use it for various tasks in their daily lives. They may not speak the same digital language as the younger generations and may not strive to stay up to date with the newest technologies since they lack the experience and skill of digital natives when it comes to using modern ICTs (Kurt, Günüç, & Ersoy, 2013). Since Generation Y and Z were exposed to these new options in their early years, technology and the digital language are nearly second nature to them, which means it’s like their native language (Brown, 2011). The next generation, born between 2010 and 2011, has been dubbed Generation Alpha. Since they are the first human cohort born entirely in the 21st century, they are considered to be the first millennial generation (McCrindle as cited in Brown, 2011).

2.8. Digital Literacy in EFL Classes

DL is increasingly becoming a global necessity, crucial for academic achievement, social interaction, and professional success, and also its importance is expected to grow even more in the coming years (Martin, 2006; Murray & Perez, 2014). DL is being used to upgrade numerous European language learning programs (Pegrum et al., 2018). Because of the vast and endless array of interactive software, apps, and tools available, digital technologies make teaching EFL classes more appealing, enjoyable, and permanent. Consequently, software applications and technological devices, such as

computers, smartphones, smartboards, and tablets, have introduced numerous advantages to the instructional process and are currently more widespread. It has been demonstrated that using digital resources can help students improve their reading comprehension, vocabulary, and vocal communication skills (Craig & Patten, 2007). Also, Warschauer and Healey (as cited in Brown, 2001, p. 145) assert that incorporating digital tools in English language classrooms enables individualization in big courses, facilitates multimodal practice, fosters collaboration, and raises the "fun" factor for students. Additionally, the development of emerging technology and new generations' familiarity with such technologies in the classes will strengthen students' enthusiasm and interest in completing their assignments and activities during and after the lessons (Costley, 2014). Moreover, these tools and platforms let teachers engage a large number of students in a short amount of time and make the lessons engaging and dynamic (Rodinadze & Zarbazoia, 2012).

The researchers aimed to assist teachers in understanding "the role that technology can play in their classrooms" (Al-Kahtani & Al-Haider, 2010, p. 153). The role of technology integration was to assist English and other language teachers in guiding their students to interact appropriately with the communicative, constructive, and inventive requirements and potential of this modern age several years after the DL framework's publication (Dudeney et al., 2013).

Hague and Payton (2010) contend that one way to implement the curriculum in a varied and dynamic way is by integrating DL throughout it. Therefore, there is a relation between DL and the improvement of English lessons. Language learners and teachers must advance their DL skills and techniques in order to maximize the benefits of digital technology for language learning (Son et al., 2017). Besides improving their DL, EFL teachers can also help their students by using technology in assignments and activities to assist students in developing DL abilities as part of their language learning process. EFL teachers can be a good guidance to assure their students to be more competent and also digitally literate learners. In another study, Godwin-Jones (2016) stated that it is crucial to address student training in the implementation of technology. For the advantages of technology usage, Basharat (as cited in Ahmed & Akyıldız, 2022) asserted that DL is advantageous for enhancing students' attention, improving academic achievement, and contributing to the progress of schools' competitiveness. Thus, it is important for language teachers to instruct their students in understanding how to navigate digital tools and facilities efficiently for language learning purposes. In addition, students should be

equipped with the knowledge of identifying and managing technological devices to enhance their learning strategies.

Furthermore, although being a teacher and planning all the lessons might be very challenging, it can turn into an easier process if the teachers become more competent in DL (Dudeney & Hockly, 2016). Therefore, the preparation of Pre-Service Teachers (PSTs) must involve early immersive field experiences and the incorporation of 21st-century skills (Coffey, 2010), which encompasses digital literacies integrated throughout the elementary curricula (Hague & Payton, 2010**).** In addition, as highlighted by the Organization for Economic Cooperation and Development, pre-service education in terms of integrating ICT for teaching may be insufficient to enhance efficient digital learning (OECD, 2020).

2.9. Digital Literacy of the EFL Teachers

There is a nice quotation stated by Ray Clifford; “Technology won't replace teachers, but teachers who use technology will probably replace teachers who do not.” (1987, p. 13). Regarding this saying, teachers, being an essential component of the teaching and learning process, are impacted by the modern revolution brought about by technology in this digital era. Especially the 21st century has introduced diverse learning dimensions that were absent in traditional education systems. This reality adds an extra layer of complexity to education in the 21st century, as it now requires teachers and students to possess distinct sets of skills to meet the evolving demands (Suwartono & Aniuranti, 2018). To develop students' competence, an EFL teacher takes on certain duties (Basharat, as cited in Ahmed & Akyıldız, 2022). Furthermore, a number of learning dimensions that were not possible in the traditional educational system have been made possible by the digital age. In light of this, educators should integrate DL into the teaching and learning process (Kurniawati, Maolida, & Anjaniputra, 2018). Since today's students no longer receive instruction in the same way as they did in the 1980s, teachers must be prepared to grow and be innovative (Fitria & Suminah, 2020).

Furthermore, inadequate resources, a restrictive school curriculum, and a lack of institutional support are just a few of the constraints that EFL teachers frequently encounter in EFL classroom environments (Zheng & Borg, 2014). It has been established that digital training in English teacher education systems has not gotten much attention despite requests for current English teachers to demonstrate strong DL competence

(Kessler, 2006). However, failing to utilize technology within its intended context can lead a teacher not to realize the benefits of technological proficiency and fail to meet their educational goals (Teo & Zhou, 2017). As a result, in order to carry out their current duties in an efficient manner, teachers must enhance their DL. EFL teachers who feel sufficiently tech-savvy are able to advise students on how to use search engines appropriately.

2.10. Digital Education in Turkey

In the context of Turkey's Education Vision 2023, the Ministry of Education has prioritized the integration of educational technology (Milli Eğitim Bakanlığı, 2018). Significant investments have been made to incorporate digital tools into education, facilitating teachers' professional development for acquiring essential 21st-century skills and adapting to ongoing changes in the field (Milli Eğitim Bakanlığı, 2018). Thus, there has been a growing interest in the practical use and implementation of technology in the EFL context in Turkey, especially with the FATIH Project, which the Ministry of National Education administered in 2011. Consequently, this project has become one of the most important steps taken to combine technology and education (FATIH Project, 2019). As a result of this project, almost all schools have started to be equipped with smartboards and tablets.

In addition, The Educational Informatics Network (EIN/EBA) has also been introduced within the scope of the FATIH project. EIN/EBA is an online social education platform that provides a number of digital course materials for using technology, sharing, and digitally creating lesson content. Therefore, providing schools with such technology-enhanced facilities and letting teachers and students adopt technology in their lessons have become vital policies of the Ministry of Education for the digitalized era in the 21st century (FATIH Project, 2019). Furthermore, the FATIH Project and the design of media literacy courses as elective courses at schools can be regarded as important implementations of DL skills (Çubukcu & Bayzan, 2013). Hockly (2012) emphasizes that language teachers "may not feel confident with technology themselves or have received little or no training in how to use technology" (p. 110). When examining the Turkish context, Turkish EFL teachers are frequently criticized for not utilizing computing technologies in the classroom despite the obvious advantages digital instructional tools offer (Çelik & Aytin, 2014).

2.11. Review of Related Research about Digital Literacy in EFL Classes

Recent advancements in the teaching and learning process, where technology has become a fundamental instructional tool, have resulted in an increase in studies examining how instructors address challenges, assess their level of DL and explore ways to enhance their proficiency in this domain. While the literature includes some studies on integrating DL and information communication technologies (ICTs) in the field of education, especially in the English as a Foreign Language (EFL) context, there is a notable scarcity of research on the specific role of DL in EFL classes. Furthermore, there is a significant gap in studies focusing on EFL in-service teachers, with limited attention given to EFL pre-service teachers (Ahmed & Akyıldız, 2022).

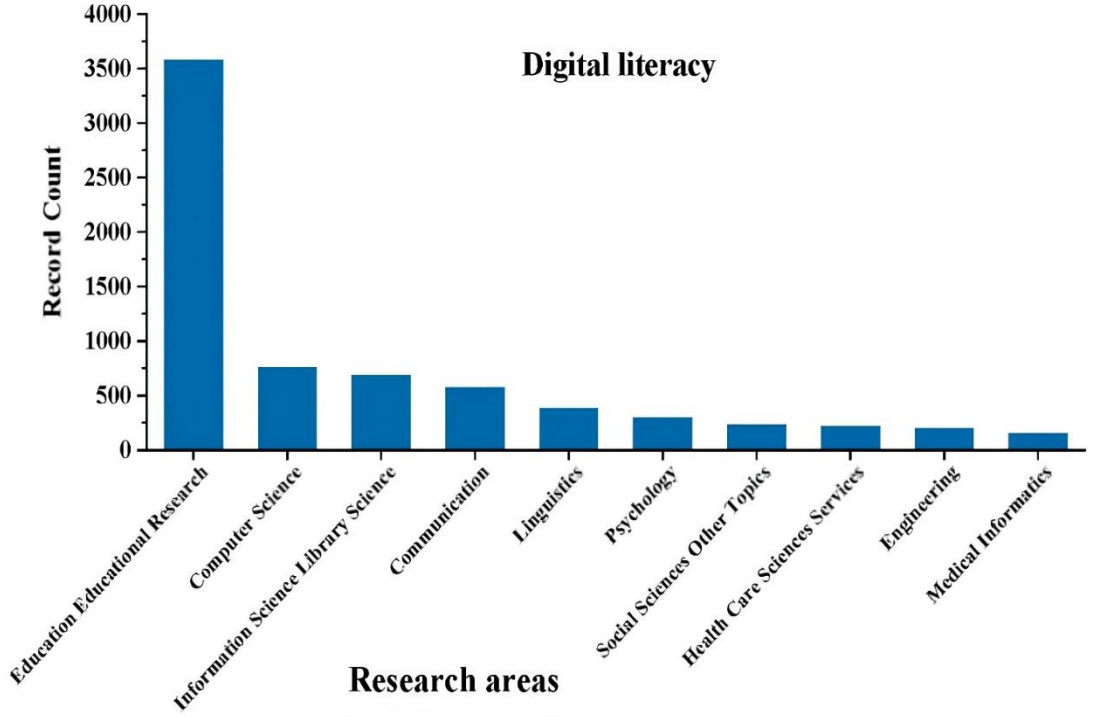

Figure 4. Source: Web of Science, the keyword DL
Source: Ahmed & Akyıldız, 2022.

Figure 4 depicts the significance of DL over the past decade across various fields, with a particular emphasis on its importance in education compared to other domains. The continual advancements in technology have led to a fundamental transformation, influencing the direct or indirect use of technological tools in all aspects of life in today's society, and each day brings new technological developments that become integrated into our daily lives (Ahmed & Akyıldız, 2022).

2.11.1. Digital Literacy of EFL Teachers in the Turkish Context

In the Turkish context, the majority of studies (Akayoglu et al., 2020; Altıner, 2019; Dedebali, 2020; Yukselir & Yuvayapan, 2019) have centered around the DL of pre-service English as a Foreign Language (EFL) teachers. Nevertheless, there is a notable gap in research, as studies have seldom concentrated on the DL levels of in-service English as a Foreign Language (EFL) teachers and their utilization of technology in teaching. Recently, there have been some studies about the attitudes of EFL teachers regarding DL and also 21st century skills (Şahin & Han, 2020; Üstündağ et al., 2017; Yılmaz et al., 2017).

In addition, Çelik & Aytin (2014) investigated the perceptions of 6 elementary and high school EFL teachers on using digital educational tools in English language learning in their qualitative study. Their results revealed that in contrast to the existing research, EFL teachers who participated in the study generally expressed that they enjoyed using computerized educational tools, identified themselves as competent in their level of DL, and felt that they could meet the needs of learners in this regard. Also, it was revealed that teachers were motivated and found digital tools helpful to improve students' competency and their attitude toward learning a language (Çelik & Aytin, 2014).

Hol & Aydın (2020) conducted a quantitative study with 563 in-service EFL teachers working in Turkey in order to ascertain the opinions of EFL teachers regarding the use of digital technologies in English instruction. Based on the participants' categorized beliefs regarding importance, use, expertise, and context, the results indicated that teachers had positive things to say about the use of digital technology in language classrooms. In a similar setting, Şahin & Han (2020) investigated the attitudes of EFL teachers toward 21st-century skills. According to their findings, the attitudes of EFL teachers toward 21st-century skills were mostly positive.

Yukselir and Yuvayapan (2019) investigated both EFL students and their instructors' perceptions of DL towards using digital tools in their instruction. Their findings showed differences in how EFL teachers and students conceptualized DL. Whereas DL skills are seen as a way for EFL students to access and analyze information on the Internet, EFL instructors regarded DL skills as facilitating social contact and communication. A study by Ahmed & Akyıldız (2022) surveyed 18 EFL teachers about their perceptions of DL in EFL classes. The findings revealed that teachers were confident users of digital tools and considered themselves digitally literate. DL positively impacted language teaching, and participants agreed that digital technology supported their teaching. However, some teachers believed digital tools had numerous disadvantages, and despite these challenges, the study confirmed the crucial role of DL in language teaching for both EFL teachers and students (Ahmed & Akyıldız, 2022).

There are also a few studies in the literature that examine DL from pre-service teachers' perfectives (Akayoglu et al., 2020; Altıner, 2019; Dedebali, 2020; Yukselir & Yuvayapan, 2019). Akayoglu et al. (2020) examined the conceptualization of DL among Turkish pre-service teachers (PTs) through a qualitative approach and stated that pre-service teachers were aware of various digital technologies and believed they could use them for professional, academic, and personal objectives. They appeared to have multiple

degrees of understanding of DL, ranging from information to collaborative, creative, and critical application (Akayoglu et al., 2020).

In another study, Altıner (2019) explored the impact of DL training on pre-service EFL teachers' development of digital literacies in relation to language learning and teaching English. The study discovered that pre-service English teachers were proficient in instructional strategies involving digital tools, such as repurposing general language resources. Pre-service EFL teachers reported that they felt more digitally literate after the training and the improvements in their beliefs about teaching with technology, self-efficacy in using digital tools, and perceived knowledge of digital tools. This increase in DL abilities was noted in a number of DL domains. As evidenced by the literature, EFL teachers have acknowledged the importance of digital technology in language instruction, and they have become enthusiastic about integrating digital tools into their classrooms and consider themselves to be skilled digital technology users. Altıner (2019) also showed that the use of digital tools raises students' motivation, involvement, and engagement. Given that there is existing research on the perceptions, understandings, and ideas of in-service English as a Foreign Language (EFL) teachers regarding the role of DL in the EFL setting, this current study aims to contribute to the literature by shedding light on its significance. Therefore, this study distinguishes itself from previous research by specifically examining the DL levels and perceptions of in-service EFL teachers.

2.11.2. Digital Literacy of EFL Teachers in the International Context

In the international context, the majority of studies have focused on DL from EFL teachers' perspectives (Benali, Kaddouri, & Azzimani, 2018; Cote & Milliner, 2018; Juurakko-Paavola et al., 2018; Machmud, 2011; Mollaei & Riasati, 2013; Pratolo & Solikhati, 2020; Saud, 2021; Soifah, Jana, & Pratolo, 2021). However, there is a gap in research as few studies concentrated on the DL levels of English teachers (Cote & Milliner, 2018; Juurakko-Paavola et al., 2018; Saud, 2021).

Machmud's (2011) qualitative study explored the challenges and issues in teaching English as a Foreign Language (EFL) in Gorontalo, Indonesia. The study found that many teachers with access to technology are not using it due to a lack of knowledge and inspiration, preferring their classical teaching approach and not willing to learn new methods as they lack time to dedicate to the best teaching reinforced by technology.

Mollaei and Riasati (2013) conducted a mixed-method study on the teachers in order to investigate the attitudes of forty EFL teachers working at various language institutions and the factors influencing their use of digital technology in the classroom. The study's conclusions showed that instructors had a favorable reaction to the use of digital tools, especially computers, in this case, in the classroom. Similarly, Srivastava and Dey (2018) examined teachers' challenges in implementing digital tools in instruction, finding obstacles like lack of internet access, technological support, instructors' competency, and limited time. One of the findings indicated that female teachers had less experience with digital tools compared to male teachers.

Cote & Milliner (2018) studied the DL of 42 English teachers working at a private Japanese university. Their study revealed that teachers had high digital proficiency levels and were generally quite confident in using digital technology to promote their teaching both within and outside the classroom. Additionally, they recognized the need for DL improvement and fervently demanded progressive skills.

In a quantitative study, Benali, Kaddouri, & Azzimani (2018) asked 160 English teachers to rate their own digital competency. The research, conducted using a DigCompEdu questionnaire, revealed that 42% of the participants were proficient in DL at the interrogator level, and 27% had digital competence at the expert level, indicating a high level of DL proficiency. The study indicates that age significantly influences teachers' DL levels, but gender does not significantly impact their digital competencies. Also, Juurakko-Paavola et al. (2018) surveyed 217 Finnish English teachers about their DL practices using a questionnaire. 117 English teachers rated their digital proficiency as Level 4 out of 5, with a small percentage identifying as Level 1-2. The study revealed that English teachers require training in ICT with more digital content to meet their technical and pedagogical needs, as suggested by the researchers. In addition, Mirra's (2019) case study uncovered that teachers utilize digital software and applications for didactic purposes after conducting observations and interviews with both pre-service and in-service teachers. The study discovered that teachers who were digitally literate were able to effectively utilize digital tools and ICT usage skills for didactic purposes, resulting in increased student interest, student-centered learning environments, and collaborative learning among students.

In order to learn more about pre-service teachers' perceptions of various dimensions of DL skills in psychological and educational activities, Garcia-Martin and Garcia-Sanchez (2017) conducted a study on 483 pre-service teachers. According to

Garcia-Martin and Garcia-Sanchez (2017), the results of their study indicated that pre-service teachers had positive opinions about using digital tools and Web 2.0 resources in their lessons. Researchers Pratolo and Solikhati (2020) looked into how teachers in EFL classes approached DL, and two EFL teachers at a private junior high school were the participants of this qualitative research. The study's findings showed that the instructors had embraced the idea of utilizing digital tools in the classroom and were skilled at using technology to search the internet for information (Pratolo & Solikhati, 2020). Soifah, Jana, & Pratolo (2021) carried out a mixed-method study and explored EFL teachers' perceptions of DL use in classrooms and the challenges they faced. It was found that schools provided the necessary equipment for digital tools implementation, and teachers favored them for student attention and reduced boredom (Soifah et al., 2021). They also stated that EFL teachers faced some challenges like connection, lack of knowledge, and student commitment, which could be addressed with cooperation from teachers, school administration, and educational organizations (Soifah et al., 2021). In another recent research, by assessing their levels of DL, Saud (2021) attempted to investigate whether English teachers in secondary schools in Nepal were prepared for teaching online. He accomplished this by surveying 426 EFL teachers online. The findings demonstrated that the educators had the necessary DL to conduct online instruction during the lockdown, including the use of multimedia programs and online presentation tools. The study also revealed that the educators picked up these skills on their own and that they felt schools should be providing more training on digital tools and literacies.

This chapter introduces the fundamental concepts and a review of the literature with a top-down approach, starting from literacy and ending with DL of EFL teachers in the international context. In the next chapter, the methodology of the study will be explained in detail.

CHAPTER III

METHODOLOGY

This chapter explains how this present study was designed and conducted. It includes research design, participants, data collection tools, data collection procedure, and also methods and techniques employed in the data analysis.

3.1. Research Design

According to Johnson and Christensen (2014), a research design is a plan, strategy, or outline used to carry out a study in order to address a research topic. With the purpose of examining the DL levels of EFL teachers and exploring their perceptions regarding their levels of DL, the present study adopts an explanatory-sequential research design, a mixed-method approach. In this research design, the researcher first collects and analyzes quantitative data and then collects qualitative data. The rationale behind this design is that the researcher can understand the research problem more by the first phase, which also helps the researcher to reflect upon and elaborate more deeply in the second phase (Creswell & Plano Clark, 2011). To reach the goals of this study, triangulation in the data collection process was ensured. Thus, two data collection tools were utilized. In this context, a questionnaire was used to get quantitative data, and some open-ended items in the questionnaire and a semi-structured interview were used to gather qualitative data. In the quantitative part of the study, the data was collected via the Digital Literacy Scale by Bayrakcı and Narmanlıoğlu (2021) (see Appendix 1), and the EFL teachers' levels of DL were examined through the questionnaire items based on their demographic features.

3.2. Participants

In Table 1, sampling techniques, number of participants, data collection tools, and time of the data collection are summarised regarding the research questions.

Table 1.

Participants and Data Collection Tools

Research Questions	Sampling Techniques	Participants	Data Collection Tools	Time
1. What do EFL teachers understand from the concept of digital literacy?	Purposive Sampling	17 EFL Teachers	Semi-structured Interview	March 2022 - June 2022, 20 minutes
2. What is the digital literacy level of EFL teachers?	Convenience Sampling	250 EFL Teachers	Questionnaire	March 2022 - June 2022, 15 minutes
2a. Is there a difference among the digital literacy levels of EFL teachers regarding their gender?	Convenience Sampling	250 EFL Teachers	Questionnaire	March 2022 - June 2022, 15 minutes
2b- Is there a difference among the digital literacy levels of EFL teachers regarding their age?	Convenience Sampling	250 EFL Teachers	Questionnaire	March 2022 - June 2022, 15 minutes
2c- Is there a difference among the digital literacy levels of EFL teachers regarding their teaching experience?	Convenience Sampling	250 EFL Teachers	Questionnaire	March 2022 - June 2022, 15 minutes
3. What digital tools and social media platforms do EFL teachers use, and for which purposes do they use them?	Purposive Sampling	17 EFL Teachers	Semi-structured Interview	March 2022 - June 2022, 20 minutes
4. What are EFL teachers' opinions regarding possible drawbacks and challenges in using digital tools?	Purposive Sampling	17 EFL Teachers	Semi-structured Interview	March 2022 - June 2022, 20 minutes
5. What do EFL teachers suggest to promote their digital literacy?	Purposive Sampling	17 EFL Teachers	Semi-structured Interview	March 2022 - June 2022, 20 minutes

As shown in Table 1, the sample of this study consists of 250 EFL teachers working in primary, secondary, and high schools affiliated with the Ministry of National Education in the Şahinbey district of Gaziantep in the academic year 2021-2022. The semi-structured interviews were carried out with 17 EFL teachers purposively selected among the questionnaire participants throughout the period of March and June 2022. About the present rules in Turkey regarding teacher employment, the population of the study includes both contract and permanent instructors but does not include any paid teachers.

Sampling is the process of choosing a specific number of participants to represent a given population from a defined population (Borg & Gall, 1983). The sample of this study for the questionnaire was chosen using the convenience sampling method, one of the non-probability sampling strategies. As Dörnyei (2007) notes, convenience sampling is a type of non-probability or nonrandom sampling in which participants in the target population are chosen for the study based on a set of practical requirements, like being in the same location, being available at a specific time, being easily accessible, or being willing to volunteer. This sampling strategy was chosen because it can be easily and quickly applied to a large number of participants within a certain time frame. 250 participants who filled out either the printed version of the questionnaire or the online form version prepared via Google Forms as a digital platform were used to collect data online data after obtaining necessary permissions from the official administrators (see Appendix 4 and Appendix 5).

After the quantitative data was collected, semi-structured interviews were conducted to get in-depth data on the qualitative part of the study. Semi-structured interviews were conducted with 17 EFL teachers who were selected by purposive sampling. As noted by Creswell and Plano Clark (2011), purposive sampling takes place when researchers deliberately choose participants who have knowledge and experience related to the phenomenon of interest. In this regard, EFL teachers were supposed to know the concept of DL, and also they were supposed to have different DL levels.

In Table 2, the demographic characteristics of the EFL teachers who responded to the questionnaire are displayed in terms of frequencies (f) and percentages (%).

Table 2.

Teachers' Demographic Features in the Questionnaire (n=250)

Variable	Group	Frequency f	Percentage %
Gender	Female	152	60,8
	Male	98	39,2
Age	Under 30	103	41,2
	31-40	104	41,6
	41 and more	43	17,2
Teaching Experience	0-5 year(s)	101	40,4
	6-10 years	71	28,4
	11-15 years	32	12,8
	16 years and more	46	18,4
First Usage of Computers	At Primary School	64	25.6
	At Secondary School	70	28.4
	At High school	58	23.2
	At University	40	16
	After University	17	6.8
Digital Devices	Laptop	209	38.35
	Computer	116	21.28
	Smartphone	113	20.74
	Notebook	39	7.16
	Tablet	35	6.42
	Smartboard	33	6.06
Total		**250**	**100**

Frequency (f), Percentage (%)

The demographic data in Table 2 is obtained from 250 EFL teachers who participated in the study. As Table 2 displays, the number of male teachers who participated in the questionnaire of the research is 98 (39,2%), while the number of female teachers is 152 (60,8%). In terms of age, 104 teachers (41.6%) are aged 31-40, respectively, followed by 103 teachers (41.2%) in the under 30 group, and 43 teachers (17,2) in 41 and more**.** Additionally, the distribution of the teaching experiences of EFL

teachers in this study indicates that 101 teachers (40.4%) have 0-5 years of experience, followed by 71 teachers (28.4%) with 6-10 years, 46 teachers (18.4%) with 16 years and more, and 32 teachers (12.8%) with 11-15 years. Moreover, Table 2 also shows the distribution of EFL teachers based on the first time they began to use computers. It can be seen that the results of the frequencies are pretty close to each other. Based on the data in Table 2, 70 teachers (%28.4) began utilizing computers during their secondary school years, indicating the early integration of technology into their educational experiences. Similarly, 64 teachers (%25.6) commenced their computer usage at the Primary School level, emphasizing the increasing prevalence of technology from an early age. 58 teachers (%23.2) also responded that they began using computers at high school, showcasing the ongoing trend of incorporating computers into the educational landscape. A notable 40 teachers (%16) initiated computer usage at the University level. Lastly, only a tiny portion of the participant EFL teachers, 17 participants (%6.8), reported that they started to use computers after completing their university education, highlighting a continuous engagement with technology post-academia. They further uttered that they were able to use computers when they started to work as a teacher.

In total, Table 2 displays valuable data offering valuable perspectives on the varied paths of first computer usage among the EFL teachers who participated in the questionnaire. Finally, the distribution of the digital devices that the EFL teachers use indicates that a laptop (%38.25) was the most used digital device among the participants, then it was followed by computer (%21.28). Surprisingly, smartphones (20.74) were seen as the third most commonly used digital device, although everyone has a smartphone today. Moreover, notebook (%7.16) ranked fourth, while tablet (%6.42) ranked fifth, and the last digital device, a smartboard (%6.06).

3.3. Data Collection Tools

Two data collection tools, as shown in Table 1, were used in this study which are a questionnaire and a semi-structured interview. The questionnaire is used to yield both quantitative and some parts of qualitative data, and the interview is conducted to obtain qualitative data.

3.3.1. The Questionnaire

The “Digital Literacy Scale” developed by Bayrakcı and Narmanlıoğlu (2021) is adapted and redesigned by the researcher to use in the first phase of data collection. The questionnaire (see Appendix 1) consists of two sections. In the first section, there are 13 questions, including 9 open-ended questions and 3 close-ended questions, collecting the demographic data as the participants’ gender, age, and teaching experience. In the second section, the questionnaire has 40 close-ended items, which are distributed as 9 items about the sub-dimensions of the EFL teachers’ ethics and responsibility (factor 1), 10 items about EFL teachers’ General Knowledge and Functional Skills, 6 items about Daily Usage, 3 items Advanced Production, 6 items about Privacy and Security, and 6 items about Social Dimension. The participants utilized a 5-point Likert scale, selecting from the following options: (1) Strongly Disagree, (2) Disagree, (3) Neither Agree nor Disagree, (4) Agree, and (5) Strongly Agree when answering the questionnaire items pertaining to the degree of agreement (see Appendix 1).

In the original version of the questionnaire (see Appendix 1), there were 29 items, but some of the items in the questionnaire were redesigned, and the number of items in total became 40. In those items, one item was supposed to measure two things. Therefore, each item determined above was divided into two items, measuring one thing at a time. Moreover, in the original version, Cronbach’s Alpha internal consistency was 0,911.

Table 3 shows the new Cronbach’s alpha internal consistency values.

Table 3.

The Cronbach’s Alpha Internal Consistency of the Scale

Scale	Cronbach's Alpha	N of Items
Ethics and Responsibility	0,861	9
General Knowledge and Functional Skills	0,918	10
Daily Usage	0,806	6
Advanced Production	0,847	3
Privacy and Security	0,862	6
Social Dimension	0,895	6
DLS	0,947	40

As seen in Table 3, after adapting and redesigning the scale, the new Cronbach's Alpha internal consistency for the total was found to be 0,947. Also, for other dimensions, Cronbach's Alpha internal consistency was found to be 0,861 for the Ethics and Responsibility dimension, 0,918 for the General Knowledge and Functional Skills dimension, 0,806 for the Daily Usage Dimension, 0,847 for the Advanced Production dimension, 0,862 for the Privacy and Security dimension; 0,895 and lastly Social Dimension. To sum up, these results suggest that the items in the questionnaire are more closely related and show higher internal consistency. It implies that the questionnaire can lead to reliable results.

To assess the feasibility, validity, and reliability of the final version of the questionnaire, a pilot study was conducted involving 30 EFL teachers (Van Teijlingen & Hundley, 2001). A pilot study enables the collection of initial insights into the studied phenomenon (Mutz & Müller, 2016). The aim was to ensure that the questionnaire items effectively addressed the research questions. After the results of the pilot study were analyzed, essential adjustments were made concerning the questionnaire's digital platform accessibility, data entry output, retrieval of research data, wording of the items, clarity, and ambiguity. Throughout the pilot study, the participants' understanding of each item was documented through individual feedback, leading to revisions based on their opinions to eliminate redundancies. Clear instructions for each questionnaire section were incorporated at the beginning, and deliberations were held on whether certain items should be mandatory or optional, guided by the received feedback. Subsequently, the questionnaire scale underwent updates with the input of language experts, focusing on refining expression, clarity, and item simplicity. Through this iterative process, the questionnaire items were refined to be free of errors and easily understandable, addressing concerns related to ambiguity, misinterpretation, and inconsistency.

3.3.2. The Semi-structured Interview

Interviews serve as a widely utilized method for collecting data in qualitative research (Dörnyei, 2007). Also, Kvale (1996) considers interviews as "…an interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production, and emphasizes the social situatedness of research data" (p.14). It's a useful data collection tool to "gather descriptive data in the subject's own words so that researchers can develop insights on how subjects interpret

some piece of the world" (Bogdan & Biklen, 2003, p. 95). In addition, one primary benefit of the semi-structured interview is its capacity to elicit open responses from subjects, as opposed to simple affirmative or negative answers (Petrescu, Lazar, Cioban & Doroftei, 2017). Moreover, Interviews are categorized into different types, including structured interviews, unstructured interviews, semi-structured interviews, ethnographic interviews, and focus group interviews, based on resource availability and the nature of the data to be collected in the research (Büyüköztürk et al., 2014).

The semi-structured interview utilized in this research (see Appendix 2) was designed to obtain in-depth data from 17 EFL teachers who had filled out the questionnaire and later volunteered for the interview. The participants for the interview were chosen through purposive sampling, reflecting the study's focus on gathering goal-oriented data from EFL teachers. In the interview, there are 11 open-ended questions focusing on the EFL teachers' understanding of the concept of DL, their views about their DL levels, digital tools, drawbacks, and suggestions. The semi-structured interview process ended when the participant EFL teachers began to share similar opinions and experiences about DL. This indicates data saturation, which is the stage of data collection at which no more information is discovered that advances a conceptual category's aspects (Glaser and Strauss, 1967).

In addition, the interview questions were developed by the researcher with oversight from academicians and experts. As mentioned in the questionnaire part, this semi-structured interview and the questions asked at the interview are piloted together with the questionnaire. The pilot study was conducted with 8 EFL teachers. The aim was to ensure the clarity, ambiguity, appropriateness, wording of interview questions and also to arrange the duration of the semi-structured interviews. The results of the pilot study were analyzed, and the interview questions were redesigned accordingly. In this iterative procedure, the interview question items underwent refinement to eliminate errors and ensure clarity, effectively addressing issues such as ambiguity, misinterpretation, and inconsistency. This pilot study also provided to enhance the quality, efficiency, and ethics of the semi-structured interview.

3.4. Data Collection Procedure

In this study, the data was collected via two data collection tools, which are a questionnaire and semi-structured interviews. The participants were made aware that their

participation in the qualitative and quantitative data collection was completely voluntary and that they could leave at any time without giving a reason. They also received guarantees that the information they provided would be kept private and that their anonymous responses would not be connected to any personal information. After the official administrators obtained the required authorization, 250 volunteer EFL teachers willingly participated in the study by answering the online questionnaire created using the digital Google Forms platform. The participants were informed that it would require about 15 minutes to finish the questionnaire. Nearly it took two months to collect all of the data. After the questionnaire, a semi-structured interview was conducted. There was a total of 17 EFL teachers interviewed, who were selected from the volunteer group that filled out the questionnaire. The participants of the interviews were selected by purposive sampling. Although in-person interviews and questionnaires were planned, the participants were interviewed via face-to-face or online meetings, and they were not requested to participate in video calls because of the earthquake that struck southeast Turkey. A voice recording was required, and once permission was granted, each participant had about 15 minutes interview conducted in Turkish. To make sure no important information was overlooked, the researcher explained the nature and purpose of the study before starting to ask interview questions. For the whole data gathered from the two tools, nearly two months was needed to gather all of the data.

3.5. Data Analysis

In the analysis of the research data, firstly, the questionnaire was analyzed. Before collecting the quantitative data for the study, confirmatory factor analysis (CFA) was conducted in this study to assess construct validity, as the original work by Bayrakcı and Narmanlıoğlu (2021) did not initially include an examination of the questionnaire's construct validity.

The Digital Literacy Scale consists of 40 items and comprises 6 dimensions. Due to the data obtained from a different sample group in this study, the construct validity was retested. Outliers were checked for each item, examining whether the z-standardized distributions of the items were within the ±3.30 range. If outside this range, they were considered outliers (Tabachnick & Fidell, 2013). Z-standard values for the items were within the desired range. However, a similar examination was conducted for the digital usage sub-dimension, and the z-value for 3 respondents was found to be smaller than -

3.30; therefore, these 3 individuals were excluded from the analysis. Confirmatory factor analysis was employed in testing construct validity. In construct validity, the T-values of the factor loadings between the dimensions and items in the model to be confirmed are crucial, and these values are presented in Table 4.

Table 4 displays the T-values of factor loadings between dimensions and items of the questionnaire.

Table 4.

Confirmatory Factor Analysis T-Values for Items

Items	**T-Value**	**Items**	**T Value**
d1	10,51*	d21	13,23*
d2	12,72*	d22	8,87*
d3	9,04*	d23	11,99*
d4	13,54*	d24	12,22*
d5	13,62*	d25	10,15*
d6	10,85*	d26	17,84*
d7	8,78*	d27	19,81*
d8	7,22*	d28	9,82*
d9	12,32*	d29	10,61*
d10	12,82*	d30	14,83*
d11	13,61*	d31	13,35*
d12	15,22*	d32	14,42*
d13	14,8*	d33	15,44*
d14	14,34*	d34	10,89*
d15	16,08*	d35	11,68*
d16	12,32*	d36	12,54*
d17	10,77*	d37	13,44*
d18	11,11*	d38	14,01*
d19	11,43*	d39	13,14*
d20	10,07*	d40	11,79*

t > 1.96 or p < .05

As shown in Table 4, T-values indicate whether the factor loadings are statistically significant. For all items, T-values outside the range of ±1.96, which is the critical T-value at the 0.05 significance level, signify the significance of the factor loading (Çokluk, Şekercioğlu, & Büyüköztürk, 2010). Consequently, all factor loadings between items and

dimensions for the Digital Literacy Scale are statistically significant. In other words, there are no items without significance.

Figure 5 displays the graph of standard factor loadings for the Digital Literacy Scale.

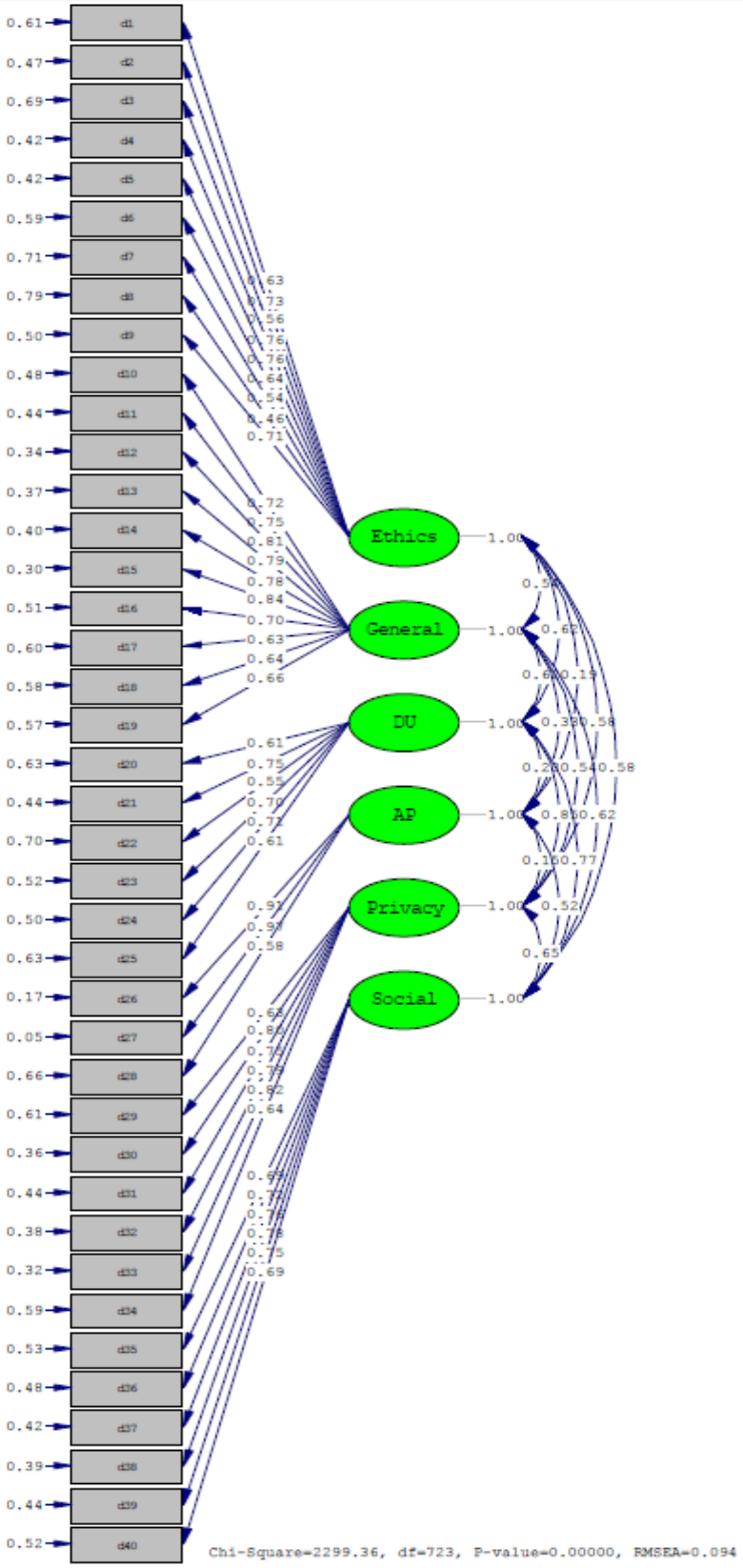

Figure 5. Standard Values Graph for the Digital Literacy Scale

As seen in Figure 5, The factor loadings for the Ethics dimension range from 0.46 to 0.76, for the General dimension from 0.63 to 0.84, for Digital Usage from 0.55 to 0.75,

for Advanced Production from 0.58 to 0.97, for Privacy from 0.63 to 0.82, and for Social dimension from 0.69 to 0.78. Factor loadings were obtained as high for all dimensions.

Table 5 shows the model fit index of the questionnaire.

Table 5.

Model Fit Index

Indexes	**Perfect Fit**	**Good Fit**	**Findings**	**Result**
X^2/sd	0-3	3-5	3.18	Good Fit
RMSEA	.00 ≤ RMSEA ≤ .05	.05 ≤ RMSEA ≤ .10	0.094	Good Fit
CFI	.95 ≤ CFI ≤ 1.00	.90 ≤ CFI ≤ .95	0.94	Good Fit
NFI	.95 ≤ NFI ≤ 1.00	.90 ≤ NFI ≤ .95	0.91	Good Fit
IFI	.95 ≤ IFI ≤ 1.00	.90 ≤ IFI ≤ .95	0.94	Good Fit
SRMR	.00 ≤ SRMR ≤ .05	.05 ≤ SRMR ≤ .10	0.082	Good Fit

Source: Schumacker & Lomax, 2015

As seen in Table 5, for CFA, another important criterion is the fit between the model and the data, and achieving this fit is an indicator that construct validity has been achieved. Firstly, the chi-square is influenced by degrees of freedom (Byrne, 2011); hence, it is recommended to focus more on the ratio of chi-square to degrees of freedom rather than whether the chi-square value is statistically significant (Hoe, 2008). If the ratio is less than 3, it indicates an excellent fit, and if it is between 3 and 5, it suggests a good fit (Kline, 2011). This ratio (2299.36/723) was calculated as 3.18, indicating a good fit. Another frequently used fit index is the Root Mean Square Error of Approximation (RMSEA), which should be below 0.10 for good fit and below 0.05 for excellent fit (Schumacker & Lomax, 2015). The RMSEA value is 0.094, indicating a good fit.

In Table 5, other fit indices included in this model are the Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI), and Standardized Root Mean Square Residual (SRMR). According to the values related to model-data fit, the adapted OKTG scale, adjusted as a four-factor model, demonstrates good model-data fit in the confirmatory factor analysis results ($\chi 2$=2299.73, df=723, RMSEA=.094, CFI=.94, NFI=.91, IFI=.94, SRMR=.082).

Moreover, as seen in Table 5, the reliability of the scale was examined using Cronbach's alpha coefficient. A Cronbach's alpha coefficient above 0.70 indicates high reliability.

Table 6 displays both the reliability of the questionnaire and also its dimensions.

Table 6.

Reliability of Scale and Dimensions

Scale	Cronbach's Alpha	N of Items
Ethics and Responsibility	0,861	9
General Knowledge and Functional Skills	0,918	10
Daily Usage	0,806	6
Advanced Production	0,847	3
Privacy and Security	0,862	6
Social Dimension	0,895	6
DLS	0,947	40

As seen in Table 6, the reliability coefficient for the Digital Literacy Scale is 0.947. Additionally, the reliability coefficients obtained for the sub-dimensions are as follows: 0.861 for the Ethics sub-dimension, 0.918 for the General sub-dimension, 0.806 for the Daily Usage sub-dimension, 0.847 for the Advanced Production sub-dimension, 0.862 for the Privacy sub-dimension, and 0.895 for the Social sub-dimension. These results indicate that the Digital Literacy Scale and its sub-dimensions exhibit high reliability.

After the CFA was finalized, the Lisrel 8.80 program was used for the analysis of the quantitative data, while SPSS 24 was employed for other statistical analyses. Outliers were checked, and three participants with z-standard values lower than -3.30 were excluded from the analysis in the digital usage sub-dimension. The normal distribution of the scale scores was assessed based on skewness and kurtosis values, and if these values fell within ±1, the score distribution was considered normal (Tabachnick & Fidell, 2013). Additionally, in group comparisons, parametric methods are utilized when there is a sufficient amount of data in each group of the categorical variable (N≥30) (Pallant, 2007). Independent sample t-tests and one-way analysis of variance (ANOVA) were used for comparing scale scores based on demographic variables. The independent sample t-test compares normally distributed scores between two groups, while ANOVA compares normally distributed scores among three or more groups. When the ANOVA result was

statistically significant, the difference between groups was compared using the LSD post-hoc method. The statistical significance level for analyses was set at $p < .05$.

For the interview data analysis, the content analysis was utilized for the semi-structured interview data in order to arrange, interpret, and provide the reader with the information gathered from the interview. The choice of content analysis for analyzing the acquired data was motivated by its significance and longstanding application in social science studies (Krippendorff, 2004). Yıldırım and Şimşek (2013) also describe this type of analysis as an interpretation and summary of the data collected using different codes, categories, and themes. The findings are presented in an understandable and methodical manner, and their interpretation is based on an analysis and justification of the information provided by the interviewees (Yıldırım & Şimşek, 2013). According to these remarks, a researcher can draw conclusions based on recurrent themes and use this information to predict future developments by connecting the themes discovered (Yıldırım & Şimşek, 2013).

In this study, semi-structured interviews were conducted with 17 EFL teachers in face-to-face and also online meetings. Since some participants were not available for face-to-face meetings, semi-structured interviews were conducted online meeting tools with some participant EFL teachers, which mostly lasted around 20 minutes. Before conducting the interview, the interview participants were informed about the ethical issues, and they all consented to participate and be recorded in the interviews. During the interviews, the audio recording was conducted so as not to miss any research data. After all of the interview meetings were finalized, the interview data were first transcribed word by word based on the recordings. The transcription of the interviews was made in a manual way without applying any digital tools. After that, the transcriptions were given to an academician who works at the Department of English Language Teaching to ensure reliability and receive necessary feedback. During the data analysis process, the researcher read the transcribed texts several times to become acquainted with the material. Then, the coding procedure was carried out by identifying the most repeated expressions by the participants. The coded data were analyzed to create themes and categories in relation to the similarities and differences between the words, sentences, expressions, and phrases of the participants. In the end, the qualitative data are thoroughly coded and explained together with quotations taken from the interview to support the qualitative findings. Some of the qualitative data are expressed as figures in tables to quantitate the qualitative data.

3.6. Trustworthiness and Ethical Considerations

Guba and Lincoln (1994) outline trustworthiness to be assessed through five criteria: credibility (internal validity), transferability (external validity), dependability (reliability), confirmability (objectivity), and authenticity. The present study's credibility is established through prolonged engagement and triangulation. Two different data collections, the questionnaire, and semi-structured interviews, were utilized to collect quantitative and qualitative data. Also, member-checking was utilized to get feedback from the participants and validate the data to ensure the validity of the findings. For the transferability of the study, providing the application of the study findings to other contexts, all the steps and decisions made were explained in detail, including participant selection, context, and the procedures implemented throughout the study. In addition, the dependability of the study is provided by the voluntary participation of the EFL teachers; also, the qualitative data were cross-checked with the help of another researcher. Additionally, for confirmability, member-checking and colleague support were employed to ensure the neutrality of the findings. Thus, the data obtained through one method was validated by employing an alternative method. For example, the transcriptions of the semi-structured interviews and related codes were analyzed by another researcher as well. Lastly, the authenticity of the present study was ensured by the careful selection of the participants, contributing to the reliability and credibility of the research findings. Also, it involved being transparent in data collection, maintaining consistency in research methods, and explicitly acknowledging any potential biases or limitations in the research design.

Moreover, to address ethical considerations, various actions were taken and implemented. Kelman (as cited in Kimmel, 2009) explains the ethical considerations as "an integral component of the research process itself, on a par with theoretical and methodological concerns – based on the proposition that what we learn through our research is intimately linked to how we learn it" (p.14). Mackey and Gass (2005) propose two main ethical considerations for the research, which are 'informed consent' and 'institution approval.' Before conducting the present study, the required permissions from Cukurova University for institution approval (see Appendix 4) and also from the Directorate of National Education for institution permission (see Appendix 5) were taken. In addition, participants were informed about the study, including the aims and data

collection procedures, before collecting any data. It was ensured that the participants voluntarily participated in the study. Therefore, a cover letter was added on the first page of the questionnaire, and it was ensured that the participants had the right to withdraw from the study at any time without any reasons required for their decision. The participants' personal responses to the questionnaire, as well as the semi-structured interviews, were kept confidential and were not shared with anyone other than the researchers and only for scientific purposes. Furthermore, the required permission for the Digital Literacy Scale (Bayrakcı & Narmanlıoğlu, 2021) was taken from the researchers before conducting the questionnaire. The corresponding permission was provided through email (see Appendix 6). Additionally, the semi-structured interviews were conducted with all the participants under the same conditions, including face-to-face and online interviews. Moreover, the participants' names were kept confidential in direct quotations from their responses at the semi-structured interviews, and each participant was given an anonymous name (e.g., Interviewee 1, Interviewee 2, etc.) for ethical reasons.

This chapter includes the research design, participants, data collection tools, data collection procedure, methods and techniques employed in the data analysis, and trustworthiness and ethical considerations explained. In the next chapter, the findings will be discussed in detail.

CHAPTER IV

FINDINGS

This chapter presents the results obtained from the questionnaire and semi-structured interviews, illustrating the findings through tables. Initially, the questionnaire findings are scrutinized, considering the variables and sub-dimensions of the study. Subsequently, the results of the semi-structured interview are analyzed with a focus on the obtained codes and themes.

4.1. The Findings of the Questionnaire

The questionnaire, designed by Bayrakcı and Narmanlıoğlu (2021), was adapted with the updated and changed items and sections by the researcher after the factor analysis was conducted. In line with the improvements, a new scale to measure the EFL teachers' DL levels in 6 different dimensions, which are General Information and Functional Skills, Daily Use, Advanced Production, Privacy and Security, and Social Dimension, was developed and applied to 250 EFL teachers. The questionnaire underwent analysis considering various variables, and the outcomes of these analyses are elaborated upon in the following sections.

Therefore, the independent t-tests and one-way analysis of variance were used to analyze the DL levels of the participants regarding their gender, age, and teaching experience.

4.1.1. The Quantitative Part of the Questionnaire

In this part, the quantitative part of the questionnaire was analyzed. The data was collected by utilizing a 5-point Likert scale, selecting from the following options: (1) Strongly Disagree, (2) Disagree, (3) Neither Agree nor Disagree, (4) Agree, and (5) Strongly Agree. There were 40 close-ended items in the questionnaire. The quantitative data was analyzed under each research question and displayed in tables.

4.1.1.1. The Digital Literacy Level of the EFL Teachers

Table 7 displays the descriptive statistics for the questionnaire and its dimensions. The Digital Literacy Scale and its sub-dimensions scores were obtained by

taking the average of the item scores. Therefore, both the scale and its sub-dimensions fall within the range of 1-5.

Table 7.

Descriptive Statistics for Scale and Dimensions

Scale Scores	Minimum	Maximum	Mean	Sd	Skewness	Kurtosis
DLS	2,1	5	3,92	0,63	-0,24	-0,489
Ethics and Responsibility	2	5	4,25	0,62	-0,92	0,814
General Knowledge and Functional Skills	1,3	5	3,74	0,93	-0,375	-0,663
Daily Usage	1,83	5	4,30	0,68	-0,949	0,359
Advanced Production	1	5	2,53	1,26	0,519	-0,906
Privacy and Security	2,12	5	3,90	0,65	-0,32	-0,407
Social Dimension	1	5	3,56	1,05	-0,22	-0,885

As seen in Table 7, The Digital Literacy Scale's mean is 3.92, and the standard deviation is 0.63. The means for the sub-dimensions are as follows: 4.25 for Ethics and Responsibility, 3.74 for General Knowledge and Functional Skills, 4.30 for Daily Usage, 2.53 for Advanced Production, 3.90 for Privacy and Security, and 3.56 for Social Dimension. The Daily Usage sub-dimension has the highest mean, while the Advanced Production sub-dimension has the lowest. Skewness and kurtosis values were examined for the normality of scores for both the scale and sub-dimensions, and these values fall within ±1, indicating a normal score distribution (Tabachnick and Fidell, 2013). Skewness and kurtosis values for both the scale and sub-dimensions are within ±1, indicating a normal score distribution.

Moreover, Bayrakcı and Narmanlıoğlu (2021) identified a table showing the competencies of each DL level depending on the results of the scale (see Appendix 3). According to this, in the present study, the participants' level of DL is between 3,63-4,17, so their level can be regarded as average. When the competencies of this level are examined, it can be stated that people with an average level of DL can independently solve non-routine but not overly complex problems. Also, they have an intermediate level of proficiency in keeping up with the digital age and remain committed to ongoing learning.

4.1.1.2. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Gender

Whether there is a significant difference in the scores of the EFL teachers on the Digital Literacy Scale and its sub-dimensions based on gender was compared using an independent sample t-test. This t-test compares the difference between continuous and normally distributed scores for two groups, and its assumptions include the normality of continuous scores and a sufficient amount of data in each group (N≥30).

Table 8 shows independent sample t-test results for the scores of the EFL teachers on the Digital Literacy Scale and its sub-dimensions based on their gender.

Table 8.

Independent Sample T-Test Table for the Scores of Teachers on the Digital Literacy Scale and its Sub-dimensions Based on Gender

Scale Scores	Group	N	Mean	Sd	$t_{(248)}$	p
DLS	Female	152	3,8	15,03	-4,074	,000*
	Male	98	4,12	16,9		
Ethics and Responsibility	Female	152	4,21	6	-1,33	0,185
	Male	98	4,32	6,17		
General Knowledge and Functional Skills	Female	152	3,41	5,68	-7,65	,000*
	Male	98	4,25	5,94		
Daily Usage	Female	152	4,21	5,32	-2,651	0,009*
	Male	98	4,44	5,96		
Advanced Production	Female	152	2,49	11,75	-0,623	0,534
	Male	98	2,59	11,16		
Privacy and Security	Female	152	3,74	6,72	-5,248	,000*
	Male	98	4,16	7,07		
Social Dimension	Female	152	3,5	6,72	-1,243	0,215
	Male	98	3,67	7,07		

*$p<.05$

As seen in Table 8, there is a significant difference in the scores of teachers based on gender for the Digital Literacy Scale (t(248)=-4.074, p<.05) as well as the General (t(248)=-7.65, p<.05), Daily Usage (t (248) =-2.651, p<.05), and Privacy (t(248)=-5.248, p<.05) sub-dimensions. Male teachers have higher mean scores on both the Digital Literacy Scale and the General, Daily Usage, and Privacy sub-dimensions compared to female teachers. However, there is no significant difference in the scores based on gender

for the Ethics (t (248) =-1.33, p>.05), Advanced Production (t (248) =-0.623, p>.05), and Social (t (248) =-1.243, p>.05) sub-dimensions.

4.1.1.3. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Age

Whether there is a significant difference in the scores of the EFL teachers on the Digital Literacy Scale and its sub-dimensions based on age was compared using the one-way analysis of variance (ANOVA) method.

Table 9 shows the ANOVA results for the scores of the EFL teachers on the Digital Literacy Scale and its sub-dimensions based on their age.

Table 9.

ANOVA Table for the Scores of Teachers on the Digital Literacy Scale and its Sub-dimensions Based on Age

Scale Scores	**Age**	**N**	**Mean**	**sd**	**$F_{(2,247)}$**	**P**	**Difference****
DLS	Under 30 years	103	4,08	0,59	6,234	0,002*	1 and 2,3
	31-40 year	104	3,83	0,64			
	41 and above	43	3,75	0,60			
Ethics and Responsibility	Under 30 years	103	4,34	0,66	2,256	0,107	
	31-40 year	104	4,22	0,56			
	41 and above	43	4,12	0,65			
General Knowledge and Functional Skills	Under 30 years	103	3,87	0,92	2,766	0,065	
	31-40 year	104	3,72	0,92			
	41 and above	43	3,47	0,96			
Daily Usage	Under 30 years	103	4,52	0,59	9,375	,000*	1 and 2,3
	31-40 year	104	4,15	0,72			
	41 and above	43	4,15	0,70			
Advanced Production	Under 30 years	103	2,55	1,31	0,084	0,92	
	31-40 year	104	2,53	1,29			
	41 and above	43	2,46	1,06			
Privacy and Security	Under 30 years	103	4,06	0,61	5,473	0,005*	1 and 2,3
	31-40 year	104	3,83	0,67			
	41 and above	43	3,72	0,64			
Social Dimension	Under 30 years	103	3,85	0,99	7,118	0,001*	1 and 2,3
	31-40 year	104	3,34	1,04			
	41 and above	43	3,40	1,03			

**p<.05; **LSD; 1: Under 30 years; 2:31-40 year; 3:41 and above*

As seen in Table 9, there is a significant difference in the scores of teachers based on age for the Digital Literacy Scale (F (2,247) =6.234, p<.05), as well as the Daily Usage (F (2,247) =9.375, p<.05), Privacy (F (2,247) =5.473, p<.05), and Social (F (2,247) =7.118, p>.05) sub-dimensions. The groups with significant differences were determined using the LSD multiple comparisons (post-hoc) methods and are indicated in the difference column. As seen in Table 9, there is a significant difference between teachers aged 30 and below and those aged 31-40 and 41 and above for both the overall scale score and the Daily Usage, Privacy, and Social sub-dimensions. However, there is no significant difference between teachers aged 31-40 and those aged 41 and above. Teachers aged 30 and below have higher average scores in the Digital Literacy Scale, Daily Usage, Privacy, and Social sub-dimensions compared to teachers aged 31 and above. However, there is no significant difference in the scores based on age for the Ethics (F (2,247) =2.256, p>.05), General (F(2,247)=2.766, p>.05), and Advanced Production (F(2,247)=0.084, p>.05) sub-dimensions.

4.1.1.4. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Teaching Experience

Table 10 displays whether there is a significant difference in the scores of teachers on the Digital Literacy Scale and its sub-dimensions based on teaching experience, which was compared using the one-way analysis of variance (ANOVA) method.

Table 10.

ANOVA Table for the Scores of Teachers on the Digital Literacy Scale and its Sub-dimensions Based on Teaching Experience

Scale Scores	**Group**	**N**	**Mean**	**sd**	**$F_{(3,246)}$**	**p**
DLS	0-5 year	101	4,01	0,59	1,506	0,214
	6-10 year	71	3,89	0,62		
	11-15 year	32	3,91	0,74		
	16 and above	46	3,78	0,64		
Ethics and Responsibility	0-5 year	101	4,31	0,63	0,562	0,641
	6-10 year	71	4,22	0,59		
	11-15 year	32	4,23	0,69		
	16 and above	46	4,20	0,61		
General Knowledge and Functional Skills	0-5 year	101	3,78	0,92	0,878	0,453
	6-10 year	71	3,75	0,87		
	11-15 year	32	3,86	0,94		
	16 and above	46	3,55	1,04		
Daily Usage	0-5 year	101	4,45	0,63	2,621	0,051
	6-10 year	71	4,24	0,61		
	11-15 year	32	4,18	0,90		
	16 and above	46	4,17	0,71		
Advanced Production	0-5 year	101	2,45	1,28	0,644	0,588
	6-10 year	71	2,66	1,31		
	11-15 year	32	2,66	1,32		
	16 and above	46	2,40	1,10		
Privacy and Security	0-5 year	101	3,98	0,61	1,383	0,248
	6-10 year	71	3,90	0,61		
	11-15 year	32	3,91	0,77		
	16 and above	46	3,74	0,70		
Social Dimension	0-5 year	101	3,76	0,96	2,146	0,095
	6-10 year	71	3,42	1,06		
	11-15 year	32	3,49	1,12		
	16 and above	46	3,40	1,11		

$*p>.05$

As seen in Table 10, there is no significant difference in the scores of teachers based on teaching experience for the Digital Literacy Scale ($F(3,246)=1.506$, $p>.05$) and its sub-dimensions, including Ethics ($F(3,246)=0.562$, $p>.05$), General ($F(3,246)=0.878$, $p>.05$), Daily Usage ($F(3,246)=2.621$, $p>.05$), Advanced Production ($F(3,246)=0.644$, $p>.05$), Privacy ($F(3,246)=1.383$, $p>.05$), and Social ($F(3,246)=2.146$, $p>.05$). The average scores of teachers on the Digital Literacy Scale and its sub-dimensions are found to be similar based on teaching experience.

4.1.2. The Qualitative Part of the Questionnaire

The qualitative data is collected through the first part of the questionnaire and semi-structured interviews. In this section, the qualitative data obtained through the open-ended items in the questionnaire will be displayed in terms of frequencies. To be consistent, the subheadings in this section are parallel to the items in the questionnaire in sequence.

4.1.2.1. The Analysis of the Item 7 in the Questionnaire

The participant EFL teachers' answers to the item 7 in the questionnaire "Why do you use these digital tools in your daily life?" have been categorized for better analysis and presented in Table 11.

Table 11.

The Purposes of Using Digital Tools

Codes	**Frequency**
Teaching	124
Communication	90
Entertainment	73
Doing research	57
Personal issues	29
Academic purposes	25
Create a website	1

Table 11 demonstrates the distribution of purposes to use digital tools among the participant EFL teachers. Based on the frequencies reported in Table 11, the participant EFL teachers were seen to use digital tools primarily for teaching purposes. The participants stated that they utilized digital tools to prepare for exams, plan their lessons, give assignments, prepare course materials, and make their classes more fun. The second frequently mentioned purpose in Table 11 was communication. The participant EFL teachers uttered that they use digital tools to read news, send e-mails, follow social media, and also keep in touch with people faster and easier. The third purpose reported in Table 11 was entertainment. It was seen that participant EFL teachers used digital tools to play games, watch movies and serious, take pictures, and listen to music. The following purpose in Table 11 was found to be doing research**.** The EFL teachers used digital tools to get some information on any topic. Also, as seen in Table 11, digital tools were used for personal issues such as shopping, paying the bills, navigating, making a reservation, or checking recipes. The last purpose in Table 11 was found to be academic purposes. The EFL teachers stated that digital tools helped them read and edit articles, prepare presentations, do homework, improve professionally, and do their work related to projects, courses, and meetings.

4.1.2.2. The Analysis of the Item 8 in the Questionnaire

The EFL teachers' answers to the item 8 in the questionnaire "How do you deal with the problems you face in digital settings? Do you ask for help from someone or try to solve them on your own?" have been categorized for better analysis and presented in Table 12.

Table 12 indicates the distribution related to how the EFL teachers deal with the problems they face in digital settings.

Table 12.

The Way That EFL Teachers Deal with Problems in Digital Settings

Codes	**Frequency**
Solve on my own	119
Ask for help	59
Both	75
Total	253

As seen in Table 12, 119 EFL teachers stated that they solved the problems independently, while 59 teachers asked for help. 75 teachers stated that they both solved the problems on their own and also with help. Those teachers mentioned that first, they attempt to solve problems on their own, and when their attempts are unsuccessful, they seek assistance. Also, the participant EFL teachers added that how they deal with the problem depends on the problem itself. The EFL teachers uttered that they ask for help in case they have a problem beyond their digital knowledge.

4.1.2.3. The Analysis of the Item 9 in the Questionnaire

The EFL teachers' answers to the item 9 in the questionnaire, "Have you ever received any training on DL, and do you have a certificate related to it?" have been categorized for better analysis and presented in Table 13.

Table 13.

The EFL Teachers' Status of Receiving any Digital Literacy Training and Certificate

Codes	**Frequency**
Receiving Training	
Yes	69
No	181
Receiving a Certificate	
Yes	69
No	181

Table 13 demonstrates whether the participant EFL teachers have received any training and certificates related to DL. As seen in Table 13, most of the participant EFL teachers did not receive any training in DL. Only 69 teachers identified that they received training and certificates. However, some of the participant EFL teachers identified that their training was not directly related to DL but included some aspects of DL. They got training under similar topics such as using Web 2.0 tools, using smartboard (Fatih Project), or MoNE's teacher training. All in all, it can be stated that most of the participant EFL teachers were not trained in DL. Therefore, EFL teachers can take some DL courses to integrate those digital skills into their teaching.

4.1.2.4. The Analysis of the Item 10 in the Questionnaire

The EFL teachers' answers to the item 10 in the questionnaire "Should a course including DL skills be integrated into the curriculum of ELT pre-service teacher training programs? If yes, why? If no, why not?" have been categorized for better analysis and presented in Table 14 and Table 15. Table 14 presents the EFL teachers' opinions about the integration of DL skills into ELT pre-service teacher training programs.

Table 14.

EFL Teachers' Opinions about the Integration of Digital Literacy Skills into ELT Pre-Service Teacher Training Programs

Codes	**Frequency**
Yes	226
No	24

As seen in Table 14, almost all of the participant EFL teachers, 226 of the total, supported the idea of integrating DL skills into ELT pre-service teacher training programs. Only 24 participant EFL teachers were against it and mentioned that the integration of DL skills into ELT pre-service teacher training programs is not necessary.

In addition, Table 15 lists the reasons the participant EFL teachers provide for integrating DL skills into the curriculum of ELT preservice teacher training programs. Table 15 also includes the digital skills the participant teachers suggest being included in the curriculum.

Table 15.

The Reasons and Suggestions of the EFL Teachers for Topics to Be Included in the Curriculum

The Reasons	**Frequency**	**Suggested Topics for Teacher Training Programs**	**Frequency**
Living in a digital age	44	Digital tools & Websites	39
Making teaching and learning more effective	17	Digital literacy skills	36
Keeping up with the latest developments related to technology	12	Technology integration in English language teaching	29
Being able to meet students' needs	11	Basic computer-related skills	9
Helping with distance education	4	Smartboard usage	3
Feeling confident and being competent	3	Programs	2
Having less effort and time	2	Web 3 tools	1
Improving personal and professional development	2		
Making our lives easier	2		
Enabling us to reach reliable information	1		
Having a lack of digital knowledge	1		
Improving creativity and critical thinking skills	1		

As indicated in Table 15, regarding the reasons of the EFL teachers about integrating DL skills into the curriculum of ELT preservice teacher training programs, the most frequently repeated reason was living in a digital age. Additionally, some of the participant EFL teachers emphasized the potential for making teaching and learning more effective, while some of the participant EFL teachers highlighted the importance of keeping up with the latest technological developments. Other reasons illustrated in Table 15 were being able to meet students' needs, helping with distance education, feeling confident and being competent, having less effort and time, improving personal and professional development, making our lives easier, enabling us to reach reliable

information, having lack of digital knowledge, and improving creativity and critical thinking skills. Thus, Table 15 provides valuable insights into the reasons for integrating DL skills into the curriculum of ELT preservice teacher training programs.

Moreover, Table 15 also illustrates some suggested topics for teacher training programs. As displayed in Table 15, the most frequently mentioned topic was digital tools and websites, indicating a strong interest in incorporating these resources into teaching practices. The second suggested topic was DL skills, emphasizing the importance of equipping teachers with the necessary digital competencies. Also, as demonstrated in Table 15, the third commonly suggested topic was technology integration in English language teaching. The other topics suggested by the participant EFL teachers were basic computer-related skills, smartboard usage, programs, and Web 3 tools.

4.1.2.5. The Analysis of the Item 11 in the Questionnaire

The EFL teachers' answers to the item 11 in the questionnaire "Would you like to get a kind of training course on digital literacy skills? If yes, what digital skills should be covered in that course? If no, why?" have been categorized for better analysis and presented in Table 16 and Table 17.

Table 16 shows the responses of the participant EFL teachers on whether they want to take a training course on DL skills.

Table 16.

EFL Teachers' Opinions about Taking a Training Course on Digital Literacy Skills

Codes	**Frequency**
Yes	179
No	68
Not Sure	3

As seen in Table 16, more than half of the participant EFL teachers stated that they wanted to get a training course on DL skills, while 68 of the participant EFL teachers did not want to get any training. Also, 3 of the participant EFL teachers seemed to be undecided about getting a training course on DL skills.

In addition, Table 17 summarizes the participant EFL teachers' preferences regarding the types of digital skills they would like to acquire through training courses on DL.

Table 17.

The EFL Teachers' Suggestions for Training Courses

Codes	**Frequency**
Digital Tools & Websites	55
Microsoft Office Programs	19
Digital Literacy Skills	15
Programs (Adobe Software, Animation- Making Mobile Games, SPSS, Canvas, Dyned, Pardus, etc.)	14
Innovative Methods for Teaching	11
Coding	10
eSafety	7
Basic Computer Skills	4
Game Creating	4
Web 3 Tools	3
Gamification	1
Social Media Literacy	1
Conducting Online Courses	1

As seen in Table 17, a significant number, 55 participants, expressed an interest in learning about Digital Tools, Web 2.0 Tools, and Websites. Microsoft Office Programs captured the attention of 19 participants. The third training was suggested as Digital Literacy by 15 participants. Additionally, 14 participants sought training in various programs, including Adobe, software, animation, mobile game development, SPSS, Canvas, Dyned, and Pardus. Moreover, innovative methods for teaching, especially those involving technology integration, attracted the interest of 11 participants. Also, specialized skills such as coding, eSafety, basic computer skills, game creation, and knowledge of Web 3 Tools also received attention from participants, demonstrating a diverse range of interests in digital literacy training. Overall, Table 17 reflects educators' eagerness to enhance their digital skills across various domains.

4.1.2.6. The Analysis of the Item 12 in the Questionnaire

The EFL teachers' answers to the item 12 in the questionnaire "How would you evaluate your knowledge about digital literacy? Why? (poor – fair – good – very good – excellent)" have been categorized and presented in Table 18.

Table 18.

The EFL Teachers' Evaluation of their Knowledge about Digital Literacy

Codes	**Frequency**
Good	118
Very Good	66
Fair	42
Excellent	16
Poor	8
Total	250

Table 18 illustrates the self-evaluation of the participant EFL teachers regarding their DL knowledge, categorizing their proficiency into five levels: Poor, Fair, Good, Very Good, and Excellent. The majority, 118 participants, rated their knowledge as "Good," while 67 participants felt "Very good." Additionally, 43 participants assessed their knowledge as "Fair," and a smaller percentage, 16 teachers regarded it as "Excellent." Only 8 participants in Table 18 rated their DL as "Poor." In total, 250 responses were collected, reflecting participants' perceptions of their DL proficiency across different levels.

4.1.2.7. The Analysis of the Item 13 in the Questionnaire

The participant EFL teachers' answers to the item 13 in the questionnaire "Are there any other digital skills-related problems you face in your classes? Please specify." have been categorized and presented in Table 19.

Table 19.

The EFL Teachers' Digital-Related Problems in the Class

Codes	**Frequency**
Internet Connection Problems	21
Problems In using Digital Tools or Programs	19
Problems Related to Smartboard Usage	18
No Smartboard	13
Problems with Ss' Usage of Technology	10
Technical Problem	13
Ss No Access to Internet or Digital Devices	7
Problems Related to Microsoft Office Programs	1

As seen in Table 19, the participants reported various challenges related to digital skills in their classes. However, some of the problems are not related to digital skills, such as internet connection problems or the absence of a smartboard; they may still have an indirect effect on participant EFL teachers' digital skills. They might hinder the participant EFL teachers from enhancing their usage of digital skills. The most common issue faced by 21 participants, as illustrated in Table 19, was internet connection problems. For this problem, the participant EFL teachers stated that they sometimes might need to change their lesson plans because the internet connection problems occurred suddenly, which has negative effects on the effectiveness of their lessons. Furthermore, Table 19 shows that 19 participant EFL teachers expressed challenges with digital tools or programs and attributed them to a lack of knowledge and difficulties in preparing digital materials. Moreover, some of the participant EFL teachers stated that they need more practice in how to cut or edit videos to use their lessons and also how to use the course book's application effectively. Additionally, in Table 19, problems related to smartboard usage were noted by 18 participants, while 13 participants highlighted the absence of a smartboard as an issue. Besides, some of the participant EFL teachers identified that there might be software problems such as not opening some programs or websites because of the censor on the smartboards at school. In addition, problems with students' usage of technology were mentioned by 10 participants, as seen in Table 19. For

this problem, the participant EFL teachers stated that the students lack critical thinking skills and do not know the eSafety rules in which they may share their passwords or personal information with others. In addition, some of the EFL teachers also expressed that students do not know how to obtain the information they need, and some of the participant EFL teachers complained about students' technology addiction, which may result in playing dangerous games. Also, some of the participant EFL teachers stated that students do copy-paste homework, which causes plagiarism. Moreover, technical problems were stated by 13 teachers, according to Table 19, which stem from electricity issues or internet cables and other equipment. Moreover, students lacking internet access or digital devices were also cited as challenges by 7 teachers in Table 19. Additionally, one participant teacher mentioned the problems related to Microsoft Office programs. These responses provide insights into the diverse digital skills-related difficulties faced by teachers in their classrooms.

4.2. The Findings of the Semi-structured Interview

To support the quantitative data, the semi-structured interviews were conducted with the participation of 17 EFL teachers. 17 EFL teachers were asked 11 questions about their DL skills. Their responses were recorded and then transcribed by the researcher. With content analysis, transcripts were coded, and responses to each interview question were categorized and explained in detail below. The interviews were categorized under Seven themes specified as *"The EFL teachers' understanding of the concept of DL*, *The EFL teachers' views about their DL levels, The EFL teachers' purposes of using digital tools, digital tools and websites for English language teaching, EFL teachers' use of social media platforms and their purposes, drawbacks and suggestions reported by the participant EFL teachers.* These themes and the interrelated codes are discussed in the following tables, and the participant EFL teachers' responses are supported by the excerpts they stated during the interviews. Frequencies in the tables show how many times these codes are uttered by the participants.

4.2.1. The EFL Teachers' Understanding the Concept of Digital Literacy

This theme is the basis of the study because the EFL teachers gave responses depending on their own understanding of DL as a concept. Based on their responses, the interrelated codes were created, and their frequencies are presented in Table 20.

Table 20.

The EFL Teachers' Understanding the Concept of Digital Literacy

Codes	**Frequency**
Understanding and Using Information	11
Accessing New Information	5
Being Able to Read on Digital Platforms	4
Critical Thinking	4
Creating, Sharing, and Collaborating	1

The responses in Table 20 indicate that the EFL teachers were knowledgeable about the concept of DL. Many participant EFL teachers highlighted the importance of being able to efficiently understand and use information in digital platforms, leading to a recognition of varying levels of DL. Thus, the most uttered code in the data was understanding and using information. Interviewees 14 and 15 commented on this code as follows:

> *"Having the ability to use any digital devices or technological devices effectively to meet my needs and goals. Having relevant knowledge and skills and being able to use them to meet my needs." (Interviewee 14, Male)*
> *"It may be related to whether a digital content or material serves the area in which it is used. When it comes to digital literacy, I think it's about whether I fully understand what is being given there and whether I use it correctly, regardless of its main purpose." (Interviewee 15, Female)*

As for the second code in Table 20, the EFL teachers also argued that using new information was one of the qualities of digitally literate individuals because, to use digital technology effectively, individuals must be open to new viewpoints. Related to this code, two participant EFL teachers make explanations as follows:

> "*As a teacher, the first thing that comes to my mind is to research digitally before preparing lessons for my students. I think it's more about researching technology." (Interviewee 6, Male)*
> *"When we say digital literacy, we think about how we access information on the internet, how we find what we are looking for, how we obtain information over the internet." (Interviewee 7, Male)*

Moreover, 2 participants in Table 20 defined the concept of DL skills as being able to read on digital platforms such as reading e-books. The third theme found in the data became being able to read on digital platforms. The participant EFL teachers stated that DL can be related to reading books online, which shows that they have a limited understanding of the term. Expressions of two participants associated with this theme are as follows:

> *"When it comes to digital literacy, the first thing that comes to mind is reading books on the internet." (Interviewee 4, Female)*
> *"As for digital literacy, things like doing literacy through technology, reading and researching something come to my mind." (Interviewee 17, Female)*

The fourth code reported in Table 20 that was found in the data is critical thinking about DL skills. Three participants claimed that DL is not only being able to use digital tools and platforms but also being critical about anything in the digital world. They argued that being able to understand whether the information you read is true or false is also one part of being a digitally literate person. Three participant EFL teachers comment on this issue as follows:

> *"I think it's about being able to judge what the intended use of an application is or to what extent the information in the application is true or false. So, I think there is a bit of a reliability and accuracy dimension rather than digital things. It may also be related to the intended use." (Interviewee 8, Female)*
> *"It may be related to whether a digital content or material serves the area in which it is used. What I expect from the digital thing I use needs to match what I get. When it comes to digital literacy, I think it's about whether I fully understand what is being given there and whether I use it correctly, regardless of its main purpose. In addition, we can access a lot of information in the digital environment, but how accurately we can filter and analyze it is debatable. (Interviewee 15, Female)*
> *"Digital literacy is being able to understand whether the information you read is true or false; for example, there are reliable websites, not YouTube, but the website address ends with gov, and you can get information from these places." (Interviewee 11, Female)*

The final code displayed in Table 19 is creating, sharing, and collaborating, which are regarded as twenty-first-century skills (National Council of Teachers of English, 2013). Only one participant valued these skills in their comments as follows:

"As a teacher, with the developing technology, we integrate technology into the teaching process much more. I define digital literacy as teaching the course effectively and efficiently by integrating computer skills as well as 21st-century skills such as creativity and communication skills because I think they are all intertwined. To use all of these effectively, 21st Century skills must also be added." (Interviewee 13, Female)

4.2.2. The EFL Teachers' Views about their Digital Literacy Levels

One of the themes that the EFL teachers often expressed during the interviews was related to EFL teachers' views about their DL levels. As displayed in Table 21, most of the EFL teachers stated their DL levels as good, while only four of them stated they were excellent, and three of them stated they were fair. However, no teacher stated their DL levels as poor. The codes and frequencies of the EFL teachers' DL levels are given in Table 21.

Table 21.
The Digital Literacy Levels of the EFL Teachers

Codes	Frequency
Excellent	3
Good	10
Fair	4
Poor	-

Table 21 demonstrates the distribution of DL levels among the EFL teachers. The most often expressed level is 'good.' The EFL teachers mostly regarded themselves as good because they stated that they were good at using technology and quite conscious while using it, but they were not capable enough in terms of creating audio-video materials, using software, writing codes, or creating something new digitally. More than half of the teachers in Table 21 stated that their DL level might be 'good,' and some participants commented on this code as follows:

"Yes, I define myself as a digitally literate English teacher. I think I can say that my level is good. But of course, I'm not at the level to write code or create something from scratch. I can design websites, etc. I can effectively use different digital tools in my lessons. I use digital media for three-quarters of my lessons. I

also use digital tools in my daily life, not only for the lessons." (Interviewee 10, Male)
"I think I am a little above the intermediate level. I am not at a very high level because sometimes I have difficulties when using new Web 2.0 tools, or my problems sometimes arise from technological possibilities. I can say that I am at an excellent level. I'm generally good at it, but sometimes I may have problems with new releases. I need to go into a little, or there might be some technical problems." (Interviewee 13, Female)

Only four of the EFL teachers in Table 21 regarded themselves as excellent in terms of their DL levels, and the expressions of two participants related to this are as follows:

"I am quite good at using technology and using some digital tools compared to ordinary people. Before the last two years, I had been teaching computer science for 5 years. I attended English classes for 16-17 hours, and the rest of the time, I was responsible for the smart boards at school, administrators' computers, etc. That's why I'm pretty good at technical things or software and writing codes." (Interviewee 7, Male)
"Yes, I define myself as excellent because I can use all Microsoft Office programs. I handle all my work with a computer. I use digital content. For example, I use e-books. I generally use all my activities as e-content, and since I use my sharing as interactive content accordingly, I believe I have digital competence." (Interviewee 1, Female)

Finally, three of the EFL teachers in Table 21 regarded their DL levels as fair and commented on this code as follows:

"I consider myself as fair. I can't say I'm excellent because this field is constantly evolving and changing. It's something progressing. Therefore, I can't say I'm very competent. I need to make myself more competent in this matter because the lack of competence is increasing day by day. There is constantly evolving technology. For example, when smart boards came to schools, I thought I was relatively close to the subject in terms of my generation, so I believed I could adapt more easily. But now, I don't think I'm competent in terms of using digital materials. I'm constantly trying to add new things to myself, asking if I can do it or if I can learn it." (Interviewee 15, Female)
"Actually, I think I am at a fair level because I don't use it much. In terms of reading books, I generally prefer reading from physical books rather than digital books. When it comes to using the internet, it's something we constantly use and look at to research something. If I were to evaluate myself in terms of technology

use, I can't say I'm highly proficient. I can say it's at a moderate level. To be honest, I feel a bit bored when I use it, and I'm not very skilled at it. If I were extremely interested, it would be different, but in my case, that's not the situation. (Interviewee 4, Female)

A general overview of the participant EFL teachers' opinions on their DL levels in Table 21 reveals that most of the EFL teachers know the basic things about the digital world and use Web 2.0 tools, but most of them do not view themselves as competent in some aspects such as creating something new digitally, using software, or creating audio-video contents. However, the analysis of this theme gave more support for the conclusions. Most participants considered themselves to be digitally literate, even though some still favored traditional means of teaching and learning according to the responses they provided at the interviews. In addition, the EFL teachers' comments on the findings in Table 21 also indicate that the participant EFL teachers are aware of their DL level. In other words, they know what they can or cannot do in terms of DL skills.

4.2.3. The EFL Teachers' Purposes of Using Digital Tools

The analysis of the semi-structured interviews revealed another theme, which is the purpose of using digital tools. As shown in Table 22, the EFL teachers had different purposes for using digital tools in their personal and professional lives. However, the content analysis of the semi-structured interviews revealed that the most frequent code in Table 22 was teaching, followed by communication, daily life, enjoyment, and academics.

Table 22.

The EFL Teachers' Purposes of Using Digital Tools

Codes	**Frequency**
Teaching	16
Communication	14
Daily Life & Personal Issues (shopping, etc.)	11
Entertainment (playing games, etc.)	11
Academic Issues	4

Table 22 shows that, except for one participant teacher, all of the EFL teachers stated that they used digital tools to teach in the class. Some of the EFL teachers also explained the importance of digital tools in teaching and that their job, teaching, is not limited to schools. Three participant EFL teachers commented on this issue as follows:

> *"Our job is not limited to only schools. It continues at home; for example, we prepare for the lesson, and we send things to the children using WhatsApp. I generally use it every evening for lesson preparation. I do all of these tasks online." (Interviewee 10, Male)*
> *"The smartboard is a must-have for me. When it's not working, I come to a standstill, and I really don't know what to do. I think about creative games, but I can say that digital applications in my teaching make up about eighty percent of my work. Also, when I can't think of something or when something puzzles me, I can quickly type it into Google and find it in 2 minutes." (Interviewee 16, Female)*
> *"I also try to use it in teaching from time to time. YouTube is one of the platforms I use the most, and it's like an extension of myself. For example, if a topic comes up, let's say it's related to globalization, I immediately show a video on YouTube. We can analyze it together with the students. Instead of just saying, "This is it," I turn to digital tools to make it more visual and auditory so that they can internalize it better." (Interviewee 14, Male)*

In addition, 'Communication' was one of the most frequent codes in Table 22, which showed that the EFL teachers mostly use digital tools to communicate, such as writing messages, calling someone, or following news on the internet. Two participant EFL teachers comment on this issue as follows:

> *'I use WhatsApp for communication purposes in my daily life, and also I use Twitter as a social media platform." (Interviewee 8, Female)*

'I use digital tools for communication and also being up to date. (Interviewee 15, Female)

Furthermore, depending on Table 22, another code, 'daily life and personal issues,' is found throughout the content analysis. The EFL teachers found digital tools very practical and stated that they used digital tools to do some tasks in their daily lives, such as shopping, navigation, bank applications, etc. Four participants explain this as follows:

"I use digital tools for almost all purposes. Digital tools are already everywhere in our lives. For instance, we have our phones at our fingertips, and it feels like we can't do anything without them. For example, when I can't find my way, I turn on the navigation application, and within 2 minutes, I quickly find the route I need to take." (Interviewee 16, Female)
"I use digital tools for almost all purposes, sometimes I prepare posters on Canva for both teaching and also my personal life. I also prepare wedding invitation cards." (Interviewee 13, Female)
"I use digital tools to do my banking transactions, or I do shopping via digital applications of stores." (Interviewee 5, Female)
"I mostly use applications for personal matters, like banking and investment apps. For example, I use some applications where I invest in bonds, buy funds, and keep track of my daily financial activities. Most of my time is spent on banking applications." (Interviewee 8, Female)

Also, another code is 'entertainment' in Table 22, and some of the EFL teachers stated that they used digital tools for entertainment purposes such as playing games, listening to music, reading books, watching series or films, etc. They also remarked that they had a fun time while using these kinds of digital tools. The following are three of the statements shared at the interviews:

"There is an online game that I like. I play chess from the Lichess website." (Interviewee 9, Male)
"I listen to music for entertainment purposes. When I go to the gym, for example, I usually wear my headphones." (Interviewee 11, Female)
"For entertainment purposes, I use YouTube a lot to watch some videos." (Interviewee 14, Male)

Moreover, as seen in Table 22, a few of the EFL teachers mentioned that they used digital tools for academic issues, such as reading articles or doing literature reviews via digital tools. Four of the teachers explain this, as stated below:

> *"I use digital tools for researching something, or sometimes I read articles." (Interviewee 2, Male)*
> *"I also use it for academic purposes when needed. I used to be a master's student, but I dropped out. Nonetheless, I still engage in research and learning on various topics via digital tools." (Interviewee 3, Male)*
> *"I'm reading articles, and also there was a tool like Mendeley, and I used it for academic literature review, but I only used it for 1-2 weeks because I couldn't adapt to it very well." (Interviewee 13, Female)*
> *"I have an e-book archive for storing information. I research things that I'm curious about. I am very curious about reading, learning, and researching. I read e-books in my free time, and I primarily use them for further research and learning new things." (Interviewee 7, Male)*

4.2.4. The EFL Teachers' Use of Digital Tools and Websites for Teaching English

The EFL teachers were asked about the digital tools and websites that they used most frequently for teaching in the class. In Table 23, the digital tools and websites uttered by the participants for teaching English are listed. These digital tools were divided into categories according to their functions, such as websites, creating online quizzes, making presentations, etc.

In Table 23, the frequencies of digital tools and websites that are mostly used by the participant EFL teachers can be examined. The analysis of this code indicated that the most used top three digital tools and websites are Wordwall, Kahoot, and YouTube. Then, they're followed by Mentimeter, Canva, Quizlet, and Aogultegin.

Table 23.

Digital Tools and Websites for Teaching English

Codes	Frequency
Websites that provide audio & video materials	
Aogultegin	4
British Council	2
Bilgeceingilizce	2
Sumeyyeogultekin	3
iSL Collective	1
gamestolearnEnglish	1
Creating online quizzes & games	
Wordwall	13
Kahoot	11
Quizlet	4
Plickers	2
Quiziz	1
Baamboozle	1
Cram	1
Edpuzzle	1
Thinklink	1
Team LMS	1
Presentation	
Mentimeter	5
Canva	4
Powerpoint	2
Digital Board	
Padlet	3
Brainstorming	
WordArt	1
Word Cloud	1
Online Dictionaries	
Thesaurus	1
Merriam webster	1
Teaching Speaking	
Go animate	1
Chatterpix	1
Teaching Listening	
Lyrics Training	1
BBC 6 Minutes English	1
Artificial Intelligence Tools	
Chatgpt	2
DALL-E 2	1
Open AI	1
Promoting Language Learning	
Duolingo	3
Play More (2,3,4,5,6,7,8 grades)	1
Online Classroom	
Flipgrid	1
Edmodo	1
Google Classroom	1
Okulistik	1
Online Meeting	
Zoom	1

In Table 23, the digital tools and websites that EFL teachers use for teaching English were displayed in different categories according to the type of digital tool or website.

In the first category presented in Table 23, the EFL teachers gave examples of some websites that provide audio or video materials. Especially these websites have many interesting materials and activities, such as worksheets, interactive worksheets, songs, videos, games, etc. Some of the participant EFL teachers expressed that they mostly use Aogultegin, Sumeyyeogultekin, and Bilgeceingilizce during the lessons since they also give access to the interactive presentation of the coursebook. Two participant EFL teachers utter in the interviews as follows:

> *"I mostly use the Aogultegin website. I like its content. It has ready-made games created with Wordwall. I can also use an interactive presentation of the course book during the lesson, which is useful because sometimes the children may forget their books. Towards the end of the lesson, I play games from the website to make it fun. There are videos on the site, and I show some flashcards from there as well. They also have worksheets that I use. We don't need to search and create a lot on our own; there are ready and good materials available. (Interviewee 5, Male)*
> *"In secondary school, I used a classic website called Sumeyyeogultekin because my students' level is very low, even this website is challenging for them." (Interviewee 3, Male)*

In the second category reported in Table 23, the digital tools that the EFL teachers use to create quizzes and games were listed. It can be seen that the EFL teachers use digital tools mostly for creating quizzes or games. Depending on the category and also in all categories, Wordwall is the most used digital tool among the EFL teachers, then it's followed by Kahoot and Quizlet. Also, the participant EFL teachers stated that they prefer to use such digital tools to revise vocabulary items. Their ideas are as follows:

> *"I send my students activities. They can do extracurricular activities at home, including game links, etc. Most of them are on Wordwall, where there are different types of games. I don't just send them and forget about it; I also ensure they follow through. In fact, I play those games first, and I send my score to the students so they can be motivated to try and beat me. I don't set my score extremely high or extremely low. It's at a level they can achieve so they can taste success. For instance, if I just send the game links and don't monitor their progress, they might play it once and then close it. However, when I send my score and challenge them to beat it, they often play it 5-6 or even 10 times. That's why I set a somewhat*

higher score. I don't make it easy by finishing it too quickly, as they earn points based on time as well." (Interviewee 10, Male)
"Indeed, I use formative assessment tools like Quizizz, Kahoot, and Quizlet for review and interim assessments. They also serve as a motivation source for students because when gamification is introduced, the classroom atmosphere undergoes a complete transformation. When a somewhat silly and competitive environment is established, the dynamics change significantly. This way, I can capture the attention of even the least interested students." (Interviewee 14, Male)
"Additionally, I started using the Plickers application this year, and it has been quite efficient. We used it for solving tests. Students have square codes in their hands, and they can turn these codes depending on their answers. So, the students should hold up their cards so that their answer is located at the top edge of their card. Then, we can instantly see their answers and scan them. I find this tool very useful." (Interviewee 8, Female)

Besides, for the third category in Table 23, the digital tools and websites that EFL teachers use for preparing presentations were listed. According to their responses, it's seen that Mentimeter is the most preferred digital tool to prepare a presentation. Then, Canva came second, and a few EFL teachers stated that they use Microsoft PowerPoint. The following lines reflect their opinions:

"I use the Canva application more often, especially when delivering vocabulary presentations or explaining any topic. I prefer this application, especially for teaching vocabulary or grammar topics. I think it works really well." (Interviewee 1, Female)
"I also use presentation applications like PowerPoint, in addition to the Web 2.0 tools. I design my own materials and show them to the students as animations during the lesson." (Interviewee 10, Male)

The fourth category in Table 23 is the digital board. A few of the teachers explained that they use Padlet to create a digital board during the lessons.

"Regarding Padlet, I use it like this: for example, after we read a text, I ask questions related to the text. This application essentially works like a forum with an online discussion approach. I instruct the students to open the application at home and leave their comments as homework. I also use it for brainstorming activities." (Interviewee 13, Female)

The fifth category in Table 23 includes the digital tools and websites that are used by EFL teachers for brainstorming activities**.** A few of the teachers explained that they

use some digital tools for brainstorming or warm-up activities, such as WordArt and Word Cloud. The following are two of the statements shared at the interviews:

> *"I use WordArt with my students in the class for brainstorming activities." (Interviewee 16, Female)*
> *"I actively use Word Cloud. During the introduction to a new topic; I use word clouds to evoke what a word brings to mind, etc." (Interviewee 13, Female)*

As seen in Table 23, the sixth category comprises the digital tools to utilize as online dictionaries. Two EFL teachers expressed that online dictionaries can be very useful for English lessons. They stated that they use Thesaurus and Merriam-Webster as an online dictionary. One participant EFL teacher explains this as follows:

> *"I always keep the Thesaurus website open. From this site, I have students find collocations. I also use the Merriam-Webster dictionary website, which has a great collection of idioms. I teach idioms from there." (Interviewee 2, Male)*

For the seventh category in Table 23, a few of the EFL teachers highlighted the importance of improving English speaking skills, and they added that some digital tools like 'Go animate' or 'Chatterpix' can be a great way to improve the speaking skills of the students. Regarding this finding, one of the participants asserts that:

> *"I sometimes use the ChatterPix application for giving assignments. Students can improve their speaking skills. Mostly, I assign a project. It takes on a project-like format, where the students themselves create it." (Interviewee 16, Female)*

As for the eighth category in Table 23, a few of the EFL teachers gave examples of the tools they use for improving students' listening ability, which are 'Lyrics Training and BBC 6 Minutes English'. One of the EFL teachers comments on this finding as follows:

> *"There is an application called Lyrics Training that I cannot currently use because it's not suitable for the children's age, but this application can be used in lessons. If I find some children's songs, it might be suitable for my students' level. In this application, the song lyrics scroll at the bottom, and children listen and leave a blank in the lyrics, which they fill in." (Interviewee 10, Male)*

The ninth category in Table 23 demonstrates some artificial intelligence (AI) tools. AI is developing day by day and also takes place in English Language Teaching. Four EFL teachers stated that they used AI tools, especially for material design. For example, an EFL teacher suggests that Chat GPT is a useful tool and says:

> *"Chat GPT is incredibly useful for me, and there's an artificial intelligence that's constantly learning and keeping itself open to learning. When I use this artificial intelligence, I end up searching through more resources. I can say that this AI is currently the most robust and well-equipped library on the market. When it comes to teaching English, I am currently teaching 8th graders. In elective English classes, we work on translating articles into English. I have introduced the usage of the Chat GPT application to them. We can work directly with the students using this application." (Interviewee 2, Male)*

The tenth category in Table 23 describes that some EFL teachers also use some language learning apps to improve students' speaking abilities. The following are two of the statements shared at the interviews:

> *"I use Duolingo to help my students speak better, and I want my students to download it on their phones. I ask them to use this application when they have free time. So, my students use it when they're at home. I also had my students download the Play More 5 application, which belongs to More and More Publications." (Interviewee 16, Female)*
> *"I am using the Duolingo app. My students like it because they like speaking English. I create a class on the app to include students by sending them a link, and I can track their progress. I do this for 6th graders." (Interviewee 8, Female)*

The eleventh category in Table 23 shows some digital tools that allow the EFL teachers to create online classrooms. A few of the EFL teachers mentioned that they have online classrooms to share some tasks or assign students their homework.

> *"I use the Okulistik website the most in class. To be honest, I don't prefer Eba much; I like Okulistik more. For example, on Okulistik, there are some really nice games related to teaching vocabulary. There are games like fill in the blanks, completing sentences, and question-answer games" (Interviewee 4, Female)*

For the last category in Table 23, one of the EFL teachers mentioned a digital tool to conduct meetings, which is 'Zoom.' One participant EFL teacher comment as follows:

"*Currently, I am using Zoom. In the language class I am currently in, my students have Zoom installed on their computers as well. I also provide extra lessons for my students in the areas where they need to learn more. I try to teach grammar structure, assign homework, and more." (Interviewee 9, Male)*

4.2.5. The EFL Teachers' Use of Social Media Platforms and their Purposes

According to the interview analysis, the participant EFL teachers stated that they utilized different social media platforms with various purposes in Table 24.

Table 24.

The EFL Teachers' Use of Social Media Platforms and their Purposes

Codes	Frequency	Purposes	Frequency
WhatsApp	17	Communication	16
Instagram	14	Teaching	14
Twitter	11	Personal Issues	9
YouTube	9	Academic	7
Telegram	8	Following Projects	2
Facebook	5		
Threads	3		
LinkedIn	1		
Bip	1		
Snapchat	1		

Table 24 demonstrates what social media platforms the EFL teachers use and why they use these platforms. The most often expressed social media platform in Table 24 is WhatsApp, followed by Instagram, Twitter, and YouTube. Moreover, the least expressed social media platforms are LinkedIn, Bip, and Snapchat. Table 24 also indicates the purposes of the EFL teachers in using social media platforms. It is seen that the EFL teachers mostly use social media platforms for the purpose of communication, as the highest frequency in Table 24, such as texting messages, following their friends on social media platforms, and following current news. Some participant EFL teachers comment on the use of social media platforms for communication as follows:

"I use WhatsApp and Telegram because I have class groups there, and I share some PDF files or documents via such tools. Sometimes, I share some links for games or interactive activities, which I prepare by using Web 2.0 tools." (Interviewee 1, Female)

"I use Twitter to follow current topics such as news. There are some news pages like The Guardian, and I use it to follow some publishers such as Barış Pehlivan. I use it mostly for agenda tracking and research purposes." (Interviewee 2, Male)
"I use Twitter mostly for informational purposes. I use it to understand the agenda more because I don't watch television or the main news bulletins. I use it to get some information about what's going on in my country. I don't write or share much on Twitter." (Interviewee 7, Male)
"There are some teacher groups on Telegram, and we consult each other about some questions in tests. If we don't find the answer, we discuss some parts we do not understand" (Interviewee 9, Male)

As for the second most expressed purpose of using social media platforms in Table 24, the EFL teachers stated that they benefited from social media platforms for teaching purposes to plan their lessons by being inspired by other EFL teachers or EFL teachers groups**,** to find materials and adapt those materials to their teaching or search some necessary documents. Thus, the EFL teachers highlighted that social media platforms contribute to their teaching a lot to get some inspiration and find interesting ideas for planning their teaching. They comment on this issue as follows:

"There are some public accounts on Instagram which belong to English teachers, such as aogultegin which belongs to the owner of the aogultegin.com. For example, I discovered his website on Instagram and got to know it through social media. I follow English teachers on Instagram, and they share their activities, what they are doing in their classes, etc. For example, there were many times when I adapted the games into my classes. Sometimes, I see an activity there and use it for my classes. I use some activities by simplifying them. In this sense, Instagram is very useful to me." (Interviewee 4, Female)
"I use Instagram, especially for education. There are some new-generation teachers; they share very good materials. There are videos about teaching vocabulary, etc. I use Instagram for this purpose regarding the teaching aspect. I follow these teachers, and I am inspired by them." (Interviewee 13, Female)
"There are some social media accounts that provide information about such effective teaching methods or classroom practices. I follow them. I wonder how I can use them in my own lessons. I am inspired by them to develop new methods to learn new things." (Interviewee 14, Male)
"There are English teacher accounts on Instagram, and I follow them. I benefit from their ideas in my lesson planning." (Interviewee 10, Male)
"I learned many new games and activities thanks to some accounts of ELT teachers on Instagram. I can say that those teachers on Instagram have contributed more compared to any in-service training." (Interviewee 11, Female)

Moreover, as seen in Table 24, some of the EFL teachers claimed that they use social media platforms for the purpose of personal issues such as learning a language, getting some information from pages, or doing research. Two EFL teachers commonly comment on this issue as follows:

> *"For example, there are some accounts on Instagram that give tips about language learning. There was an account of a man who speaks 12 languages, he has interesting experiences and gives good practical information. There is also an account called Turkish Polyglot. I follow these accounts. Since I am also interested in other languages, these kinds of things interest me. For example, I was learning Arabic for a while." (Interviewee 7, Male)*
> *"Now, I'm trying to learn a language, and I use YouTube a lot." (Interviewee 12, Female)*

Besides, In Table 24, some of the EFL teachers explained that another reason for using social media platforms is for academic purposes. The participant teachers remarked that they could be easily informed about recent articles, some foundations, or seminars through social media platforms. Three EFL teachers commonly express their ideas on this issue as follows:

> *"I use Instagram to learn about some seminars or training announcements." (Interviewee 3, Male)*
> *"I use Twitter mostly for academic purposes. I look at journals because sometimes we don't know about every journal. I follow world-famous journals. There are some Q1-level journals. They sometimes provide open access and usually announce it on Twitter. They put articles, etc. free download links. This way, I have access to academic things." (Interviewee 8, Female)*
> *"In the academic sense, there are some organizations such as ERIC or Tedmem to keep up with the most current and influential publications. I follow their accounts, especially to read their reports. I follow the general national reports of education in a country. Some reports are very useful to see the bigger picture, such as what is the situation across the country, the situation in schools, the schooling rates here, the increase and decrease here, and the factors behind these." (Interviewee 14, Male)*

The purpose of "following projects" in Table 24 received the least attention from the participants at the interview. Only two participant EFL teachers claimed that they use social media platforms to follow some pages related to various projects, such as Erasmus

or eTwinning. The EFL teachers also highlighted that some social media platforms help them to learn more about projects or find partners for their projects. Expressions of these two participants about using social media platforms for projects are as follows:

> *"I follow Facebook for Erasmus projects, and I can also find everything for academics on Facebook." (Interviewee 1, Female)*
> *"I don't normally use Facebook, but it is an active social media platform and is often used by EFL teachers for the following projects. For example, I found a partner there for the e-Twinning project. I also access Erasmus projects from there in the same way. Instagram and Facebook are very active in this sense, especially Facebook." (Interviewee 16, Female)*

4.2.6. The EFL Teachers' Drawbacks in Using Digital Tools

Some participant EFL teachers reported their opinions regarding some possible drawbacks or challenges they face while they are using digital tools. This theme was reported repeatedly by the EFL teachers in the interviews. Table 25 indicates the possible drawbacks and challenges of the EFL teachers in using digital tools.

Table 25.

The EFL Teachers' Drawbacks in Using Digital Tools

Codes	Frequency
Time	10
Motivation	8
Lack of support from MoNE	8
The physical conditions of classrooms	5
Students' lack of technological devices	4
Limited lesson time	2
Expensive training fees	2
Unproductive training	2
Crowded classes	1
Lack of a database platform at schools	1

The distribution of the frequencies in Table 25 clearly shows that the major drawback of using digital tools is time for the EFL teachers. Most of the participant teachers stated that they couldn't find enough time to use digital tools for the reasons such as their lesson hours at school, personal issues, and house chores. Four participants commonly comment on this issue as follows:

"*For me, the biggest drawback is time. As a mother of two kids, probably time would be an issue for me because sometimes I feel like I can't catch up on anything in my life." (Interviewee 4, Female)*
"Of course, time is a drawback for me. I work in the afternoon and have 30 lesson hours each week, so I get really tired when I go back home late in the evening. In the mornings, I can only do my personal tasks. However, I also have a private life, so I need to spend some time for myself to rest. Thus, time is a problem for me." (Interviewee 12, Female)
"There might be some drawbacks because of time and energy issues. I have a very busy school life, and when I go back home, I feel very tired because I also have other things to do at home. For this reason, it might be hard to find some time and energy to promote my DL. Of course, I may find some time, but I don't think that it will be so productive." (Interviewee 13, Female)
"Average English teachers can sit down and create digital materials on their own and even produce great things. However, this requires incredible time and effort. Now, if we consider an average teacher, someone who is married and has children, etc., believe me, when they come home, they don't want to start working on something. Creating digital materials for 3-4 hours every day is not an easy task. For example, I know some programmers. Even for a small part of a website, they sit and write codes for hours. So, using the world of IT is nice, but creating something is challenging, to be honest. It takes a lot of time." (Interviewee 7, Male)

The second drawback displayed in Table 25 is the motivation to use digital tools. The participant EFL teachers stated that they may lose their motivation when they cannot apply digital tools appropriately in their teaching and assigning homework because of some reasons such as the socioeconomic status of students, crowded classrooms, students' level, or lack of technological devices. Two EFL teachers express their ideas as follows:

"For example, if I send some activities to students via digital platforms, I might lose my motivation if I can't take any feedback from my students or they don't complete the activities. I also feel demotivated if I couldn't implement what I know." (Interviewee 10, Male)
"I think lack of motivation might be a drawback for me because sometimes you may not know whether the thing you conduct in your class may work or not. In that sense, I don't want to waste my time, and this can make me feel less motivated to do something new." (Interviewee 15, Female)

Moreover, another repeatedly reported drawback in Table 25 is the lack of support from MoNE. The participant EFL teachers stated that MoNE does not support

EFL teachers enough so that they can improve their DL skills. Three EFL teachers make the following statements about the lack of support from MoNE:

> "*The lack of support from MoNE is another drawback for me. There aren't any seminars or trainings about this topic. For example, I'm working in Malazgirt, Muş, as an English teacher and now I will have to watch an unnecessary seminar telling about the familiar things I already know. Instead, if they prepare a seminar related to computer usage or any technological device or digital tool, it would be better for me. I find it useless to repeat the information we know already." (Interviewee 2, Male)*
> *"I think MoNE should support this issue more because I believe that the teachers who have many years of experience in teaching don't know much about DL. Thus, they might have problems because of the generation gap. When we didn't participate in any seminars or training after university, we were not competent enough, and we might have difficulty with this topic. Thus, the lack of support from MoNE can be a drawback." (Interviewee 15, Female)*
> *"Actually, MoNE does not support the teachers about this issue. The reason that I see myself as competent in DL but most teachers are not good at this issue. I believe that MoNE should encourage teachers and do some incentives. They don't motivate teachers. There might be more dissemination works related to DL. Otherwise, teachers can see themselves as competent since they're not aware of recent technological improvements." (Interviewee 16, Female)*

Additionally, in Table 25, the EFL teachers also expressed that the physical conditions of classrooms can be another challenge that hinders them from promoting their DL. The participant EFL teachers explained that they couldn't implement the new things and digital activities they had learned because of some technological infrastructure in their classrooms or schools, such as a lack of technological devices or internet connection. The participant EFL teachers share their ideas about this topic in the following statements:

> *"First of all, the computers and smartboards in my school are old-fashioned. The internet connection is not stable. We even cannot use printers at school. Because of these problems, we cannot do anything digitally. Sometimes smartboards or computers are not connected to the internet." (Interviewee 3, Male)*
> *"The thing that hinders me is not being able to put the things I know into practice, which makes me disappointed. I can't directly implement most of the things in my classes. The reason is the classic problems in the classroom, such as internet connection problems and crowded classrooms. Also, not every student has a digital device at home, and sometimes the internet connection might be good in one class but also it might be bad in another class. Sometimes, the smartboard in some classrooms can be out of order. Thus, I am sometimes not able to provide equal opportunity in education. So, the lack of facilities becomes a challenge for*

teachers. In the end, of course, I can say that I have improved my DL skills, but I don't feel well when I can't use that information for teaching English and helping my students." (Interviewee 8, Female)

Students' lack of technological devices is another code reported for the drawbacks in Table 25.

The EFL teachers remarked that students might not have computers, laptops, or smartphones, which might make it difficult for the EFL teachers to integrate digital activities into their teaching to develop students' DL skills. The following are two of the statements shared at the interviews:

"Moreover, the financial limitations of the students also come into play. For example, not all of them have access to the internet, and having a tablet or computer is not common. This makes it challenging for us to help them improve their digital competencies. When there are limitations due to financial constraints, it becomes difficult to highlight our digital competence as well. Unfortunately, due to limited resources and financial circumstances, this becomes a significant challenge." (Interviewee 1, Female)
"The lack of resources for children can also be another barrier because not all the students have an internet connection at home, computer or tablet. Children may have low socio-economic levels, which means only a few of them may have resources available but not in others." (Interviewee 5, Female)

Moreover, according to Table 25, a few of the EFL teachers highlighted the limited lesson time and explained that they don't have enough time to use digital tools in their classes. They thought the syllabus was quite intense, and they had difficulty covering the topics, so they couldn't spare any time to conduct digital activities in the class. Two EFL teachers comment on this issue as follows:

"For example, there are 5 hours of English lessons for 9th graders in my school. For 10-11-12 grades, there are only 2 hours of English lessons in the classrooms. Our curriculum is incredibly loaded. I look at the reading passages in the 11th-grade books, and there are sentences of 3-4 lines. That's why we are trying to develop the curriculum. Therefore, we cannot do things like adding this extra thing to the lesson or using a digital tool. There are 4 hours of English lessons in 10-11-12 grades in regular high schools. However, since I work at Imam Hatip High School, we only have half of it. Here, we are only trying to make something up, considering the conditions we have." (Interviewee 7, Male)

"Additionally, we have limited English class hours in primary school, with only 2 lessons per week. I can apply such things more in 2nd grade as the topics are quite manageable. However, it might be a bit challenging to implement them in 3rd and 4th grades." (Interviewee 10, Male)

Besides, as seen in Table 25, a few of the EFL teachers complained about expensive training fees. The EFL teachers claimed that they wanted to participate in training programs but couldn't afford them since those programs were beyond their budget. The following lines reflect their opinions:

"Teachers want to improve their digital skills, but some training can be expensive. For example, I attend a training session, and at the end of the training, I receive a certificate. However, no teacher can afford to enroll in a training program costing 300 to 500 dollars out of their own pocket. It's not possible. This kind of support can be provided by MEB." (Interviewee 14, Male)
"There are indeed places that offer very high-quality education, but unfortunately, most of them come with a fee. In that sense, teachers may not find an opportunity to improve their skills even if they want to." (Interviewee 8, Female)

Furthermore, in Table 25, some EFL teachers also complained about unproductive training. The EFL teachers added that they don't want to waste their time because of the irrelevant, known, or unproductive content. The participant EFL teachers think that when they participate in any training or seminars, they may learn the things they already know, or the content may be too long, so they may get bored. Their ideas are as follows:

"I follow the seminars and training programs within the Ministry of National Education (MEB). I keep up with the latest training opportunities. I'm always ready to take part in any available training. I've even taken robotics coding training. I'm very interested in training, I try to participate as I can but every time, the training turns out to be a disappointment. I get disappointed every time, and the content may not be that productive." (Interviewee 17, Female)
"Sometimes, the training may be beyond its purpose. For example, sometimes, a topic that could be covered in one hour is stretched out throughout the whole day. Of course, I'd like to attend if it's productive. However, the content of the training can sometimes be inefficient." (Interviewee 11, Female)

In addition, only one EFL teacher in Table 25 mentioned the crowded classes. She thinks that applying an activity might be quite difficult in crowded classes and comments on this issue as follows:

"Even if the infrastructure is good, overcrowded classrooms can be a problem. For instance, I can adjust an application for 20 people, but the class has 40 students. In this case, I try to group the students, which creates additional time consumption." (Interviewee 8, Female)

Similarly, as for the last item in Table 25, only one EFL teacher reported a lack of a database platform at schools. She further commented that state schools also need to have a platform as private schools have. This platform might be quite useful for uploading some documents, assigning students homework, using interactive materials, or tracking students' progress. Thus, she thinks that there is a gap in state schools in terms of database platforms. She explains this as follows:

"Schools do not provide sufficient databases. There is no database or application provided by schools that allows us to interactively use the resources. Unlike private schools or schools in other countries, we do not have platforms where we can upload assignments, purchase and use interactive materials, and have teachers track our progress. For example, there's Dyned, but it's a very inadequate application and, in my opinion, quite poor. No one uses the Dyned application anymore. I find it insufficient. There are many other excellent applications out there. There are also great portals that private schools use, filled with activities, where teachers can monitor students and maintain records, similar to what you see in Dyned and other systems. Unfortunately, we do not use these applications, and there is a gap in this area." (Interviewee 1, Female)

4.2.7. The EFL Teachers' Suggestions to Promote Digital Literacy

One of the research questions focused on the suggestions provided by the EFL teachers about how to improve their DL skills. Therefore, Table 23 presents the EFL teachers' suggestions about how to promote DL among teachers. The most frequent code in Table 26 is to participate in seminars, courses, or trainings about DL skills. The participant EFL teachers also listed other suggestions as doing research, following social media platforms, asking for help from a competent person in DL, and lastly, increasing motivation.

Table 26.

The EFL Teachers' Suggestions to Promote Digital Literacy

Codes	Frequency

Participating in seminars, courses, or training	12
Doing research	11
Following Social media platforms	7
Asking for help from a competent person in DL	6
Increasing motivation	2

As the most frequently uttered suggestion in Table 26, the participant EFL teachers recommended that EFL teachers participate in seminars, courses, or training to improve their DL skills and become more competent in using digital tools and activities. The following are two of the statements shared at the interviews:

> *"We can attend courses and in-service training programs. Additionally, we can have more discussions with individuals interested in these topics and seek their help. The most effective option would be to take a course. Participating and learning firsthand would be very beneficial." (Interviewee 4, Female)*
> *"I believe that we can only develop ourselves through seminars and by bringing people together. Because people like me have a lot of responsibilities when they get home from school. There isn't much time for self-improvement. I can only manage my own tasks at home. But if they say, 'You must be at this place at this time and take this training,' then I would go and learn something." (Interviewee 5, Female)*

Related to this suggestion, some of the EFL teachers give examples of the types of training they want to receive. The EFL teachers claimed that hands-on training might focus on the practical part rather than theoretical information. Some of the EFL teachers further think that the practical part is mostly missing in seminars provided by MoNE. One of the participant teachers focused on the importance of practice and hands-on activities in training programs as follows:

> *"As a suggestion, I believe that it can be a practical education aimed at teachers. That is the most important part, in my opinion. Having a one-sided information transfer, where someone knowledgeable comes and introduces the program, does not have much value. One-way communication, in this sense, cannot impart the necessary application skills. It should be directly in a 'hands-on practice' format. So that I can actually use the program there and survive, have that experience." (Interviewee 14, Male)*

The second most frequent code for the suggestions in Table 26 is doing research. The EFL teachers claimed that they can improve their DL levels by doing research so that they can use digital tools and platforms in their teaching effectively. The following lines reflect their opinions:

> *"But I constantly research to make the best use of whatever is digital. For example, if something comes to my mind, I search for it on Google or YouTube. I look, learn, and do it. So, I can directly solve my internet-related issues by searching on the internet." (Interviewee 3, Male)*
> *"As I mentioned, I have not done anything extra. I come across them from somewhere, and out of curiosity, I check them out. For instance, I see them on Twitter, and because I follow such things, similar content usually comes across my path. I have not done anything extra, but I encounter these kinds of things in my daily life, and I add them. So, I research applications, see what other people are using, etc." (Interviewee 10, Male)*

In addition to these reflections, one of the participant teachers also suggested that teachers can determine what they need to improve, and then they can conduct a project to learn and understand DL skills better. He explains his idea as follows:

> *"If I were to give a recommendation, I believe that the first step is to have a need. When you need something, you make tremendous progress in that area. In other words, when you have a project in your mind and you work on a project-based approach, you naturally start learning things you do not know. In this sense, if we ask what an English teacher can do, they should start to find an idea. They can think of a teaching technique, activity, or project and start with that. They should find whatever is needed, no matter how they can, to make it happen. The first step is to have an idea. They can research and explore what digital tools are available. I believe the best way is to get to work and learn through project-based learning." (Interviewee 7, Male)*

Also, as seen in Table 26, some of the participant EFL teachers suggested following social media platforms such as YouTube or Instagram to promote their DL. They recommended that there are some public pages on social media platforms that can provide useful suggestions or tips for EFL teachers. Thus, the EFL teachers can be inspired by them and improve their DL skills. Their ideas are as follows:

> "*In terms of digital literacy, I follow some YouTube channels. Thanks to those channels, I can find what I am looking for. This way, I can do it. I also follow*

YouTube and Instagram pages related to information technology." (Interviewee 1, Male)
"In general, I also try to follow things on social media. I look at what is being used, what is being done, different approaches, things that catch my attention, or what I can implement. I try to take things I can apply and make adjustments. For example, when I feel inadequate in a particular area, I look at what others have done. I try to learn what I can do, and I give up on what I cannot do. On social media, there are teacher groups that I follow. For instance, I really like the 'mamamira' account. I can benefit from it as it also works with elementary school students." (Interviewee 15, Female)

Besides, another code in Table 26 is asking for help from a competent person in the field of DL. Some of the EFL teachers stated they could ask for help from more knowledgeable people using digital devices and platforms. The following are two of the statements shared at the interviews:

"Taking a step towards becoming digitally literate requires staying one step ahead. In fact, I am constantly trying to improve myself in this regard. For example, when I meet software developers, engineers, or others who are more competent in digital things, I try to gather information from them to be able to use better programs in my profession. I seek knowledge to use advanced interfaces." (Interviewee 6, Male)
"I mostly learned from more competent people in my social circles, such as friends who are English teachers, or sometimes, I come across things while browsing, and I look into them out of curiosity." (Interviewee 5, Female)
Teachers can research and explore what digital tools are available, and they can ask those who are knowledgeable. Learning from those who use the digital world extensively in teaching is also beneficial. (Interviewee 7, Male)

As the last code in Table 26, only two EFL teachers emphasized the importance of motivation. The participant teachers think that when they don't feel a need to improve their DL, their motivation may decrease. The EFL teachers also suggested determining clear goals might increase their motivation, and thus, they can improve themselves. The following statement reflects their opinions:

"I do not currently believe in a logic that goes like 'we have digital literacy training; let's enroll you and improve your level.' I believe that such things are related to a teacher's desire, self-confidence, or motivation. Regarding digital literacy, I think we can change or improve things on our own. It starts with the

teacher being willing and motivated. In fact, by definition, because of being digital, I don't believe it can be achieved with a training or course, like 'let us teach you this theoretically.' I think it's more about trial and error, experimenting, exploring out of curiosity. A person can learn and explore if they are curious. But if someone is going to participate in training, it should be of their own free will. Sometimes, the Ministry of Education can push training on you, saying 'you have to attend,' but instead of that, we can do it on our own terms." (Interviewee 8, Female

This chapter dealt with both the quantitative and qualitative findings that emerged throughout the study, and in the next chapter, the findings of the present study will be discussed in relation to previous studies.

CHAPTER V

DISCUSSION

This chapter discusses the findings of the study in relation to the research questions and the previous studies conducted on DL. The discussion is divided into two sections. Initially, the focus is on the quantitative data gathered from the Digital Literacy Questionnaire, involving responses from 250 EFL teachers. In the second section, the discussion centers on the qualitative data obtained through open-ended items on the first part of the questionnaire and the semi-structured interviews with 17 EFL teachers who possessed substantial knowledge about DL.

5.1. Discussion of the Quantitative Findings

Since this study was structured with the explanatory sequential design of mixed-method research, two instruments for data collection, namely a questionnaire and a semi-structured interview, were employed to address these questions. Firstly, the questionnaire was applied to 250 EFL teachers to collect data quantitative and also qualitative data with some open-ended items added to the questionnaire. Secondly, a semi-structured interview was conducted with 17 EFL teachers to collect qualitative data for the study.

5.1.1. The Digital Literacy Level of The EFL Teachers

When the quantitative data was examined, the total score was obtained from the Digital Literacy Scale and its sub-dimensions, and the mean was found as 3.92. As the score ranges in the Digital Literacy Scale were examined, it was found that the EFL teachers had an average level of DL. For the sub-dimensions of the questionnaire, the sub-dimension of Daily Usage, then it is followed by the sub-dimensions of Ethics and Responsibility, Privacy and Security, General Knowledge and Functional Skills, Social Dimension, and Advanced Production in order. Therefore, the DL levels of the EFL teachers who participated in the present study can be regarded as average.

The results of this research seem to be consistent with some studies in the literature. Firstly, Christiani, Tungka, and Nainggolan (2022**)** reached similar results in their study, which examined the levels of DL among 336 Indonesian EFL teachers to determine how prepared they were to incorporate and use digital tools into their language

instruction. They concluded that Indonesian EFL teachers had a moderate level of DL, which means that they were prepared to learn in an online setting that was supported and helped by digital tools, but they also had some difficulties (Christiani et al., 2022). In another study, Saud (2021) conducted a study with 426 master's and doctorate-holding Nepalese EFL teachers who demonstrated sufficient DL to facilitate their online instruction in lockdown and pandemic scenarios.

Several factors might explain the finding of an average level of DL among the EFL teachers who participated in this study. The average level of DL among EFL teachers in this study might be affected by some factors such as differences in educational backgrounds, varying access to digital resources, diverse levels of exposure and experience with technology, as well as the influence of institutional support, opportunities for professional development, and individual preferences in adopting digital tools for teaching (Ahmed & Akyıldız, 2022; Mudra, 2020; Pratolo & Solikhati, 2020; Soifah et al., 2021). When the findings of the interview were analyzed, it was reported that there are several drawbacks affecting the EFL teachers to enhance their DL, which stems from time, motivation, lack of support from MoNE, the physical conditions of the school and **C**lassrooms, students' lack of technological devices, fewer lesson hours, expensive training fees, unproductive training, crowded classes, and lack of a database platform at schools. Moreover, as discussed in the literature review, the generation gap might also be the reason for having a moderate level of DL (Brown, 2011; McCrindle, 2006; Prensky, 2001). Since teachers were mostly not born in a technologically advanced era, they might still have some difficulties catching up with current technological advancements (Strause & Tan, 2017).

However, the present study's findings do not support the previous research conducted by Doğan (2023). She examined Turkish EFL teachers' DL levels and found that the EFL teachers had a highly proficient level of DL. Similarly, the study of Pehlevan & Ünal (2022) revealed that EFL teachers demonstrated a high level of DL, scoring well in sub-factors such as Attitude, Technical proficiency, Cognitive skills, and Social-Emotional aspects. In another study, Mavi (2020) examined the self-efficacy of EFL instructors, their levels of confidence concerning DL, and the use of ICTs (information and communication technologies) in Turkish higher education. According to his research, EFL instructors in Turkish higher education appeared to be aware of the opportunities provided by contemporary ICTs for language learning, and they reported having a good general level of DL skills to use a variety of technologies in their classrooms to enhance

their students' educational experiences. The findings of the present study also contradict similar studies in the recent literature (Benali et al., 2018; Cote & Milliner, 2018; Juurakko-Paavola et al., 2018;) showing that EFL teachers possess a high digital competency ability. In other studies, conducted with pre-service teachers in different fields, it was found that they had a high level of DL (Ata & Yıldırım, 2019; Liza & Andriyanti, 2020; Peled, 2021; Üstündağ et al., 2017).

Furthermore, some studies have discovered low DL levels among EFL teachers. For example, Machmud (2011) found that EFL teachers in Indonesia had a low level of DL, and therefore, they did not actively use digital tools even though there were high-quality technological tools available to them.

5.1.1.1. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Gender

The results of the study showed that the male EFL teachers' DL levels were higher than the female EFL teachers' levels depending on the Digital Literacy Scale, and the male EFL teachers had higher mean scores on the General, Daily Usage, and Privacy sub-dimensions of the questionnaire compared to the female EFL teachers. However, there is no significant difference in the scores based on gender for the Ethics, Advanced Production, and Social sub-dimensions. When the literature was examined, surprisingly, Demir (2021) stated that gender affects the DL of EFL teachers and found out that female teachers in the study had higher scores compared to male teachers regarding their DL. On the other hand, the findings of the present study are found to be parallel with some studies. Previous studies conducted by Ata and Yıldırım (2008) and Özcan (2022) have proposed that male teachers tend to exhibit higher DL scores than female teachers. This outcome also aligns with the findings reported by Ardıç and Çiftçi (2019), indicating that gender can have a significant impact on various competencies related to ICT competence. Their research demonstrated that male teachers tended to exhibit higher ICT competence levels compared to their female counterparts. Similarly, Mavi (2020) conducted a study and found that male instructors had a higher level of confidence in all aspects of DL. Also, Çam & Kiyici (2017) aimed to assess the DL levels of prospective teachers studying at different departments of Sakarya University based on gender. It reveals that male prospective teachers exhibited higher levels of both visual and computer literacy compared to their female counterparts.

However, the studies of Garcia-Perez, Rebello-Catalan and Garcia-Perez (2016), Benali et al. (2018), Rahimi and Yadollahi (2011) produced contradictory findings, which found no statistically meaningful difference between male and female teachers' various DL-related efficacies. In another study conducted by Pehlevan & Ünal (2022), it was revealed that there was no notable difference in DL levels of EFL teachers and its sub-dimensions of the scale based on gender. Similarly, this aligns with the results of Peled (2021), who again observed no significant difference in DL scores between males and females of pre-service teachers. Also, Zhang (2023) could not find any differences between male and female EFL teachers regarding their DL skills.

5.1.1.2. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Age

In the present study, whether or not the EFL teachers' DL levels differed based on their ages was investigated. It was found that there were some statistically meaningful differences in teachers' DL levels compared to their ages in each DL dimension. Accordingly, there is a significant difference among the participant EFL teachers aged 30 and below, those aged 31-40, and those 41 and above for both the overall scale score and the Daily Usage, Privacy, and Social sub-dimensions. On the other hand, there is no significant difference between the EFL teachers aged 31-40 and those aged 41 and above. Teachers aged 30 and below have higher average scores in the Digital Literacy Scale, Daily Usage, Privacy, and Social sub-dimensions compared to teachers aged 31 and above. Nonetheless, there is no significant difference in the scores based on age for the Ethics, General, and Advanced Production sub-dimensions. In general, it can be stated in this study that as the EFL teachers in the study got older, their DL levels in some dimensions started to decrease. Nevertheless, it is essential to emphasize that these differences based on age were statistically significant only within specific age groups, as detailed in the previous chapter.

These results are in line with the findings of Garcia-Perez et al. (2016), Rahimi and Yadollahi (2011), and Michalakis, Vaitis, and Klonari (2019), who found that teachers' ages can influence their various DL-related competencies. Moreover, surprisingly note that the present study found that the participant EFL teachers who are aged 30 and below exhibited the highest overall DL level in some dimensions because they represented the youngest members of generations Z and Y in the study, implying

that they were 'digital natives' (Prensky, 2001 & Bennet, Maton & Kervin, 2008). Also, Mavi (2020) found similar results, which showed a trend where the self-efficacies of teachers participating in the study tended to decrease across all dimensions of DL as they aged. It was concluded that EFL teachers aged 20-25 exhibited the highest DL levels of self-efficacy, whereas those aged 41 and above demonstrated the lowest levels of self-efficacy in DL levels (Mavi, 2020). In contrast to these findings, Demir (2021) found that there is no significant difference between age and EFL teachers' DL skills.

It is noteworthy to highlight that this present study found statistically significant differences observed in the overall DL scores between digital native teachers aged under 30 (Mean=4.08) and digital immigrant teachers aged 41+ (Mean=3.75). Nevertheless, it is essential to emphasize that these age-related differences were identified as statistically significant only within specific age groups and also in some dimensions of DL, as displayed in Table 9.

5.1.1.3. The Differences among the Digital Literacy Levels of the EFL Teachers Regarding their Teaching Experience

Concerning the teaching experience of the EFL teachers, it was found that there is no significant difference in the scores of the EFL teachers based on their teaching experience for the Digital Literacy Scale and its sub-dimensions as a result of the one-way analysis of variance (ANOVA) method. This suggests that a teacher's classroom experience does not have a considerable impact on their proficiency with digital tools and technologies.

These results are consistent with the research conducted by Çöp (2023), who found no statistically significant difference between the years of teaching experience and DL levels of EFL teachers. Similarly, Haviz, Maris, and Herlina (2020) and Semerci and Aydın (2018) found no evidence of a significant relationship between teaching experience and various aspects of technology integration in education. Also, Demir (2021) determined that the years of teaching experience among the participant EFL teachers do not show a statistically significant difference in the total scores revealed in the dimension of teachers' DL.

However, this finding of the present study contradicts the findings of Gökdaş and Çam (2022), which likewise found a statistically significant correlation between instructors' levels of DL and how long they have been teaching. Additionally, Alhassan's

(2017) study identified a positive yet modest correlation between the duration of teaching experience and DL skills. These findings suggest that, although teaching experience may contribute to teachers' DL to a certain extent, other factors are likely to play a more substantial role in being competent in DL.

5.2. Discussion of the Qualitative Findings

In this section, the findings of the open-ended items on the first part of the questionnaire and the semi-structured interviews conducted with 17 EFL teachers were discussed in connection with the existing literature. As mentioned previously, the primary aim of collecting qualitative data was to gather comprehensive data to address research questions 1, 3, 4, and 5 in this study. Therefore, it was aimed to collect in-depth data and more detailed information from the participant EFL teachers about the EFL teachers' understanding of the concept of DL, the EFL teachers' views about their DL levels, the EFL teachers' purposes of using digital tools, digital tools and websites for English language teaching, the EFL teachers' use of social media platforms and their purposes, the EFL teachers' drawbacks in using digital tools, and the EFL teachers' suggestions to promote DL.

5.2.1. The EFL Teachers' Understanding the Concept of Digital Literacy

The EFL teachers' responses to their understanding of the concept of DL indicated that they were mostly aware of the concept of DL. In addition, the EFL teachers showed their understanding the concept of DL by touching upon different aspects of DL, such as being able to adopt new information, use and understand information, create, collaborate, and share information, think critically, and make evaluations. However, all in all, their understanding the concept of DL seemed to close the existing definitions of DL in the literature (Bawden, 2001; Gilster, 1997; Martin, 2006) since there isn't any agreement on that in the literature. Considering the EFL teachers' comprehension of DL, it can be argued that their self-assessment of understanding the concept of DL reflected the diverse and varied definitions.

Ahmed and Akyıldız (2022) reached similar results about secondary and high school EFL teachers' general views about DL. It was recognized that secondary and high school EFL teachers exhibit notable variations in their definitions of "DL." While the majority of secondary school teachers emphasize effective technology use for accessing

and sharing information, high school teachers highlight the importance of not only finding information but also conveying it securely to students using digital tools (Ahmed & Akyıldız, 2022).

In line with these findings, Akayoğlu et al. (2020) conducted a qualitative study and explored how Turkish pre-service EFL teachers defined the concept of DL. It was discovered that the prospective teachers (PTs) were aware of DL as a concept. They highlighted some important aspects while making their definition of the term such as adopting information and being receptive to new perspectives to effectively utilize digital technologies (Akayoğlu et al., 2020).

When referring to DL, the EFL teachers stated that they consider how they access information on the internet, how they locate what they need, and also how they retrieve information online. In addition, some of the participants defined DL, as possessing the capability to effectively use any digital tool or technological device to fulfill their needs and goals. Similarly, in another study conducted by Yukselir and Yuvayapan (2019), similar findings were recorded. It was found that EFL instructors provided comments on the definition of DL encompassing activities such as searching for information on the internet, browsing, accessing information, and being able to use digital tools appropriately (Yukselir & Yuvayapan, 2019).

Some of the participants in the present study explained the term 'digital literacy' by making connections with 21st-century skills by highlighting the importance of critical thinking and evaluation. They stated that DL is not just using digital tools or platforms but being critical about anything digital. In line with this, Yukselir and Yuvayapan (2019) found out that EFL instructors defined DL as a blend of critical thinking skills, a crucial aspect of 21st-century skills, and the ability to differentiate between fact and fiction.

To conclude, there were variations of definitions of DL. The results revealed that some of the EFL teachers were more informed about DL in all aspects, while some had insufficient knowledge about DL. However, teachers need to possess a comprehension of DL and the societal norms associated with the appropriate utilization of new technologies (Dudeney & Hockley, 2016).

5.2.2. The EFL Teachers' Views about their Digital Literacy Levels

Regarding the qualitative data, the EFL teachers mostly identified themselves as ‘good’ for their DL skills. This finding is similar to the results of the quantitative data, which was collected through the questionnaire measuring their DL levels. Depending on

the analysis of semi-structured interview results, it was recognized that some of the EFL teachers were not fond of using digital tools in their teaching because of some problems such as physical conditions of classrooms, less motivation, crowded classes, fewer lesson hours, etc. Also, it was understood that some of the EFL teachers only associated the term DL with digital reading and writing and expressed their reluctance to apply for their DL skills. Additionally, some EFL teachers explained that they did not see themselves as competent enough and were easily bored with digital things, but still, they evaluated their DL levels as good. Akayoğlu et al. (2020) also reached similar conclusions in which the pre-service EFL teachers assessed themselves as digitally literate. It was reported that some of them still expressed a preference for traditional methods of teaching and learning according to the results of interviews. Also, Juurakko-Paavola et al. (2018) asked teachers to evaluate their digital skills, and it was revealed that most of the teachers regarded their digital skills as good. Similarly, Cukur (2023) uncovered that most of the EFL teachers expressed that they feel quite confident about using digital tools due to their knowledge and endeavors to stay up-to-date with the latest digital tools.

5.2.3. The EFL Teachers' Purposes of Using Digital Tools

The results of the qualitative data indicated that the EFL teachers had different purposes for using digital tools in their lives. The most frequently expressed purpose was teaching, followed by communication, daily life, enjoyment, and academics in order. The EFL teachers stated that they apply digital tools during the lessons to make learning easier and more enjoyable for their students. The participants also emphasized that they sometimes use digital tools for the planning phase of the lesson while deciding on the learning activities or preparing any digital materials. Especially it was found that the EFL teachers use digital tools mostly to prepare online quizzes or games which were favored by students since they had fun while engaging with them. Ahmed and Akyıldız (2022) also reported similar results, including that some of the secondary school EFL teachers use digital tools for teaching purposes to make the lessons more engaging and enjoyable. They also remarked that EFL teachers' typical usage of digital tools revolved around teaching purposes, self-improvement, and information assessment. Moreover, Solano, Cabrera, Ulehlova, and Espinoza (2017) stated that EFL teachers suggested to use of digital tools as supplementary resources for teaching purposes because they believed that such tools can facilitate easier learning of the English language for students. Similarly,

Cukur (2023) unveiled that teachers utilize digital tools to support the teaching and learning process, making their lessons more interesting, touching upon different learner styles, and also preparing and adapting materials as well as using them for communication, entertainment, and academic purposes. Similarly, Amhag, Hellström and Stigmar (2019) investigated in what ways teacher educators utilize digital tools and found similar results. It was stated that teacher educators utilize digital tools for teaching, communication, day-to-day administration, and research.

5.2.4. The EFL Teachers' Use of Digital Tools and Websites for Teaching English

The EFL teachers seemed to use digital tools mostly to create quizzes or games. In that sense, the most frequently used digital tools are Wordwall, Kahoot, Quizlet, Mentimeter, Canva, Padlet, Duolingo, Chatgpt, and PowerPoint. Moreover, it was also reported that most of the EFL teachers utilize some websites that provide educational resources such as coursebooks, materials, ideas for teaching, etc. The websites touched upon by the participant EFL teachers are Aogultegin (for primary school), Sumeyyeogultekin (for secondary school), Bilgeceingilizce (for primary school), and Sumeyyeogultekin and British Council. The findings are found to be parallel with previous studies by Kayar (2019) and Özel (2013), in which they asserted that Web 2.0 tools are highly appealing to educators, particularly for EFL teachers, as a way to make lessons engaging and entertaining. They identified a majority of Web 2.0 tools employed by EFL teachers, including Kahoot, Quizlet, Quizizz, Padlet, Mentimeter, Edmodo, Duolingo, Google Classroom, StoryJumper, etc. In line with this, Ahmed and Akyıldız (2022) also revealed that the most commonly utilized digital tools among secondary school EFL teachers are Web 2.0 tools such as Kahoot, Edpuzzle, and Quizizz while high school EFL teachers indicated their mostly used digital tools such as Kahoot, Edpuzzle, Quizizz, Quizlet, Padlet, Mentimeter, Powerpoint, Prezi, etc. Furthermore, Soifah et al. (2021) explored the DL practices of EFL teachers by aiming to reveal digital technologies employed by the teachers and found out that EFL teachers mostly utilize Microsoft Office programs such as Powerpoint, Kahoot, Quizzes, Google Classroom, and some useful websites. Cukur (2023) uncovered that interactive versions of the coursebooks, Kahoot, Quizlet, Padlet, and Google Classroom were commonly used digital tools among EFL teachers**.** Additionally, Moorhouse and Yan (2023) identified 98 digital tools used among English language teachers. The top ten digital tools were Kahoot, Quizizz, Quizlet,

Padlet, Google Classroom, Epic, Youtube, Nearpod, Quizizz, Google Forms, and Mentimeter, which were utilized by the EFL teachers to make interactive presentations and to aid in extracurricular learning activities by assigning homework, and sending lesson materials and activities via digital tools. Moorhouse and Yan (2023) also uncovered that English language teachers a various kinds of websites offering offer genuine immersion in language learning such as BBC.

5.2.5. The EFL Teachers' Use of Social Media Platforms and Their Purposes

In this study, the most frequently emphasized social media platforms that are used by the participant EFL teachers are WhatsApp, Instagram, Twitter, YouTube, Telegram, and Facebook. As the most frequently used digital tool, WhatsApp was commonly preferred by the participant EFL teachers. It was found that the EFL teachers utilized WhatsApp for communication purposes and also for sharing documents, and links engaging in activities or online exercises through web 2.0 tools. Similarly, Ahmed & Akyıldız (2022) found that some high school EFL teachers utilize WhatsApp to send assignments and notify students during lessons. This also aligns with the findings of previous research by Bensalem (2018). Moreover, Soifah et al. (2021) unveiled that the most used social media platforms by EFL teachers were WhatsApp and Instagram, then they are followed by YouTube. This is also parallel to the present study, in which some of the EFL teachers expressed that they use YouTube more often in their lessons. They further mentioned that YouTube can be useful for listening to songs or watching videos about the topic of the lesson. Karkoulia (2016) supports this finding by emphasizing that YouTube can be useful in improving the listening skills and pronunciation of the students and it can be employed both inside and outside the classroom, which facilitates easy sharing of videos. In addition, Solano et al. (2017) found out that YouTube was one of the most utilized tools used by EFL teachers in the lesson. In parallel with this, Alhassan (2017) also reached the result that YouTube is one of the popular platforms among teachers which allows them to share multimedia content or videos.

For the purposes of using social media platforms, the EFL teachers stated that they utilize social media platforms mostly for communication purposes. Then, it is followed by teaching, personal issues, academics, and following projects. Likewise, Ahmed and Akyıldız (2022) concluded that EFL teachers utilize social media resources in both personal and academic contexts for several purposes, including communication,

entertainment, academics, and literacy development. For the communication aspect, this present study aligns with the study of Alhassan (2017), in which more than half of the teachers stated they use social media platforms to stay in touch with students or encourage them to connect with community figures or experts in specific areas of interest. Additionally, Mudra (2020) revealed that EFL teachers use Facebook and WhatsApp for both entertainment and communication purposes, which provide them with opportunities to interact with their learners.

5.2.6. The EFL Teachers' Drawbacks in Using Digital Tools

According to the analysis of qualitative data, the EFL teachers highlighted some drawbacks and challenges of using digital tools as time, motivation, lack of support from MoNE, the physical conditions of the classrooms, students' lack of technological devices, fewer lesson hours, expensive training fees, unproductive training, crowded classes, lack of a database platform at schools. Additionally, the majority of the EFL teachers in the study attempt to independently solve the challenges in digital settings though some of the EFL teachers try to seek assistance when needed; others adopt a combination of solving problems autonomously and occasionally seeking help.

The findings of the present study were compatible with some studies. For example, Ahmed and Akyıldız (2022) found similar drawbacks that EFL teachers faced in using digital tools, which are inadequate resources, a very rigid curriculum, a lack of institutional support, students' socio-economic problems, wasting time, and technical issues such as internet connection or access were the challenges that were identified. Also, in a similar study, Doğan (2023) explored the challenges in terms of ICT and using digital tools for English lessons, and the drawbacks were similar to the ones obtained in the present study. Doğan (2023) stated that some factors like student demotivation, technology limitations, insufficient resources in schools, unequal access to the Internet or devices, lack of support from schools or parents, and classroom management issues could hinder EFL teachers from effectively incorporating ICT and digital tools in English lessons. Also, Solano et al. (2017) figured out that EFL teachers working at state schools seemed to refrain from utilizing digital tools in their teaching due to a lack of adequate facilities in the classrooms. In another study, Soifah et al. (2021) aimed to find the challenges of EFL teachers when implementing DL practices, and it was found that the problems mostly may arise from the internet connection, teachers' and students' lack of

knowledge about DL skills, attitudes of the teachers and also students' dedication. Moreover, Pratolo & Solikhati (2020) identified that the challenges of implementing DL were insufficient technological resources, time and effort problems, lack of budget, and the students' lack of readiness. In another study, Cukur (2023) found out that the most common challenges in using digital tools were lack of technological sources, technical problems such as internet connection, classroom conditions like crowded classes, and students' lack of digital competence. The study's results were also similar to the current study in terms of emphasizing that teachers may be confused when a big obstacle related to digital issues occurs during the lesson.

To sum up, the possible challenges and drawbacks of using digital tools might negatively affect teachers who utilize digital tools in their teaching. Çelik & Aytin's (2014) research highlighted that while teachers possess the skills to utilize digital tools, the absence of necessary equipment in their classrooms hinders their implementation. Ultimately, even the teachers with top-notch technology training encounter obstacles imposed by factors beyond their control, often dictated by authorities.

5.2.7. The EFL Teachers' Suggestions to Promote Digital Literacy

According to the results of qualitative data, the participant EFL teachers provided some suggestions to promote their DL. The participants mostly suggested participating in seminars, courses, or training, doing research, following social media platforms, asking for help from a competent person in DL, and increasing motivation. Likewise, a study by Pehlevan and Ünal (2022) also identified a necessity for a technology course where participants could acquire current information from the field and learn effective methods of integrating technology into lessons.

Besides, Aslan and Zhu (2017) conducted a study examining the factors influencing the successful integration of ICT into teaching practices. They found that pedagogical knowledge and training related to ICT were crucial predictors of successful technology integration. Moreover, Yukselir and Yuvayapan (2019) reported similar findings about suggestions for enhancing DL. It was found that EFL instructors suggested some discussion websites to exchange information among EFL teachers, making use of online resources and professional development activities such as teacher training courses or peer observation. It was also emphasized that professional development activities in teacher education, particularly those involving platforms where colleagues share and

exchange information, contribute significantly to English language teaching. Additionally, another study by Solano et al. (2017) also emphasized that additional training for teachers on the effective use of digital tools in teaching EFL is essential, which can replace traditional teaching methods with more dynamic, interactive, and collaborative approaches.

Furthermore, the participant EFL teachers in this study remarked on the importance of training, which includes hands-on experience, and they claim that teachers need to get such training to improve their practice in using digital tools. This finding is similar to a study conducted by Pehlevan and Ünal (2022), in which it was reported that the integration of theory with practical application allows pre-service teachers to grasp the philosophy behind technology integration more comprehensively. Also, the results of the present study align with other research findings emphasizing the significance of experiential learning, reinforcing the importance of a hands-on approach in technology integration education for prospective teachers (Kimm et al., 2020; Reisoğlu & Çebi, 2022). Similarly, Amhag et al. (2019) revealed a desire for additional courses that provide technical and practical insights into the development and utilization of web-based education, and they also expressed that teachers need practical workshops and real-world examples of applications, including hands-on experience.

Secondly, the EFL teachers suggested that a teacher can improve their DL level by doing research about what they need or wonder and by also applying what they have learned to their teaching. In line with this, Pehlevan & Ünal (2022) discovered that pre-service English teachers acknowledged the significance of autonomous learning. Participants expressed the belief that individual efforts to seek and acquire necessary information are valuable. They also emphasized the importance of self-directed learning rather than solely relying on the education provided in the teacher training program (Pehlevan & Ünal, 2022). Therefore, it can be concluded that EFL teachers make use of some external sources, such as researching or putting their knowledge into practice by applying what they have learned to enhance their DL.

Thirdly, when the findings of the interviews were analyzed, it was found that one of the common suggestions for enhancing DL was utilizing social media platforms. The participant EFL teachers also recommended following social media platforms such as YouTube or Instagram. The EFL teachers suggested following some English teachers on social media networks who are sharing ready-made materials, some ideas for activities about different topics, and also their teaching experiences. It showed that the EFL teachers

mostly tend to use available materials instead of creating original ones. This finding is in line with the previous research; for example, Doğan (2023) discovered that EFL teachers, regarding their DL levels, utilize digital content for language instruction more frequently than they produce original digital resources. Similarly, Albirini (2004) found that though English teachers use digital materials effectively in their everyday lives, they do not exhibit advanced DL skills when integrating them into classroom practices. One possible explanation for this could be that the Internet, which provides a deep and rich source of content, makes it possible to access many course materials appropriate for teaching English without having to invest any time or energy (Albirini, 2004)

The final commonly recommended suggestion was that the EFL teachers should seek assistance from individuals who possess greater proficiency in terms of DL. The EFL teachers emphasized that someone knowledgeable about digital issues can help them promote their DL. Also, the EFL teachers suggested that they could share and negotiate their ideas to enhance their DL skills. Thus, collaboration among colleagues was emphasized by the EFL teachers to enhance their DL. In that sense, they make use of peer learning, which serves as an additional method for acquiring knowledge about various educational technologies. In line with this finding, Kurt, Akyel, Kocoglu, and Mishra (2014) conducted a study that emphasized that collaborating with peers offers the chance to witness examples of digital applications and tools.

This chapter discussed the findings of the present study in relation to previous studies, and in the next chapter, the conclusions drawn from the study, implications, limitations, and suggestions for further research will be explained in detail.

CHAPTER VI

CONCLUSION

This chapter provides an overview of the study, conclusions drawn from the data, implications of the study, limitations, and suggestions for further research.

6.1. Overview

The purpose of this research was to determine the DL levels of EFL teachers and if there was any relationship between the EFL teachers' DL levels and their gender, age, and teaching experiences. Also, it aimed to explore the opinions of EFL teachers regarding their levels of DL, to what extent EFL teachers are digitally literate and use digital tools in their teaching, why EFL teachers use digital tools and social media platforms, to portray the possible drawbacks and challenges that EFL teachers face while using digital tools, and also the EFL teachers' suggestions to promote DL.

It is crucial that EFL teachers need to be digitally literate enough and have the necessary digital skills so that they can adjust their teaching to 21st-century conditions. Furthermore, since there were only a few studies about the level of EFL teachers' DL, this topic couldn't see enough attention in the literature, which makes this study significant, and it contributes to the current literature.

In this mixed-method study, the explanatory sequential research design was utilized. In this research design, the researcher first collects quantitative data, and after analyzing them, the researcher collects qualitative data (Creswell & Plano Clark, 2011). The Digital Literacy Scale (see Appendix 1) was used as the questionnaire for the quantitative part of the study, while the semi-structured interview (see Appendix 2) and some open-ended items in the questionnaire were provided to collect the qualitative data for the present study.

6.2. Conclusions

As a result of both quantitative and qualitative data collected through the questionnaire and semi-structured interviews, it was found that the EFL teachers had a moderate level of DL. In addition, there is a relationship between the EFL teachers' DL levels and their gender. Thus, it was found that the DL levels of the male EFL teachers

were higher than that of the female EFL teachers, which suggests that the male EFL teachers are more competent in DL skills. Similarly, the findings show that there is a relationship between the EFL teachers' DL levels and their age. The study yields that the EFL teachers aged 30 and below have higher DL levels compared to the EFL teachers aged 31 and above. However, the outcomes of the one-way analysis of variance (ANOVA) method revealed that there is no significant relationship between the DL of EFL teachers and their teaching experience. As reported by Çöp (2023) and Haviz et al. (2020), the study shows that the teaching experience of the EFL teachers has no effect on their DL levels.

In addition, seven themes emerged through the analysis of the qualitative data, which are EFL teachers' understanding the concept of DL, the EFL teachers' views about their DL levels, the EFL teachers' purposes of using digital tools, digital tools, and websites for English language teaching, the EFL teachers' use of social media platforms and their purposes, the EFL teachers' drawbacks in using digital tools, and the EFL teachers' suggestions to promote DL.

The qualitative part of the study provided valuable results. Firstly, the study revealed that the EFL teachers touched upon different aspects of DL such as understanding and using information, accessing new information, being able to read on digital platforms, critical thinking, and creating, sharing, and collaborating. In addition, some of the participants limited the term DL to reading and writing digitally. However, all in all, their understanding of DL seemed to be similar to the existing definitions of DL in the literature since there is no agreement on that in the literature (Akayoğlu et al., 2020; Bawden, 2008; Cote & Milliner, 2018). Considering the EFL teachers' comprehension of DL, it can be argued that their self-assessment of understanding DL reflected the diverse and varied definitions throughout the study.

Secondly, the EFL teachers were asked to share their views about their DL levels. Throughout the study, most of the EFL teachers claimed to have a moderate degree of DL level. Interestingly, it was seen that some of the teachers do not even know the term DL, and they tend to associate it with digital reading and writing. Besides, some of the EFL teachers explained their reluctance to use digital tools in their teaching. During the interviews, some of the EFL teachers expressed that they did not see themselves as competent enough to use digital skills and easily got bored in digital settings, but they still evaluated themselves as good when their opinions about their DL levels were asked.

Thirdly, it was found that the EFL teachers mostly used digital tools for different purposes such as teaching, communication, daily life, enjoyment, and academics. Above all, teaching was found as the main purpose of using digital tools among the participant EFL teachers. The EFL teachers expressed that digital tools help them plan their lessons, prepare exams, give assignments, prepare course materials, and make their classes more fun, engaging, and interactive (Ahmed & Akyıldız, 2022; Solano et al., 2017). Then, the code teaching was followed by the purpose of communication, which helps them to write messages and get in touch with people, especially with their students, via online class groups or following news on the internet. For daily life purposes, the EFL teachers found digital tools very practical and stated that they used digital tools to do some tasks in their daily lives, such as shopping, navigation, and bank applications (Amhag et al., 2019). For enjoyment purposes, the EFL teachers expressed that they use digital tools to watch movies or series, play games, and read e-books. Lastly, some of the EFL teachers stated that they used digital tools for academic purposes, such as reading and editing articles or doing literature reviews.

Moreover, it was found that there is a variety of digital tools used by the EFL teachers. The EFL teachers are seen to use digital tools for audio and video materials, online quizzes and games, presentations, digital boards, brainstorming, online dictionaries, teaching speaking and listening, artificial intelligence tools, language learning, online classroom**s**, and online meetings. However, the EFL teachers mostly use digital tools, allowing them to create online quizzes such as Wordwall, Kahoot, or Quizlet. In addition, the EFL teachers also reported utilizing social media platforms while teaching. The top three social media platforms used by EFL teachers were WhatsApp, Instagram, and Twitter, and the others were YouTube, Telegram, Facebook, Threads, LinkedIn, Bip, and Snapchat in order. Regarding the purposes of using social media platforms, it was revealed that the EFL teachers mostly use them for teaching, communication, and personal issues. Nevertheless, some of the EFL teachers stated that digital tools are useful for academic purposes and following projects, as well.

As for the drawbacks and challenges the EFL teachers face in using digital tools, time, motivation, and lack of support were the most uttered ones by the EFL teachers. Other possible drawbacks and challenges that emerged in the study were the physical conditions of the classrooms, students' lack of technological devices, limited lesson time, expensive training fees, unproductive training, crowded classes, and lack of database platforms at schools.

Lastly, the EFL teachers made useful suggestions to promote DL skills among the EFL teachers. Those suggestions included participating in seminars, courses, or training, doing research, following social media platforms, asking for help from a competent person in DL, and also increasing motivation.

6.3. Implications

The results of this study imply some pedagogical considerations for EFL teachers, trainers as well as authorities and decision-makers responsible for planning course outlines and curriculums in schools and teacher training institutions.

This study shows that most of the EFL teachers were not competent enough to explain the term DL, or they were able to explain only a few aspects of DL. Still, some of the EFL teachers seemed not to be able to make a distinction between DL and digital reading or writing. The EFL teachers' lack of explaining the term DL highlights a crucial gap in DL competence among the EFL teachers. This necessitates the integration of a dedicated DL course into EFL teachers' training programs. Thus, educational institutions can empower future teachers with the essential skills to navigate and utilize digital tools effectively, ensuring they are well-prepared to meet the evolving demands of modern language teaching and education.

Teachers play a crucial role in meeting students' current learning needs by emphasizing their commitment to digital tools, especially when taking into account the learning tendencies and profiles of new learners. For instance, by utilizing online resources, multimedia, and interactive applications, teachers who are skilled with digital tools can create engaging lesson plans that promote student engagement and information retention (Kurniawati et al., 2018). Teachers who are adept at using digital tools can also successfully integrate digital tools into the curriculum to help students improve their critical thinking, problem-solving, and DL skills (Ahmed & Akyıldız, 2022; Celik & Aytin, 2014).

It can be concluded that DL has a big role in helping EFL teachers become more proficient instructors. With the aid of training, the digital levels of EFL teachers can be improved. Moreover, EFL teachers' DL skills are crucial for engaging and connecting with students who tend to use digital tools in their daily lives. On the other hand, improving students' level of DL also needs to be taken into account. The academic

achievement of students is connected to their DL skills, which play a crucial role in raising future citizens to contribute to the nation (Pangrazio, 2016).

Today's students are generally regarded as 'digital natives' since they were born in a technology era. Such students are quite comfortable and accustomed to using digital tools in both their learning process and daily lives. As a result, ELT coursebooks should incorporate interactive digital activities for digital native students so that EFL teachers become more familiar with and capable of employing those digital activities in their classes. Another implication might be that professional development initiatives, collaborative learning communities, and teacher education programs have the potential to enhance the DL proficiency of EFL teachers. As part of professional development (PD) activities, EFL teachers can engage in online professional development opportunities such as attending workshops and seminars to enhance their digital skills and get valuable feedback from their colleagues. Such training enables teachers to practice digital skills in their classes since the training might include hands-on experience and active participation of teachers.

Moreover, it was seen that EFL teachers use social media platforms for teaching purposes. EFL teachers found it useful to follow other EFL teachers on social media platforms and be inspired by the activities and materials they have shared. As this trend continues to evolve, it implies a need for establishing guidelines and frameworks for the effective and responsible use of social media in educational contexts which would contribute to fostering a supportive and collaborative online community among EFL teachers and educators. By acknowledging and harnessing the power of social media in professional development, educational stakeholders can facilitate the exchange of innovative teaching practices and resources, ultimately enhancing the overall quality of EFL instruction (Akayoglu et al., 2020).

6.4. Limitations and Suggestions for Further Research

This study was conducted only with the EFL teachers working at the MoNE schools located in the Şahinbey district of Gaziantep, Turkey. Also, the participants taking place in the questionnaire are limited to the EFL teachers who work at the state schools, including primary, secondary, and high schools located in the Şahinbey district of Gaziantep. It means that if this study had been carried out in another city in Turkey, the results might have been different, and the reflections of the participant EFL teachers

may vary. For future studies, it is recommended to explore the context of this study with diverse participants in various cities across Turkey. Comparative analyses can be conducted to compare and contrast the findings with the results obtained in this study. Besides, the relationship between getting training on DL and the EFL teachers' DL levels might be examined in further studies.

Secondly, this study investigates the DL levels of EFL teachers, and it does not involve teachers working in other fields. Hence, the data includes only the opinions of the EFL teachers related to DL, and the findings of the study are not generalizable to other teachers from different fields. Moreover, this same study can be replicated with EFL students in the same context to find out about their DL level and choices of digital tools.

The findings are also limited to the two data collection tools used in the study, which are a questionnaire and semi-structured interviews. As an extra tool, lesson observations might be conducted to see how EFL teachers integrate technology and what kind of digital tools they use. Besides, EFL teachers might get training on DL, and then whether this training increases the DL levels of EFL teachers might be examined. In addition, the scope of this study is limited to the 2021-2022 academic year. Therefore, the results cannot be generalized to the other academic semesters. Also, that academic year was under the control of the pandemic situation, and teachers had to be familiar with digital technologies and digital tools brought by online teaching. Therefore, this situation might have affected the responses of the participants throughout the study.

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APPENDICES

Appendix 1. Digital Literacy Scale (DLS)

Dear colleague,

The present research is conducted within the Cukurova University English Language Education Master's Program by the English teacher Selma Çelik, who works in the Şahinbey district of Gaziantep/Turkey. This questionnaire aims to find out the digital literacy levels of EFL teachers, their perceptions regarding their levels of digital literacy, and to what extent they are digitally literate and use digital tools in their classes. The last aim is to examine whether there is any difference in digital literacy levels of EFL teachers in terms of gender, age, and years of teaching experience.

Your participation is based on a voluntary contribution. Your personal responses to the questionnaire, as well as the information you offer in the research, will be kept private and will not be shared with anyone other than the researchers. To guarantee that the research findings are legitimate and consistent, it is critical that you answer all of the questionnaire questions and double-check your answers.

I sincerely thank you for your time and for contributing to an academic study. If you have further questions or need clarifications concerning the purpose of the research or the questionnaire items in general, please feel free to contact the researcher through the e-mail address provided below.

Best regards.

Researcher Info:

Selma Çelik
Program: Cukurova University English Language Education Master's Program

PART 1 - PERSONAL INFORMATION

Please answer the questions below with your personal information.

1. Gender:

( ) Male ( ) Female

2. Age:

3. Teaching Experience (e.g., 3 years):

4. Type of school you are currently working:

( ) Primary School ( ) Secondary School ( ) High School

5. When did you first begin to use computers?

6. Which digital device(s) (i.e., computer, laptop, notebook…) do you use?

7. Why do you use these digital tools in your daily life?

8) How do you deal with the problems you face in digital settings? Do you ask for help from someone or try to solve them on your own?

9) Have you ever received any training on digital literacy, and do you have a certificate related to it?

10) Should a course including digital literacy skills be integrated into the curriculum of ELT pre-service teacher training programs? If yes, why? If not, why?

11) Would you like to get a kind of training course on digital literacy skills? If yes, what digital skills should be covered in that course? If not, why?

12) How would you evaluate your knowledge about digital literacy? Why? (poor – fair – good – very good – excellent)

13) Are there any other digital skills-related problems you face in your classes? Please specify.

PART 2 - THE QUESTIONNAIRE

Please select your answers by considering your self-efficacies concerning the aspects of digital literacy mentioned in the statements. You need to indicate how much you agree or disagree with each of the following statements.

LEVEL OF AGREEMENT

1- I Strongly Disagree

2- I Disagree

3- I Am Uncertain

4- I Agree

5- I Strongly Agree

	Digital Literacy Scale	**I Strongly Disagree**	**I Disagree**	**I am Uncertain**	**I Agree**	**I Strongly Agree**
1.	I am aware that my personal or legal rights (privacy, copyright, freedom of speech, etc.) continue in digital media as well as in daily life.	1	2	3	4	5
2.	I know how to behave to protect my own and others' personal data (photo, address, family information, etc.) online.	1	2	3	4	5
3.	I can inquire from different sources whether the information I accessed online is correct or not.	1	2	3	4	5
4.	I am aware of the ethical responsibilities such as cyberstalking.	1	2	3	4	5
5.	I am aware of the legal responsibilities such as cyberbullying (insult, swearing, hate speech, etc.) and online abusing.	1	2	3	4	5
6.	I can recognize digital games that are suitable for cognitive and moral development.	1	2	3	4	5
7.	I can recognize content that is suitable for cognitive and moral development.	1	2	3	4	5
8.	I am aware that everything I do online is recorded.	1	2	3	4	5
9.	I am aware of the ethical and legal responsibilities that may arise from copyright violations in digital environments.	1	2	3	4	5
10.	I know the concepts such as licensed software, demo software, pirated software, malware, crack, etc.	1	2	3	4	5
11.	I know what hardware technologies mean.	1	2	3	4	5
12.	I know what software technologies mean.	1	2	3	4	5
13.	I can install the operating system on my computer.	1	2	3	4	5
14.	I can format the operating system on my computer.	1	2	3	4	5

15.	I can install software on my computer or other electronic devices.	1	2	3	4	5
16.	I can install programs on my computer or other electronic devices.	1	2	3	4	5
17.	I know what Torrent, Internet, World Wide Web (WWW) terms mean.	1	2	3	4	5
18.	I can change the proxy settings of devices to access banned websites.	1	2	3	4	5
19.	I can change the DNS settings of devices to access banned websites.	1	2	3	4	5
20.	I can effectively use e-Government applications (MHRS, UYAP, tax & penalty inquiry, etc.)	1	2	3	4	5
21.	I can use cloud computing technologies (Google Drive, iCloud, Dropbox, etc.) effectively in daily life.	1	2	3	4	5
22.	I can use the calendar on mobile devices not only just for looking at date but also as reminder, for taking notes and creating events.	1	2	3	4	5
23.	I can do activities such as "uploading videos / broadcasting" online.	1	2	3	4	5
24.	I can use digital technologies effectively in daily practice such as reservation, shopping, address finding, etc.	1	2	3	4	5
25.	I can add a web page that I use to bookmarks or favorites.	1	2	3	4	5
26.	I can develop software based on digital technologies.	1	2	3	4	5
27.	I can develop applications based on digital technologies.	1	2	3	4	5
28.	I can use at least one programming language (Java, C, Visual Basic, PHP, etc.).	1	2	3	4	5
29.	I know how to restrict apps' access to my personal information (location, contacts, camera, etc.)	1	2	3	4	5
30.	I can recognize unwanted / spam emails and phishing messages.	1	2	3	4	5
31.	I can block unwanted / spam emails and phishing messages.	1	2	3	4	5

32.	I can change the privacy settings on my social media posts and profile.	1	2	3	4	5
33.	I can change the security settings on my social media posts and profile.	1	2	3	4	5
34.	I know how to create a strong password.	1	2	3	4	5
35.	I can design a website using web design systems (Weebly, WordPress, etc.)	1	2	3	4	5
36.	I can publish a website using web design systems (Weebly, WordPress, etc.)	1	2	3	4	5
37.	I can write on my own blog page or on different blogs.	1	2	3	4	5
38.	I can share on my own blog page or on different blogs.	1	2	3	4	5
39.	With the help of digital technologies, I can change various images (photography, sound recording and video, etc.) and produce new content.	1	2	3	4	5
40.	I can effectively use at least one software related to my field (Photoshop, SPSS, Premiere, Office Word, etc.).	1	2	3	4	5

The questionnaire is over. Thank you very much for your valuable time and participation. We would like to conduct a face-to-face interview (or online interview via Zoom) to obtain more detailed information about digital literacy from you within the scope of this thesis we are conducting. If you would like to participate in the interview, please note your email address below.

(Participation in the interview is voluntary.)

I would like to give more details about digital literacy in a face-to-face interview.

( ) Yes ( ) No

If you responded **"yes,"** please note your e-mail address: _____

Appendix 2. Semi-Structured Interview

1. What do you understand from the term digital literacy? (What comes to your mind when you hear this term? No need for definition)
2. What do you think about your level of digital literacy? Would you identify yourself as a digitally literate person or as a digitally literate English teacher? Why? Please give details and examples.
3. What digital tools do you use?

   3a. Are you good at using digital tools in your classes such as smartboard or any Web 2.0 tools?

   3b. How do you think you can use digital tools in teaching English in EFL classes? Please give details and examples such as using smartboard.
4. For what kind of purposes do you use digital tools? (in your daily life, teaching, personal issues, enjoyment, projects, etc.)
5. Which social media platforms do you use? (Facebook, Instagram, WhatsApp....)
6. For what kind of purposes do you use social media platforms you specified above? (personal issues, academic, or communication)
7. Can you create any kind of content in audio, video, and webpage via the digital tools you use? If yes, what kind of digital materials have you prepared or created so far? Can you give an example? If not, why? Do you prepare any digital materials, or do you ask for help from someone else?
8. Have you ever attended any digital literacy course in your pre-service, in-service teacher training program, or any other training, or have you ever studied digital literacy as one part of your courses?

   If yes, how do you think it contributed to your teaching practice? If not, would you like to attend such a course? Why?
9. What have you done to promote your digital literacy, or if you have not done anything, how would you promote your digital literacy? Please provide some suggestions.
10. What might be the possible drawbacks or challenges of promoting your digital literacy?
11. Do you think your participation in this study created an awareness of digital literacy for you? Please share your opinions.

Appendix 3. Digital Literacy Scale Score Ranges and Competence (Bayrakcı & Narmanlıoğlu, 2021)

Digital Literacy Scale Score Ranges	Level	Competence
1,62-3,07	Low/Poor	S/he can perform simple and routine digital operations at the most basic level; It is the entrance level. He/She often needs the guidance of others.
3,08-3,62	Below Average/Weak	He/she is capable of solving uncomplicated routine tasks and clearly understand problems on his/her own.
3,63-4,17	Average	S/he is able to solve non-routine but not complicated problems on his own. S/he is intermediate in keeping up with the digital age and continues to learn.
4,18-4,72	Above Average/Good	S/he is a digital literate who can solve complex situations on his own and guide others in routine tasks. S/he can both apply and interpret digital technologies in his/her own life.
4,73-5,00	High/Perfect	S/he is at the level of expertise to be able to guide others in solving problems encountered in professional life and to propose or produce new ideas and processes related to work.