T.R.

ISTANBUL SABAHATTIN ZAIM UNIVERSITY

GRADUATE EDUCATION INSTITUTE

DEPARTMENT OF ENGLISH LANGUAGE TEACHING

ENGLISH PREPARATORY SCHOOL INSTRUCTORS' AND STAKEHOLDERS' APPLICATION AND PERCEPTION OF TECHNOLOGY IN EFL CLASSES

MA THESIS

Hatice OSTA

Istanbul

February-2024

T.R.

ISTANBUL SABAHATTIN ZAIM UNIVERSITY

GRADUATE EDUCATION INSTITUTE

DEPARTMENT OF ENGLISH LANGUAGE TEACHING

ENGLISH PREPARATORY SCHOOL INSTRUCTORS' AND STAKEHOLDERS' APPLICATION AND PERCEPTION OF TECHNOLOGY IN EFL CLASSES

MA THESIS

Hatice OSTA

Supervisor

Assoc. Prof. Hidayet SARANDİ

Istanbul

February-2024

This study has been approved in partial fulfillment of the requirements for MA Degree in English Language and Teaching

Supervisor Assoc. Prof. Dr. Hidayet SARANDI

Member of jury Assoc. Prof. Dr. Kamil Arif KIRKIÇ

Member of jury Assoc. Prof. Dr. Mehdi SOLHI

Approval by

Prof. Dr. Erhan İÇENER

Director, Graduate Education Institute

DECLARATION OF SCIENTIFIC ETHICS AND ORIGINALITY

This is to certify that this MA thesis titled "English Preparatory School Instructors' and Stakeholders' Application and Perception of Technology in EFL Classes" is my own work and I have acted according to scientific ethics and academic rules while producing it. I have collected and used all information and data according to scientific ethics and guidelines on thesis writing of Sabahattin Zaim University. I have fully referenced, in both the text and bibliography, all direct and indirect quotations and all sources I have used in this work.

Signature

Hatice OSTA

Istanbul, February, 2024

ABSTRACT

ENGLISH PREPARATORY SCHOOL INSTRUCTORS' AND STAKEHOLDERS' APPLICATION AND PERCEPTION OF TECHNOLOGY IN EFL CLASSES

Hatice OSTA

M.A., Department of English Language Teaching

Supervisor: Assoc. Prof. Hidayet SARANDI

February, 2024 –121 Pages

The present study aims to investigate (a) the factors affecting the integration of technology into English as a Foreign Language (EFL) classes, (b) the perceptions, habits, needs of EFL instructors and (c) the stakeholders' (head of the department, level coordinators, Continuous Professional Development Unit member) support and evaluation of the current technology use at a foundation university in İstanbul. This study aims to investigate the current use of technology in universities and its alignment with the needs of the institution and instructors. The research employs a mixed methods approach, combining qualitative and quantitative data collection and analysis methods to provide a comprehensive understanding of the technological landscape in higher education. The data were collected through a questionnaire conducted with sixty-eight instructors, a semi-structured focus group interview with twenty instructors chosen randomly from the participants who completed the questionnaire and interviews with six stakeholders (a member of Continuous Professional Development Unit, four level coordinators, and the head of the department) to triangulate the data and obtain generalizability. The findings showed that while the instructors had positive attitude toward technology integration into their teaching, they had some reservations about online or hybrid education. That revealed a gap between the instructors' preference of mode of education and stakeholders' opinion of instructors' preference. In addition, it would be of benefit for the stakeholders to assume greater responsibility and take proactive measures for the professional development of instructors to enhance the instructors' technology use. While the study was carried out on a limited scale,

there is a desire to provide further support for research on technology integration in other higher education institutions with comparable contexts.

Keywords: EFL, technology integration, teachers' perception, technology in EFL classes

ÖZET

İNGİLİZCE HAZIRLIK OKULU EĞİTİMCİLERİNİN VE PAYDAŞLARININ İNGİLİZCE HAZIRLIK SINIFLARINDA TEKNOLOJİ UYGULAMALARI VE ALGISI

Hatice OSTA

Yüksek Lisans, İngiliz Dili Eğitimi

Tez Danışmanı: Doç. Dr. Hidayet SARANDİ

Şubat, 2024- 121 Sayfa

Bu çalışma İstanbul'da bulunan bir vakıf üniversitesindeki (a) yabancı dil sınıflarında teknoloji entegrasyonunu etkileyen faktörlerin, (b) yabancı dil öğreticilerinin yabancı dil sınıflarındaki teknoloji entegrasyonuna, algısına, değişen davranışlarına ve ihtiyaçlarına yönelik algılarının ve son olarak (c) bahsi geçen üniversitedeki paydaşların destek ve değerlendirmesinin araştırılmasını amaçlamaktadır. Mevcut üniversitede teknoloji kullanımı açısından daha derin bir anlayışa sahip olunması, kurumun ve öğretim elemanlarının ihtiyaçlarına cevap verilmesi amaçlanmıştır. Veriler, 68 eğitmenle yapılan bir anket, anket katılımcıları arasından seçilen rastgele 20 eğitmenle yapılan yarı yapılandırılmış odak grup görüşmesi ve verileri üçgenlemek için paydaşlarla (CPDU üyesi, seviye koordinatörleri, bölüm başkanı) yapılan görüşmeler yoluyla toplanmıştır. Çalışmanın amacı, teknolojinin derslere entegrasyonunu etkileyen faktörleri, öğretim elemanlarının derslerdeki algılarını ve uygulamalarını, idari beklenti ve desteği daha derinlemesine anlamayı amaçlamıştır. Bulgular, katılımcıların genel olarak teknolojinin sınıflarına entegrasyonuna yönelik olumlu tutumlara sahip olduklarını ancak çevrimiçi ya da hibrit öğretime karşı endişe taşıdıklarını ortaya koymuştur. Çalışma sonunda öğretim elemanlarının tercihleri ile diğer paydaşların öğretim elemanlarının tercih beklentileri arasında farklılık ortaya çıkmıştır. Ayrıca eğitmenlerine gelişme şansı vermek için paydaşların giderek daha fazla sorumluluk alması ve eyleme geçmesi gerektiği ortaya konmuştur. Benzer bağlamlara sahip diğer yükseköğretim kurumlarında daha fazla teknoloji entegrasyonu araştırmasının desteklenmesi hedeflenmiştir.

Anahtar Kelimeler: İngilizce'nin yabancı dil olarak öğretilmesi, teknoloji entegrasyonu, eğitici algısı, yabancı dil sınıflarında teknoloji kullanımı

ACKNOWLEDGEMENT

I would like to extend my gratitude to my supervisor, Dr. Sarandi, whose guidance and support carried me through all the stages of my thesis. I would also like to thank my committee members for making my defense a teaching moment and giving me a chance to prove myself.

Thanks also to my dearest friends, Cansu Dinç Ayaz, Melike Ekiz, and Dr. Ebru Caymaz who acted as my unofficial mentors and supported me emotionally as well as academically.

TABLE OF CONTENTS

THESIS APPROVAL……i

DECLARATION OF SCIENTIFIC ETHICS AND ORIGINALITY……...ii

ABSTRACT.....iii

ÖZET..... v

ACKNOWLEDGEMENT..... vii

TABLE OF CONTENTS.....viii

LIST OF TABLES xii

LIST OF FIGURES xiii

LIST OF ABBREVIATIONS xiv

CHAPTER I

INTRODUCTION..... 1

1.1. Introduction 1

1.2. Background of the Study..... 2

1.3. Statement of the Problem..... 3

1.4. Significance of the Study 4

1.5. Purpose of the Study 5

1.6. Limitations of the Study 7

1.7. Research Questions of the Thesis 8

1.8. Operational Definitions..... 8

CHAPTER II

LITERATURE REVIEW..... 10

2.1 History of Technology Use in English as A Foreign Language (EFL) Settings 10

2.1.1. TPACK Framework: Is Technological Knowledge Sufficient? 12

2.1.1.1. Technological Knowledge (TK) 14

2.1.1.2. Content Knowledge (CK) 14

2.1.1.3. Pedagogical Knowledge (PK) 14

2.1.1.4. Pedagogical Content Knowledge (PCK) 14

2.1.1.5. Technological Content Knowledge (TCK) 15

2.1.1.6. Technological Pedagogical Knowledge (TPK) 15

2.1.1.7. Technological Pedagogical Content Knowledge (TPACK) 15

2.2. Technology Integration in EFL Classes in Face to Face, Online and Hybrid Education 15

2.3. The Role of Teachers in The Digital Age 17

2.4. Technology Integration Practices from In-Service Instructors' Experiences: Studies from around The EFL World 19

2.5. Technology Integration Practices from In-Service Instructors' Experiences: Studies from EFL Turkish Context 22

2.6. Factors Affecting Instructors' Technology Integration Practices in EFL Classes 23

2.6.1. Digital Literacy 24

2.6.2. Frequency of Teachers' Software Use in Their Personal Lives 25

2.6.3. Teachers' Attitude towards Computer 26

2.6.4. Teachers' Perceived Self-Confidence in the Technology Integration 27

2.6.5. Atmosphere of Working Place 29

CHAPTER III

METHODOLOGY 32

3.1. Introduction 32

3.2 Research Design 32

3.3. Setting 33

3.4 Participants 35

3.4.1. Instructors 35

3.4.2. Stakeholders 35

3.4.3. Role of the Researcher 36

3.5 Data Collection Instrument 36

3.5.1. The Quantitative Data Collection 36
3.5.1.1. Demographic Information 37
3.5.1.2. Software Knowledge Scale 38
3.5.1.3. Frequency of Using Software for Personal Aims Scale 38
3.5.1.4. Computer Attitude Scale 39
3.5.1.5. Self-Confidence in ICT Integration Scale 39
3.5.1.6. School Atmosphere Scale 39
3.5.2. The Qualitative Data Collection 40
3.6. Data Analysis Procedures 41
CHAPTER IV
FINDINGS 43
4.1. Introduction 43
4.2. Findings of Quantitative Data 43
4.2.1. Research Question 1 44
Instructors' Perceptions Toward Various Concepts 44
4.2.2. Research Question 2 48
Instructors' Attitudes toward Integrating Computers into Their Classes 48
4.3. Findings of Qualitative Data 50
4.3.1. Research Question 3 51
Instructors' Preferences of Mode of Education 51
4.3.2. Research Question Four 52
Instructors' Current Experiences 52
4.3.3. Research Question Five 54
Instructors' Needs 54
4.3.4. Research Question Six 56
Stakeholders' Ideas and Considerations 56
CHAPTER V
DISCUSSION AND CONCLUSION 58
5.1. Discussion of the findings 58
5.1.1. Research Question One 58

5.1.2. Research Question Two 60
5.1.3. Research Question Three 60
5.1.4. Research Question Four 61
5.1.5. Research Question Five 62
5.1.6. Research Question Six 63
5.2. Conclusion Remarks 64
5.3. Limitations and Further Suggestions 66
BIBLIOGRAPHY 67
APPENDICES 79
APPENDIX A 79
APPENDIX B 104
APPENDIX C 105
CURRICULUM VITAE 106

LIST OF TABLES

Table 3.1: Demographic Information Table 37

Table 4.1: Instructors' Technological Knowledge Table.....44

Table 4.2: Instructors' Frequency of Individual Computer Usage Table.....45

Table 4.3: Instructors' Self-Confidence in Using Computer Table.....46

Table 4.4: Instructors' Institutional Support Table…….....47

Table 4.5: Instructors' Attitudes toward Integrating Computers into Their Classes…
…….....49

Table 4.6: Codes and Comments Related to the Third Research Question…….....52

Table 4.7: Codes and Comments Related to the Fourth Research Question.....53

Table 4.8: Open Codes and Comments Related to the Fifth Research
Question.....55

LIST OF FIGURES

Figure 2.1: The TPACK Framework and its Knowledge Components 13

LIST OF ABBREVIATIONS

BECTA: British Educational Communications and Technology Agency

CALL: Computer Assisted Language Learning

CALT: Computer Assisted Language Teaching

CEFR: Common European Framework

CK: Content Knowledge

CPDU: Continuous Professional Development Unit

EFL: English as a Foreign Language

FITness: Fluency of Information Technology

ICT: Information and Communication Technology

LC: Level Coordinator

LMS: Learning Management Systems

NRC: National Research Council

PCK: Pedagogical Content Knowledge

PK: Pedagogical Knowledge

PP: Preparatory Programme

SFA-T3: Survey of Factors Affecting Teachers Teaching with Technology

SPSS: Statistical Package for Social Sciences

TAM: Technology Acceptance Model

TAU: Testing and Assessment Unit

TCK: Technological Content Knowledge

TK: Technological Knowledge

TPACK: Technological Pedagogical Content Knowledge

TPK: Technological Pedagogical Content Knowledge

CHAPTER I

INTRODUCTION

1.1. Introduction

The prominence of technology in the field of language education has brought about a paradigm shift in the practice of second language (L2) teaching, ushering in a new era of innovative pedagogical approaches and instructional methodologies. The impact of technology on L2 teaching has been profound, encompassing a wide array of digital tools, interactive platforms, and online resources that have redefined the dynamics of language acquisition and instruction. This study aims to delve into the multifaceted ways in which technology has significantly transformed L2 teaching. The integration of technology in EFL classes has undergone significant evolution over the past two decades, reshaping the landscape of language instruction and learning. This is a transformative journey from the early 2000s to the present day. In the early 2000s, the introduction of digital tools such as language learning software, multimedia resources, and computer-assisted language learning (CALL) programs marked a significant milestone in the integration of technology in EFL classes. These tools provided educators and learners with new avenues for language practice, interactive exercises, and multimedia-rich content, laying the foundation for subsequent advancements in technology use. The mid-2000s witnessed a paradigm shift with the widespread availability of online resources, including web-based language learning platforms, virtual language exchange programs, and open educational resources. These online resources expanded the horizons of EFL instruction, offering learners access to authentic materials, interactive activities, and global communication opportunities, thereby enriching the language learning experience. In the last decade, pedagogical shifts in EFL instruction have been propelled by technological advancements such as mobile-assisted language learning (MALL), gamification, and adaptive learning platforms. These developments have facilitated personalized and adaptive learning experiences, catering to diverse learner needs and preferences, while also fostering greater autonomy and engagement in language learning.

Collectively, most of the studies conducted on the technology integration into EFL classes demonstrated the evolving ways of teachers' varying levels of self-efficacy,

the impact on learners' performances, and the issues dealt with in integrating technology into EFL instruction.

Overall, the research over the last decade underscores the significance of technology in EFL classes, emphasizing the need to understand teachers' habits, learners' perceptions, and the challenges associated with technology integration to enhance the effectiveness of EFL instruction.

1.2. Background of the Study

The last half of the 20th century hosted a rapid rise in digital technologies and the rapid expansion of information and communication technology (ICT), leading to the mass production of various digital devices. At the beginning of the new millennium, education, along with every other area, found itself surrounded by a remarkable array of ICT devices, such as mobile phones, desktop computers, tablets, laptops, LCD screens, digital cameras, and the internet.

These advancements have significantly impacted all facets of modern life, including education. The rise of ICT has profoundly influenced education, prompting educators to argue that the existing education system is no longer suitable for the new millennium. Prensky (2001) highlighted that students of the new millennium "are no longer the people our education system was designed to teach" (p. 1), asserting that their upbringing in a technology-rich environment has physically altered their brains, leading them to think and process information fundamentally differently from previous generations.

Digital native generation, born after 1980, has grown up in an environment saturated with digital technology and adeptly uses digital devices. In contrast, digital immigrants are those who learn about and adapt to technology. In response to the nature and preferences of the millennial generation, there has been a widespread call for reforming the education system to align with millenials' learning styles and needs, particularly through the integration of digital technologies (Godwin-Jones, 2018; Stockwell, 2012). Numerous scholars have emphasized the significance of this reform, asserting that change in education must be encouraged and nurtured, and that technology is an unavoidable aid in educational reform (Chen & Chen, 2015; Cuban, 2001; Fullan, 2016).

Using technology in schools is not an option but a necessity, and it has turned into an indispensable part of language learning and teaching. In summary, the escalation of digital technologies and the emergence of the digital native generation have brought about a re-evaluation of the education system, with a strong emphasis on integrating digital technologies to meet the needs of the 21st-century learners. This shift is inevitable and also essential for preparing students to succeed in the globalized world of the 21st century.

However, as a result of the Covid-19 pandemic, another rapid transformation across various sectors followed, including education and health. This has resulted in the introduction of new integrations and applications, with the employment of technology in the education field. While technology has been recognized as a necessity in classrooms for over two decades, the urgent need brought about by the Pandemic has shown the importance of integrating technology and education, making it a necessity for most institutions (Önalan & Kurt, 2020; Sipila, 2014).

Consequently, educators have been exploring different methods to meet the needs of learners and adapt recent trends into their classes. However, there are numerous factors that shape this integration. Previous studies have examined external factors, instructors' perspectives and beliefs, self-efficacy, attitudes, technology availability, and administrative support. These are just a few examples of the factors that have influenced the relationship between instructors and their use of technology in various educational settings, ranging from primary and secondary schools to higher education institutions (Dashtestani, 2012; Francom, 2020; Gürfidan & Koç, 2016; Hsu, 2010; Light & Pierson, 2013).

1.3. Statement of the Problem

The focus of this thesis is to examine the determinants influencing the incorporation of technology into English as a Foreign Language (EFL) classes, as well as the attitudes, requirements, and behaviors of EFL instructors concerning the utilization of technology both during and post the pandemic era.

Even though extensive research has been carried out in the last twenty years to investigate various topics that either enable or hinder teachers' preferences of technology in diverse educational environments, in Turkish context, there is a scarcity of research (Arslan, 2021; Çakır, 2018; Göktaş & Yıldırım, 2016). The examination

of teachers' attitudes and perspectives of the integration of technology into the classroom, along with school-related factors such as technology infrastructure and administrative support, has been a focal point in numerous studies as they are recognized as influential determinants of teachers' utilization of technology in educational settings. Prior to mandating the use of technology in classrooms, it is imperative to comprehend how teachers perceive the factors that could influence their incorporation of technology, particularly in light of ongoing efforts to enhance technology utilization across diverse educational environments and the pivotal role that teachers have in technology implementation (Miranda & Russell, 2012). There is a need to contribute to the existing body of research by investigating how English as a Foreign Language (EFL) instructors in Turkish higher education perceive the variables that may impact their practices and attitudes towards technology integration.

1.4. Significance of the Study

As technology continues to advance at a rapid pace, its integration into the field of EFL education has become a must. The utilization of technology in EFL instruction has the capacity to significantly enhance the learning experience and outcomes for both educators and learners. Therefore, the study aimed to search for the perceptions, habits, attitudes and their expectations from their institution. This was a necessity in the EFL field, drawing upon relevant scholarly insights and research.

The integration of technology in EFL education is essential due to its capacity to engage and motivate learners (Uzunboylu, 2019). It is emphasized that technology offers diverse tools and resources that help different learning styles and creates a more interactive and dynamic learning environment. By incorporating multimedia elements, interactive exercises, and online resources, technology can attract students' interest and keep them engaged in the learning process. This is particularly crucial in the EFL context, where maintaining learners' motivation and interest in language acquisition is paramount.

Furthermore, Uzunboylu (2019) underlined the role of technology in providing personalized and adaptive learning experiences. With technology, teachers can customize learning materials and activities based on individual learners' needs and proficiency levels. Adaptable programs and online platforms can offer tailored feedback and content, enabling learners to progress depending on their speed and

concentrate on fields that need improvement. The personalized nature of this type of teaching is especially beneficial in EFL education because learners often have diverse linguistic backgrounds and varying levels of proficiency in the target language.

In addition, technology integration in the EFL field facilitates access to authentic language resources and cultural content (Hursen, 2017). This highlights that digital tools and online platforms provide learners with opportunities to engage with authentic language materials, such as videos, podcasts, and digital literature, allowing them to immerse themselves in real-world language usage. This exposure to authentic language input is instrumental in developing learners' language skills and cultural competence, as it provides them with insights into the practical use of the language in genuine contexts.

Moreover, the use of technology in EFL instruction has been shown to enhance learners' autonomy and self-directed learning skills (Uzunboylu, 2019). Digital resources and online platforms rest the responsibility of their learning journey on the learners, encouraging them to explore independently and engage in self-directed practice. This autonomy fosters a sense of initiative in learners and equips them with essential skills for lifelong learning and language acquisition beyond the classroom.

In conclusion, the integration of technology in EFL education is indispensable for creating engaging, personalized, and culturally rich learning experiences. The insights from Uzunboylu (2019) and Hursen (2017) underscored the transformative potential of technology in enhancing learners' motivation, autonomy, and access to authentic language resources. As technology continues to evolve, its integration will undoubtedly have a crucial role in changing the future of EFL education, offering innovative opportunities for effective language learning and teaching.

1.5. Purpose of the Study

The researcher's current institution has used technology in the classes not only as a way of instructional delivery but also as a learning tool. Considering the present needs and further expectations of the current institution and instructors regarding technology practices in the classes, this study aimed to search for factors affecting technology integration into classes, instructors' perceptions and practices in classes, and the administrative expectations and support. Also, it needed to be searched whether hybrid education is preferable or not by the instructors at the current university as a system

evaluation. The study aimed to have a deeper understanding of the needs of the institution, as well as be an example for the further studies planned to be conducted in different higher education institutions. The lack of information regarding the perception of instructors and administrators on technology in the English as a Foreign Language (EFL) field can pose significant challenges and hinder the effective implementation of technology-enhanced language learning. Understanding the perspectives of instructors and administrators is crucial for informed decision-making and the development of strategies that align with the needs and expectations of stakeholders in the EFL education context.

The study is important for several reasons. Firstly, the absence of insights into instructors' and administrators' perceptions regarding technology integration in EFL education can lead to a disconnect between the intended educational objectives and the actual implementation of technology in the classroom. Orfan et al. (2021) emphasized that instructors' perceptions significantly influence how they utilize educational resources, including technology, which in turn impacts learners' attitudes and learning outcomes. Without a clear understanding of instructors' perspectives, there is a risk of misalignment between the intended educational goals and the actual practices in the classroom.

Moreover, the lack of information on instructors' and administrators' perceptions can impede the identification of barriers and challenges associated with technology integration in the EFL field. Alharbi (2015) highlighted that the lack of authentic language learning situations outside the classroom hindered students' from improving their English communication skills. Similarly, Saputra et al. (2022) pointed out the scarcity of research on how secondary EFL teachers perceived online learning challenges, particularly in areas such as technology use, instruction, assessment, and student engagement. Without a comprehensive understanding of these challenges, it becomes difficult to develop targeted interventions and support mechanisms to address them effectively.

In conclusion, the lack of information regarding the perception of instructors and administrators on technology in the EFL field can impede the effective implementation of technology-enhanced language learning. It is essential to conduct research that explores the perspectives, needs, and challenges faced by instructors and

administrators to inform evidence-based decision-making, develop targeted support initiatives, and ensure the successful integration of technology in EFL education.

1.6. Limitations of the Study

This study has its own limitations. It was conducted at a single foundation university in İstanbul, which limits the generalizability of the findings to other institutions or educational contexts. The sample size of sixty-eight instructors and a limited number of stakeholders may not fully represent the diverse perspectives and experiences within the institution. Time constraints and resource limitations caused the study to be conducted within a specific timeframe, which may have affected the depth and breadth of data collection and analysis. Longitudinal studies or extended data collection periods could provide more comprehensive insights into the long-term effects of technology integration. Also, the data collected through questionnaires and interviews rely on self-reported information from participants, which may introduce inaccuracies or discrepancies in responses. Participants' perceptions, attitudes, and behaviours towards technology integration may not fully align with their actual practices in the classroom. Factors such as institutional culture, leadership, and support systems may influence the integration of technology in unique ways. Furthermore, the study did not account for potential confounding variables or control factors that could influence the integration of technology into EFL classes, such as instructor expertise, student demographics, or technological infrastructure. Future research could benefit from considering these variables to provide a more nuanced understanding of the factors affecting technology integration. Moreover, while the study included interviews with stakeholders, the perspectives of other relevant stakeholders, such as students, IT administrators, or curriculum designers, were not explored. Incorporating diverse perspectives could enrich the analysis and provide a more holistic understanding of technology integration in higher education. Finally, despite efforts to maintain objectivity and neutrality in data collection and analysis, researcher bias may have influenced the interpretation of findings. Researchers' own backgrounds, experiences, and beliefs about technology integration could have shaped their perceptions and conclusions drawn from the data.

1.7. Research Questions of the Thesis

The current study aimed to examine (a) the factors affecting the integration of technology into EFL classes, (b) the perceptions, habits, attitudes, needs of EFL instructors and (c) the stakeholders' support and evaluation of the current technology use at a foundation university in Istanbul during and after the pandemic period in general.

For the deeper understanding, the following questions were directed. The first two questions were addressed using quantitative data and the next questions were addressed using qualitative data.

1. What are the instructors' perceptions toward their
   a) technological knowledge,
   b) frequency of computer usage,
   c) self-confidence in using computer,
   d) institutional support?
2. What are the instructors' attitudes toward integrating computers into their classes?
3. What are the instructors' preferences of mode of education: hybrid, online education, or face to face education?
4. What are the instructors' experiences toward online education since the beginning of hybrid use at the current university?
5. What are the needs of the instructors toward using technology in their EFL classes?
6. What are the stakeholders' ideas and considerations about the instructors and their activities in terms of technology use?

1.8. Operational Definitions

Computer Assisted Language Learning (CALL): It is a combination of technological activities which embraces a learner-centered environment, improves learner autonomy, and produces better learning outcomes through computer-assisted activities to acquire a language (Zaman, 2022).

Information and Communication Technology (ICT): It is used to describe contemporary technological implications and its paralleled effects on delivery of technology (Ani et al., 2005).

Digital Literacy: This is a multidiverse terminology that includes computer literacy, attitudes toward learning foreign languages, and computer-assisted language acquisition (Öz et al., 2015).

Technological Pedagogical Content Knowledge (TPACK): This term is defined as a framework that outlines what kind of knowledge educators must possess in order to use technology in the classroom (Tarango et al., 2022).

Technology Perception: The user's perspective on the effective usage of CALL software (Scagnoli et al., 2014)

Technological Knowledge: This term is used to clarify the instructors' accumulation of knowledge in technology based on language learning applications design and CALL pedagogy (Li, 2020).

CHAPTER II

LITERATURE REVIEW

This section includes a review of the related literature on technology integration practices and factors affecting foreign language instructor's preferences. First, it gives a general view about technology integration practices in English as a foreign language class. Then, it gives details on the various usages of technology integration processes in different ways of educational contexts. Next, it reviews different studies around the world and from Turkish context. Finally, instructors' perceptions before and after the Pandemic are discussed.

2.1 History of Technology Use in English as A Foreign Language (EFL) Settings

In contemporary educational institutions, instructors are increasingly expected to possess the competence to adapt to the latest technological advancements. This necessitates their training and development as knowledgeable and skilled individuals capable of meeting the rapidly evolving societal demands. English language teaching as a foreign language has significantly evolved in response to the technological changes of the current century, enabling the adoption of diverse methods and innovative approaches to cater to learners' needs in line with technological advancements. While traditional instructional tools such as radio, projectors, and cameras have been beneficial for teaching, it was not until the 1960s that the use of technology as a genuine aid in education was widely acknowledged. Since the 1960s, technology-based language teaching has gained prominence, leading to the development of various new methods aimed at automating English language learning. Additionally, the emergence of Computer Assisted Language Learning (CALL) as a novel concept also took place during this period (Wilson, Orellana, & Meek, 2010).

Before delving into the phases of Computer Assisted Language Learning (CALL), it is pertinent to examine the underlying reasons for the technological reform. Cuban (1993) identified three driving forces that instigated the technology reform. Firstly, there was a reliance on technology for social engagements, such as job opportunities and marketing. This indicates a societal shift towards technology-dependent interactions. Secondly, educators advocated for autonomous learning, wherein learners construct their own knowledge on a given topic. Computer-assisted language learning was perceived as a means to facilitate autonomous learning conditions for learners.

Lastly, there was an emphasis on productivity within a short timeframe, which served as another rationale for the use of CALL in EFL classes. The aim was to enhance the efficiency and productivity of both learners and instructors in the classroom (Cuban, 1993). Consequently, CALL is now characterized as a swift, cost-effective, and socially accepted approach to language learning. These outcomes are corroborated by contemporary studies, which support the notions of creating social engagement, fostering autonomy in learning, and providing rapid, cost-effective learning solutions in various contexts (Angelova & Zhao, 2016; Azmi, 2017).

Up until the 1980s, a period referred to as 'Restricted CALL' by Bax (2003) was recognized as a precursor to subsequent CALL applications, owing to its capabilities in basic translation and drilling activities. In this period, the advancements in media and interactive practices, facilitated by technological enhancements such as voice recording devices and television-assisted interactive learning opportunities, presented learners with new avenues for exploration. As technology continued to evolve, paving the way for the predecessors of modern computers, educational practices assumed a new role and became integral to a technology reform in education. Toffler (1980) articulated that computers augmented our mental capabilities, akin to how second-wave technology enhanced our physical prowess. This phase, termed 'Open CALL' by Bax (2003), provided learners with opportunities for interaction with peers, in addition to mechanical activities. Interaction-based initiatives such as interactive games, videotape materials, and software programs empowered learners to progress and advance their skills (Davies et al., 2013).

In the late 1980s and 1990s, the Internet era gained popularity among both learners and instructors, revolutionizing the accessibility and dissemination of information. The development of the Internet facilitated seamless social and cultural interactions, while digital mediums such as CDs and DVDs simplified the sharing of information. Moreover, the convergence of software and web technologies transformed communication into not only a means of socializing but also a way of life (Otto, 2017). Subsequently, in the 21st century, sociocultural theories underscored the significance of social interaction in learning and language usage, leading to the emergence of collaborative educational practices within CALL technologies. These developments encompassed a diverse array of resources, social applications, and learning

management systems (LMS) for both in-class and extracurricular activities, reflecting the evolving landscape of CALL.

Furthermore, there has been a notable shift in the roles of learners and instructors. Instructors have transitioned from being authoritative figures to becoming learning partners, while traditional classrooms are no longer the sole locus of educational activities. The abundant availability and easy access to vast amounts of information have precipitated an ongoing evolution in education, perpetuating the dynamic nature of technology's role in the educational domain (Beatty, 2010; Davies et al., 2013).

Moreover, a new classification, "Integrative CALL," has been introduced, albeit not universally embraced by authorities in the field. This classification introduces an element of ambiguity in the definition of integration, with the term "integrate" denoting the combination of multiple elements to enhance effectiveness. Scholars working on Technology Integration have predominantly emphasized a collaborative process that underscores the importance of pedagogy and its holistic implications (Cennamo, Ross, & Ertmer, 2010). Additionally, Özer (2022) defined technology integration as the efficient application of educational technology to achieve targeted learning outcomes. Torsani (2016) emphasized the transformative nature of technology integration, advocating for its application in instructional settings to transcend mere dissemination of information.

In summary, numerous studies have underscored the significance of positive transformation and collaboration in technology integration within educational settings. Torsani (2016) highlighted the indispensability of applying technology integration in classrooms, emphasizing the pivotal role of instructors as implementers of new technology integration. Therefore, technology integration should be underpinned by a theoretical framework that supports collaboration among different components in the learning process, ensuring its effective incorporation into educational settings (Heath, 2017; Önalan & Kurt, 2020).

2.1.1. TPACK Framework: Is Technological Knowledge Sufficient?

The integration of technology into teaching is a multifaceted endeavour, with each class presenting unique characteristics that influence the application of technology. While instructors may perceive technology as a complex field, it is imperative to acknowledge the necessity of integrating technology into classes through teachers'

knowledge (Richards, 2015). In response to this need, Koehler and Mishra (2006) developed a framework based on Shulman's concept of pedagogical and content knowledge, as outlined in his work "Those Who Understand: Knowledge Growth in Teaching" (1986). Shulman's model emphasized the importance of pedagogical and content knowledge in transforming subject matter into understandable data for learners. This pioneering framework laid the foundation for the Technological Pedagogical Content Knowledge (TPACK) model, which has gained prominence in the 21st century as a crucial requirement for effective teaching. The TPACK model encompasses three core domains: Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), and Technological Pedagogical Content Knowledge (TPK), each of which reflects the intersection of teacher knowledge based on content, pedagogy, and technology (Koehler & Mishra, 2006).

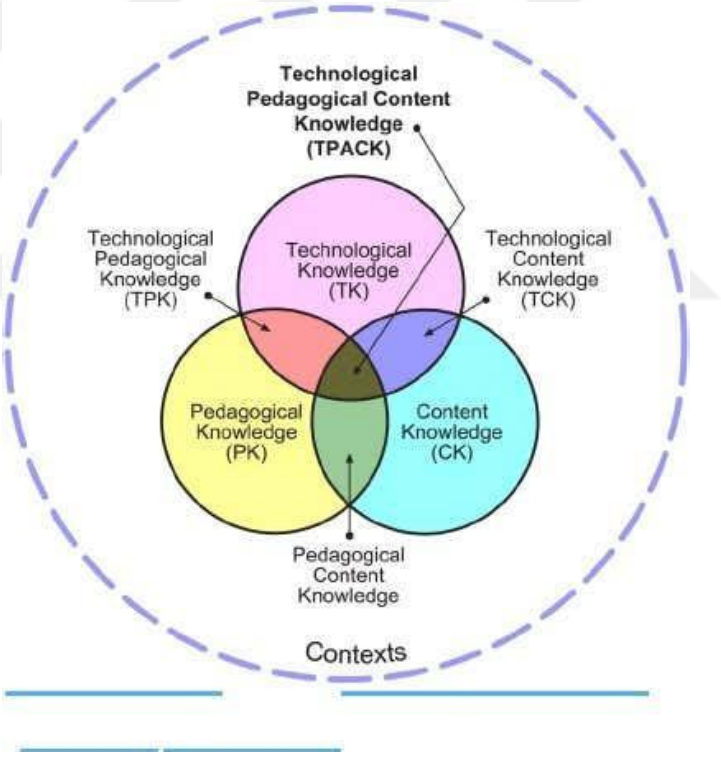

Figure 2.1: The TPACK Framework and Its Knowledge Components

The interplay among content, pedagogical, and technological knowledge within the TPACK framework presents new pathways to additional knowledge domains, such as Technological Pedagogical Knowledge or Pedagogical Content Knowledge. It is evident that no single element takes precedence over these interconnected domains. The integration of these knowledge components as a cohesive whole holds greater

significance in the context of learning and teaching processes (Schmidt et al., 2009; Richards, 2015).

The TPACK framework encompasses the following core components.

2.1.1.1. Technological Knowledge (TK)

TK is an evolving domain, challenging to define and potentially subject to obsolescence. It covers various perspectives and approaches to technology which can be used with all tools and resources. The TPACK framework's conceptualization of TK is parallel to the Fluency of Information Technology (FITness) that the Committee of Information Technology Literacy of the National Research Council (NRC) proposed (1999). Acquiring TK enables individuals to accomplish diverse tasks using technology and develop alternative approaches to task completion, evolving through ongoing interaction with technology (Schmidt et al., 2009).

2.1.1.2. Content Knowledge (CK)

CK is a fundamental aspect of teaching, encompassing concepts, theories, organizational frameworks, evidence, and proof. It varies significantly across fields, necessitating teachers' comprehensive understanding of the foundational knowledge within their respective disciplines (Koehler & Mishra, 2006).

2.1.1.3. Pedagogical Knowledge (PK)

PK encompasses a teacher's comprehensive understanding of teaching methods, including educational purposes, values, and aims, as well as classroom management, lesson planning, and assessment strategies. It calls for a good grasp of various theories of learning including cognitive, social, and developmental and their application in the classroom (Koehler & Mishra, 2008).

2.1.1.4. Pedagogical Content Knowledge (PCK)

PCK emphasizes the transformation of subject matter for teaching, involving the interpretation, representation, and adaptation of teaching materials to accommodate different perspectives and what students already know. Effective teaching necessitates awareness of common misconceptions, connections among content-based ideas, and alternative teaching strategies (Koehler & Mishra, 2006).

2.1.1.5. Technological Content Knowledge (TCK)

TCK reflects the historical link between technology and content knowledge, with advancements in various fields leading to new technologies that let data be represented and manipulated in novel ways. It is of utmost importance to comprehend the effect of technology on practices and knowledge in order to develop technological tools that are appropriate for education (Chapelle, 2003; Mishra and Koehler, 2006; Richards, 2015).

2.1.1.6. Technological Pedagogical Knowledge (TPK)

TPK focuses on how technology can transform teaching and learning when used in specific ways. It calls for a profound grasp of technology's limits and applications, as well as how they relate to pedagogical designs and strategies that are disciplinarily and developmentally appropriate (Mishra and Koehler, 2006).

2.1.1.7. Technological Pedagogical Content Knowledge (TPACK)

TPACK extends beyond the core components of content, pedagogy, and technology, serving as the foundation for efficient education with the help of technology. It necessitates a comprehension of how to effectively present ideas through technology, using pedagogical methods enhanced by technology to teach content, and recognizing how technology can either introduce new knowledge systems or enhance existing ones (Mishra and Koehler, 2006).

These components collectively form the TPACK framework, representing the intricate interplay of content, pedagogical, and technological knowledge in educational contexts.

2.2. Technology Integration in EFL Classes in Face to Face, Online and Hybrid Education

Technology integration in English as a Foreign Language (EFL) classes has undergone significant transformations in the face of various educational modalities, including face-to-face, online, and hybrid education. The COVID-19 pandemic has accelerated the adoption of online and hybrid learning, presenting both challenges and opportunities for EFL educators and learners. The shift to online and hybrid education has prompted a re-evaluation of pedagogical approaches and the integration of technology to enhance language learning experiences.

The challenges of online learning during the COVID-19 pandemic have been experienced by EFL learners, with many expressing dissatisfaction with the progress in language learning performance in online settings (Mahyoob, 2020). Blended learning, which integrates face-to-face and online instruction, has emerged as the "new normal" in course delivery across higher education, emphasizing the need for a seamless integration of technology and traditional instruction (Dziuban et al., 2018). Teachers have been confronted with the need to adapt to online teaching, highlighting the importance of pedagogical and technological competence in navigating the complexities of online education (König et al., 2020).

The viability of augmented reality game-enhanced education in blended and online EFL classes has been explored, with findings indicating improved speaking proficiency in the blended group compared to the face-to-face group (Khodabandeh, 2022). However, challenges persist in teaching oral English communication skills in EFL contexts, underscoring the need for effective technology integration to overcome these challenges. EFL teachers have demonstrated the ability to conduct fully online English teaching during the Pandemic, emphasizing the importance of technology integration and proficiency in online instruction (Kusuma, 2022).

The TPACK framework, which combines technological, pedagogical, and content knowledge, has an important role in successful technology integration in EFL classrooms. The framework stresses the dynamic equilibrium among content, pedagogy, technology, and teaching/learning contexts, underscoring the need for a comprehensive understanding of the interplay among these components (Alim & Alim, 2022). Furthermore, the framework suggests that technology integration should be based on a theoretical framework that supports collaboration among different components in the learning process (Khalawi & Halabi, 2020).

The challenges of online learning, including technology use, instruction, assessment, and student engagement, have been reported by secondary EFL teachers, highlighting the need for effective technology integration strategies (Saputra et al., 2022). The use of technology-integrated online learning in EFL classrooms has been recommended as beneficial, emphasizing the potential of technology to enhance language learning experiences (Al-Qahtani, 2019).

The role of technology-related policy and constructivist teaching beliefs in how English teachers accept technology has been examined, emphasizing the need for supportive policies and pedagogical beliefs to facilitate effective technology integration (Huang & Teo, 2020).

In conclusion, technology integration in EFL classes across face-to-face, online, and hybrid education presents a complex landscape of challenges and opportunities. The TPACK framework, along with supportive policies and pedagogical beliefs, plays a crucial role in navigating the complexities of technology integration in EFL classrooms, ultimately enhancing language learning experiences in diverse educational modalities. As technology continues to evolve, the effective integration of technology in EFL education will remain a critical area of focus for educators and researchers alike.

2.3. The Role of Teachers in The Digital Age

Besides the technological changes in the classes, the roles of teachers in the digital age have evolved significantly, reflecting the changing landscape of education and the integration of technology, as well. Shaffer, Nash & Ruis (2015) identified traditional and modern roles for teachers, shedding light on the multifaceted responsibilities and competencies required in the digital classroom.

Traditional roles for teachers encompassed tutoring, explicating, disciplining, counselling, and evaluating students. In contrast, modern roles for teachers in a digital classroom include coordinating, mentoring, translating, learning, and expertise. These modern roles emphasize the need for teachers to skilfully organize resources, provide individualized learning opportunities, assist learners in interpreting feedback, stay updated on technological advancements, and possess expertise in subject matter, pedagogy, and technology.

Moreover, Son (2000) proposed new roles for language teachers specific to Computer-Assisted Language Learning (CALL) classrooms, such as observer, implementer, manager, designer, researcher, and evaluator, in addition to their common roles as tutor, mediator, guide, and facilitator. This highlights the diverse and complex aspects of teaching language in the digital age, requiring teachers to fulfill diverse roles to effectively integrate technology into language learning.

Chapelle and Hegelheimer (2004) emphasized the importance of teachers' ability to develop digital language learning tasks and select appropriate tasks for language learning from the internet. Additionally, language teachers should consider learners' communicative competence in cyberspace contexts, incorporating specific linguistic characteristics and language varieties from the virtual world into language learning materials to enrich students' linguistic repertoire.

Furthermore, teachers of the information age should continuously follow the latest findings of research about the properties of useful language learning practices and apply them to technology-mediated tasks to provide ideal opportunities and enjoyable language learning experiences for students. Hubbard (2004) stressed the importance of training students to learn and benefit from technology-mediated language learning practices, focusing on motivating learners, learning strategies, technology-mediated interaction, and authentic communication.

In addition, technology-based language assessment is a significant issue that language teachers need to understand, as the use of computer-based tests for classroom assessment, placement, achievement, and other purposes is gaining importance. Teachers should monitor students' progress through computer-based quizzes and provide accurate feedback on their performances, demonstrating the need for a deep understanding of computer-assisted language testing.

Moreover, teachers should guide students towards self-directed learning and provide them with opportunities to develop the necessary skills of self-directed learning, leveraging information and communication technology to transform the learning context into a learner-centered environment. This involves incorporating multimedia resources to engage students in activities that make learning enjoyable and promote positive attitudes towards learning.

In conclusion, the evolving roles of teachers in the digital age underscore the multifaceted responsibilities and competencies required to effectively integrate technology into language teaching. The modern roles of teachers in a digital classroom encompass a wide range of responsibilities, emphasizing the need for continuous professional development and adaptability to the changing landscape of education.

2.4. Technology Integration Practices from In-Service Instructors' Experiences: Studies from around The EFL World

The integration of technology in English as a Foreign Language (EFL) classrooms has been a subject of extensive research, with a focus on in-service instructors' experiences at universities around the world. Specifically in Sub-Saharan African nations, Agyei and Voogt (2012) investigated the possibilities of Technological Pedagogical Content Knowledge (TPACK) as a framework to enhance how pre-service teachers experience technology integration within their education. The study emphasized how important TPACK is in influencing pre-service teachers' perceptions of technology integration. The results also showed that using exemplary materials to support teachers during collaboration is an encouraging strategy for developing teachers' TPACK in the Ghanaian context. The study also highlighted the challenges faced by the experimental teachers in designing interactive activities suitable for the learners with spreadsheets to lead them towards improving higher concepts.

Hussein et al. (2021) investigated why instructors intended to continue reusing Google Classroom in Iraq, emphasizing the impact of system quality on instructors' ongoing decision to reuse Learning Management Systems (LMS). According to the findings, service quality did not influence the satisfaction of instructors positively, and poor internet connection and students' reluctance were the main issues instructors had while using Google Classroom.

Semiz and İnce (2012) examined the Technological Pedagogical Content Knowledge, technology integration self-efficacy, and instructional technology outcome expectations of pre-service physical education teachers. The study revealed that there was limited integration of physical education and sport-related emerging technologies in teaching practices in higher education, shedding light on the challenges in technology integration in specific disciplines.

In their discussion of EFL teachers' attitudes and behaviors toward digital English learning, Nugroho & Mutiaraningrum (2020) drew attention to the differences in teachers' views and behaviors around technology integration. The study emphasized how important it is to close the gap that exists between instructors' perceived and real use of technology in the classroom.

In order to support 21st-century learning, Wang (2022) created a TPACK scale for EFL teachers. The results showed that, although some teachers showed a high degree of confidence in their TPACK, their instructional strategies mostly emphasized lower-order thinking and a minimal amount of technology integration. The study emphasized how crucial it is to match successful technology integration strategies with instructors' faith in TPACK.

O'Dwyer et al. (2004) investigated the technology use in elementary school classrooms by analysing questionnaire data from 1490 teachers in 96 schools across 22 Massachusetts districts. The results revealed relations regarding leadership practices, technology emphasis, technology-related professional development and policies along with teachers' use of technology. The study highlights the importance of regarding both organizational and individual factors when assessing the effect of technology on teaching and learning in schools.

Esteve-Mon et al. (2020) addressed the issue of digital teaching competence among university instructors. While previous studies mostly focused on the pre-service level, this study focused on the importance of digital competence of university teachers. The findings showed that university instructors needed to be skillful in meeting the challenges of today's digital society. While most instructors showed adequate technical digital competence, there were variations in the pedagogical use of technologies, particularly in utilizing them for their own development. The study highlights the importance of both technical and pedagogical digital competence among university instructors to improve teaching, foster students' digital skills, and encourage continuous professional development.

Fernández-Batanero et al. (2021) aimed to examine the intersection of educational technology and teacher stress, to understand the current situation of research in this area. Reviewing the literature, the study identified 16 related articles. The findings illustrated that teachers frequently experience different levels of anxiety and stress related to the integration of educational technology in their classrooms. The review suggests further research to prevent and alleviate teacher stress and provide support for technical challenges.

Garzón-Artacho et al.'s study (2021) aspired to assess 140 teachers in the Autonomous Community of Andalusia, Spain, who were teaching Lifelong Learning, regarding

their digital competency. The study's findings showed that instructors often lack proficiency with digital tools, particularly when it comes to creativity, information literacy, and problem-solving. Nonetheless, they demonstrate adequate proficiency in digital content collaboration and communication. By suggesting areas for development and potential focus in teacher training programs, the study highlighted the significance of characteristics including age, teacher training, and school type.

Smarkola, (2007) analyzed the self-reported computer use and future plans about computer applications among 160 student teachers and 158 experienced teachers, utilizing the Technology Acceptance Model (TAM) as the conceptual framework. The results showed important findings, with pre-service teachers expressing willingness to integrate computer use into their teaching after their practicum. Both student teachers and experienced ones considered computer usage useful in class. There were no significant differences between the groups about computer use. The study recommended practical implications for teacher preparation programs along with edtech researchers.

Ansari et al. (2022) investigated how public university students' learning is affected by technological and infrastructural facilities in the Sindh province. The findings showed a positive relation between the facilities and the students' experience. Moreover, infrastructural facilities contributed to creating a helpful learning environment. The study highlighted the importance of ensuring sufficient opportunities in public universities to improve students' learning experiences.

In conclusion, the research on technology integration practices from in-service instructors' experiences at universities around the EFL world has provided valuable insights into the challenges, beliefs, and practices regarding technology integration into language teaching. The studies have underscored the importance of addressing the technological skills gap, aligning teachers' confidence in TPACK with effective technology integration practices, and bridging the gap between teachers' ideas and actual practices in technology integration. These findings contribute to the ongoing discourse on effective technology integration in EFL classrooms and highlight the need for targeted interventions to support technology integration practices among in-service instructors.

2.5. Technology Integration Practices from In-Service Instructors' Experiences: Studies from EFL Turkish Context

The studies conducted in Turkish context on technology integration during the Pandemic yielded related results to those conducted globally. Educators reported both the advantages and disadvantages of remote teaching. For instance, Erkan and Balbay (2021) surveyed 110 instructors at the school of foreign languages and interviewed 24 of them and found that many regarded this period as "a time for self-investment" (p. 1207). Teachers acquired new skills due to the technical knowledge they gained, becoming more flexible and better time-managers. They also noted that this experience helped strengthen relationships among colleagues, fostering a stronger sense of community and collaboration. However, they encountered obstacles such as personal and professional life balance, technical problems, inefficient infrastructure, lack of professional training about technology, and technical assistance, and the inability to physically engage with their students.

Another study by Tümen Akyıldız (2020) with the participation of 6 EFL teachers working in a secondary school revealed impediments to remote teaching, categorized into student-related, technology-related, teacher-related, and parent-related problems. Technology-related issues included internet connection and inadequate resources, while teacher-related problems included unfamiliarity with remote education, lack of technological training, and personal issues. The study also suggested improvements for remote education processes, such as training and technological support for distance education, adaptation of different approaches to remote education, and motivational support for students, as well as raising parents' awareness.

In their comprehensive research study, Erdoğan and Yazıcı (2022) reached out to 155 EFL teachers working in different education levels to assess their perceived competence during synchronous and asynchronous online education. The results showed that they were content with their lesson planning and grammar and vocabulary teaching competence, while they felt less competent when teaching students with disabilities and retaining student interaction and motivation. The technological problems encountered by the teachers were reported to be related to creating or adapting materials, sharing them with learners, monitoring their progress.

Önalan and Kurt (2020), explored the factors influencing technology integration in education in 70 university-level Turkish EFL teachers. According to the results, the teachers were familiar with common software, had positive attitudes, and high self-confidence in integrating technology. They also had a positive school climate but received limited administrative support, especially in technological infrastructure and institutional encouragement. The results suggested a need for improved technological resources, administrative and technical support, and targeted training for identified issues in technology use and integration among instructors.

Comparably, Okkan and Aydin (2022) looked into how 210 Turkish university professors felt about using computers to teach and learn English. The findings indicated that instructors' personal interests were mostly centered around communication and work-related technologies, and that their knowledge of particular software was restricted. In spite of this, the teachers generally had favorable opinions of computers and exuded confidence when incorporating them into their lessons. Overall, the study emphasizes the necessity for more thorough investigation of the responsibilities and perspectives of instructors regarding computer integration in foreign language instruction at Turkish higher education institutions.

2.6. Factors Affecting Instructors' Technology Integration Practices in EFL Classes

The integration of computer technology in classrooms has not been satisfactory, despite its potential and increased availability in language schools. Many voices worldwide have raised concerns about teachers' reluctance to use computers effectively (Al-Seghayer, 2022; Cuban, 1993; Çelik & Aytın, 2014; Dehqan, Barjesteh, & Faraji, 2017; Ghaemi & Mostafavi, 2015; Tri & Nguyen, 2014). Joyce and Calhoun (2010), for example, highlighted the slow integration of technology in schools and the lack of knowledge and skills provided to teachers through pre-service and professional development. Researchers have explored factors that encourage and impede technology use, categorizing them as first and second-order barriers (Ertmer, 1999). These barriers include access to hardware and software, technical and administrative support, beliefs about technology, unwillingness to change, and lack of instructional models. Other studies have classified barriers into material and non-material conditions, teacher and school level barriers, and micro, meso, and macro-level barriers (Balanskat, Blamire & Kefala, 2006; BECTA, 2004; Mirzanjani, et. al.,

2015; Pelgrum, 2001). The digital divide, lack of theoretical foundations, and teachers' beliefs and teaching philosophy also influence technology integration. Additionally, teachers' years of experience and the nature of technology itself can hinder its use in the classroom. These barriers need to be recognized and managed to minimize their impact on technology integration.

2.6.1. Digital Literacy

The emergence of new literacies in education, including digital literacy, has significantly affected the re-conceptualization of literacy. Digital literacy, among other literacies, is considered one of the newest in education. It has been construed in many ways, reflecting the changing nature of computer technology. Street (2003) defined it more accurately as "particular ways of thinking about and doing reading and writing in cultural contexts" (p. 79). Digital literacy is seen as essential to prepare students to meet the demands of an increasingly computer-dependent modern world. It encompasses the capacity to comprehend and utilize information from various sources when presented via computer. Additionally, it is closely related to other literacy terms such as network literacy, information literacy, electronic literacy, media literacy, and computer literacy (Hargittai, 2005; Robb & Charismiadji, 2011). However, scholars have noted that computer knowledge alone is not enough to successfully integrate technology into education. Teachers need to synthesize content, pedagogical and technological knowledge to effectively incorporate technology into their teaching practices (Schaffhauser, 2009).

Aydın (2013) analyzed the perceptions of 157 Turkish English as a Foreign Language (EFL) teachers about computer usage in EFL teaching. The study investigated teachers' knowledge of software, reasons for personal computer use, attitudes, self-confidence in integrating computers, and the school climate and support for computer use in teaching EFL. According to the results, Turkish EFL teachers had limited knowledge of specific software and had challenges using these programs. Despite these, teachers generally had positive attitudes toward computer integration, perceived themselves as confident in using computers, but expressed concerns about insufficient technical and institutional support. The study underlined the need for addressing teachers' knowledge issues, providing technical support, and improving the school climate to better facilitate the effective integration of technology into EFL education.

Similar difficulties experienced by EFL teachers were presented in the study conducted by Şevik and Yücedağ (2021). All 40 teachers had no prior remote education experience and lacked any training on the topic. Results also concluded that teachers had major problems with technology, mostly related to internet connection, lack of technological devices, and technical knowledge. They also expressed concerns about the quality of remote education, indicating that reduced communication among students and teachers, lack of technological assets, and no prior experience with remote education would hinder the fulfillment of its purpose.

2.6.2. Frequency of Teachers' Software Use in Their Personal Lives

Ware (2008) emphasized that a substantial number of teachers' personal interest and willingness toward technological developments was necessary to integrate technology into the classroom. Galloway (2010) highlighted the significance of technology use in teachers' personal lives and stressed that it was unrealistic to expect the technology integration into the classroom from teachers who did not use the technology themselves in their personal lives. Wozney, Venkatesh and Abrami (2006) found that teachers' computer use outside the school in their personal lives was the most important predictor of their technology integration into instructional activities inside the schools. In a study conducted by Tour (2015), it was concluded that the ways participants used digital technologies in classrooms were shaped by their digital mindsets. It searched the digital mindsets of language teachers and how their personal digital literacy practices influenced their use of technology in teaching. Findings showed that there was little comprehension of how teachers' everyday digital literacy practices affected teaching with technologies. Findings also showed that the participants' digital mindsets influenced their use of technology, with some teachers adopting traditional approaches while others integrated new literacies into their teaching. The findings suggested that teachers' personal experiences with technological tools were important to consider in professional development and teacher education. The study also highlighted the need for language teachers to reflect on their classroom activities and explore how their assumptions about technology informed their teaching practices. On the contrary, language teachers who did not have the experience of playing computer games in their daily routines did not believe in the helpfulness of the games for language instruction or learning. Robinson and Mackey (2006) emphasized the relationship between pre-service instructors' integration of

technology into the classroom and their technology use in their personal lives. They stressed the importance of teachers' computer use in their everyday activities and pointed out that teachers brought not only the skills of computer use in their personal lives to the classroom but also their attributes and values related to that computer use. The frequency of computer use has been studied with regard to variables including computer attitude, computer knowledge and skill, computer experience, computer ownership, willingness to use computer, and computer acceptance. There is evidence in the literature that supports the existence of a relationship between computer use and positive attitude towards the computer (Alavi & Jalilifar, 2013; Esmaeili, et al, 2015; Khosravizadeh, et al, 2016). The more teachers use the computer, the more knowledge and skill regarding the computer they will gain. Furthermore, teachers' confidence in the educational use of computer technology directly associates with the frequency.

2.6.3. Teachers' Attitude towards Computer

Computer technology is rapidly advancing, with new, more advanced, and capable technologies quickly replacing current ones. Schools and educational institutions are consistently investing in modern educational technologies to replace older devices and software programs with updated ones. The development of new language software is making them more intelligent, capable of error detection, and supplying intelligent feedback (Gilakjani & Leong, 2012). However, the extent to which these developments excite and engage teachers, fostering a positive attitude towards these devices, is crucial. While educational centers focus on the potential advantages of hardware and software for students, little notice has been given to factors that impede teachers from using digital technologies in classrooms. The availability of computers in classrooms is important, but the most crucial element in effective technology use by teachers is their positive attitude towards it. Positive attitudes among teachers can lead to the allocation of financial resources for instructional technologies and can affect the success of technology integration into educational practices. Teachers' attitudes are a vital factor in technology integration, and positive attitudes can lead to remarkable achievements (Kreijn, et. al., 2012). Attitude is a key factor in technology integration, and teachers' positive attitudes are necessary for successful computer integration into classrooms. Teachers' attitudes influence students' exposure to technology-based instruction, and positive attitudes are essential for technology integration. Developing positive attitudes in teachers towards computer technology is crucial for successful

technology integration. Understanding teachers' attitudes is important for policymakers to identify psychological barriers that influence teachers' instructional behaviors, particularly regarding technology integration.

In examining teachers' attitudes towards computer use within the Turkish EFL context, several studies have contributed valuable insights. Çelik (2013), for example, explored Turkish EFL teachers' attitudes towards computer-assisted language learning (CALL), revealing a generally positive disposition towards integrating technology into language instruction. Conversely, Öztürk and Alci (2016) investigated the attitudes of Turkish EFL teachers towards technology integration, highlighting challenges such as limited access to resources and inadequate training, despite recognizing the benefits of technology in language teaching. A study by Yücel (2019) further delved into Turkish EFL teachers' attitudes towards educational technology, noting a shift towards more positive attitudes over time due to increased exposure to technology and professional development opportunities. In a different vein, Gündüz (2017) examined the factors influencing Turkish EFL teachers' attitudes towards computer use, identifying variables such as age, teaching experience, and training as significant predictors. Additionally, Özsevik and Göksu (2018) investigated the effect of professional development programs on Turkish EFL teachers' attitudes towards computer-assisted language teaching (CALT), revealing a positive correlation between participation in such programs and favorable attitudes towards technology integration. Collectively, these studies underscored the complex interplay of factors shaping Turkish EFL teachers' computer use attitudes, highlighting the importance of addressing challenges and providing targeted professional development to promote effective technology integration in language teaching practices.

2.6.4. Teachers' Perceived Self-Confidence in the Technology Integration

Technology integration in education is a convoluted process that is heavily affected by teachers' confidence and beliefs. It is highly important to understand teachers and what motivates them to use computers. Technology integration plans might be at risk if teachers' confidence in computer use is not considered from the outset. It is stressed that technology implementation programs may face resistance from teachers if they do not address the issue of promoting teachers' confidence in computer use and reducing computer anxiety. The BECTA report (2004) identified instructors' confidence level in information and communication technology use as the most important factor

determining their ICT use for teaching purposes. The report shows that instructors with lower confidence in ICT use are likely to avoid integrating it into classroom activities. Numerous studies have cited instructors' lack of confidence in their competence to use technology for teaching purposes as an obstacle against technology integration (Almekhlafi & Almeqdadi, 2010; Brush, et al, 2008; Ertmer, 2012). Despite being high digital technology users, the digital native generation of teachers generally lacks the confidence to immerse their teaching with technology (Ertmer & Ottenbreit-Leftwich, 2010; Joo, et al, 2018; Mahdizadeh, et al, 2019). Teachers need to possess the necessary level of confidence to remove barriers that prevent them from learning modern and emerging technologies and integrating them into teaching practices.

Self-confidence is a compound construct that includes interest, relevance, expectancy, and outcomes. In the context of technology use, these components refer to environmental factors that attract attention, activities oriented to goals, teachers' expectation to be successful, and technology use in education, respectively. Teachers' confidence level is a determinant factor in their willingness to apply digital technologies into instruction. Teachers' beliefs are also vital for their willingness or reluctance to use computers in education. Resistance to using digital technologies in education is attributed to numerous factors, and teachers' confidence level is one of the determinant factors in their willingness to apply these technologies into instruction (Ertmer et al, 2012; Koc, 2017; Teo, 2011).

Teachers' confidence can be constructed with prior successful experiences, and frequent exposure to computer technology enhances teachers' self-confidence. However, unsuccessful experiences with computers can develop negative attitudes towards computer use in teacher-students. Teachers' confidence is directly influenced by their computer experiences, and successful practice can lead to changes in beliefs. Teachers' confidence is also influenced by their prior experiences with instructional technologies and their exposure to the actual capabilities of these technologies in education (Ertmer & Ottenbreit-Leftwich, 2010; Teo, 20122; Tschannen-Moran et al, 1998). In conclusion, teachers' confidence in technology integration is a critical factor that influences their enthusiasm to combine technology into their teaching practices.

2.6.5. Atmosphere of Working Place

In examining the factors that affect teachers' willingness or reluctance to use computers in classroom activities, researchers have seen that some of the reasons lie beyond individual cognition. While many researchers have focused on individualistic cognitive variables or psychological constructs such as teachers' beliefs, digital literacy, attitudes, experiences, and perceptions, it has been noted that teachers' computer acceptance for classroom use can also be influenced by the social contexts in which they work. The culture and atmosphere of the workplace have a profound effect on how teachers perceive teaching with computers. Contextual factors such as school climate, availability of technical support, existing technical infrastructures, and the encouragement or discouragement from stakeholders have shifted the focus from an individualistic view to social and environmental aspects. The nature of teachers' behaviors and ways of thinking of computer use are considered as social phenomena. Strong leadership in schools has been seen to have an impact on teachers' integration of computers into classrooms, and administrators' support for instructional technology is crucial for successful technology implementation. Teachers should be encountered by administrators in the decision-making process, and colleagues' support promotes the likelihood of teachers teaching with technology (Windschitl & Sahl, 2002). The focus has shifted from teachers as isolated individuals to teachers as groups within diverse settings and various contexts in which teaching and learning occur. In this regard, it has been argued that instead of exploring influencing factors only in the cognition and minds of individualized teachers, they should also be investigated in the "fields of interaction" among teachers in groups (Hargreaves, 2015; Little, 2003; Van Oers et al., 2008).

In the social context of schools, stakeholders have a spectrum of concerns about modern digital technologies introduced to the school setting. Teachers are curious, mingled with wonder and concern, to know how they can adjust and harmonize themselves with the presence of new digital devices and what type of support and aid will be provided by the school if they are going to integrate them into classrooms. To integrate computer technology successfully into instructional activities, teachers need access to professional experts or a community of exemplary technology-using teachers who share their experiences of computer use in education (Ertmer, 2005). Establishing a community as a way for the development of the profession is strongly recommended

in the literature of professional development. Vicarious experiences have been suggested as an influential learning way in which teachers learn through seeing similar others as models that provide useful necessary information about how to use technology in teaching. The significance of social networks among computer-using teachers has been emphasized, and influential people in teachers' lives have been identified as strong predictors of computer use by teachers (Daly, et al, 2019; Van Veelen, et al, 2018).

School environment is vital in creating conditions that facilitate the flourishing of exemplary computer-using teachers. In such an environment, there are full-time computer coordinators who support computer-using teachers through technology-based practices. The successful implementation of technology integration into instructional practices is constantly reported from schools that are adequately equipped with proper information and communication technology resources. The insufficiency of the number of computers in schools has been identified as the biggest mentioned impediment for technology integration in the literature. Problems associated with technological resources include the lack of a well-planned schedule of using ICT labs, insufficient quantity of computers, outdated computer machines, and improper software. Teachers' reluctance to utilize technology in class can also stem from the lack of technicians who at once fix technical problems encountered during teaching (Snoeyink & Ertmer, 2001).

The literature highlights a noticible gap in the integration of computer technology in language classrooms, despite its potential and increased availability in educational settings. While numerous studies have explored factors influencing teachers' reluctance to use computers effectively, including barriers such as access to hardware and software, technical support, and beliefs about technology, there is limited research focusing specifically on instructors in preparatory schools within the EFL context. Existing literature has identified barriers at various levels, from material conditions to teachers' beliefs and teaching philosophy, but there is not sufficient comprehensive understanding of instructors' perceptions, attitudes, preferences, and needs regarding technology use in EFL classes within preparatory schools. Furthermore, the literature highlights the importance of addressing these barriers to minimize their impact on technology integration. Therefore, there is a clear need for a study that investigates instructors' perceptions, attitudes, preferences, and needs towards technology use in

EFL classes within preparatory schools, as well as stakeholders' perspectives on instructors' activities in terms of technology integration. Such research will contribute to filling the gap in the literature and provide valuable insights for enhancing technology integration efforts in language education settings.

CHAPTER III

METHODOLOGY

3.1. Introduction

This study aims to identify the technology integration practices and factors affecting foreign language instructor's preferences, as well as institutional support for their practices. Accordingly, this section examines the research design, setting, participants, data collection instruments and data analysis procedures.

3.2 Research Design

The current study was a descriptive study. Descriptive studies are defined as a light on contemporary issues or problems via a manner of statistics collection which lets researchers describe the scenarios more clearly. Such studies also facilitate active collaboration and coordination among researchers and research participants (Bickman & Rog, 1998). The current study also adopted a mixed-method approach. Studies that collect qualitative and quantitative data employ a mixed-method approach. Within a mixed-method approach, there are different perspectives on how research paradigms inform the design of mixed-method studies.

Quantitative data were gathered via a survey modified from the study conducted by Papanastasiou and Angeli' (2008). The questionnaire was developed to search for the factors affecting teachers' technology integration practices as psychometric properties that allow researchers to examine factors like teachers' knowledge of computer software, their personal computer use habits, their attitudes toward and confidence in integrating computer-based technologies into the classroom, and their opinions about the support and climate of the school. A 5-point Likert scale, ranging from "I cannot use/do" (1) to "I can use/do very well/very often" (5), was used to answer the questionnaire's items. The first part of the questionnaire elicited demographic information about the participants, such as age, years of experience, and gender. The second part contained Likert-type scales that elicit the factors affecting technology integration into classes, instructors' perceptions and practices in the classes, and administrative expectations and support.

In addition to gather qualitative data, two separate semi-structured interviews were conducted: one with a focus group selected from the participant instructors, and

another with the principal, four coordinators, and CPDU members individually. The primary purpose of this approach was twofold: firstly, to provide a neutral and open environment for the instructors, free from any potential bias that may arise from speaking in the presence of stakeholders. Secondly, it aimed to gather qualitative insights into administrative implications, expectations, and support regarding the use of technology within the institution, fostering an equitable and comfortable setting for both instructors and stakeholders. The interview questions were derived and modified from the existing questionnaire.

The current data, which were gathered through both quantitative and qualitative features, were analyzed through the Statistical Package for Social Sciences 25 (SPSS) program for the quantitative data, and the qualitative data results were examined through thematic analysis. It involved identifying recurring themes and patterns within textual interview transcripts and open-ended survey responses. Through the process, the researcher first familiarized herself with the data. After carefully reading and re-reading data set, the researcher generated initial themes based on the qualitative questions. The researcher began by identifying segments of text (e.g., sentences, paragraphs) that capture specific concepts, ideas, or experiences, which then named as "codes". Once the researcher had enough codes, she started grouping them based on their similarities and relationships. This process helped identify broader categories or themes that capture the essence of the data. Then, the themes were reviewed and revised. The researcher evaluated the identified themes to ensure they accurately represented the data and were not based on personal biases or preliminary assumptions.

In the final step, the themes were defined and described. This provided detailed descriptions of each theme, highlighted its key features, and how each theme was related to other themes. To ensure reliability, a second coder apart from the researcher was included in the interviews.

3.3. Setting

English was the medium of instruction at the foundation university in Istanbul, where this study was conducted in the academic year 2022–2023. 68 English as a Foreign Language (EFL) instructors were employed by the university's English Preparatory Programme, which is housed inside the Foreign Languages Department. The main goal of the Preparatory Programme, also known as PP from now on, is to produce graduates

who are autonomous, have the capacity for critical thought, are dedicated to academic integrity and lifelong learning, and are proficient in the English language.

The curriculum offers classes at four levels: A1 (Elementary), A2 (Pre-intermediate), B1 (Intermediate), and B2 (Upper-intermediate) in order to accomplish the goals specified above. These levels consist of four courses spread over two semesters and are created in accordance with the Common European Framework (CEFR) results. Through weekly level meetings, unit meetings, and spot checks, among other stakeholders such as level heads, unit heads, and the coordinator herself, the university administration makes sure that each level is meeting the required learning outcomes. The program's fundamental methodology centers on collaboration and revision, which forms the basis of the institution's curriculum and student-centered learning program.

The Continuous Professional Development Unit (CPDU) and the Testing and Assessment Unit (TAU) are the two separate units that make up the Preparatory Program, and each has particular duties. At every proficiency level, there are four coordinators as well. The PP coordinator assigns duties to the unit and level leaders and specifies the functions of these units.

Level heads are in charge of updating instructors on weekly administrative and academic issues provided by the coordinator and units through scheduled meetings. They also supervise the way each level's classes are taught. The midterm and final tests in each module, as well as the placement exam at the start of the semester, are all prepared and administered by the Testing and Assessment Unit. Students must take the Placement Exam in the fall semester in order to get their competency level determined. Students who receive enough grades to be classified as B2 are encouraged to sit for the Proficiency Exam, which is also administered by this unit. This test determines whether students are proficient enough in English to continue taking classes at their faculties without needing to enroll in a preparatory program.

The last level, Continuous Professional Development level (CPDU), involves teacher observations. It is in charge of professional development programs related to teacher training, fostering an atmosphere in which educators can share insights about their own teaching practices and needs.

In order to advance to a higher proficiency level, students must attend eighty percent of their level courses and receive an average score of sixty out of one hundred on all

in-class assessments, including quizzes, class projects, written assignments, speaking assignments, midterm tests, and final exams. After two semesters, students who have advanced to the B2 level can take the Proficiency Exam, and if they pass with a score of sixty, they can begin their undergraduate studies.

3.4 Participants

3.4.1. Instructors

This study was carried out involving sixty-eight EFL Preparatory School instructors who were working in the Preparatory School in the foundation university located in Istanbul. Their ages, nationalities and educational background varied. The data revealed a diverse age range among participants, with the majority falling between the ages of 25 and 35. Regarding years of experience, 22 of participants had between 5 to 15 years of teaching experience. In terms of education level, 39 instructors held a Master's degree, followed by 24 with a Bachelor's degree and 5 with a Doctorate. Nearly all participants reported having access to a home computer, while a slightly lower percentage had access to a work computer. The gender distribution showed a higher representation of females among the participants. Additionally, 47 participants had undergone pre-service or in-service courses on technology integration in education, indicating a level of familiarity and potential interest in technology integration practices. They taught at least eighteen hours per week. They had three days face-to-face education and two days online education duties. Besides teaching hours, they were supposed to prepare materials, took different missions for testing and assessment purposes through their office hours. The descriptive information in detail was discussed under the findings.

3.4.2. Stakeholders

Within the study, stakeholders included four coordinators of each level, a CPDU member and the principal of the preparatory program. The coordinators of each level included four instructors who had worked within the current institution at least for three years. Their educational background changed from English Language and Literature, American Language and Literature and English Language Teaching. Two of the instructors had an MA degree in English Language Teaching. One of them also had an MA degree in Educational / Instructional Technology.

CPDU members had the responsibility of planning the professional development activities during the academic year. Besides conducting formal and informal observations, they had the responsibility of checking the academic assessment of the instructors for the academic procedures demanded by the university administration. The principal of the preparatory school had academic and management duties. She had been a member of the current instructor for over eight years.

3.4.3. Role of the Researcher

In this study, the researcher played several roles. To figure out what affected the use of technology in English classes, she wanted to understand the experiences of instructors and stakeholders firsthand. She took the lead in collecting data by creating interview questions, running a group discussion, and observing the actual teaching environment. By listening to the participants' stories and perspectives, she aimed to understand their motivations, challenges, and thoughts about using technology in their classes. Throughout this process, she kept in mind her own background and potential biases, staying open to their unique points of view. This active approach was crucial as she analyzed the information gathered, searching for patterns and recurring themes within the collected data. Also, she was the first coder of the qualitative data.

3.5 Data Collection Instrument

Data were gathered for the study from both the quantitative and qualitative sources. A questionnaire was used for the quantitative data collection. Then, semi-structured focus group interviews with 20 participating instructors, and semi-structured interviews with the principal, level coordinators, and CPDU members were used to gather data for this study.

3.5.1. The Quantitative Data Collection

The quantitative data were derived from the participants' responses to a questionnaire employed by Papanastasiou and Angeli (2008). The Questionnaire of Factors Affecting Teachers Teaching with Technology included six parts; Demographic information (1), Computer Software knowledge (2), Frequent use of software for personal aims (3), Attitude towards computer (4), Self-confidence in ICT use (5), and School atmosphere (6). (See Appendix A).

3.5.1.1. Demographic Information

In the initial section of the questionnaire, the objective was to collect demographic information pertaining to the age and gender of the teachers, duration of international study, the number of computer labs and computers in each lab and classroom, possession of personal computers at home, academic qualifications of the teachers, and their participation in technology-focused professional development programs.

Table 3.1: Demographic Information Table

Variable	Category	N	%
Age	Below 25	12	17.65
	25-30	17	25.00
	30-35	19	27.94
	35+	20	29.41
Years of experience	0-5	15	22.06
	5-10	22	32.35
	10-15	21	30.88
	15+	10	14.71
Degree of Education	Bachelor's degree	24	35.29
	Master's degree	39	57.35
	Doctorate	5	7.35
Having a home computer	Yes	64	94.12
	No	4	5.88
Having a work computer	Yes	61	89.71
	No	7	10.29
Gender	Female	55	80.88

	Male	13	19.12
Pre-service or in-service courses related to the integration of computers in teaching and learning	Yes	47	69.12
	No	19	27.94
	Maybe	2	2.94

When the distribution of participants according to degree of education was examined, it was seen that people with a master's degree had the highest rate (57.35%). The majority of participants had both home (94.12%) and work computers (89.71%). According to the gender distribution of the participants, the rate of female participants was higher than male participants (80.88%). Most of the participants (69.12%) stated that they had taken either pre-service or in-service courses for the integration of computers into teaching and learning.

3.5.1.2. Software Knowledge Scale

In the second section of the questionnaire, the aim was to assess the computer software proficiency of EFL teachers. This section was comprised of fourteen items pertaining to various types of computer software applications, presented in the form of a Likert-type scale ranging from "I cannot use it" (assigned number 1) to "I can use it very well" (assigned number 5). EFL teachers were requested to self-assess their proficiency with these items. Some of these items encompassed commonly used applications, which are fundamental software tools typically included in any technology training program, such as "Microsoft Word, Excel, PowerPoint, Paint, as well as the internet and E-mail."

3.5.1.3. Frequency of Using Software for Personal Aims Scale

In the third section of the questionnaire, the objective was to assess the frequency of software usage by EFL teachers for their personal activities. This section consisted of fifteen five-point Likert-type items, ranging from "Never" (assigned number 1) to "Almost every day" (assigned number 5). Similar to the second section (Teachers' software knowledge), some of these items encompassed commonly used applications, including "PowerPoint, Word, compact discs, internet, E-mail, Paint, Excel, and games". Additionally, less common applications such as "Publisher, Model-It,

FrontPage, Access, Logo, Kidspiration, and Stagecast Creator" were incorporated to determine this type of software usage.

3.5.1.4. Computer Attitude Scale

In the fourth section of the questionnaire, the aim was to assess the EFL teachers' attitudes towards the computer as an educational technology. This section had fifteen items presented in the form of a 5-point Likert-type scale, ranging from "completely disagree" (assigned number 1) to "completely agree" (assigned number 5). Some of these items focused on the comfort level of EFL teachers regarding the use of computers in language education such as "I feel comfortable with the idea of the computer as a tool in teaching and learning"; or "The use of computers in teaching and learning stresses me out.". Additionally, certain items explored the beliefs of EFL teachers regarding the importance of computer technology in language teaching such as "The computer is a valuable tool for teachers.", while others examined their perspectives on the potential of computer technology to revolutionize their instructional methods such as "The computer changes the way I teach; or "The computer helps teachers to teach in more effective ways.".

3.5.1.5. Self-Confidence in ICT Integration Scale

In part five of the questionnaire, the aim was to evaluate how the EFL teachers perceived their self-confidence in integrating information and communication technology into classrooms and the items were about instructors' self-confidence such as "I can select appropriate software to use in my teaching"; or "I can teach my students to select appropriate software to use in their projects.". There were eight items in this section. It was in the format of five-point Likert-type scale, varying from "completely disagree" (number 1) to "completely agree" (number 5).

3.5.1.6. School Atmosphere Scale

In the last section of the questionnaire, the aim was to evaluate the school climate with regard to its support for technology integration. This section comprised twelve items, utilizing a 5-point Likert-type scale format, where responses ranged from "completely disagree" (assigned number 1) to "completely agree" (assigned number 5). Certain items focused on whether the members of the language schools (e.g., principal, technology coordinator, and colleagues) actively encouraged EFL teachers to incorporate technology into their instructional practices. Additionally, some items

inquired about the technological infrastructure within the language schools, aiming to assess whether it was adequate, appropriate, and conducive to supporting teachers in utilizing technology for teaching purposes.

3.5.2. The Qualitative Data Collection

To gather the qualitative data, the semi-structured focus group interviews were conducted with twenty instructors who had completed the questionnaire. Additionally, semi-structured interviews with the principal, level coordinators and the CPDU member (in total six stakeholders) were conducted.

The goal was to triangulate the data collected from the questionnaire. Both the research questions and the questionnaire served as the basis for the questions that were designed and used during the semi-structured interview. The instructors discussed their ICT practices and beliefs while providing an overall assessment of how technology was used at their schools. The conversation was audio recorded. English was used for the data collection. Nevertheless, the instructors added some Turkish-language remarks at the conclusion of the interview. There was about an hour's worth of recorded data per instructor in the dataset (see Appendix B).

For the semi-structured interview with the principal, level coordinators and CPDU member, the responses were also gathered the same way. The main aim during this interview was to gather information about the institution support and teachers' attitudes toward the activities conducted by the coordinators and CPDU members.

Data were collected in English via oral discussions and recorded. The data comprised approximately forty minutes of recorded data (see Appendix C). Right after the data were collected, the audios of both interviews were transcribed, and a systematic classification was applied to identify themes and patterns. During the thematic coding process Kvale and Brikmann's (2009) suggestions were followed:

a. Read and make notes: To capture the substance of the data, the first stage entails reading the transcriptions in depth and taking meticulous notes.

b. Label: The next step after reading the transcriptions is to find and classify any acts, activities, or thoughts that are pertinent, repetitive, or startling.

c. Order: Once significant characteristics have been identified, the researcher needs to prioritize which codes are more important.

d. Categorize: The next stage is to name the categories and topics and determine which are more pertinent once they have been developed.

e. Connect: To interpret the findings, the researcher finally explains the categories and the relationships between them.

3.6. Data Analysis Procedures

For the quantitative data, Statistical Package for the Social Sciences (SPSS 25), was used for conducting descriptive statistics. It provided a comprehensive toolset for analyzing and interpreting data. Descriptive statistics, such as measures of central tendency, variability, and frequency distributions were computed using SPSS 25 and the data was organized and summarized.

Qualitative methods were also employed in the current study to examine interview data. Transcribing the audio-recorded data was the first step in the data analysis process, which made sure that no important information was lost in the conversion from audio to written format. In order to preserve messages and crucial information from the audio version, the audio data were converted into written data (Corbin and Strauss, 2008). After the transcriptions were finished, the unprocessed data were ready for thematic analysis, which is a methodical coding and theme or pattern recognition process identifying recurring themes and patterns. This coding procedure was carried out in accordance with Kvale and Brinkmann's (2009) recommendations, which included reading the transcriptions to take notes, labelling pertinent and repeated elements, selecting the most significant codes, grouping them into themes and categories, and outlining the categories and their relationships to interpret the findings in light of earlier research, theories, and concepts.

Following a review of several qualitative data analysis methods, thematic analysis was chosen as the main research methodology. Considering that the research questions guided the specified topics under which the data were gathered, the results were interpreted and the pertinent theoretical frameworks were supported by the use of thematic analysis using various codes gathered through the qualitative questions. Applying Lincoln and Guba's (1985) evaluative criteria which include credibility, transferability, dependability, and confirmability was necessary to guarantee the accuracy of the coded data. These standards were maintained by employing strategies like extended participation, triangulation, peer debriefing, extensive description,

external audits, and audit trials, which guaranteed the objectivity and reliability of the study's conclusions.

CHAPTER IV

FINDINGS

4.1. Introduction

This chapter presents the findings gathered from the data analysis obtained from the questionnaire and interviews. The data were presented based on the research questions. Firstly, quantitative data collected through the SPSS 25 program were presented. The frequency method was used to analyze the data. The presentation of each set of data associated with the corresponding research question was mentioned in Section 1.7. In the second part, the qualitative data gathered through semi-structured focus group interviews conducted with twenty instructors and semi-structured interviews with six stakeholders (the principal, 4 level coordinators and a CPDU member) were presented.

4.2. Findings of Quantitative Data

In order to investigate the reliability, internal consistency coefficient Cronbach's Alpha test statistic was used. Reliability coefficient $0.00 \leq \alpha < 0.40$ (not reliable); $0.40 \leq \alpha < 0.60$ (low confidence); It was determined as $0.60 \leq \alpha < 0.80$ (reliable) and $0.80 \leq \alpha < 1.00$ (highly reliable) (Kalaycı, 2008). Reliability results were given by taking this into consideration. To calculate the reliability of the questionnaire, each part was analyzed. The general reliability of the Questionnaire was calculated 0,789 which indicated high reliability. Instructors' Self-Confidence in Using Computer was calculated 0,903 while Instructors' Institutional Support was found 0,873. Both of them indicated high reliability. Instructors' Attitudes toward Integrating Computers into Their Classes was calculated 0,707.

In the first part of this chapter, the findings of the questionnaire were presented. The researcher examined the frequency of the participants' responses to the items/questions in this questionnaire to address the following research questions.

1. What are the instructors' perceptions toward their
   a) technological knowledge,
   b) frequency of computer usage,
   c) self-confidence in using computer,
   d) institutional support?

2. What are the instructors' attitudes toward integrating computers into their classes?

4.2.1. Research Question 1

Instructors' Perceptions Toward Various Concepts

a) Instructors' Technological Knowledge

Based on the results of the participants for perceived technological knowledge showed in Table 4.1, the majority of the participants could use almost all the programs proficiently. The percentage of the instructors who chose the response of 'I cannot use it' ranged between 00.0 to 10,29. Among the programs, the Internet (93.12%), and online communication programs (85.29%) received the highest rate of instructors who claimed to use these programs well or very well (see item 5 and 8). Responses to items 1, 4, 6 and 9 showed that word processing (77.94%), presentation software (75.00%), concept mapping (73.53%) and online game platforms (73.53%) were the programs that the participants could use skillfully. However, the participants' perceived knowledge about graphics (61.76%) and use of online learning platforms (54.41%) were rather low compared to other programs (see items 3 and7).

Table 4.1: Instructors' Technological Knowledge

No	Computer Software	1 %	2 %	3 %	4 %	5 %	M	SD
1	Word processing	-	4.41	17.65	36.76	41.18	4.15	0.87
2	Spreadsheets	-	25	25	26.47	23.53	3.49	1.11
3	Graphics	10.29	27.94	20.59	26.47	14.71	3.07	1.25
4	Presentation software	1.47	-	23.53	39.71	35.29	4.07	0.85
5	The Internet	-	-	5.88	27.94	66.18	4.6	0.6
6	Concept mapping	2.94	8.82	14.71	36.76	36.76	3.96	1.07
7	Online Learning Platforms	5.58	19.12	30.88	20.59	23.53	3.37	1.21
8	Online Communication Platforms	-	-	14.71	22.06	63.24	4.49	0.74
9	Online Game Platforms	2.94	5.88	17.65	25	48.53	4.1	1.08

N= 68, 1=I cannot use it, 2=I can use it to a small extent, 3=I can use it satisfactorily, 4=I can use it well, 5=I can use it very well.

b) Instructors' Frequency of Individual Computer Usage

As stated in Table 4.2, the data of the frequency of instructors' personal computer habits showed that accessing the Internet (97.06%,) had the highest rate among the activities (see item 6). More than half of the instructors used computers to communicate (77.94%) daily. Developing materials (39.71%) and processing texts (36.76%), were among the activities that instructors performed once or twice a week (see item 7 and 3). Almost half of the instructors used the computer for their own educational purposes once or twice a semester such as joining online lessons (52.94%) and attending educational courses (51.47%) (see items 9 and 10). When it came to developing multimedia, the responses of the instructors ranged between similar rates for each option as most of them never (27.94%) developed multimedia. Similarly, 30.88% of the instructors never played games (see item 1).

Table 4.2: Instructors' Frequency of Individual Computer Usage

No	Item	1 %	2 %	3 %	4 %	5 %	M	SD
1	Play games	30.88	14.71	14.71	22.06	17.65	2.81	1.52
2	Make presentations	1.47	32.35	44.12	11.76	10.29	2.97	0.96
3	Process texts	-	2.94	10.29	36.76	50	4.34	0.78
4	Prepare materials	2.94	13.24	27.94	39.71	16.18	3.53	1.01
5	Communicate	-	1.47	2.94	27.94	77.94	4.72	0.59
6	Access the Internet	-	1.47	-	1.47	97.06	4.94	0.38
7	Develop multimedia	27.94	22.06	16.18	14.71	19.12	2.75	1.49
8	Visit educational webpages	4.41	27.94	29.41	20.59	17.65	3.19	1.16
9	Join online lessons	11.76	52.94	11.76	13.24	10.29	2.57	1.18
10	Attend educational courses	22.06	51.47	13.24	7.35	5.88	2.24	1.07

N= 68, 1=never, 2=once or twice a semester, 3=once or twice a month, 4=once or twice a week, 5=almost every day

c) Instructors' Self-Confidence in Using Computer

When it came to being self-confident about using computers in classes, the responses of the instructors showed that the majority of them felt confident as the percentage of

the instructors who chose the response of 'Strongly agree' ranged between 25.0 to 69,12. Responses to item 1 showed that more than half of the participants stated that they felt confident when choosing the right software (86.76%). Responses to item 2 showed that 95.59% of the participants said that they could use online communication sites and all of them could use email to communicate with students (see item 4). In terms of teaching students how to choose appropriate programs (76.47%) and use online communication tools (85.29%), the majority of the participants felt confident. Finally, as items 7 and 3 showed, even though 98.53% of the participants felt confident about using the Internet to meet certain learning goals, only 86.76% of them were confident about designing technology-enhanced materials.

Table 4.3: Instructors' Self-Confidence in Using Computer

No	I feel confident that…	1 %	2 %	3 %	4 %	5 %	M	SD
1	I can select appropriate software to use in my teaching.	-	10.29	2.94	61.76	25.00	4.01	0.84
2	I can use online communication sites/ programs/apps in my class.	-	1.47	2.94	64.71	30.88	4.25	0.58
3	I can design technology enhanced learning activities for my students.	-	5.88	7.35	55.88	30.88	4.12	0.78
4	I can use email to communicate with my students.	-	-	-	30.88	69.12	4.69	0.47
5	I can teach my students to select appropriate software to use in their projects.	-	7.35	16.18	42.65	33.82	4.03	0.9
6	I can teach my students how to use online communication tools.	-	5.88	8.82	55.88	29.41	4.09	0.79
7	I can use the Internet in my lessons to meet certain learning goals.	-	-	1.47	51.47	47.06	4.46	0.53

8	The computer can help students understand concepts more easily.	-	4.41	11.76	54.41	29.41	4.09	0.77

N= 68, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

d) Instructors' Institutional Support

Table 4.4 showed the instructors' perception of the support they believed they received from the school. Instructors' responses to items 1, 2 and 3 on school support showed that the participants felt almost equally encouraged by their colleagues (77.94%), coordinators (79.41%) and the principal (75%). However, the rate of the encouragement they received from the CPDU was lower as 63.24% of the participants felt encouraged while 22.06% of them felt neutral (see item 4). Although 89.7% of the instructors said that they often exchanged ideas with their colleagues, (see item 5) the rate of discussing the integration of technology in meetings was lower (72.06%) as item 7 showed. When it came to other teachers' using computers in teaching and learning, item 6 showed almost all participants reached an agreement (98.53%). However, they felt unsure about the teachers being well informed about the value of computer as 23.53% felt neutral (see item 8). Finally, responses to items 9, 10 and 11 indicated that the participants felt unsure about the variety of software at their institution (45.59%), the technical support they received (55.88%) and the infrastructure of their university (63.23%).

Table 4.4: Instructors' Institutional Support

No	I feel confident that…	1 %	2 %	3 %	4 %	5 %	M	SD
1	Other teachers encourage me to integrate computers in teaching and learning.	-	2.94	19.12	60.29	17.65	3.93	0.7
2	The coordinators encourage me to integrate computers in teaching and learning.	-	5.88	14.71	58.82	20.59	3.4	0.77
3	The principal encourages me to integrate computers in teaching and learning.	2.94	7.35	14.71	55.88	19.12	3.81	0.93
4	The CPDU encourages me to integrate computers in teaching and learning.	-	14.71	22.06	47.06	16.18	3.65	0.93
5	I often exchange ideas about technology	-	1.47	8.82	61.76	27.94	4.16	0.64

	integration with other teachers.							
6	There are other teachers in my school who use computers in teaching and learning.	-	-	1.47	48.53	50.00	4.49	0.53
7	In the meetings. we frequently discuss how to integrate computers in the school curriculum more efficiently.	1.47	14.71	11.76	52.94	19.12	3.74	0.99
8	Teachers in my school are well informed about the value of computers in teaching and learning.	1.47	10.29	23.53	45.59	19.12	3.46	0.98
9	A variety of computer software is available for use at my university.	-	22.06	23.53	41.18	13.24	3.46	0.98
10	The technical support at my university is adequate.	1.47	22.06	22.06	42.65	11.76	3.41	1.01
11	The technical infrastructure at my university is adequate.	7.35	23.53	32.35	27.94	8.82	3.07	1.08

N= 68, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

4.2.2. Research Question 2

Instructors' Attitudes toward Integrating Computers into Their Classes

Table 4.5 presented the data about the attitudes of instructors toward integrating computers into their classes. According to the responses to item 1 in the table, most of the participants felt comfortable using computer in classes (M=4.34). Also, more than half of the participants disagreed that using computers in teaching and learning stressed them out as shown in item 2. (67.65%,). Responses to items 3 and 6 showed that a great deal of the participants disagreed with being skeptical (M=2.31) and scared (M=2.16) about using computers as they mostly agreed on feeling excited (M=4.04, see item 5). Item 7 showed that most of the participants (98.53%), thought that the computer is a valuable tool. Moreover, they agreed upon computer usage changing the way they taught (80.88%), and the way students learned (82.35%). Similarly, the results of items 14 and 12 showed that using computers helped instructors to teach more effectively (M=4.1) and students to learn better (M=3.84). Finally, the results indicated that more than half of the teachers (60.29%) disagreed with computers not being good for teaching (see item 15) and 73.57% of the teachers thought that computers are indeed helpful for students (see item 13).

Table 4.5: Instructors' Attitudes toward Integrating Computers into Their Classes

No	Item	1 %	2 %	3 %	4 %	5 %	M	SD
1	I feel comfortable with the idea of the computer as a tool in teaching and learning.	-	2.94	5.88	45.59	45.59	4.34	0.73
2	The use of computers in teaching and learning stresses me out.	29.41	38.24	11.76	13.24	7.35	2.31	12.24
3	If something goes wrong, I do not know how to fix it	26.47	25	16.18	26.47	5.88	2.6	1.29
4	The idea of using a computer in teaching and learning makes me skeptical.	25	41.18	16.18	13.24	4.41	2.31	1.12
5	The use of computer as a learning tool excites me.	-	4.41	16.18	50	29.41	4.04	0.8
6	The use of computers in teaching and learning scares me.	32.35	39.71	10.29	14.71	2.94	2.16	1.13
7	The computer is a valuable tool for teachers.	1.47	-	-	41.18	57.35	4.53	0.66
8	The computer changes the way I teach.	-	7.35	11.76	48.53	32.35	4.06	0.86
9	The computer changes the way students learn in my classes.	-	7.35	10.29	47.06	35.29	4.1	0.87
10	I can do what the computer can do equally as well.	11.76	48.53	20.59	14.71	4.41	2.51	1.03
11	The computer is not helpful for student learning because it is not easy to use.	26.47	55.88	13.24	4.41	-	1.6	0.76
12	The computer helps students understand concepts in more effective ways.	1.47	7.35	17.65	52.94	20.59	3.84	0.89

13	The computer helps students learn because it allows them to express their thinking in better and different ways.	2.94	7.35	17.65	47.06	25	3.84	0.99
14	The computer helps teachers to teach in more effective ways.	1.47	1.47	13.24	52.94	30.88	4.1	0.79
15	The computer is not good for teaching because it creates technical problems.	23.53	60.29	8.82	7.35	-	2	0.79

N= 68, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

4.3. Findings of Qualitative Data

The study employed content analysis as the primary method for analyzing qualitative data, which were collected based on themes derived from the research questions. The data were interpreted using codes to align with relevant theoretical frameworks. To gather reliable data for the following research questions, semi-structured focus-group interviews with twenty participant instructors and semi-structured interviews with the six stakeholders from different units were applied:

3. What are the instructors' preferences of mode of education: hybrid, online education, or face to face education?
4. What are the instructors' experiences toward online education since the beginning of hybrid use at the current university?
5. What are the needs of instructors at preparatory school toward using technology in their EFL classes?
6. What are the stakeholders' ideas and considerations about the instructors and their activities at preparatory school in terms of technology use?

Throughout the interview, the instructors were asked ten questions. Then, based on the instructors' answers, the thematic coding for the data analysis procedure was decided. For each question, different codes were assigned. In the following tables, the codes, properties of the codes and examples of participants' words from semi-structured focus group interviews were presented in detail. The semi-structured interview with the stakeholders were examined separately for the sixth research question.

4.3.1. Research Question 3

Instructors' Preferences of Mode of Education

For the third research question, the aim was to investigate instructors' preferences for the mode of education. The data were gathered through focus-group interviews with the twenty participant instructors.

In the focus-group interview, the instructors were asked their preferences regarding the mode of education; hybrid, face to face or online. They had all experienced all three of the modes during and after the pandemic. The themes *insights* and *preferences* were connected with the third research question since their perspectives directly determined their preferences of mode of education.

For insights, they mentioned that they felt safer when they were prepared with other gadgets in case of a possible technical problem. They realized that technology brought issues, but they were possible to be handled with technology. They also stated that they used technology to increase engagement since this generation of students were born into a digital age requiring a technological touch every now and then. Besides, technology use was inevitable to stay relative due to the last developments in education since most of the assignments, homework or self-study materials were assigned via applications or web systems.

Regarding their answers, the instructors acknowledged technology as a must in their classes. They declared that having a positive attitude toward technology mainly aided the flow in the classroom with the learners who were born into a technology age. On the other hand, for their mode of education, they were not willing to teach online or hybrid education. Fifteen out of twenty instructors emphasized the importance and comfort of being able to educate their learners through a face-to-face session. They were all in favor of utilizing technology to a limited extent. They claimed that personal touch was an inseparable part of education and with online or hybrid education, something was missing. They believed that using technology to support face to face education was better than completely relying on online or hybrid education. Some of the instructors even commented that they never wished to experience hybrid system ever again.

The following table revealed detailed comments related to the findings for the third question.

Table 4.6: Codes and Comments Related to the Third Research Question

Theme	Category	Code	Examples of Participants' Words from Semi-structured Focus Group Interview
Insights	Safety Awareness Engagement Being up-to-date	Feeling safer Using more recent experiences Knowing what to do Using practical ways	I feel safer when I have a laptop and a tablet with me. When one device fails, I tend to use another to solve that problem. Speakers won't work? I use my tablet. As an instructor, technology makes my life and job much easier. I see tech as a game-changer in the classroom. It's not just about gadgets; it's about creating engaging experiences. I believe it is important since we are dependent on smartboards, projectors etc. Also, online systems are important for our students. We assign most of the homework online now. You know, technology in the classroom is like adding a secret ingredient to a recipe…
Preferences	Adjustments Attitudes Innovation	Seeing the differences Acting differently Trying a new way	There's a certain magic in the personal touch that can't quite be replicated by technology. Blending face-to-face learning with online tools gives the best of both worlds, letting students engage in person while having resources at their fingertips online. Hybrid use is the worst possible option and I would never like to experience it again. I believe we need to be in touch with their pupils literally. Online education doesn't feel real.

4.3.2. Research Question Four

Instructors' Current Experiences

The fourth research question aimed to examine the experiences of the instructors toward new modes of education at the current institution. The data were gathered

through focus-group interviews with the twenty participant instructors through the following question: “What are your experiences like toward online education since the beginning of hybrid use at the current university?”

During the focus group interview, the instructors were required to answer questions related to their experience on the technology integration into classes, their confidence and competency level of the current hybrid experience, and their plans regarding their proficiency in ICT. The codes gathered through the answers of the participants. The codes were determined as *personal resolutions*, *change, and future plans*.

Regarding their answers, the instructors explained that they needed to balance their understanding and application of hybrid education. They claimed that the perceived and desired practices of hybrid education weren’t met during this process. Even though they saw themselves as positive practitioners of technology during learning-teaching activities, they highlighted the struggle and continuous demands of technology integration in their classes. The following table revealed detailed comments related to the findings for the fourth question:

Table 4.7: Codes and Comments Related to the Fourth Research Question

Themes	**Category**	**Codes**	**Examples of Participants’ Words from Semi-structured Focus Group Interview**
Personal Resolutions **Change**	Consistency Confidence Competency Weakness Strength Impractical Hard to follow and apply Cooperation	Feeling incompetent Having little opportunities Having hard times in hybrid Feeling useless	Due to outside effects, technology can sometimes make me lose track of time. I’m all in for trying out new tech stuff, but I admit I could do better with using it consistently. We cannot utilize it as much as we can because of the lack of equipment and training. At first, I thought it would be easy, but as the instructor, it is incredible difficult to keep both online and offline students engaged at the same time. There’ve been ups—like the flexibility it offers—and downs, like keeping that engagement going strong and making sure everyone feels connected in the online space. But sometimes, I worry about leaning too heavily on tech, potentially losing

Future plans	Professional development	Ongoing learning Working with a team	touch with the core principles of teaching. I'm planning to dive deeper into cutting-edge tech courses. I aim to keep attending webinars, following technology blogs and simply getting more creative with the skills and knowledge I already have. There's always room for improvement, and having a well-rounded skill set that embraces both old-school and tech-savvy methods is crucial.

4.3.3. Research Question Five

Instructors' Needs

For the fifth research question, the aim was to investigate the instructors' needs for technology integration at the current institution. The data were gathered through focus-group interviews with the twenty participant instructors.

During the focus group interview, the instructors were supposed to answer questions related to their current needs in ICT, the amount of institutional support they got, and their expectations from their institution. In the same way, stakeholders were supposed to answer similar questions based on their observations regarding the instructors' needs. The codes were gathered through the answers of the instructors. The codes were determined as *physical needs, collaboration, and investment.*

Regarding their answers, the instructors explained what they expected from their current institution based on ICT. Their needs were asked and collected, and it was perceived that they expected the current institution to follow the latest innovations for the sake of their educational practices and instructors' needs.

It was a common point that the devices, tools and systems could be more up to date. It was also mentioned that they relied on each other for tech support and they needed more training sessions. They stated that they would consolidate the training provided by the school with their personal efforts.

The following table revealed detailed comments related to the findings for the fifth question:

Table 4.8: Codes and Comments Related to the Fifth Research Question

Themes	Categories	Codes	Examples of Participants' Words from Semi-structured Focus Group Interview
Physical needs **Collaboration** **Investment**	Change Innovation Expectations Appreciation Working together Modernism Sustainability Competency	Physical incompetence of the institution Newly established features Professional development Being able to work within a team Following up-to date features Earning lifelong information Being able to use the recent developments	Most of the technology we use is either insufficient or outdated. Strengthening the basics before diving headfirst into tech is crucial. I find the devices in my classrooms a bit outdated. We could use more user-friendly tech tools that really sync up with what we're teaching. However, the actual support should be coming from the administration of the university. There's been some support, which is great, but it'd be fantastic to have more ongoing training and a clearer plan for how we integrate tech across the board. While I appreciate the support, it seems there's a bit of a tech-heavy focus. They need to follow the advancements in technology and provide us with more than the bare minimum. It would be great to find that balanced integration is key for sustainable growth. I am strong enough to adapt with new learning styles but weak when I deal with frequent and boring online classes, especially when they exceed the right amount of weekly sessions. Also, setting up a space for educators to swap stories and ideas could be a game-changer. I would spend more time and more money on training and equipment.

4.3.4. Research Question Six

Stakeholders' Ideas and Considerations

For the sixth research question, the aim was to investigate the stakeholders' ideas and considerations based on the instructors' technology integration and their practices, as well as their needs at the current institution. The data were gathered through semi-structured interviews with the six stakeholders (principal of the department, 4 level coordinators, and one CPDU member).

In terms of instructors' knowledge on technology integration, the stakeholders believed that the instructors knew the importance of technology integration. However, they needed some assistance regarding it. Also, in terms of the instructors' preferences, four out of six stakeholders supported the idea that instructors were in favour of the hybrid education more than others:

"…they are mostly happy about it, and we also try to kind of discuss what we can do and how we can integrate technology into the classes. So, they have a positive attitude towards technology integration." (CPDU Member)

"Given the high number of students in our classes, it is quite challenging for instructors to manage a physical classroom. Instead, they prefer a combination of online education with face to face facilities." (LC 1)

"…it is also useful for the instructors in terms of decreasing the time spent on different activities such as providing feedback or asking questions." (LC 2)

From the perspectives of stakeholders, instructors' experiences toward online education since the beginning of hybrid use at the current university had been positive. Mostly, they assumed this change as an encouraging motive in their institutional practices. However, they realized the instructors' newly-adapted criticism over their hybrid practices:

"Since online education has nearly become an integral part of our education system, instructors are more open and receptive to the idea of online classes." (LC 3)

"They tend to prefer it over the completely face-to-face version; however, they acknowledge certain problems and difficulties with online education." (CPDU Member)

“I think the instructors weren’t sure about what they wanted. One day they said the hybrid system shows us how valuable the face to face lessons are, the other day they said it is a must to answer students’ technology needs in the classes. So that kind of comments have made us a little bit more skeptical about online lessons.” (LC 2)

When the instructors’ needs were asked, the results of the stakeholders’ interview showed that instructors’ needs were known by most of the stakeholders. Five out of six stakeholders mentioned their awareness on the instructors’ technological needs.

“Not only for the instructors, but also for the whole system, they need training when there are new technology related tools or procedures.” (The principal)

“Well at the beginning of each academic year we try to kind of educate new teachers and our current teachers about technology integration. However, these cannot be enough. Additional training opportunities must be provided and, updated and user-friendly tools must be adapted.” (LC 3)

“We mostly do workshops and one of the things that we use a lot is the colleague’s support. I think having a moderate place to work and supportive coworkers are more important. Especially, in the workshops we teach or show how to use certain online tools and sometimes when a teacher finds a new tool, he or she wants to show it to the other teachers, and we conduct a workshop. That’s what we need, working together more.” (CPDU Member)

CHAPTER V

DISCUSSION AND CONCLUSION

5.1. Discussion of the Findings

In this chapter, the findings of each research question are summarized and discussed in light of the relevant data. This is followed by delineating the limitation of the study and its implications for language institutes in general. Finally, it suggests the areas where future studies can be conducted.

5.1.1. Research Question One

The first research question sought to find out how instructors perceive their technological knowledge, their frequency of computer usage, their self-confidence in using computers, and their institutional support. Based on the data, most of the instructors could use at least one of Word processing programs, Spreadsheets, graphics, presentation software, the Internet, concept mapping, online learning, communication, and game platforms proficiently contrary to previous studies in the extant literature. For instance, Önalan and Kurt (2020) found that contrary to common programs, instructors had difficulty using educational programs. Similarly, in the studies of Esteve-Mon et al. (2020), Fernández-Batanero et al. (2021) and Garzon-Artacho et al. (2021), the teachers showed low level of technology competency.

In this study, it was also found that although frequently used programs such as the Internet and online communication programs were chosen as the programs instructors were best at, the rate of educational programs such as word processing, presentation software, and concept mapping were also higher. Findings also showed that compared to the studies conducted in the early pandemic period, there was a significant improvement in instructors' technology usage skills. However, according to the results, using graphics and online learning platforms still needed improvement as the majority of the instructors indicated that they either had limited or satisfactory skills when it came to using these programs. These findings suggested that even though instructors' overall proficiency in technology usage was well, there were specific areas where they may benefit from additional support and training.

The study not only highlighted the overall high proficiency in technology usage among instructors but also identified specific areas where further support and training may be

beneficial. Additionally, the findings underscored the complex interplay between instructors' attitudes, stress levels, and the perceived value of computers in teaching, shedding light on the multifaceted nature of technology integration in educational settings.

The teachers' personal computer usage habits and their sense of confidence in their competence to use computers for teaching and learning objectives were the subjects of the subpart of the first question. Computers were largely utilized by instructors for communication and Internet access. However, because they participated less particularly in educational classes, they used educational programs less frequently. Studies that examined teachers' use of digital platforms for learning purposes corroborated these findings (Baumer, 2015; Belda-Medina & Calvo-Ferrer, 2022). Furthermore, the results were consistent with the research investigating the teachers' perceptions of technology use in class which concluded that teachers felt more comfortable using technology for personal needs than instructional needs (Okkan & Aydin, 2022).

The results also showed that instructors felt confident about integrating computers into teaching in line with the studies of Aydın (2013) and Rogosic (2015). The instructors felt most confident about using online communication tools, email to communicate, and the Internet to reach their lesson aims. These findings made a contribution to the broader understanding of teachers' engagement in technology and its implications for education.

Integration of digital literacy education gains importance when considering the relationship between individual computer usage choices and self-confidence in computer use. Since instructors' personal computer usage habits influence their confidence in technology integration, it is necessary to incorporate digital literacy lessons into teacher training programs. This education should emphasize the effective use of educational software and digital platforms for learning purposes, thereby enhancing instructors' confidence and readiness to integrate technology into teaching. Findings regarding reported stress experienced by instructors highlighted the importance of creating supportive learning environments that promoted technology integration without overwhelming instructors. This should involve sharing best

practices among instructors, providing opportunities for peer support and acknowledging the challenges associated with technology integration.

5.1.2. Research Question Two

The second research question asked about instructors' attitudes toward integrating computers into their classes. While half of the instructors had positive attitudes about integrating computers into teaching, almost twenty per cent of them also felt stressed about the integration of technology in their classes regardless of their ages, genders, or years of teaching experience. Furthermore, the results revealed that the majority of the instructors thought that computers were valuable tools for teaching, and they changed the way instructors taught and the way students learned as also stated in the study of Smarkola (2007). These results were contrary to the studies of O'Dwyer et al. (2004) in which teacher characteristics' characteristics such as age, years of teaching experience, and technology proficiency significantly influenced technology use. As a result, it can be concluded that teachers who are comfortable with integrating computers into teaching are more willing to do so (Hernández-Ramos et al., 2014).

The fact that almost 50% of instructors had positive attitudes toward tech use suggested that overall instructors' experience with the use of technology was a positive one and that these instructors were likely to embrace further training to explore new avenue on tech use in the future. On the other hand, the fact that one fifth of instructors were relatively less positive toward technology use revealed a lack of consensus among instructors regarding the usefulness of technology in language teaching and suggested that some instructors may require more surgical training programs that could exercise the possibility of shifting their attitudes and encouraging them to integrate technology into their practices. Such programs may require running for more extended time and demand constant observations, scaffolding and repeated consultations with the instructors.

5.1.3. Research Question Three

The third question investigated instructors' preferences for the mode of education. Comments gathered through the focus group interview provided comprehension of the instructors' perspectives on technology and their teaching methodology.

Even though all twenty of the instructors emphasized the significance of using technology in class to increase engagement, fifteen of them positioned themselves against online or hybrid education. While acknowledging the benefits of technology as a tool to keep the students engaged, they highlighted the merit and relaxation of in-person interaction in the educational process, making them cautious to welcome online or hybrid teaching from time to time. The findings also correlated with the König et al. (2020) that revealed that there was a challenge for the instructors during the adaptation of online and hybrid educational practices.

Despite their positive remarks on technology use in class, the instructors agreed on the idea that technology could not replicate the in-person connection with their learners. Their indication towards a significant preference for in-person instruction instead of hybrid or online learning environments also supported Mahyoob's (2020) idea revealing dissatisfaction of the instructors toward e-learning.

The instructors understood the value of technology integration and emphasized the need for more help in this area in terms of changing classroom dynamics and instructor's role, but they did not choose hybrid or online education as their first preference. In line with Khalawi & Halabi's study (2020), the findings also supported that the instructors found themselves in an ongoing change and confronting classroom environments. With the pandemic, they were able to experience both online and hybrid education and they stated that relying fully on online media was stressful and lacked the personal touch. They listed possible technological issues and not being able to supervise or observe the students during class as their main concerns. The opinions and remarks expressed by the instructors highlighted the sophisticated relationships between educational choices and technology integration. As Son (2000) emphasized, the data presented showed that CALL classes were indispensable parts of the digital age for instructors.

5.1.4. Research Question Four

The fourth question aimed to investigate the instructors' experiences of hybrid and online education use at the current institution. The data showed the instructors' opinions about the newly-adopted teaching approach at the present university, with a prominence on their practices and experiences on technology integration and hybrid learning.

The findings revealed that the instructors emphasized the difficulties and unfulfilled expectations related to the intended and perceived practices of hybrid education. Similar to Nugroho & Mutiaraningrum's (2020) findings, the current data presented that the instructors were stuck between the lack of enough knowledge about the use of technology and their wishes to have a deeper understanding of how to integrate it into their teaching. They underlined the necessity for them to balance their knowledge and the implementation. Their comments focused mainly on how they realized that they had not been ready for a fully online system, their concerns about their technological proficiency, and the problems hybrid education brought along. It was revealed that they were in need of systematic training to boost their confidence and practices in TPACK. As supported in Tümen Akyıldız's (2020) study, the instructors knew the importance of technology, but they faced various problems, such as unfamiliarity with remote education or lack of technological training.

Since it was only due to the pandemic that the institution turned to online education, the instructors had limited time to adapt. Even though they had believed to be avid technology users before the pandemic, they realized they needed support and time to adapt their teaching according to the new system. They were aware of the advantages along with difficulties that came with technology integration into the classroom. They mentioned technical issues, lowered student engagement and interaction, and catching up with the new system. The results put emphasis on how fundamental it was to help the instructors navigate the ongoing changing field of educational technology. There occurred the need for support from the stakeholders. The instructors stressed their willingness to comply with training sessions, workshops provided by the institution as well as personal development plans.

5.1.5. Research Question Five

The fifth question aimed to investigate the instructors' needs based on technology integration at the current institution. Three main categories emerged from the instructors' responses: investment, teamwork, and physical demands.

Involving ICT, the instructors stressed that to support their instructional methods and meet their needs, the institution was required to correspond with the latest improvements. The instructors were also complained about the lack of a physical

environment which did not meet the needs of the modern era, or user-friendly technological tools (see Şevik and Yücedağ, 2021 for similar findings).

The instructors also underlined the significance of continuous training and a more precise approach to integrating technology throughout the organization. Their willingness to take part in professional development events, such as webinars and technology training, showed that they were ready to take the initiative to deal with the challenges of hybrid learning. They identified the lack of tools and education as existing limitations. They showed willingness to learn more about new technologies and become more competent in the use of technological practices. Similar to the findings in Erkan and Balbay's (2021) study, it was found that the instructors were generally willing to take every step for self-investment. The instructors explained that they expanded their technology integration skills in order to productively fulfil the expectations of hybrid learning. They also expressed their needs for exchanging information and sharing actual experiences on technology integration in their working atmosphere. Similar to the instructors' comments, the stakeholders put emphasis on the importance of workshops, peer support, and collaboration among educators.

It was also found that the instructors believed there was a lack of support for their various demands and offering inclusive support and resources (see also Joyce & Calhoun, 2010). Furthermore, the instructors put emphasis on the necessity of modern, user-friendly digital tools, continuous training, and collaboration opportunities in their working places. At that point, the findings showed that stakeholders were not fully aware of the needs of the instructors in terms of technology integration. As Ertmer (2005) discussed, the instructors needed to be able to reach experts in technology easily and they were expected to be engaged by administrators in the decision-making process (Windschitl and Sahl, 2002) since they were the ones dealing with the issues firsthand.

5.1.6. Research Question Six

The sixth question focused on the stakeholders' perspective of instructors' technology use. The findings regarding instructors in this study presented complex results. While stakeholders generally perceived instructors as positive towards technology integration and supportive of hybrid education (Principal, CPDU Member, LC 1, LC

2), there were also indications of uncertainty (LC 2, LC 3, CPDU Member). This suggested a potential gap between stakeholder expectations and instructor experiences.

All six stakeholders were of the opinion that the instructors had an understanding of the importance of technology use in class. They believed that despite the unplanned transition to online education, the instructors overcame the issues by being open to adaptation and having a positive attitude.

The results revealed that four of the stakeholders assumed that the instructors favored online or online education due to several reasons including increased flexibility, reduced time constraints (LC 2), and a renewed appreciation for face-to-face interaction (LC 3). However, according to the answers of the instructors for their choice of mode of education, it was revealed that they preferred face to face education.

The study also revealed a strong emphasis on supporting instructors' technological needs. Stakeholders acknowledged the need for ongoing training (The principal, LC 3) and user-friendly tools (LC 3). Interestingly, a collaborative approach featuring workshops and peer support was seen as valuable (CPDU Member).

5.2. Conclusion Remarks

This thesis examined the factors that affect how technology is used in English as a Foreign Language (EFL) classes and the attitudes, demands, and practices of EFL teachers in terms of technology use before, during, and after the pandemic.

The result of the quantitative data revealed that participants tended to have positive attitudes towards integration technology into their classes. They believed that using computers not only enabled teachers to teach more effectively but it also assisted learners to learn more proficiently which created a reinforcing environment both among the teachers and between the teachers and learners. However, they expected that the institutions should be more supportive by providing the necessary assistance to integrate technology into both learning and teaching. Given the identified areas of improvement in technology usage, ELT institutions are expected to prioritize the development of tailored training programs focusing on educational software, graphics, and online learning platforms. These programs offer hands-on training and support to instructors, ensuring they are equipped with the necessary skills to effectively integrate technology into language teaching practices.

In addition to the data gathered through quantitative data, the qualitative data tools and findings also supported aforementioned points. Based on the findings of the study, the instructors were able to take a critical look over each technological application at their universities. Even though the instructors at the current institution were in favor of using technological tools or practices in their teaching, the majority of the instructors claimed that they did not have adequate knowledge regarding technology use. Moreover, the findings also revealed that there was a moderate environment among colleagues in terms of information sharing for technological implications. However, as the comments in the quantitative data revealed, they expected stakeholders to take more responsibilities and actions in order to give their instructors chances to develop. The identified differences between instructors' and stakeholders' perspectives regarding preferred modes of education and technology integration highlighted the need for enhanced communication and collaboration within the institution.

In order to overcome these challenges, regular meetings and dialogues between instructors, administrators, and stakeholders should be held to discuss the issues, needs, and potential solutions. Joint task forces or committees could be helpful to focus on exploring effective technology integration strategies and fostering a shared understanding of best practices. Transparency in decision-making processes is another way to involve instructors in discussions and actively seek their feedback on proposed changes or initiatives. As highlighted during the study, the diverse and multifaceted nature of instructors' needs to be taken into consideration regarding technology integration. To effectively support instructors, institutions can benefit from conducting regular needs assessments to identify emerging challenges and tailor support strategies accordingly, providing a variety of support resources such as individual consultations, mentoring programs, or online help desks to cater to different learning styles and preferences and recognizing and acknowledging the ongoing challenges faced by instructors in adapting to new technologies and hybrid learning environments. ELT institutions should prioritize the establishment of comprehensive support systems to address instructors' uncertainties regarding technical support, infrastructure, and software availability. This may involve allocating resources for technical assistance, updating infrastructure to support the latest technology, and providing access to a variety of educational software and online resources. Moreover, promoting

collaboration and communication among stakeholders can help create a supportive environment conducive to effective technology integration in language teaching.

Last but not least, the findings suggest that successful implementation of hybrid education requires not only technology integration but also a focus on instructor development. Providing ongoing training, user-friendly tools, and fostering collaboration among instructors can empower them to navigate the evolving hybrid environment and maximize its benefits for both themselves and their students.

5.3. Limitations and Further Suggestions

This study has a number of drawbacks. The sample size was one of the main limitations. Even if the study was conducted to shed light on the technology integration at a certain institute, the sample size was too small to generalize the data. Future studies may include more participants at an institution, or they may enlarge the district they investigate.

The second limitation was the duration of the data collection procedure. As a result of some bureaucratic needs, the study was concluded in a very short time. A more prolonged investigation may provide more reliable findings and provided the possibility of recording the change in instructors' perceptions and attitude as well as their actual classroom use.

For future studies, the integration of ELT teacher training education programs into their curriculum can be studied. Studying how proficient instructors can become in utilizing a wide range of educational technology tools is also recommended. This study can encompass not only basic computer skills but also advanced competencies in using educational software and digital platforms for language teaching and learning purposes.

Further research could explore the specific challenges instructors face in the hybrid model and delve deeper into their evolving needs and preferences. This would inform the development of targeted support systems and ensure a smooth transition for faculty in this new educational landscape.

BIBLIOGRAPHY

Agyei, D. & Voogt, J. (2012). Pre-service teachers' competencies for technology integration: Insights from a mathematics-specific instructional technology course. In P. Resta (Ed.), *Proceedings of SITE 2012--Society for Information Technology & Teacher Education International Conference* (pp. 1094-1099). Austin, Texas, USA: Association for the Advancement of Computing in Education (AACE).

Alavi, M., & Jalilifar, A. (2013). Computer Use and English Language Learning: The EFL Malaysian Secondary School Students' Perspective. *Journal of Language Teaching and Research, 4*(3), 564-571.

Alharbi, H. A. (2015). Improving Students' English Speaking Proficiency in Saudi Public Schools. *International journal of instruction, 8* (1), 105-116.

Alim, R. Z., & Alim, N. (2022). EFL Students' Perceptions toward the Implementation of TPACK in Hybrid Classroom. *Langkawi Journal of The Association for Arabic and English, 8*(2), 83-97. http://dx.doi.org/10.31332/lkw.v0i0.3833

Almekhlafi, A., & Almeqdadi, F. (2010). Teachers' Lack of Confidence in Using Technology: A Major Barrier to Technology Integration in EFL Teaching. *English Language Teaching, 3*(4), 1-12.

Al-Seghayer, K. (2022). Saudi EFL Teachers' Self-efficacy in Technology-assisted Language Learning (TALL). *International Journal of Applied Linguistics and English Literature, 11*(2), 53-64.

Angelova, M., & Zhao, Y. (2016). Using an online collaborative project between American and Chinese students to develop ESL teaching skills, cross-cultural awareness and language skills. *Computer Assisted Language Learning, 29*(1), 167-185.

Ansari, A. S., Shah, S. S., & Khoso, I. (2022). The Impact of Technological and Infrastructural Facilities on Student's Learning: A Change Management Perspective. *Journal of Business and Social Review in Emerging Economies*, *8*(2), 371-380.

Aydın, S. (2013). Teachers' perceptions about the use of computers in EFL teaching and learning: The case of Turkey. *Computer Assisted Language Learning, 26*(3), 214-233.

Azmi, N. (2017). The benefits of using ICT in the EFL classroom: From perceived utility to potential challenges. *Journal of Educational and Social Research, 7*(1), 111.

Balanskat, A., Blamire, R., & Kefala, S. (2006). The ICT impact report: A review of studies of ICT impact on schools in Europe. European Schoolnet, 1, 1-71. Retrieved from http://colcct.colfinder.org/sites/default/files/ict_impact_report_0.pdf

Baumer, E. P. (2015, April). Reflective informatics: conceptual dimensions for designing technologies of reflection. In *Proceedings of the 33rd annual ACM conference on human factors in computing systems* (pp. 585-594).

Bax, S. (2003). CALL—past, present and future. *System, 31*(1), 13-28.

Belda-Medina, J., & Calvo-Ferrer, J. R. (2022). Using chatbots as AI conversational partners in language learning. *Applied Sciences*, *12*(17), 8427.

Beatty, K. (2010). Teaching and researching computer-assisted language learning. (C. N. Candlin & D. R. Hall, Eds.) (2nd ed.). Pearson Education Limited. Bickman, L. & Rog, D. J. (1998), Handbook of Applied Social Research Methods, Sage Publications, London

Bickman, L., & Rog, D. J. (1998). Handbook of applied social research methods. (No Title).

British Education Communication and Technology Agency (BECTA) (2004). A Review of the Research Literature on Barriers to the Uptake of ICT by Teachers.

Brush, T., Glazewski, K. D., & Hew, K. F. (2008). Teachers' Beliefs and Technology Integration Practices: A Critical Relationship. *Computers & Education, 51*(3), 1069-1079.

Cennamo, K. S., Ross, J. D., & Ertmer, P. A. (2010). *Technology integration for meaningful classroom use: a standards-based approach.* Belmont, Calif, Wadsworth.

Chapelle, C. (2003). English language learning and technology. *English Books. 6*.

Chapelle, C. & Hegelheimer, V. (2004). The English language teacher in the 21st century. In S. Fotos & C. Browne (eds.), New Perspectives in CALL for Second Language Classrooms (pp. 299-316). Mahwah, NJ: Erlbaum.

Corbin, J., & Strauss, A. (2008). Basics of qualitative research (3rd ed.): Techniques and procedures for developing grounded theory. SAGE Publications, Inc., https://doi.org/10.4135/9781452230153

Cuban, L. (1993). Computers meet classroom: Classroom wins. *Teachers college record, 95*(2), 185-210.

Çelik, S., & Aytin, K. (2014). Teachers' Views on Digital Educational Tools in English Language Learning: Benefits and Challenges in the Türkiye. *Tesl-Ej, 18*(2), n2.

Daly, A. J., Liou, Y. J., & Pachucki, M. C. (2019). The Social Side of Educational Computing: Understanding the Relationship between Social Network Processes and Social Network Structures. *Educational Technology Research and Development, 67*(5), 1215-1238.

Dashtestani, R. (2012). Barriers to the implementation of CALL in EFL courses: Iranian EFL teachers' attitudes and perspectives. *The JALT CALL Journal, 8*(2). 55-7

Davies, G., Otto, S. E., & Rüschoff, B. (2013). Historical perspectives on CALL. *Contemporary computer-assisted language learning,* 19-38.

Dehqan, M., Barjesteh, H., & Faraji, M. (2017). Coming to terms with technology: Iranian high school teachers' perceived barriers and proposed solutions. *Teaching English Language, 11*(2), 77-101.

Dwyer, O. J. (2004). Symbolic accretion and commemoration. *Social & Cultural Geography*, *5*(3), 419-435.

Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education, 15*, 1-16.

Erdoğan, P., & Yazıcı, E., (2022). From the Eyes of EFL Teachers in Turkey: Synchronous and Asynchronous Online Teaching During the COVID-19

Pandemic. *The Journal of Language Teaching and Learning , vol.12*, no.1, 61-77.

Erkan, G., & Balbay, S. (2021). How English language instructors coped with the onset of the pandemic and remote language teaching: A case study. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 21*(4), 1198-1211.

Ertmer, P. A. (1999). Addressing first-and second-order barriers to change: Strategies for technology integration. *Educational technology research and development, 47*(4), 47-61.

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration?. *Educational technology research and development, 53*(4), 25-39.

Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Digital Natives and Digital Immigrants: Examining the Factors Influencing Teachers' Use of Technology in the Classroom. *Journal of Educational Computing Research, 42*(1), 1-26.

Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher Confidence in Technology Integration: A Qualitative Inquiry into Ontario Classrooms. *Journal of Technology and Teacher Education, 20*(1), 63-88.

Esmaeili, F., Ansari, M. A., & Mousavi, S. M. R. (2015). Computer Assisted Language Learning in Iranian EFL Context: Opportunities and Attitudes. *Theory and Practice in Language Studies, 5*(5), 1023-1031.

Fernández-Batanero, J. M., Román-Graván, P., Reyes-Rebollo, M. M., & Montenegro-Rueda, M. (2021). Impact of educational technology on teacher stress and anxiety: A literature review. *International journal of environmental research and public health*, *18*(2), 548.

F. M. Esteve-Mon, M. Á. Llopis-Nebot and J. Adell-Segura, "Digital Teaching Competence of University Teachers: A Systematic Review of the Literature," in IEEE Revista Iberoamericana de Tecnologias del Aprendizaje, vol. 15, no. 4, pp. 399-406, Nov. 2020, doi: 10.1109/RITA.2020.3033225.

Francom, G. M. (2020). Barriers to technology integration: A time-series survey study. *Journal of Research on Technology in Education, 52*(1), 1-16.

Galloway, J. P. (2010). Understanding Innovation: Classifying Technology Usage for Real Integration and Value. *Journal on School Educational Technology, 5*(3), 1-10.

Garzón-Artacho, E., Sola-Martínez, T., Romero-Rodríguez, J. M., & Gómez-García, G. (2021). Teachers' perceptions of digital competence at the lifelong learning stage. *Heliyon*, *7*(7).

Ghaemi, F., & Mostafavi, M. (2015). The status of computer-assisted language learning in Iran. *International Journal of Educational Investigations, 2*(2), 121-127.

Gilakjani, A. P., & Leong, L. M. (2012). EFL Teachers' Attitudes toward Using Computer Technology in English Language Teaching. *Theory & Practice in Language Studies, 2*(3).

Gürfidan, H., & Koç, M. (2016). The Impact of School Culture, Technology Leadership, and Support Services on Teachers' Technology Integration: A Structural Equation Modeling. *Education & Science/Egitim ve Bilim, 41*(188).

Habbash, M. (2021). Using internet-based reading activities to enhance the face-to-face teaching of reading in community college at the university of Tabuk. *Asian EFL Journal, 28*(3), 10-22.

Hargittai, E. (2005). Survey measures of web-oriented digital literacy. *Social science computer review, 23*(3), 371-379.

Hargreaves, A. (2015). Teacher Collaboration in Educational Contexts. In The Routledge International Handbook of Teacher and School Development (pp. 159-173). Routledge.

Heath, M. K. (2017). Teacher-initiated one-to-one technology initiatives: How teacher self-efficacy and beliefs help overcome barrier thresholds to implementation. *Computers in the Schools, 34*(1-2), 88-106.

Hernández-Ramos, J. P., Martínez-Abad, F., Peñalvo, F. J. G., García, M. E. H., & Rodríguez-Conde, M. J. (2014). Teachers' attitude regarding the use of ICT. A factor reliability and validity study. *Computers in Human Behavior*, *31*, 509-516.

Hsu, S. (2010). The relationship between teacher's technology integration ability and usage. *Journal of Educational Computing Research, 43*(3), 309-325.

Huang, F., & Teo, T. (2020). Influence of teacher-perceived organisational culture and school policy on Chinese teachers' intention to use technology: An extension of technology acceptance model. *Educational Technology Research and Development, 68*(3), 1547-1567.

Hubbard, P. (2004). Learner training for effective use of CALL. In S. Fotos, & C. Browne (Eds.), New perspectives on CALL for second language classrooms (pp. 45–68). Lawrence Erlbaum.

Hursen, Ç. (2017). Determining candidate teachers' tendency to the use of technology. *World Journal on Educational Technology: Current Issues, 9*(4), 183-190.

Hussain Al-Qahtani, M. (2019). Teachers' and students' perceptions of virtual classes and the effectiveness of virtual classes in enhancing communication skills. Arab World English Journal (AWEJ) Special Issue: The Dynamics of EFL in Saudi Arabia.

Hussein, M. H., Ow, S. H., Ibrahim, I., & Mahmoud, M. A. (2021). Measuring instructors continued intention to reuse Google Classroom in Iraq: a mixed-method study during COVID-19. *Interactive Technology and Smart Education, 18*(3), 380-402.

Joo, Y. J., Park, S. H., & Kim, H. J. (2018). Digital Native Teachers' Digital Literacy and Digital Technology Integration: Investigating the Role of Confident and Innovative Pedagogies. *Computers & Education, 127*, 13-24.

Joyce, B., & Calhoun, E. (2010). Models of professional development: A celebration of educators. Corwin Press.

Kalaycı, N. (2008). An Application Related to Project Based Learning in Higher Education Analysis in Terms of Students Directing the Project. *Egitim ve Bilim; Ankara Vol. 33*, Iss. 147, 85.

Khalawi, A., & Halabi, M. (2020). An inquiry into Saudi EFL teachers and students' perceptions of EFL virtual classes and its relation to learner autonomy. *International Journal of English Language Education, 8*(2), 57-76.

Khodabandeh, F. (2022). Investigating the effectiveness of augmented reality-enhanced instruction on EFL learners' speaking in online flipped and face-to-face classes. Language Teaching Research, 13621688221110991.

Khosravizadeh, M., Riasati, M. J., & Shakeri, N. (2016). The Impact of Computer Assisted Language Learning (CALL) on Iranian EFL Learners' Attitudes towards Computers. *International Journal of Instruction, 9*(2), 167-182.

Koc, M. (2017). Exploring the Factors Influencing Teachers' Adoption of Digital Technologies in the Classroom. *Journal of Educational Technology & Society, 20*(1), 308-319.

König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in Germany. *European journal of teacher education, 43*(4), 608-622.

Kreijn, K, Van Acker, F, Vermeulen, M & Van Buuren, H. (2012). What stimulates teachers to integrate ICT in their pedagogical practices? the use of digital learning materials in education. *In Computer in Human Behavior, 29*: 217-225.

Kusuma, I. (2022). EFL Preservice Teachers' Technology Integration in Managing and Teaching Speaking Skills During Emergency Remote Teaching. *Profile Issues in Teachers Professional Development, 24*(2), 149-165.

Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing.* Sage.

Lailiyah, M., & Cahyono, B. Y. (2017). Indonesian EFL teachers' self-efficacy towards technology integration (SETI) and their use of technology in EFL teaching. *Studies in English Language Teaching, 5*(2), 344-357.

Light, D., & Pierson, E. (2013). The impact of school technology infrastructure on teachers' technology integration: A survey in thirteen countries. *Ubiquitous Learning, 5*(4), 29.

Little, J. W. (2003). Teacher Collaboration in Learning Communities: Contextual Factors that Mediate its Success. *Teaching and Teacher Education, 19*(2), 221-235.

Lincoln, YS. & Guba, EG. (1985). Naturalistic Inquiry. Newbury Park, CA: Sage Publications.

Mahdizadeh, H., Biemans, H. J. A., & Mulder, M. (2019). Digital Immigrant Teachers Learning to Become Technology Integrators: A Case Study on the Use of Google Classroom for Teaching and Learning. *Computers in Human Behavior, 92*, 560-568.

Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal (AWEJ), 11*(4).

Miranda, H. P., & Russell, M. (2012). Understanding factors associated with teacher-directed student use of technology in elementary classrooms: A structural equation modeling approach. *British Journal of Educational Technology, 43*(4), 652-666.

Mirzajani, H., Mahmud, R., & Luan, W. S. (2015). A review of research literature on obstacles that prevent use of ICT in pre-service teachers' educational courses. *International Journal of Education & Literacy Studies, 3*(2), 26-31.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record, 108*(6), 1017-1054.

Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers' beliefs and practices about digital learning of English. *EduLite: Journal of English Education, Literature and Culture, 5*(2), 304-321.

O'Dwyer., L. M., Russell., M., & Bebell., D. J. (2004). Identifying teacher, school and district characteristics associated with elementary teachers' use of technology: A multilevel perspective. *Education Policy Analysis Archives*, 12(48)

Okkan, A., & Aydin, S. (2022). Instructor Perceptions of the Use of Computers in English Language Teaching in Higher Education. *International Journal of Teacher Education and Professional Development (IJTEPD)*, *5*(1), 1-21.

Orfan, S. N., Noori, A. Q., Hashemi, A., & Akramy, S. A. (2021). Afghan EFL Instructors 'Use of Teaching Methods. *International Journal of English Language Studies (IJELS), 3*(5), 31–38. https://doi.org/10.32996/ijels

Otto, E. K. (2017). From the past to present: A hundred years of technology for L2 learning. In C. A. Chapelle and S. Sauro (Eds.), *The handbook of technology and second language teaching and learning* (pp. 10-25). John Wiley & Sons, Inc.

Önalan, O., & Kurt, G. (2020). Exploring Turkish EFL teachers' perceptions of the factors affecting technology integration: A case study. *Journal of Language and Linguistic Studies, 16*(2), 626-646. https://doi.org/10.17263/jlls.759264

Özer, G. (2022). Teaching During the Pandemic: The Effects Of The Covid-19 Pandemic On The Teachers' Perceptions Of Technology Integration In Efl Classrooms [M.A. - Master of Arts]. Middle East Technical University.

Sipila, K. (2014). Educational use of information and communications technology: Teachers' perspective. *Technology, Pedagogy and Education, 23*(2), 225-239.

Papanastasiou, E. C., & Angeli, C. (2008). Evaluating the use of ICT in education: Psychometric properties of the survey of factors affecting teachers teaching with technology (SFA-T3). *Journal of Educational Technology & Society, 11*(1), 69-86.

Pelgrum, W. J. (2001). Obstacles to the integration of ICT in education: results from a worldwide educational assessment. *Computers & education, 37*(2), 163-178.

Prensky, M. (2001). Digital natives, digital immigrants part 2: Do they really think differently?. *On the horizon, 9*(6), 1-6.

Richards, J. C. (2015). Technology in language teaching today. *Indonesian JELT: Indonesian Journal of English Language Teaching, 10*(1), 18-32.

Robinson, M., & Mackey, M. (2013). Assets in the classroom: Comfort and competence with media among teachers present and future. In Popular literacies, childhood and schooling (pp. 200-219). Routledge.

Rogošić, S. (2015). Construct Validity of the Questionnaire Measuring Technical and Socio-psychological Factors which Affect Successful Integration of ICT into Education. *Croatian Journal of Education, 17*(4), 983–1007

Saputra, E., Saputra, D. B., Handrianto, C., & Agustinos, P. (2022). EFL Students' Perception towards Online Learning: What to Consider?. *Indonesian Journal of English Language Teaching and Applied Linguistics, 7*(1), 123-140.

Schaffhauser, D. (2009). Which came first--The technology or the pedagogy?. *The Journal, 36*(8), 27-32.

Schmidt, D. A., Baran, E., Thompson, A. D., Mishra, P., Koehler, M. J., & Shin, T. S. (2009). Technological pedagogical content knowledge (TPACK) the development and validation of an assessment instrument for preservice teachers. *Journal of research on Technology in Education, 42*(2), 123-149.

Semiz, K., & Ince, M. L. (2012). Pre-service physical education teachers' technological pedagogical content knowledge, technology integration self-efficacy and instructional technology outcome expectations. *Australasian Journal of Educational Technology, 28*(7).

Shaffer, D. W., Nash, P., & Ruis, A. R. (2015). Technology and the new professionalization of teaching. *Teachers College Record, 117*(12), 1-30.

Sipilä, K. (2014). Educational use of information and communications technology: Teachers' perspective. *Technology, Pedagogy and Education, 23*(2), 225-241.

Smarkola, C. (2007). Technology acceptance predictors among student teachers and experienced classroom teachers. *Journal of Educational Computing Research*, *37*(1), 65-82.

Snoeyink, R., & Ertmer, P. A. (2001). Thrust into technology: How veteran teachers respond. *Journal of Educational Technology Systems, 30*(1), 85-111.

Son, J. B. (2000). Computer-assisted language learning: Study book. Toowoomba: Distance Education Centre, The University of Southern Queensland.

Son, J. B., Robb, T., & Charismiadji, I. (2011). Computer literacy and competency: A survey of Indonesian teachers of English as a foreign language. *Computer-Assisted Language Learning Electronic Journal (CALL-EJ), 12*(1), 26-42.

Şevik, M., & Yucedag, Z. (2021). An evaluation of distance education during the Coronavirus 19 pandemic: the views of Turkish EFL teachers. *Mehmet Akif Ersoy Üniversitesi Eğitim Bilimleri Enstitüsü Dergisi, 9*(11), 171-190.

Street, B. (2003). What's 'new'in the new literacy studies? Critical approaches to literacy in theory and practice. *Current Issues in Comparative Education, 5*(2), 77-91.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). London, England: Pearson/Allyn & Bacon

Teo, T. (2011). Factors Influencing Teachers' Intention to Use Technology: Model Development and Test. *Computers & Education, 57*(4), 2432-2440.

Toffler, A., & Alvin, T. (1980). The third wave (Vol. 484). New York: Morrow.

Torsani, S. (2016). CALL Teacher Education: Language Teachers and Technology Integration. Rotterdam, The Netherlands: Sense Publishers. Warschauer, M. (1996). Computer assisted language learning: An introduction. In S. Fotos (Ed.), Multimedia Language Teaching (pp. 3–20). Tokyo: Logos International. Retrieved February 10, 2017 from http://www.ict4lt.org/en/warschauer.htm

Tour, E. (2015). Digital mindsets: Teachers' technology use in personal life and teaching. *Language Learning & Technology, 19*(3), 124-139.

Tri, D. H., & Nguyen, N. H. T. (2014). An exploratory study of ICT use in English language learning among EFL university students. *Teaching English with Technology, 14*(4), 32-46.

Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher Efficacy: Capturing an Elusive Construct. *Teaching and Teacher Education, 14*(7), 783-805.

Tümen Akyildiz, S. (2020). College Students' Views on the Pandemic Distance Education: A Focus Group Discussion. *International Journal of Technology in Education and Science, 4*(4), 322-334.

Uzunboylu, H. (2019). Assessment of student scores based on specific variables in the web-assisted English grammar exercises. *World Journal on Educational Technology: Current Issues, 11*(3), 205-219.

Van Oers, B., Wardekker, W., Elbers, E., & Van der Veer, R. (2008). Reconceptualising Professional Learning Through Interactions in Communities: A Sociocultural Framework for Understanding Teacher Learning. *Teaching and Teacher Education, 24*(3), 377-387.

Van Veelen, R., De Wever, B., Valcke, M., & Van Keer, H. (2018). Teachers' Professional Interactions: A Social Network Approach to Teachers'

Interactions as Members of Professional Communities. *Teaching and Teacher Education, 75*, 69-79.

Wang, A. Y. (2022). Understanding levels of technology integration: A TPACK scale for EFL teachers to promote 21st-century learning. *Education and Information Technologies, 27*(7), 9935-9952.

Ware, P. (2011). Computer-generated feedback on student writing. *TESOL Quarterly, 45*(4), 769-774.

Wilson, C., Orellana, M., & Meek, M. (2010). The Evolution of Classroom Technology - Interactive Feature. The New York Times. Retrieved from http://www.nytimes.com/interactive/2010/09/19/magazine/classroom-technology.html

Windschitl, M., & Sahl, K. (2002). Tracing teachers' use of technology in a laptop computer school: The interplay of teacher beliefs, social dynamics, and institutional culture. *American educational research journal, 39*(1), 165-205.

Wozney, L., Venkatesh, V., & Abrami, P. (2006). Implementing computer technologies: Teachers' perceptions and practices. *Journal of Technology and Teacher Education, 14*(1), 173-207.

APPENDICES

APPENDIX A

QUESTIONNAIRE

ENGLISH PREPARATORY SCHOOL INSTRUCTORS' AND STAKEHOLDERS' PERCEPTION AND APPLICATION OF TECHNOLOGY IN EFL CLASSES

Dear Respondents,

This questionnaire aims to obtain data for my MA study titled "**ENGLISH PREPARATORY SCHOOL INSTRUCTORS' AND STAKEHOLDERS' PERCEPTION AND APPLICATION OF TECHNOLOGY IN EFL CLASSES** " to investigate the factors affecting the integration of technology into English as a Foreign Language (EFL) classes and the perceptions, needs, and habits of EFL instructors regarding the use of technology during and after the pandemic period. Your answers will be kept confidential.

Thank you for your participation.

For further information please contact me via e mail;

DEMOGRAPHIC INFORMATION *

Age

- ◯ 20-25
- ◯ 25-30
- ◯ 30-35
- ◯ 35+

Years of experience *

- ◯ 0-5
- ◯ 5-10
- ◯ 10-15
- ◯ 15+

Degree of Education *

- ◯ Bachelors Degree
- ◯ Masters Degree
- ◯ Doctorate

Do you have a home computer? *

- ◯ Yes.
- ◯ No.

Do you have a work computer? *

- ◯ Yes.
- ◯ No.

Gender *

- ◯ Female
- ◯ Male
- ◯ Other

During your pre-service or in-service teacher training, did you participate in professional development courses related to the integration of computers in teaching and learning? *

- ◯ Yes.
- ◯ No.
- ◯ Maybe

Bölüm 2/6

KNOWLEDGE OF COMPUTER SOFTWARE

Please think about the following computer software tools and answer how you use them during your teaching and learning practices.

Word processing (e.g., Word) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Spreadsheets (e.g., Excel) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Graphics (e.g., Paint, Photoshop) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Presentation software (e.g., PowerPoint, Prezi,etc.) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

The Internet *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Concept mapping (e.g. Inspiration, Padlet,etc.) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Online Learning Platforms (Udemy, edX, Coursera,etc.) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Online Communication Platforms (MS Teams, Zoom, etc.) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Online Game Platforms (Kahoot, Quizziz, etc.) *

- I cannot use it
- I can use it to a limited extent
- I can use it satisfactorily
- I can use it well
- I can use it very well

Bölüm 3/6

FREQUENCY OF SOFTWARE USE FOR PERSONAL PURPOSES

I use computer to:

Play games (Adventure, Action,Platform, etc. games) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Make presentations (PowerPoint, Prezi,etc.) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Process texts (Word, Padlet,etc.) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Prepare materials (Using MS Programs, DIY EFL Material Preparation Websites) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Communicate (Zoom, E-mail,etc) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Access the internet (Chrome, Explorer, Ubuntu, Safari) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Develop multimedia (Canva, YouTube, etc.) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Visit educational webpages (TED-Ed, EdX, HowStuffWorks,etc.) *

- Never
- Once or twice a semester
- Once or twice a month
- Once or twice a week
- Almost every day

Join online lessons (Coursera, OPEN Access, etc.) *

- ○ Never
- ○ Once or twice a semester
- ○ Once or twice a month
- ○ Once or twice a week
- ○ Almost every day

Attend educational courses (Coursera, PrePlay, ITTT, etc.) *

- ○ Never
- ○ Once or twice a semester
- ○ Once or twice a month
- ○ Once or twice a week
- ○ Almost every day

Bölüm 4/6

COMPUTER ATTITUDES

Please choose the best answer that defines your computer usage attitudes.

I feel comfortable with the idea of the computer as a tool in teaching and learning. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The use of computers in teaching and learning stresses me out.* *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

If something goes wrong, I do not know how to fix it. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The idea of using a computer in teaching and learning makes me sceptical. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The use of computer as a learning tool excites me. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The use of computers in teaching and learning scares me. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer is a valuable tool for teachers. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer changes the way I teach. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer changes the way students learn in my classes. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can do what the computer can do equally as well. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer is not helpful for student learning because it is not easy to use. *

- ○ Completely disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Completely agree

The computer helps students understand concepts in more effective ways. *

- ○ Completely disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Completely agree

The computer helps students learn because it allows them to express their thinking in better and different ways. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer helps teachers to teach in more effective ways. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer is not good for teaching because it creates technical problems. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

Bölüm 5/6

PERCEIVED SELF-CONFIDENCE IN INTEGRATING ICT

Please choose the best option

I can select appropriate software to use in my teaching. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can use online communication sites/ programs / apps in my class. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can design technology-enhanced learning activities for my students. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can use email to communicate with my students. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can teach my students to select appropriate software to use in their projects. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can teach my students how to use online communication tools. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

I can use the Internet in my lessons to meet certain learning goals.

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The computer can help students understand concepts more easily

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

5. bölümden sonraki kısım Sonraki bölüme geç

Bölüm 6/6

SCHOOL CLIMATE AND SUPPORT

Açıklama (isteğe bağlı)

Other teachers encourage me to integrate computers in teaching and learning.

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The coordinators encourage me to integrate computers in teaching and learning. *

- ◯ Completely disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Completely agree

The principal encourages me to integrate computers in teaching and learning. *

- ◯ Completely disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Completely agree

The CPDU (Continous Professional Development Unit) encourages me to integrate computers in teaching and learning. *

- ◯ Completely disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Completely agree

I often exchange ideas about technology integration with other teachers. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

There are other teachers in my school who use computers in teaching and learning. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

In the meetings, we frequently discuss how to integrate computers in the school curriculum more efficiently. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

Teachers in my school are well informed about the value of computers in teaching and learning. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

A variety of computer software is available for use at my university. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The technical support at my university is adequate. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

The technical infrastructure at my university is adequate. *

- Completely disagree
- Disagree
- Neutral
- Agree
- Completely agree

APPENDIX B

Semi-structured Focus Group Interview Questions for the Instructors

INTERVIEW QUESTIONS

FOCUS-GROUP INTERVIEW

The aim of this interview is to investigate (a) the factors affecting the integration of technology into English as a Foreign Language (EFL) classes, (b) the perceptions, habits, changing attitudes, needs of EFL instructors and (c) stakeholders' support and evaluation of the current technology use at our university during and after the pandemic period in general. With this purpose, please feel comfortable to reflect on how you feel and think about the given questions. The information you give and your names will remain confidential.

1. How do you perceive technology integration into their classes?
2. What are your current needs at the current institution toward integrating technology in your classes?
3. How much institutional support do you get in relation to the use of technology use?
4. What kind of activities did you attend to improve your skills in technology use in their classes?
5. Which one do you prefer for your teaching, hybrid use, online education, and face to face education?
6. How are your experiences toward online education since the beginning of hybrid use at the current university?
7. What strengths and weaknesses did you realize in yourselves for technology integration into your classes? (Confidence, Competency, Frequency, etc.)
8. What are your expectations from your stakeholders in terms of technology integration into your classes?
9. What kind of future activities are you planning to do to improve yourself in technology integration?
10. What would you do differently in terms of technology integration at your current institution?

APPENDIX C

Semi-structured Interview Questions for Stakeholders

INTERVIEW QUESTIONS

THE PRINCIPAL (HEAD OF PREP. SCHOOL), LEVEL COORDINATORS, CPDU MEMBER

The aim of this interview is to investigate (a) the factors affecting the integration of technology into English as a Foreign Language (EFL) classes, (b) the perceptions, habits, changing attitudes, needs of EFL instructors and (c) your support and evaluation of the current technology use at our university during and after the pandemic period in general. With this purpose, please feel comfortable to reflect on how you feel and think about the given questions. The information you give and your names will remain confidential.

1. How do instructors at your preparatory school perceive technology integration into their classes?
2. What are the determined needs of instructors at the current institution toward integrating technology in their classes?
3. How much institutional support do you give in relation to the instructors' use of technology?
4. What kind of activities do you apply to improve instructors in technology use in their classes?
5. What do you observe about the instructors' preferences for hybrid use, online education, and face to face education?
6. What have you observed about the instructors' attitudes toward online education since the beginning of hybrid use at the current university?
7. What strengths and weaknesses did you realize in yourselves as stakeholders for technology integration into the classes and teacher support?
8. What kind of future activities are you planning to do to support instructors' technology integration?

CURRICULUM VITAE

Hatice OSTA

A. EDUCATION

BA: İstanbul Okan University,

Translation Studies, 2014, İstanbul

MA: İstanbul Sabahattin Zaim University,

English Language Teaching, 2024, Ongoing, İstanbul

B. EXPERIENCE

* Mimar Sinan Fine Arts University, İstanbul

10/2023 – CURRENT

- giving General English lessons to various departments

* Altınbaş University, İstanbul

09/2017 – 01/2024

- worked in the MLD and taught Academic Writing, Medical English, English for Specific Purposes..etc.
- worked in the Preparatory School and taught General English
- prepared materials, exam documents.. etc. for various levels

* Istanbul Medipol University, İstanbul

10/2016 – 07/2017

- taught General English for students of various majors

* Dilko Language Schools, Istanbul,

04/2014 – 10/2016

- taught both adults and high school students
- gave YDS and LYS lessons