

Exploring The Barriers That Hinder the Effective Use of Technologies in EFL Classrooms During COVID-19

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Submitted to the
Institute of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

Master of Education
in
Information and Communication Technologies in Education

Eastern Mediterranean University
August 2021
Gazimağusa, North Cyprus

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ABSTRACT

This study investigates the barriers that hinder the effective use of Information and Communication Technologies (ICT) in English as a foreign language (EFL) classes during COVID-19. The study was done to explore the challenges experienced by the EFL teachers at a foreign languages and English preparatory school (FLEPS) at a university in North Cyprus while giving online lessons during the COVID-19 pandemic. The qualitative research approach was used in this study and the data were gathered through interviews. The participants' sample was chosen by purposive sampling technique. Later all participants were contacted through Microsoft Teams and interviewed online for the study. Eight interviews were conducted and transcribed, which after coding process followed thematic analysis for development of themes so that the research questions of this study can be answered. The findings demonstrated the need for teachers' Technological, Pedagogical and Content Knowledge (TPACK) trainings as well as the provision of proper infrastructure for easy access of technological tools and effective implementation of ICT into classroom. Hence, based on the findings various useful suggestions are provided which can be helpful for policy makers, educationalists, researchers and teachers for effectively incorporating ICT into their teaching and producing productive ICT lessons in online educational setup in future practice.

Keywords: ICT utilization, EFL teachers, ICT adoption in classroom, COVID-19

ÖZ

Bu çalışmanın amacı, COVID-19 sürecinde, Bilgi ve İletişim Teknolojileri'nin (BİT) yabancı dil olarak İngilizce öğretiminde etkili bir şekilde uygulanmasını olumsuz şekilde etkileyen etmenleri ortaya çıkarmaktır. Bu araştırma Kuzey Kıbrıs'ta bulunan bir üniversitenin Yabancı Diller ve İngilizce Hazırlık Okulu'nda (YDİHO) görevli İngilizce öğretmenlerinin COVID-19 pandemi sürecinde çevrimiçi derslerde yaşamış oldukları sorunları tespit etmek için yürütülmüştür. Bu çalışmada nitel araştırma yöntemi kullanılmış ve veriler görüşmeler yoluyla toplanmıştır. Araştırmanın katılımcıları amaçlı örnekleme tekniği kullanılarak seçilmiştir. Görüşmeler Microsoft Teams aracılığıyla çevrimiçi ortamda gerçekleşmiştir. Toplamda sekiz görüşme yapılmış ve görüşmeler yazıya dökülmüştür. Araştırma sorularına yanıt verebilmek için toplanan veriler tematik analiz yöntemi kullanılarak çözümlenmiştir. Araştırma bulguları öğretmenlerin Teknolojik, Pedagojik ve Alan Bilgisi (TPAB) eğitimine ihtiyaç duyduğunu ve ayrıca teknolojik araçlara kolay erişim için ve BİT'lerini etkin olarak derslerine entegre edebilmeleri için uygun altyapıya ihtiyaç duyulduğunu ortaya çıkartmıştır. Bu sebeple, bulgulara bağlı olarak yöneticilerin, eğitimcilerin, araştırmacıların ve öğretmenlerin BİT'lerini eğitime etkin bir şekilde entegre edebilmeleri ve BİT'lerini yaratıcılığı geliştirebilecek şekilde kullanmaları için çeşitli önerilere yer verilmiştir.

Anahtar Kelimeler: BİT kullanımı, İngilizce öğretmenleri, sınıfta BİT'in benimsenmesi, COVID-19

DEDICATION

To the person, who have been a great support for me throughout my life and loved me generously from the core of his heart,

*I dedicate this thesis to the most amazing person of my life, **Mr. Abdul Qadir Khoso**, my beloved father, my Hero, a blessing and an inspiration.*

Next, I would dedicate this thesis work to my mom, **Shereen Abdul Qadir**, my elder sister **Kiran Khoso** and my younger brother **Rehman khoso** for their all-time support and guidance throughout my academic journey.

ACKNOWLEDGEMENT

My gratitude to Assit. Prof. Dr. İldeniz Özverir, my thesis supervisor for his all-time support and sincere efforts towards completion of the thesis. He is the one who believes in strengths of his students and knows the ways to polish their skills. I would not have completed this work without his timely guidance and support.

Professor Dr. Ersun İşçiolu, Chair of the Department of Computer Education and Instructional Technologies, has my admiration for his dedication to his faculty students. My gratitude to FLEPS Director Assist. Prof. Dr. Ramadan Eyyam and the teachers for their co-operation in data collection process.

My gratitude to Dr. Faizan Ali for his continues guidance towards my academic career right from joining EMU until this date. A person who kept on monitoring my progress and helping me whenever I needed his assistance. I thank my friends, Dr. Paras Aziz, Shazia Khokhar and Laiba Ali who supported me whenever I needed them.

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Chapter 1

INTRODUCTION

For many years, the educational institutions have globally worked on innovation in education by integrating it with technology (Shen & Ho, 2020). The digital revolution is not really a new wonder; it is being used in postsecondary learning for a number of years (Kopp et al., 2019). Stakeholders must focus on digital transformation in higher educational institutions since it is a current issue, also and the ability to use ICT in practically every part of life has increased. Therefore, the higher education institutions must pay attention to make potential professionals who can cope well with the challenges of this new setup and provide solutions as well (Bond et al., 2018).

According to Lowther et al. (2008) ICT can help students learn new skills, develop their knowledge as well as help to increase learners' enthusiasm. Reid (2002) argues that the computer technologies provide extra time for students so that they can explore away from normal course contents that help them to understand concepts in a much better way. Hence, ICT based teaching goes beyond old-fashioned classroom teaching and demands teachers to use their own creativity to develop their classroom materials and approaches in their own style.

For nearly two decades, online and mixed education has been a fragment of university teaching curriculum. (Singh & Thurman, 2019). Various academic institutions in correspondence to the rapid developments of ICT as an outcome of globalization have

concentrated on distant education mode and have invested much amount of money to transcend education globally as an alternate to traditional classroom based teaching (Birch et al.,2019; Öztas et al., 2017).

As recently, COVID-19 pandemic has affected human life from elementary things to the utmost vital ones (Celik et al., 2020). Education is the key and its purpose is to enlighten people and make them knowledgeable. It has been negatively affected by this pandemic as it stopped human communication and locked the gates of all educational institutes starting from China since February 2020 and later the other infected countries (Celik et al., 2020). In this way, around the end of April 2020, UNESCO declared that over one hundred countries have closed their academic institutes due to coronavirus disease (Unesco, 2020). Hence, due to the pandemic, the educational organizations had to shift online teaching and learning in their higher educational institutes (UNESCO IESALC, 2020). For example, some of the educational institutes shifted to full online teaching method, while others proposed hybrid methods by removing some parts of teaching. Furthermore, some educational institutes immediately shifted to online teaching method by providing teachers with just a few days of preparation for the new setup of online teaching, while others avoided making a decision to set up an online teaching and learning environment due to a lack of teacher preparation or online teaching resources (Dhawan, 2020).

The shift into online educational setup due to COVID-19 pandemic was sudden and unpredicted and it brought a vast revolution in educational systems (Selwyn, 2012; McFarlane, 2019). Hence, such lock down challenged everyone including teachers, students as well as their parents with a complete new situation (Huber & Helm 2020).

Researches show that the institutional features can affect success of online teaching, such as technology provision, pedagogical provision or even the serious concern of institute about the integration of online and hybrid education (Bao, 2020). Whereas, the institute's support is the most essential one, which according to some studies is often inadequate (Palloff & Pratt, 2013). McGee et al. (2017) claims that the amount of institute's assistance marks how online teaching can be applied and continued, while it is uncertain if the universities can address the concerns of instructors in order to promote online teaching. Hence, for this task, the teachers may be provided with adequate support and professional development programs (Goktas et al., 2009).

Conversely, many researchers have found that that the instructors are affected by both factors, such as institutional and individual, to utilize ICT in teaching methodology (Ertmer & Ottenbreit-Leftwich, 2010; Howard, 2019). According to some researchers, the most important obstacles in the way of online teaching is the individual himself (Albion et al., 2015; Stein et al., 2011). As the innovation in schooling methodology with ICT use depends mainly on teachers' own participation and provision, it is essential that they have enough knowledge, expertise and trainings to successfully assimilate and adjust information technology in teaching. Gurley (2018) mentions that the online teaching not only requires technological abilities but also novel pedagogical tactics than traditional classroom for online teaching support. Bates and Sangrà (2011) pointed out that the teachers' inadequate pedagogical knowledge as well as their insufficient knowledge of learning theories is a kind of obstacle that restricts them from online teaching. In addition, regardless of their subject, the change from conventional teaching to online learning demands new roles and skills for teachers.

In addition to above mentioned dynamics, successful ICT application in EFL backgrounds necessitate teachers' technological pedagogical content knowledge (Aniq & Drajadi, 2019), that is a multifaceted area of knowledge, combining three knowledge domains, such as technology, content and pedagogy (Mouza et al., 2017) is among the important factors that predicts teachers' behavioral intentions concerning usage of technology (Hsu et al., 2020).

Previous literature has proved the association in between the impact of technology and EFL instructional progress in relation to teachers' perceptions. Li and Ni (2011) investigated Chinese EFL teachers in relevance to their progressive experiences towards using technology in class and stated that the usage of ICT is valuable for improved teaching purpose as it is linked with advanced teaching, associates teachers' with real domain of ideas, and supports them to experience creative teaching methods. Khan (2013) claimed that incorporating ICT in teaching has direct link with quality education as it enables teachers to make learning an interesting activity. Besides teachers' positive perceptions towards ICT usage, they pronounced that they were very happy to use e-sources for their teaching provided by their institutions. Similarly, Hidayat et al. (2018) declared that the ICT usage enriches teaching and suggested that assimilating ICT into English language education shows a significant role in students' success. Since, there are various merits of technology use in EFL classes as revealed by various studies and a substantial role that it plays in elevating EFL instruction, numerous studies have explored factors linked with ICT implementation to cope well with the necessities for improved and stress-free technology use (Ertmer et al., 2012; Jhurree, 2005; Joo et al., 2016). Since a number of researches have declared that the ICT integration in English language teaching plays a very significant role for better learning, there seems a need to look for the barriers that stop teachers from effective

implementation of it in classrooms. In order to make online teaching more useful it is significant to study its usage as well as its potential. Moreover, it is important to go further than accidental online teaching practices to the advanced online teaching and learning resulting from vigilant teaching plans and methods (Hodges et al., 2020).

1.1 Statement of Problem

Online education has been a very important part of education globally over the past three decades (Singh & Thurman, 2019). According to Karpati (2009), difficulties of teaching EFL are more critical where the ICT is linked with the collaboration of teachers and their perceptions (Aydin, 2013). Various reasons are associated to instructor's unwillingness to make use of ICT into their teaching, such as lack of ICT skill, dearth of status quo, little motivation, less time, lack of self-efficacy, growth of heavy workload, in adequate knowledge and less approach (Rezaei & Meshkatian, 2017). On the other hand, Philipsen et al. (2019) established that the provision of trainings for online teaching are not enough for teachers, but alongside the institutes must have clear prophecy and objectives for online teaching and learning. Hence, both teachers' opinions related to the institutional support as well as the institutions prophecy and objectives would positively effect on teachers' concept of readiness and skills for online teaching (Howard et al., 2018).

Educational sector has shifted to online teaching and learning (OTL) in order to maintain social distancing around March 2020 because of the COVID-19 epidemic in most of higher educational institutes around the globe regardless of whether the educational staff was ready for this or not (UNESCO IESALC, 2020). Hence, this quick shift to the teaching enables the best provision to perceive the amount to which teachers were ready for online coaching (Brooks & Grajek, 2020). Bao

(2020) mentioned that there was dearth of online materials, technological infrastructures as well as pedagogical support for OTL as there was a very short time for institutes because of the sudden shift to online educational setup. Similarly, Ioannou et al. (2020) also found that the empirical studies are missing on the subject of real world application of advanced technologies and pedagogies in teaching. Therefore, in order to make sure that all learners are provided with excellent education, it is essential to discover a broad variety of issues relevant to ICT use and its implementation by university teachers, exclusively to benefit online schooling in an online educational environment (Kebritchi et al., 2017).

Accordingly, this study will present the problems or the obstacles that the EFL teachers of a FLEPS at a university in North Cyprus are facing in online education system during COVID-19 pandemic. There is no such research conducted before on the same issue in the context of this university. In addition, the novel COVID-19 pandemic is a new phenomenon that has brought a big shift in educational setup, so the teachers as well as institutes need guidance for effective implementation of online education globally or even in North Cyprus context. Although, this study will focus at the EFL teachers of a FLEPS at a university in North Cyprus for whom technology use in classroom is not a new phenomenon but the total conversion of education into online teaching is a big challenge. This study will fill in the gap of the barriers that bring problems in modernized teaching setups or in online education. Previous researches on ICT integration have shown various challenges that became hindrance in the way of effective online teaching (e.g. Gholami, 2020). Hence, there seems a need of a study for exploration of the problems that distract teachers and provide hindrance in their way when they try to integrate technology in classrooms.

1.2 Aim of Study

The aim of this study is to discover the barriers related to ICT integration in teaching and learning EFL at FLEPS of a university in Famagusta, North Cyprus. The study is significant as it explains EFL teachers' standpoints on the barriers about technology integration in online classes during COVID-19. In addition, this research will fill a gap in the existing literature, as there is no research conducted on the same issue in the context of North Cyprus universities. However, globally, many researchers are conducting research on this issue since the online educational system have brought various challenges for teachers. Hence, such researches may help educational institutions and teachers to give effective online lessons. So, the goal of this research is to look into the problems experienced by EFL teachers of a FLEPS at a university in North Cyprus in online education during the pandemic with the objective to help the educational institutions, educationalists and policy makers to effectively deal with the online teaching systems.

1.3 Research Questions

1. What technological support is provided to FLEPS teachers for using ICT in language teaching classes during COVID-19?
2. What kind of pedagogical issues do teachers face while integrating technology in English teaching during the coronavirus pandemic?
3. What kind of technological issues do teachers experience while integrating technology in language classes during the coronavirus pandemic?

1.4 Significance of the Study

This study is important for all EFL teachers around the world, but especially for EFL teachers of a FLEPS at a university in North Cyprus as it would highlight problems

related to online teaching. In addition, the study will provide in-depth information of the factors that affect online education in general and teaching English as a foreign language at FLEPS in specific. Hence, this study will be beneficial all teachers worldwide since it is based on investigation of online mode of education during COVID-19 pandemic. Overall, this research study will be significant for:

- Language teachers
- University teachers
- Higher education institutions
- Educationalists
- Scholars
- Higher education commission
- University policy makers

1.5 Limitations of the Study

This research has limitations because it only looked into the issues of ICT integration at FLEPS in a North Cyprus University, which is a limited space of inquiry. The study employed only interview tool for data collection, which is a limitation of this study. In addition, the study is limited as it focused on the barriers that were experienced by English language teachers of a university only. Hence, it does not cover all English language teachers of North Cyprus universities and neither has it covered English language teachers globally. Moreover, the study is limited, as only 10 participants participated. The study is limited as it is just a qualitative study of the problem. Also, the study was conducted in 2 months' time period which is very short time to analyze a phenomenon in detail. In this way, this study is time bound, area bound, sample bound and genre bound. Hence, the study findings cannot be generalized to all EFL teachers of North Cyprus region or worldwide.

1.6 Organization of the Thesis

Starting with introduction, chapter 2 begins with a thorough review of the literature related to the issues that affect EFL teachers' use of technology into technology-mediated classroom. Various new and old concepts are presented related to the research topic. Chapter 3 includes discussion on methodology of this research study. Various aspects of methodology are presented, such as sample size, context of participants, data collection tool and data analysis. Chapter 4 embodies qualitative data analysis with presentation of findings as well as some discussion was done on the findings. Thematic analysis was used to interpret results of the study thus; various themes were generated in the light of research questions of this study. Chapter 5 is comprised of the study conclusion. It has specific convincing findings and discussion under the head of research questions of this study, limitations of the study and future suggestions.

Chapter 2

Chapter 2

LITERATURE REVIEW

This chapter includes review of the literature and discussions on various aspects of technology integration into classrooms generally and ICT in English as a foreign language (EFL) context particularly. The discussion starts with the explanation of ICT in education and goes in detail to describe various factors related to technology incorporation in English language teaching.

2.1 Information and Communication Technologies in Education

Information and communication technologies have been merged to educational institutions dramatically during the last two decades. Strategies have been produced to combine ICT in educational systems and the policy makers and researchers are trying hard to highlight the problems related to ICT knowledge provision to the students (Fraillon et al., 2014). ICT can be acknowledged as the education and principled exercise of simplifying knowledge and refining enactment by crafting, consuming and handling suitable technology measures and resources (Joshi, 2016). Similarly, Ramorola (2014) explained ICT implementation as the amalgamation of technology with teaching to adjust with the requirements of the syllabus and learning effects of the lectures, course contents or different activities. Richard and Lochart (1996) argued that teaching does not involve a simple process; it follows multifaceted procedures, such as selecting course materials, classroom activities and many other things. Consequently, it is believed that the adoption of technology in educational environment helps teachers to produce effective learning environment and also helps to simplify teaching and learning procedures (Chamorro & Rey, 2013).

Presently, online education is expanding and going beyond ecological obstacles by employing global education prospects that are implemented globally by higher educational institutes (Shukor et al., 2014). Education, delivered from distance via internet and supported by electronic devices, for example, computers, laptops, tablets or mobile phones that require internet connection, is called online education (Gonzalez & Louis, 2018). According to Ally (2008), online education can be acknowledged as usage of the internet in gaining access to resources, having collaboration with teachers, students, contents, also getting help in learning procedure to increase knowledge, as well as making progress and meaning by learning experience.

Over a decade the demand of technology implementation in education have increased to advance the effectiveness of teaching and learning (Chauhan, 2017; Voogt et al., 2009; Yenkimaleki & van Heuven, 2019). Thus, various studies are conducted to highlight the essentials that are needed for effective ICT application in educational context. Allen and Seaman (2010) surveyed around twenty-five hundred universities and colleges in the USA providing online education and found that around 19% of the institutes stated they were not provided with any training program for online education. Whereas, Johnson and Berge (2012) described that the teachers must be provided with effective trainings for their teaching, initial support, and delivery of course, when they are supposed to prepare their new courses for online education.

2.2 ICT and EFL Teaching

Educational technology is essential part of learning and teaching. It can greatly affect students' learning and help in achieving educational goals (Hawkins et al., 1996). Many researches have claimed that the ICT usage is very significant for learners to study as well as work in digital age (Bransford et al., 2000; British Educational

Communications and Technology Agency [Becta], 2003). The traditional methods of teaching are out dated, as they cannot help individuals to work productively at their respective institutions around the globe. Hence, the institutes that do not provide ICT usage in their teaching practices cannot make their learners able to live well in the current era of technology (Bransford et al., 2000). Bransford et al. (2000) claimed about ICT that it has the power to play different roles in teaching and learning together, as many researches have looked over the literature related to ICT and instruction and concluded that the computer technology has huge power to enrich education. Similarly, Wong et al. (2006) also supported the idea that the incorporation of digital tools into educational environments help and support the teaching procedure.

Consequently, in present situation computer technology has been a great part of today's world and initiating the need for all young learners to get familiarity with it from early age (Hew & Brush, 2007). Lewis (2004) argued that there are numerous technical tools for English language-teaching classrooms of young learners, for example e-mails, podcasts, e-cards, weblogs, downloadable resources and numerous other technological materials. In addition, there are many sites that provide various amusing topics and themes for children that can add flavor to traditional teaching styles. Moreover, the other example of technological tools include huge amount of mobile or computer based applications and learning management systems available for teachers as well as learners (Sulaimani et al., 2017). In this way, many research studies focusing on technology mediated language teaching have concentrated on the efficiency of technological benefits in second or foreign language teaching. Language teaching can be made more effective by using technology resources like multimedia

materials such as, pictures, texts and videos on one single screen (Mohsen & Shafeeq, 2014).

Lama (2006) found that the assimilation of ICT in teaching young EFL learners helps teachers to provide students with multisensory and multimedia experiences that can be generated by images, sounds, graphics and animations. Hence, technology plays a role of a very important tool in the learning of children (Gonzalez-Carriedo & Esprivalo Harrell, 2018) and can enable learners to become bilinguals or biliterate persons (Liu et al., 2002; Macaruso & Rodman, 2011). Supporting the similar viewpoint, Xu (2010) stated that the technology-assimilated teaching can transcend from time and space and is able to provide learners with an authentic environment of learning. This saves the time while outspreading class knowledge, which is contrary to the traditional practice of teaching having a limited amount of knowledge.

The real implementation of ICT in education is deeply reliant on its usage by teachers in their instruction-related procedures (Bingigmlas, 2009). Therefore, the instructors must have an efficiency to implement technologies well and should be able to enable their learners well so that they can utilize technological tools advancing their logical thinking and intellectual abilities (Peters, 2006).

A variety of research studies have mentioned various issues that obstruct teachers in using technological tools in instruction, for example, opinions of teachers towards technology use, their teaching styles and their usage of technical equipment. Apart from teaching, the other related issues highlighted are about the effectiveness of trainings with which the teachers are facilitated, the provision of institutional support, environment of the school and the availability of digital devices and materials (Cuban

et al., 2001; Zhao & Frank, 2003). Such factors are dealt in detail in the following section.

2.3 Factors Affecting ICT Use in Education

Ertmer (2005) by lengthening the study of Becker (2000) on the subject of complications related to computer technology usage in classroom, acknowledged two kinds of obstacles that produce hindrance for effective ICT dependent teaching. The first order obstacles are not internal for teachers, but they are external, such as inadequate technological resources, insufficient trainings, proper maintenance and management of class time. The second order barriers are pedagogical as well as epistemological opinions of teachers, awareness and abilities; for example, knowledge of importance of ICT, their skills and sureness in utilizing technologies in educational environment and the flexibility to alter the old traditional teaching methods.

On the other hand, Prestridge (2012) specifies that the initial order obstacles are almost controlled since the ICT provision is made available with professional development trainings and curriculum development. However, eradication of first order barriers does not guarantee the effective procedure of ICT implementation. Oroma et al., (2013) showed a non-regular usage of ICT in African context regardless of sufficient availability of technology. Hence, other studies conducted in fully technology-equipped environments declared that even if the obstacle of lack of technology is overcome, the other major obstacle appears that is the uncertainty of the faculty to implement ICT in education (Schoepp, 2005). This study is in alignment with the argument that even if the external limitations are removed, there will not be an effective implementation of technology overcome (Ertmer et al., 2007).

Recently attention is shifted to second order obstacles such as pedagogical concerns with regard to technology use as a main factor in technology implementation (Tondeur et al., 2012). Mueller et al. (2008) claim that the entire concentration is altered to examine the individual variances regarding opinions, approaches and abilities of teachers. Nonetheless, even after two decades of researches on the barriers regarding technology use for teachers have shown almost the same results. According to Luongo (2018), the lack of experience with regard to online teaching is an obstacle for online education. Martin et al. (2019) also declared that the willingness of teachers' for online coaching and learning indicates that the teachers' online teaching experience influences designing and simplification of their online teaching subjects, which is, features of instruction preparation and manifestation. On the other hand, lowest self-efficacy of teachers is directly linked with their slight or no experience of teaching in digital environment before in their academic carrier. Similar results were established by the study of Bolliger et al. (2019) who conducted research in the context of public universities of United States of America. Their findings presented that the teachers with not much experience, for instance less than three years' were not much aware of making online programs as well as the activities and schemes to support it. Hence, these samples present that the ICT integration in education is directly linked with teacher's online teaching experience as well as their self-efficacies in technology integration.

Tsai and Chai (2013) acknowledged third order obstacles, which are related intellectual pondering and strategy making abilities. Teachers must overcome such barriers so that they can use technology enthusiastically and easily in their teaching backgrounds. Hence, it means creating significant learning conditions along with

efficient educational experiences for the learners, teachers must consider ICT as a basic part of their educational setup in their daily lessons and they must consider it as an effective tool that can enhance learning of students.

Baran (2011) points out that the technical support is one of the most important motivational factors for teachers to teach online. Similarly, the technical problems are considered as the obstacles for students in online teaching so the teachers must help students get easy access to technology support (Coomey & Stephenson, 2001). Correspondingly, Chigona and Chigona (2010) conducted a qualitative study to assemble and examine empirical information of the elements that prevent educators from usage of ICT tools in Khanya high schools of South Africa. Interviews were conducted with fourteen teachers and the participants were chosen from four high schools. The study found that the insufficient training, lack of computer labs, absence of technical support and insufficient technology tools were the elements that discouraged teachers from ICT implementation in class practice.

Researches have reported that more time is required for the preparation of online teaching class (Bacow et al., 2012; Baran, 2011). Hence, for some of the teachers, online education is more time consuming as compared to traditional face-to-face education (The Council of Independent Colleges, 2016). Similarly, Phillips et al. (2016) conducting research on the barriers and various concerns that are experienced by teachers in relation to blended teaching environment pointed out a heavy workload on the part of teachers due to preparation of online lessons, as they require more time to get higher level of teaching expertise for classroom teaching.

Review of the literature revealed that negative perceptions of teachers on using ICT in class affect negatively the implementation of information technology in teaching. For example, Silviyanti and Yusuf (2015) found that the negative opinions of teachers can cause the obstructions and limits the use of ICT use in class. In another study Turk and Cherney (2016) declared that the resistance of teachers for online teaching as well as their low interest in acceptance of online education is supposed to be a hindrance in online education. Mueller et al. (2008) mentioned that apart from teachers' beliefs towards technology implementation, their own personal characteristics such as skills and information may obstruct them in using technology in class.

A large number of studies conducted in the context of EFL teachers' obstacles or challenges towards technology integration in their teaching have produced various results. Teachers' attitude towards ICT integration in education is correspondingly important in EFL contexts as it is directly linked with teachers' readiness towards implementation of technology advancement (Sahin-Kizil, 2011), outspreads and assists technology assimilation (Jalali & Dousti, 2014), as well as communicates with the intention of ICT use in miscellaneous surroundings (Liu et al., 2017). On the other hand, a number of educationalists have agreed on the point that the sufficient technological support as well as administrative provision (Nim et al., 2009), online services (Dashtestani, 2014), adequate technological and pedagogical assistance (Pujari et al., 2020), and the accessibility of using technology based devices (Turgut, 2017) were the environment allied issues with respect to application of ICT in EFL pedagogy. However, EFL teachers face challenges related to their proficiency to adjust well into their new roles as facilitators in an online teaching set up associated with a unified online platform with the students. Whereas, they also need to search and

discover various suitable methodologies to utilize online platform for effective learning. However, developing online learning environment is complex because of the diversified student population with different levels of motivation, interaction and learning competences (Bodey et al., 2016).

According to Farjon et al., (2019), technology assimilation in teaching is much more than just amalgamation of technology in instruction. More accurately, to provide successful integration of technology the teachers need to be well efficient in three knowledge domains, such as technical, pedagogical and content knowledge. This is further explained in the following section.

2.4 TPACK Knowledge

Mishra and Koehler (2007) gave the concept of Technological, Pedagogical and Content Knowledge (TPACK) which was constructed upon Shulman's (1986) Pedagogical Content Knowledge (PCK) theory that actually denotes particular specialized knowledge which includes two kinds of knowledge; common pedagogical philosophies and expertise, and adequate information of the subject to be educated. Shulman (1987) stated that both the content knowledge and pedagogical knowledge should not be considered as separate things. However, later Mishra and Koehler (2006) by incorporating the element of technology, elaborated that the pedagogical skills, content knowledge, and technological information have overlapping relations with each other. Thus, Mishra and Koehler (2006) discussed that there is difference between knowing technology (know-what) and knowing how to use it (know-how) for teaching purpose.

The TPACK framework proposed by Mishra and Koehler's (2006) is made up of seven components: technological knowledge, such as knowledge of computer technology

tools usage; pedagogical knowledge as for example knowledge of dealing course content instructions effectively; content knowledge such as knowledge of the course contents to be educated; technological content understanding, such as how to use technology to deliver the subject's content by using technology; technological pedagogical knowledge as for instance skills to use technology in pedagogical activities; and collectively TPACK. This framework denotes the teacher's capability to utilize technology for instructional purposes and present the course contents effectively by the collaboration of technology, pedagogy and content knowledge. The idea of TPACK includes technological familiarity and abilities, information of subject matter, profiles of learners, acknowledged practices, and teachers' pedagogical competency to utilize ICT in classroom in a much more efficient way (Koehler & Mishra, 2009). Whereas, pedagogical knowledge enables teachers to attain knowledge and abilities to implement technology into teaching procedure (such as preparation and curriculum design) and also enables them to make use of such sources in the instructional practices in classroom (Almerich et al., 2016).

Various established research studies (Jimoyiannis, 2010; Staus et al., 2014; Xie et al., 2017) have found that the TPACK related professional development programs have positive relation with teacher efficacy to plan and apply technology based lessons in classroom environments. Similarly, Joo et al. (2018) revealed in their study that the preservice Korean teachers having high level of TPACK knowledge demonstrated advanced stages of professed user friendliness and professed practicality related to ICT, also their self-efficacy is very high in creating enriched learning environments by the help of new learning technologies. Hence, proficient technology implementation is not possible until and unless a teacher makes association of content, pedagogy and technology inside the classroom (Voogt et al., 2013).

Although TPACK can be called a basic component to the effective ICT implementation, it offers the information of three major pillars of knowledge, such as, technical, pedagogical and content information that are very significant for ICT implementation (Hsu, 2016). On the other hand, teachers, having expertise in all three knowledge domains as well as its implementation into production of knowledge, be affected by their subjective elements and principles. Hence, it looks like a multifaceted procedure having numerous dimensions for all teachers (Luik et al., 2018).

2.5 Technological Support

Butler and Sellbom (2002) conducted research on problems in adoption of technology for educational purposes. The school should acknowledge the technical staff that the reliability is the most significant thing mainly when it is related to the classroom. In addition, they should be encouraged to buy extremely trustworthy technologies, develop schemes for examination and up-holding classroom technologies and generate novel tactics (comprising trainings for staff) to guarantee that exceptionally quick reactions are ready for interruptions. The faculty should test new setups of technology in class room even before being installed and all classrooms should be as identical as possible, while the variances amongst should be carefully acknowledged. Furthermore, faculty members must be given consultation sessions about the new style of teaching with technology and categories should be made of the members who applied for such support. They should estimate the effect of technology on learning and establish workshops, conferences, or even various handouts sharing info to the staff members and boost them up to measure and estimate the effect of technology on education. In addition, they must categorize approaches and behaviors that seem poor or insufficient support and try to decrease these by the help of technical staff so that quick feedback system should be provided which can tackle huge range of problems.

Ghavifekr et al. (2016) established substantial challenges linked with ICT implementation in teaching. According to their findings, ICT integration in education has to deal with poor connections of internet, or limited accessibility, inadequate technical support, shortage of time and a very low competency of ICT skills of teachers. Gebremedhin and Fenta (2015) acknowledged that the integration of technology has brought many challenges that has affected productive implementation of digital technologies in educational environment. According to them the challenges related to ICT in education are; the lack of technological tools or resources, insufficient technical help, unprivileged computer technology for teachers, and a very low appreciation for teachers which can have negative effect on perceptions of teachers' for ICT integration in educational institutes. Therefore, they established that the successful integration of computer technology in teaching can only be witnessed if the above mentioned challenges are tackled properly.

Teachers' knowledge and abilities are considered as their technological proficiencies that makes them able to suitably utilize technological tools in their teaching styles (Almerich et al., 2016). According to Son (2018), there are other various challenges with respect to technology use, such as, planning collaborative activities, increasing prescribed education, obtaining support like learners' support as well as handling the problems related to technology use. Moreover, there are problems related to financial status of students as well, such as their inability to purchase internet or even smartphones and the problems of unstable internet connections. Hence, if there are problems related to technology access, even the best pedagogy will remain useless (Burston, 2014; Cakrawati, 2017).

The review of literature highlighted that the technical support which is delivered to educators and other stakeholders does involve the procedure of management, system and training as the most important elements (Drossel et al., 2017; Eickelmann et al., 2017; Porter & Graham, 2016). These perform crucial part for raising affirmative attitudes for technology use in educational environment and there is a substantial association amongst the provided support (co-workers and organization) and the objective to utilize ICT (Ansyari, 2015; Chai et al., 2018; Dong et al., 2019; Joo et al., 2016; Koh et al., 2017; Meristo & Eisenschmidt, 2014). Bangkok (2004) pointed out that in each school teachers must be provided with ICT head who could provide administrative and pedagogical assistance to teachers. The ICT coordinator is a different post than that of the technology assistant. The ICT coordinator should play the role of a guide for teachers to help them in their problems and find solutions related to the teaching problems of the staff member, help teachers in obtaining ICT sources and conduct coaching requirements, valuation of ICT associated skills of teachers and advising them on their skill developments. National Center for Educational Statistics (2000) regarding the significance of ICT coordinator revealed that the three quarters of surveyed instructors alleged that the less technical supervision for employing technologies into classrooms delayed the technological usage. Moreover, the poll discovered that the schoolteachers having no coordinator for their help reported the lack of technical assistance as the main barrier in technology integration in their classes than the teachers who had technical coordinators at their help. In addition, 64% of the teachers surveyed acknowledged inadequate technology assistance or guidance as an obstacle towards technology usage into classrooms. Hence, the absence of technical help seems amongst the most crucial things why instructors do not make usage of technology into their lectures.

2.6 Professional Development and Trainings

Many researches have highlighted the need of institutional support for online education in higher schooling (Naylor & Nyanjom, 2020). Similarly, many researches have revealed that the online instruction is connected to pedagogical and technical support, strong management and prophecy of institute for online instruction (Bao, 2020; Rapanta et al., 2020). Hence, in order to implement online teaching to its potential, it is necessary to provide sufficient training to teachers so that they will be better prepared for it (Moorhouse, 2020).

Baran and Correira (2014) on the ground of previous studies for online education suggested a professional development framework with three support points, such as coaching support, community support and institutional support. Teaching support related to technology, pedagogical information, content making along with some workshops, showcases, training courses or individual guidance; community support nurturing teamwork concentrating on friendly learning groups, peer provision and practice groups; institutional support stressing institutional culture, institutional support and acknowledgement. Such universal approach towards professional development puts emphasis on the significance of the whole as well as its association with its parts and supports online teachers to accept their new tasks with new environment, expertise and proficiencies (Baran & Correira, 2014).

Hauck and Stickler (2006) asserted that the online teachers have to adjust themselves with various teacher roles, as they have to be administrator, problem handler, co-learner, practicing various ways of teaching as well as emerging new e-teaching capabilities. Hence, to perform such innovative job and form the identity of online teacher, the teachers must bring about advanced pedagogies, access their new roles

and achieve novel proficiencies and also professional development must be provided to prepare them for online teaching (Baran & Correia, 2014). The training programs must provide trainings beyond just technology usage information, while it should also provide information related to pedagogies used for online instruction, mixing technology with education, digital proficiencies as well as novel approaches to instruction, so that an optimistic attitude towards online teaching can be established and fresh views can be nurtured (Bates & Sangrà, 2011; Comas-Quinn, 2011; Thompson et al., 2007).

Fullan (1992) recommended that professional trainings for teachers should not be just like once workshops, but it should be like continuing experiences so that teachers can remain updated with developing technologies and make use of the opportunities to keep reflective eyes on their practices. There should be follow up meetings for teachers so that they can be well informed of current emerging technologies. In this way, the teacher training is very essential and these training programs should provide help to teachers to build up necessary skills for integration of technology in their teaching styles. Similarly, Muller (2008) along with his colleagues linked computer technology training to effective implementation of ICT into the classroom. Their research of 400 pre-tertiary teachers revealed that the professional trainings along with continuous maintenance of good training are the enormous causes of effective ICT integration. Consequently, Baran and Correia (2014) pointed out that the professional development is the basic thing that can help online teachers in applying new pedagogies, assessing their new roles, achieving the needed proficiencies and rebuilding innovative teacher roles inside online teaching environment.

2.7 Factors Affecting ICT in EFL Classes

Earlier researches on the issue of ICT implementation into classroom have discovered that the procedure of ICT integration is a complex phenomenon as it involves various affecting issues (Spiteri & Rundgren, 2018). Those issues are categorized among numerous groups. For example, Afshari et al. (2009) categorized these issues as manipulative factors and non-manipulative factors. Manipulative factors are comprised of the teacher's attitudes towards technology, their computer technology skills and the accessibility of technological tools. Non-manipulative factors include age of teachers, their experience of coaching, knowledge of ICT and the provision provided by their institutes. On the other hand, ChanLin et al. (2006) categorized these issues as personal factors which include belief of teachers, their interest and their experience related to technology use, social factors which include community support, trends of technology and social change, curricular factors which include abilities, knowledge, teaching load and easiness or difficulty of technology usage, and lastly environmental factors which include computer facilities of school and budget. Similarly, Spiteri and Rundgren (2018) found four key factors in ICT implementation into classroom practice: teachers' abilities, such as computer efficiency, different roles and evolving technologies; teacher's knowledge, such as their new pedagogy, training and syllabus; teacher's attitude, such as their confidence, modernization, awareness and motivation and school culture, such as support, peer mentoring and infrastructure. Hence, facilities, believes, training programs, attitudes, instructional support and the capabilities of teachers are the main elements that influence integration of ICT in language teaching (Albirini, 2004).

As mentioned in the earlier given researches, the successful implementation of computer technology in EFL background is possible by teachers' technological and

pedagogical knowledge area (Aniq & Drajeti, 2019) which is a multifaceted area of three knowledge components, such as, pedagogy, technology and content (Mouza et al., 2017). Also, a very dominant factor that triggers teacher's attitudes towards ICT usage in their teaching (Hsu et al., 2020). Consequently, administrators and teacher educators must encourage the TPACK involvement among teachers teaching English as a foreign language so that the adoption of technology can be improved (Mei et al., 2018). Even though TPACK remains as a basic supposition into the existing literature contrariwise, pedagogical, technological and content knowledge of teachers does not guarantee the productive integration of ICT in learning environment (Polly et al., 2010).

The role of school environment in ICT application have been investigated by various studies. Chen (2008) in one of his studies conducted on Thai EFL teachers demonstrated that the participants of his study agreed over the importance of school climate, which facilitates them with a proper technical infrastructure, teaching related assistance and technical help for effective implementation of ICT. Similarly, Naima (2017) considered school climate as a facilitating element for ICT integration. He argued that the school environment makes the provision of technological tools for EFL language teaching since the lack of technological devices access can stop the implementation of technology largely. In order to authenticate the idea of facilitating school environment for ICT integration in EFL pedagogy, Singh (2019) considered school environment of EFL teacher as the most important factor as it is critical in providing enough technological devices and infrastructure. Similarly, Alghasab et al., (2020) stated that the school environment is a factor that provides environmental support to enhance teachers' acceptance towards technology use and encourages them in technology-assimilated backgrounds. Hence, classroom enriched with technological

support was considered as the major component in EFL school syllabus leading to improved ICT usage.

However, contrary results were produced by Raygan and Moradkhani, (2020) in the investigation of factors influencing technology integration in EFL context. They argued that the two factors attitudes of teachers, and teachers' TPACK knowledge have direct influence on technology integration whereas the third factor which is environmental factor such as school climate have indirect relation to it. Therefore, they stressed that there should be some other broad considerations to investigate various other environmental factors that affect ICT integration. Hence, since this study focused on the three aspects of technology (attitudes of teachers, teachers' TPACK knowledge and environmental factors), there seems a need for further inquiry of factors that restrict technology usage in EFL context.

The affecting factors in terms of ICT integration for all teachers may not be the same. Higher educational sector teachers are a heterogeneous group due to having diverse background, experience with online teaching and learning and different educational disciplines and consequently various essential features distressing one type of individuals may not be the same or completely different for another type. In order to supply effective assistance, better perception of grounds to know why teachers are willing or not willing for online coaching is essential (Bruggeman et al., 2020). Similarly, Aydin (2012) conducting research on the factors influencing technology in EFL context argued that the teacher demotivation is done due to various additional environmental aspects, such as organizational limitations, hardworking conditions, and unsuitable physical circumstances.

Another study conducted on the factors that affect ICT integration was done by Lawrence and Tar (2018). They found numerous factors, such as teacher related, technology related and institute related as the hindrances in the acceptance of IT implementation in classroom. The barriers regarding teachers include insufficient digital skills, reluctance to modify their teaching style, inadequate time and complication of technology integration in classroom; technological level barriers include supposed easiness of usage, supposed effectiveness of technology and benefits of its use; institutional level barriers include, insufficient training, inadequate technological support, inappropriate infrastructure and less access of digital equipment. Consequently, a huge amount of research conducted in various educational contexts have found that regardless of the teachers technological competencies are necessary, it is not sufficient to enable them to get confidence and use their technological skills effectively to expedite and enrich learning of their students (Jimoyiannis, 2010; Koehler et al., 2014; Koh et al., 2014; Liang et al., 2013; Tsai & Chai, 2013).

Alghasab et al. (2020) conducted a study on primary school EFL instructors over the aspects that affect integration of computer technology in classes. They found various factors such as inappropriate infrastructure of classrooms, lack of technological tools, health concerns and personal expenditures, limited ICT expertise of teachers and insufficient professional development training programs related to technology use, inadequate parental support and insufficient time are the main hindrances in the way of ICT dependent teaching. Afshari et al., (2009) argued that there has been a little research done in the context of inadequate parental support, health concerns as well as personal expenses. Similarly Nikolopoulou and Gialamas (2016) conducting research on the barriers affecting ICT integration among public secondary school teachers

argued that the teachers' pedagogical knowledge as well as their confidence of ICT can enhance implementation of computer technology in classrooms. Moreover, the absence of administrative, technical and financial support are among the main hindrances of ICT integration.

The research findings presented above show various elements that distract ICT dependent teaching and all researches are done in different contexts with different level teachers, as primary, secondary or higher education. Although the above presented research review presents diversified results on the issues that hinder technology usage in classes, still there seems a need for more contextual studies under the same topic to verify or compare the findings for future researches. Therefore, there seems a research gap in the contextual background of the research participants. Therefore, after reviewing all the research conducted on the issue of technology integration in EFL teacher's context, there seems to be need of empirical research done on the same issue in the context of North Cyprus during COVID-19. Consequently, this research study aims to help policy makers to overcome the barriers in integrating technology to its potential during COVID-19 pandemic and after.

2.8 Summary of the Chapter

This chapter elucidated several issues that disturb ICT incorporation in education generally and in EFL context particular. Various research study findings were presented to highlight the research gap and importance of this study. Although ICT is very much in the educational context since the breakout of COVID-19 pandemic, there seems to be a need to conduct research on the barriers that affect online education. Therefore, following the research questions, this research investigates the provision of technological support, pedagogical problems, technological problems as well as

various other factors during COVID-19 at FLEPS. The next chapter will discuss the research methodology employed in this st

Chapter 3

METHODOLOGY

3.1 Research Design

Methodology holds a very important place in research. It is decided in accordance to the kind of the issue explored in social sciences or humanities. This study undertook qualitative research method for the inquiry of factors affecting Information and Communication Technology (ICT) application in English language coaching classrooms. Qualitative research keeps focus at the subjective and numerous viewpoints of the participants on a specific phenomenon. Hence, this study utilized qualitative approach to explore a problem, give weightage to the participant's voices, draw the complication of the situation and transfer manifold perceptions of the participants (Creswell & Clark, 2011). Consequently, qualitative study is more suitable for this study as this study investigates teachers' problems that they face during ICT integration in their lessons.

The research design of this study is phenomenology, which is known as educational qualitative research design (Creswell, 2013; Maxwell, 2013). Phenomenology approach focuses on life experiences of a group of individuals who have firsthand knowledge of a situation event or experience (Padilla-Daiz, 2015). Since FLEPS teachers have experienced online teaching during the COVID-19 and have first-hand knowledge about the online teaching during the pandemic. Therefore, the researcher

decided to employ phenomenology approach of qualitative research for this research study.

The researcher utilized semi-structured interviews in order to get deep down information, viewpoints of the participants as well interpretations of the phenomenon around them to collect intense and abundant knowledge of the problem (Buarki, 2010). Mack et al., (2005) describe interviews as the most operational ways of giving human voice to research problems. Semi structured interview was selected for data collection tool so that the main questions and other relevant questions can be asked for the study. Borg and Gall (1989) mention this kind of interview as the most suitable way of inquiry in educational studies. This chapter provides the methodology employed in this study, data collection process and the methods for the analysis of the data.

3.2 Research Context

This study was conducted at a Foreign Languages and English Preparatory School (FLEPS) of a university in North Cyprus. The rationale behind choosing this institute and university is that the researcher belongs to the same university, thus, it will save the time and effort while approaching the study participants as well as it will ease the researcher to begin the research process by gaining the approval of the research from the nearby situated offices. Moreover, the time when this research study started was the time of COVID-19 pandemic so the selection of the context was made according to ease the research process.

3.3 Participants

The participants of this study are English language teachers currently teaching at English Preparatory School at a North Cyprus University who teach English language to ungraduated and graduate students. In order to conduct interviews for this study

total eight teachers were selected. The reason behind selecting these teachers was that these teachers actually belong to language teaching profession and some of them had been the students of the same institute.

These teachers had work experience of teaching English from 16 to 32 years. They had masters and PhD degrees. Some of them were having degree from the same university and some from abroad. For the privacy and secrecy purposes, the names were given to them by numbering, for example P1, P2, P3.

3.4 Sampling Method

A sample denotes a set or a subset of the people, which are proposed to be focused on the study (Hartas, 2010). The data collected for this study was based on purposive sampling. Purposive sampling is a type of non-probability sampling in which the researcher while choosing the participants mainly rely on his or her judgement (Bloor & Wood, 2006). Hence, the study sample was selected by keeping the problem of the study in the mind so that a comprehensive information regarding the research problem can be obtained. A list of ELT teachers was obtained from the administration who were teaching online during the pandemic. The author has purposively contacted to the teachers who were delivering online lessons. As a result, total 8 interviews were collected based on saturation point, since no new information was generating.

The data collection procedure begun by obtaining the list of teachers teaching at FLEPS, who were teaching English to graduate and undergraduate level students. After that, they were contacted through Microsoft Teams chat message. Consequently, the saturation point reached after conducting eight interviews, which were later transcribed and used for data analysis of this research.

3.5 Data Collection Instrument

Since the study employed qualitative research method, the instrument selected for data collection was semi-structured interview. The rationale behind choosing semi-structured interview was this that the semi-structured interviews provide an in-depth information of the problem. As according to Bernard (1988) semi-structured interview is a type of interview in which the interviewer has the control of the procedure to collect in-depth information from the interviewee and is free to ask for more in-depth knowledge if any new leading point arises from the interviewee mouth.

All interviews were conducted online due to COVID-19. Interviews were directed to provoke the needed information for the study comprising background information of the participants. The collection of ideas for interview questions were made by having look at the past researches. As the context of this study was different from others, the questions of interview were made appropriate with accordance to the context of the research. Hence, the interview questions were specially made for this study. So, first problematic areas were identified based on the literature review and then context specific questions were developed accordingly.

The questions for interview created the foundation for research questions of this study. The interview involved three categories of questions with overall twenty five questions (listed in Appendix A) based on the issues related to the hindrances experienced by teachers in an online education and the trainings provided them for better online educational setup. The interview started with teachers' demographic data, like, their overall teaching experience, their information of technology and technological skills and the number of years they have been familiar to technology use. After that, they

were asked about the trainings provided to them by their institute prior to COVID-19, technological, pedagogical and other general problems they faced in classes during COVID-19. Hence, the interview questions were about teachers' technical knowledge, usage of technological devices and the problems faced by such integration, their pedagogical knowledge about ICT tool implementation in their teaching style, miscellaneous hindrances that they experienced in technology dependent class and the support which they were provided by their institute for effective use of technology in their teaching during COVID-19 pandemic. The reasons for asking all these questions were to clear to what extent they are efficient in using ICT tools in teaching, how much comfort do they feel in ICT integration and what kind of things bring obstacles in their ways. Also, they were inquired about any trainings or support which were provided to them by the university authority for appropriate use of technology into teaching a foreign language efficiently.

The pilot study of interview questions was done before hand with the help of a teacher who teaches English in Preparatory school of the North Cyprus University. She has a huge experience of teaching English to foreign students as well as her experience with language and technological tools is of great importance. On the other hand, she is the one who frequently uses ICT in her classrooms for better understanding of her students.

The purpose behind piloting the questions in the interview was to double check the clarity level of questions so that any misunderstanding can be avoided while conducting the interviews. Hence, the pilot study helped in eliminating the questions that were repeated and re-constructing the questions, which were unclear.

3.6 Data Collection Procedure and Ethical Considerations

Before conducting interviews, both ethics committee approval (Appendix C) and FLEPS administration approval was gathered. Then, all potential participants were contacted via Microsoft Teams and they were informed about the research aim. During this process, they were informed both verbally and in written by giving them informed consent form (Appendix B). All participants were informed that the information collected through this study will be confidential and no names will be publicized. Hence, the consent of the participants was obtained before conducting interviews and the ethics procedures were followed (Gillham, 2005).

Individual meetings were managed to conduct interviews with the participants of this study in April-May 2021. The internet connection was very good so there was no issue related to internet connection and it had a very good sound quality. There was no disturbance noted during the interviews. The interviews were recorded for future analysis. Furthermore, for the reliability and validity purpose further short notes were generated. The medium of language used during the interviews was English. The overall time period of an interview was in between 20 to 60 minutes.

Firstly, the general information of the participant was collected. After that, specific questions were asked about the main issue. While taking interviews follow up questions were asked based on the answers about the main given topic by teachers regarding the factors that influence usage of ICT implementation in their EFL classes during COVID-19. Such questions were asked for more clarity and to obtain detailed information of the issue. The questions were asked very carefully as there was no navigation in the questions so the answers collected from the participants were unbiased (Gillham, 2005).

After conducting interviews, the interview recordings and the information collected was transcribed by using Express Scribe Transcription Software word by word as it was generated from the participants' interviews. Later on, the data collected was cautiously studied and a few things were omitted such as repeated words or the words like, "as you know" or "a kind of".

3.7 Analysis of Data

In order to explain the data collected, the content of data was analyzed inductively. Firstly, by repeated listening of the interviews a general ideas or topics were collected which were revealed by the participants. The interview transcriptions were sensibly read and different parts of the interviews were highlighted by various colors. After that, coding procedure was applied as suggested by Saldana (2013). The study applied holistic coding for collecting codes and patterns, which according to Saldana (2013) is the most appropriate one coding for the beginners in qualitative method of inquiry learning how to do coding. Holistic coding relates a particular code to a big part of data to grasp the overall subjects and the probable groupings, which may develop (Saldana, 2013). Thematic analysis was used to analyses the data obtained through the data set. As according to Braun and Clarke (2006) thematic analysis is a process that involves penetrating through the data set to find out the recurrent patterns of meaning. The themes were generated by condensing the codes that had similar patterns. Thematic analysis was used because of its flexibility and its easiness for a researcher who is new to research and is a beginner in learning qualitative techniques of analysis Braun and Clarke (2006).

Then, the codes were condensed and collected together into themes, which had similarities and valid patterns. Hence, total four themes were developed from analysis of data:

1. Insufficient technology support by institute
2. Insufficient training for online teaching pedagogy
3. Pedagogical barriers in online teaching
4. Technological barriers

3.8 Research Process and the Role of the Researcher

Fink (2000) has split the qualitative research procedure into seven parts, which are stimulated by KVALE (1996). According to her, the qualitative research process follows, thematising, designing, interviewing, transcribing, analyzing, verifying and reporting. Hence, in all these steps the researcher plays a vital role.

The research process begun with designing step, which according to Fink (2000) prepares the researcher to schedule his steps to conduct the research by making methodology map. The researcher decides on the time schedule of various steps, the instrument and the number of participants in his study. This researcher selected interview as a data collection tool for this study and prepared open ended semi structured interview protocols for data collection.

The next step followed by this research study is interviewing which according to Fink (2000) is prepared based on the specific themes related to the research questions of the study that will be covered in the interviews. The researcher prepared the interview questions by having a look at the literature available. However, the researcher did not only ask those questions already prepared for interview but also added a few more questions while their conversation as there was need of such questions.

The next step was transcribing the interviews. The interviews were transcribed by using Express Scribe Software and word by word the researcher noted everything. The

researcher was very much careful to note down each sound coming from the interviewee and wrote everything on papers. The transcripts were read twice by the researcher so that the familiarity with the data can be generated. After that the coding procedure begun which gave the way for analyzing step. Fink (2000) mentioned that there are computer based program for coding procedure but even if it is done by the computer software it is the researcher himself who explains or makes the categories of the codes. McCracken (1998) pointed out that in both, the coding as well as analysis process the researcher employs his personal awareness and skills to make sense of the data received. Thus, this researcher created codes which were further developed into themes.

The next step was thematising by compiling the patterns of codes to answer the research questions of this study. According to Braun and Clarke (2006) thematic analysis is a process that involves penetrating through the data set to find out the recurrent patterns of meaning. The researcher did thematic analysis and developed four themes.

Verification and reporting of the findings is the last step covered by the researcher. Fink (2000) mentioned that the verification procedure involves generalizability, reliability and validity of the research findings. Generalizability concerns that the results of the study can be generalized, reliability involves the uniformity of the results and the validity confirms if the research obtained the intended goal. Kvale (1996) argued that the verification is inevitable in the research process before the researcher starts reporting his findings. On the other hand, generalizability, reliability and validity check is to be performed by the researchers at almost all stages of the research procedure but there seems no obvious proof of it taking place. The researcher showed

the findings to one of the experts in thematic analysis and reviewed the literature and then found the results of this study generalizable, reliable and valid. Reporting is the last stage done in this research to present the findings of the study. Alvesson and Skoldberg (2000) stated that the researcher plays a very vital role in presenting his research findings. However, the findings would be developed by the respondent's knowledge but it will get voice of the researcher when it comes to report the findings. Therefore, the final report is coming directly from the understanding and the context which was made in the mind of researcher by the answers of the study participants.

3.9 Summary of the Chapter

Overall, all aspects related to methodology are briefly discussed in this section. In this respect, reasons for selecting qualitative study for this research and choosing interview as a tool for data collection were presented. All the important aspects starting from research context, sample size, sampling method, data collection instrument, data collection procedure, analysis of data were presented in detail. Moreover, ethical considerations were also covered. The next chapter presents the data gathered through the interviews.

Chapter 4

RESEARCH FINDINGS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents qualitative analysis of semi-structured interviews conducted from eight EFL teachers of a FLEPS at a university in North Cyprus. The interviews were conducted and analyzed by using thematic analysis. The requirements of thematic procedure were followed rigorously, such as making codes, categories and emerging themes out of them as suggested by Saldana (2013).

4.2 Issues Related to Teacher Training

The below given table presents the knowledge and experiences of the participants before the pandemic time. The participants were aware of some technological tools such as the usage of Padlet, projectors, PowerPoint presentations, overhead projectors, converse computers, laptop, cassette players, CD-ROMs, CD players, digital projectors, Encarta, as well as using online teaching materials. On the other hand, the online teaching environment demands more than this knowledge, which the teachers had before the pandemic time.

Table 4.1: Teachers' experience and knowledge of ICT in EFL teaching before the pandemic.

| S. No. | Name | Years of experience in teaching EFL | Use of technology in class before pandemic | Technological tools used before Covid-19 |
|--------|------|-------------------------------------|--|--|
| 01 | P1 | 25 years | Yes | Padlet, video recording by Flipgrid |
| 02 | P2 | 25 years | Yes | Pcs, Projectors, PowerPoint presentations |
| 03 | P3 | 21 years | Yes | Overhead Projectors, converse |
| 04 | P4 | 21 years | Yes | Computers and projectors |
| 05 | P5 | 24 years | Yes | Laptop, PowerPoint slides and projector |
| 06 | P6 | 25 years | Yes | Overhead Projectors, Cassette Players, CD players, digital projectors, Laptops |
| 07 | P7 | 32 years | Yes | Computer, CD roms, Encarta |
| 08 | P8 | 16 years | Yes | Overhead projector, Digital Projector, Laptop, Online Teaching Materials |

Hence, for the effective application of technology into classes it is necessary to provide trainings to teachers so that they can implement technology by amalgamating it with their pedagogical content knowledge. Koehler and Mishra (2008) proposed three main kinds of knowledge, Technological Pedagogical Content Knowledge (TPACK) that must be combined into teachers' professional trainings so that they can successfully incorporate technologies into their digitalized classes. The participants of this study narrated that they were not provided with sufficient trainings to utilize Information and Communication Technology (ICT) tools in classroom practice. They were initially provided with one training only. For example, in the following script, two of the participants are indicating how many times they were provided with training during COVID-19 to integrate technology into education:

No, there was only one training. (Interview with P3)

I wasn't provided with any training; I can only think of one training. And, and what that was, it was a Moodle, we had a training on Moodle. (Interview with P6)

Participants do not consider that the one training provided to them for learning a new online setup of education is enough for them to start with, as whole system was new to them. They argued the insufficient training opportunities with the following words:

I would say no because it wasn't sufficient (training) let's say. Because we had just video sharing. (Interview with P4)

Honestly speaking, we didn't get enough training about that. Just I think we had one meeting in the beginning. Afterwards, actually, we had to figure everything out by ourselves, but we didn't get enough training. (Interview with P5)

Consequently, the main barrier in ICT integration into an educational set up seems to be insufficient trainings provided to the teachers. Therefore, for effective use of technology teachers believed in trainings which can make them able to perform well in technology integrated environment. This finding relates to the findings of Dong (2018) who asserted the necessity of professional development training courses for teachers that are particularly developed to enable them for effective use of technology by giving them sufficient knowledge and understanding of technology use.

4.2.1 Continuous Trainings

Teachers believed that there should be continuous trainings provided to them to make them learn various updated applications that can help them in teaching English in online teaching environment. Since technology is updating and bringing new things everyday so the school should provide updated trainings to enable teachers to learn new things and implement them in their classes.

I would say that we all could have some training, because I mean, you don't know what you're missing until you see it,... You might think that you know, quite a

lot about things until people introduce new things to you. So..., training and even refreshing your knowledge and things like that are needed. (Interview with P6)

Consequently, teachers take training as a never-ending thing. They believe that there should be regular trainings for teachers to get competency in ICT skills and avoid the barriers that discourage them in utilizing ICT in educational environment. This finding relates to Muller's (2008) research, conducted with 400 teachers, who found that the continuous trainings for teachers are the essential components besides effective assimilation of computer technology in teaching.

The participants of this study stated that the need for training comes from day to day experience of ICT integrated classroom. They narrated the idea that no one knows the problems of ICT based education until they start practicing it. Hence, once they practice then only they will have to face various things every day.

But you see, the need for learning comes from on a day to day basis, you come up with a problem with your students, for example, and then there is a need to learn something new. (Interview with P1)

Or to keep their (students) interest alive you might feel that you, you need to find something else interesting, another app, for example. (Interview with P1)

They held this belief that such trainings will help teachers to teach innovatively by making it interesting, communicating and engaging for their learners as well as enhance their teaching methodologies positively. This is related to the findings of Fullan (1992) who stated that there should be repeated trainings to keep the teachers updated with modern technology tools. Moreover, such training programs should help teachers grow their skills for successful implementation of ICT in their classes.

4.2.2 Technological and Pedagogical Knowledge

The contributors of this study consider insufficient Technological and Pedagogical knowledge (TPK) of a teacher as one of the main difficulties for effective technology implementation into classroom. According to them, there should be trainings for both technological awareness as well as pedagogical awareness so that a teacher can best serve his job. Insufficient knowledge of TPK use in online classes causes hindrance in teaching.

I think we could have training in like many different areas with technology. Like, I think everyone has experienced technical problems for a start. It could be simple issues, it could be very simple things like when you share your screen, like sometimes you might have a problem, or how to share it in a certain way, or have two screens at the same time so that you can see your students and see the material as well. Simple things like that. And then there could be other things like it could be to do with methods and tips on how to make it more interesting. (Interview with P5)

Comas-Quinn (2011) also generated similar findings while investigating the effect of blended learning introduced on a distant language-teaching course. He stressed over the significance of the pedagogy awareness of online teaching and the new tasks and duties that teachers may not be used to them. Consequently, it is vital to raise awareness among online teachers and enhance their information as well as experience by providing them professional development trainings. On the other hand, some teachers did not experience pedagogical problems. However, they presented the need of technological trainings for effective use of ICT in their lessons.

Actually both of them, pedagogical, it's okay but technological it will be better I think. (Interview with P2)

There is a risk of not being able to deliver the lesson in a planned way. In a way that you planned it because of some kind of lack of technological knowledge. (Interview with P1)

Technically, I had a few problems, because I wasn't familiar with Microsoft Teams. It took me a week, actually. And a lot of sleepless nights to feel comfortable with it. (Interview with P1)

Hence, the participants of this study believed that their teaching might be affected by insufficient technological knowledge. Therefore, according to them insufficient knowledge of technological tools can negatively affect their teaching. Similarly, Li and Walsh (2010) also asserted that one of the significant problems in using technology in classes are inadequate trainings and inappropriate institutional support.

4.2.3 Technology Trainings for Students

The study discovered that the students need ICT skills so the teachers believed that the institute must arrange trainings for students regarding technology awareness so that they can manage well their activities in online educational environment. One of the participants of this study stated the need for student's technology training. The respondent believed that the students remain quite since they do not know how to follow a teacher on online network based class.

...because we don't know they (students) are quite. I think it is our job to prepare a kind of needs analysis sheet and give chance to students to say I am 100% good at this, or I'm 50% good at this so they can decide and then see the result or I don't know those students, but the result shows me that I have to give them a kind of training. Yeah, we have to do that....(Interview with P7)

Another participant indicated that the students make mistakes while using ICT tools since they do not have sufficient knowledge of technology. In other words, being unaware of the online educational setup, students make mistakes in uploading their tasks in wrong places, and this increases the job of a teacher to monitor learners' activities and put things on right places. Hence, students' low awareness of technological tools is another kind of distraction that a teacher faces in a technology-integrated classroom.

The only problems that students face is they upload things into the wrong place and this is extra load for teachers because you need to be checking and putting into the right place if they haven't, you need to inform them then you need to edit the assignments and then allow them to upload again. So, this is the challenge that we faced because it's ongoing and it's like never ending. (Interview with P4)

The respondents of this study tends to believe that the institute must provide trainings for students as well so that they can understand things well in ICT based educational system. Similarly, Solangi et al. (2018) supported this idea that the ideal method to use computer technology in education would be to enhance students as well teacher's knowledge of computer technology.

4.2.4 Exam Administration

The participants stated that there were no trainings given to the teachers for preparation of exams. This also troubled them to create exams in ICT based classroom. Thus, the respondents urged a need to receive training for preparation of exam materials for online exams.

May be in preparing exams. In teaching...., it's okay. But in preparing the exams,... we are using different question types, different techniques. We need the training for setting on exams. (Interview with P3)

Hence, teachers indicated a need for training, related to various aspects of online teaching, either it be teaching related, lesson planning related, exams, assessment and feedback related. The contributors of this study came across various such barriers, which could be reduced by paying more attention to diversified trainings for teachers.

4.3 Pedagogical Issues in Online Teaching

The contributors of this study highlighted various pedagogical problems that they experienced in online class during corona virus epidemic. The switch from traditional classroom to ICT dependent class was itself a challenging factor for majority of

teachers. The respondent's little familiarity with new pedagogy needed for online education was again a problem to be dealt efficiently.

I would say because it was new to us we had to learn other new things that were offered to us. For example, Vocaroo is something that I used after now or voice recording as a type of feedback. What we were used to is, using pen and paper and then when we try to put pen and paper on to the online system it turn out to be more challenging. (Interview with P4)

The lack of teacher's pedagogical knowledge resulted in little participation of students in class. Hence, the teachers faced the problems of low student engagement in classes due to the shift of new teaching pedagogy in an online educational system. The teachers were unable to engage students well in ICT dependent class due to lack of new pedagogy knowledge. One of the participants indicated this problem with the following words:

But then the second problem was to involve students more and help them participate more in classes. (Interview with P8)

However, one of the participants of this study rejected the idea that the lack of pedagogical knowledge can negatively affect effective online teaching. The participant stated that the pedagogical knowledge of a teacher is not something that is essential part of ICT based teaching but it is equally important for traditional classes as well. Therefore, it is possible if a teacher does not have pedagogical knowledge he cannot perform well in both classes; face-to-face as well as online or ICT dependent class.

But that's not directly linked to online teaching. If you have some pedagogical knowledge missing, you might experience some problems in a face-to-face class as well. (Interview with P1)

The respondents of this study showed that they tried to tackle the pedagogical issues by careful consideration of their teaching methodology. There was no additional training provided to them to improve on their pedagogical strategies. Thus, they

reflected on their own teaching style and tried to perform well by bringing solutions to their problems.

One of the first things I experienced was that I wasn't having group work and then this semester, I learned how to open the channels and now I put students into groups and discuss things and then share on their screen. (Interview with P5)

Well, I can say like, as I said, while enhancing student participation involving students more, motivating students to work in groups and sending them to channels and make sure that they actually use it, keeping students attentive. Trying to find like online tools to enhance my teaching, most of them are required to really search on it and you know, ehh then you end up with working in front of the laptop for a long. (Interview with P4)

The contributors of this study tried to explore ways how they can better integrate technology in their classroom. By reflecting on their experiences, they were able to bring about some changes in their teaching process to gain better outcomes of online teaching. Moreover, they revealed that to get familiarity with new teaching techniques is not a simple thing rather it takes a long time to improve upon the existing teaching practices.

4.4 Insufficient Trainings for Online Teaching Pedagogy

The participants established that there were no separate trainings related to pedagogy, given to them. This was a kind of obstacle in their way of online teaching. Although teachers seem to be efficient in their teaching pedagogy, they tend to think that the modern educational setup must be explained to teachers so that they may provide their best performance in class. Instead of having knowledge of ICT tools when it comes to utilization of such tools in educational environment, a new pedagogy is needed with which a teacher must be familiar to adopt the change for effective teaching (Herrington et al., 2010).

Well, I think the pedagogically, I might need training because I know that I am familiar with the technology now. But I do need to learn more stuff to do with pedagogical stuff. (Interview with P8)

Hence, for majority of teachers one of the main hindrances in their online teaching was insufficient pedagogical knowledge. They pointed out a need to know how to utilize online tools for teaching and how to effectively plan ICT based lesson. This was a kind of distracting factor in their online lessons. The participants were confused about their own performance in online teaching since everything that they knew in theory they had to experiment it now. But they never knew how far they were able to make successful attempts as they were not sure about students learning capacity.

Pedagogical, like I said in theory we know student centered, communicative ah, we know everything but actually putting that theory into practice is what a challenge is. So you can say that I am planning on doing this and this way using this theory but amm, putting that online is a challenge and I question whether I was able to achieve what I wanted to do or how many of the students were actually active and interacted and produced. (Interview with P4)

When the respondents were asked about trainings related to new pedagogy, they showed positive attitude towards pedagogy-based trainings to fit well into a new system of education. One of the contributors of this study stated that all teachers need new pedagogy training so that they can put what they already know in theory into practice.

I would say yes everyone does. Because it is putting the theory into practice. (Interview with P4)

Overall, the responses of the participants demonstrated various problems that they faced due to lack of pedagogical knowledge. Likewise, the respondents showed the urge to get trainings for the best delivery of new technology driven classes. Although

they were familiar with technology use before the pandemic, they needed more trainings so that they can enhance their students' learning more.

4.5 Technological Problems

This study found various technological barriers that affected ICT based education. The barriers are discussed below in detail.

4.5.1 Poor Internet Connection

The respondents stated various technology related problems that distracted them in online lessons and the most common problem experienced by almost all participants was poor internet connection. Lassoued et al., (2020) studied the obstacles in the way of distant education in the context of Arab world (Algerian, Egyptian, Palestinian, and Iraqi) with a huge sample of university professors and students. Their study revealed that the online educational system during COVID-19 pandemic suffered largely due to unstable internet connections in majority of the remote areas resulting various barriers in broadcasting and impediment of lessons. Similarly, Bean et al. (2019) asserted that the slow and unstable internet connections can have negative impact on the quality of online lessons.

When the participants were enquired about technological problems in their online teaching, they replied as under.

The most important one is as I said, is internet. The speed of the internet..(Interview with P3)

The internet connection was sometimes very slow. (Interview with P2)

So the problems are mostly to do with the speed of the internet connection. (Interview with P8)

Technical problems like internet connection problems,..... (Interview with P5)

Srichanyachon (2014) suggested that the unstable internet connection delay the delivery of education. Therefore, the slow speed of internet can cause havoc to online education.

4.5.2 Electricity Cut Off

Another factor affecting online education during the pandemic was electricity cut off. Unavailability of electricity distracted teachers during their lessons and caused many problems. This problem seems to be very demotivating factor for instructors, especially in an online teaching environment. This barrier disturbed timetable of classes, as they had to schedule their meetings some other time.

Other factors, you know, we are living in Cyprus and electricity cuts is more often comparing to other parts of the world. I mean, if there is no electricity you don't have internet and you have to schedule your lesson for some other time. (Interview with P5)

Ivala (2013) came to similar conclusions after conducting research in remote communities in Sub-Sahara Africa and discovering that the online education process suffers greatly due to a dearth of consistent electricity and internet connectivity.

4.5.3 Technical Problems

The study found various technical problems that disturbed online education during the pandemic time. The problems are discussed under different headings in the below given paragraphs.

4.5.3.4 Material Sharing

The participants of this study mentioned various technical problems that they experienced in online teaching. They highlighted the problems related to, such as, materials sharing and uploading audio and video files. These problems distracted

teachers and students when they tried to upload something on the system. Consequently, the participants indicated that this problem was time consuming for both students and for them. Typical responses regarding this problem include:

Sometimes there is a material yes material sharing I think this is problem. (Interview with P7)

Students had problems connecting and uploading materials. (Interview with P2)

One day I tried to upload from the evening but I couldn't upload my updates. So in the morning when I opened my computer, I missed one hour.... So in the morning, I lost an hour. (Interview with P7)

Another participant stated that the students faced problems related to material sharing or uploading their assignments on the system. Since the online system is sometimes hanged due to heavy load thus does not allow students to submit their work on time.

And the certain steps of their tasks they need to upload, their speaking task on Moodle, and there are deadlines for it. But when Moodle gets overloaded, they're busy. They cannot upload it. It doesn't let them in, like one of my students, for example, last semester, even though she uploaded it, the system didn't accept her upload, and she got a zero because of that. So there are some problems in that sense uploading student's work sometimes they experienced it. (Interview with P1)

In line with the above raised problems, another participant indicated the relationship with the file size and uploading problem. She continued to argue that when students had to upload files in big sizes, they experienced troubles.

But for the speaking the students have to use this format. They need to record their voice. So there, we had some problems with the big files, the students sometimes have big file, so we had a difficult time to solve this problem. (Interview with P7)

Hence, both teachers and students found it difficult to tackle all these issues.

4.5.3.2 Displaying Problems

Another distracting factor reflected through this study was screen freezing. This problem appeared to be very demotivating factor for teachers while delivering lectures online. One of the participants stated that:

The technical problems, . . . , you're sharing your screen, and sometimes it freezes. Even if you have a good internet connection. I do not know if this is related to teams. But when you change page, when you turn the page over, that's when the screen freezes. (Interview with P6)

4.5.3.3 Problems Related to Instant File Sharing

Instant file sharing is important in language classes. Especially in EFL teaching the teachers play some video clips or audio clips of native speakers, which are very helpful for students. Similarly, Liu et al. (2014) described that in EFL learning due to lack of exposure to native English environment, the learners depend on technology for authentic learning, as for example for listening and speaking. Therefore, the situation presents the idea that it is essential to use technology in EFL classroom. Consequently, another technical problem that was experienced by the participants was related to instant files sharing. The participants of this study highlighted the problem of sound sharing while playing audio or videos for listening activities. Concerning this issue, the participants shared their viewpoint as following:

When I played videos, I can't incorporate the sound so that students can hear it. So I had a lot of problems with this. And I couldn't resolve the problem. (Interview with P6)

And there were problems when I was doing that, at the beginning, doing listening. I couldn't get the sound heard. (Interview with P2)

Jgtap (2016) pointed out that the teachers in the technology induced classroom must be equipped with sufficient information and IT knowledge as they perform the role of a facilitator and information supplier.

4.6 Summary of the Chapter

This chapter delivered the information collected through interviews. The coding procedure was applied to the interview transcripts. Then the highlighted synopsis from interviews were presented and thematic analysis was done. Hence, total five themes were developed which were analysed and reported in this chapter. All the themes were generated by keeping research questions in the focus and thus the themes provided answers to the study's research questions. The next chapter provides discussion over research questions future suggestions and constrains of the study.

Chapter 5

CONCLUSION

5.1 Introduction

This chapter develops a discussion on the findings of the study. With this qualitative study it was aimed at finding various factors that bring barriers in the way of ICT based education in EFL classrooms during COVID-19. Four research questions guided this research. Interview used as data collection tool, which comprised of 25 questions. The following interpretations are made from the study participant's interviews. They are discussed below under each research question of this study.

5.2 Findings and Interpretations of Research Questions

5.2.1 Research Question 1

What technological support is provided to FLEPS teachers for using ICT in language teaching classes during COVID-19?

Majority of the teachers found insufficient training of ICT as a chief cause to the failure of online classes. They believed that the lack of technological knowledge is the main barrier in technology driven class. Since the teachers are not well trained in technology domain, there must be proper trainings for them so that they can make effective use of it. Teachers needed to start from zero level as they had to go online so they needed proper trainings starting from simple things like introducing them with Microsoft Teams, how to call meeting, sharing e-books, recording meetings, uploading assignments and providing feedback. The teachers stated that they need trainings for various things, such as trainings for online teaching pedagogy, trainings for using

various technology applications in class, trainings for making online exam papers or doing assessments.

The contributors of this study pointed out that the requirements of ICT based classes are completely different from that of the face-to-face class. They called online teaching a new setup of education so they need new strategies to deal with this system. Although they were familiar with technology use in theory, they had no experience of teaching their courses fully online. Since, they were very well aware of face-to-face teaching methodology so they showed a need to get expertise in online teaching by getting proper pedagogical and technological trainings so that they can effectively use ICT in their classes. However, the participants of this study proposed a need for technological trainings for teachers as well as for students.

The study participants showed a need for continuous trainings for teachers. According to them, technology is changing every other day so in order to make the most of the technology, they need to be updated with its usage. Therefore, there should be updated trainings for all the teachers so that they can learn various new applications that are coming in the market for teachers use and can benefit and broaden their students' learning. Hence, overall all the participants were well aware of the importance of faculty provided trainings for effective use of ICT in educational environment. Consequently, the insufficient trainings were considered main barrier in technology integration in educational setup. The collective findings of this study generate a thought that provision of technological and pedagogical trainings can enhance ICT integration in EFL classes.

5.2.2 Research Question 2

What kind of pedagogical issues do teachers face while integrating technology in English teaching during the corona virus pandemic?

The participants of this study faced various problems due to lack of pedagogical knowledge for teaching online. They do not know how to innovatively integrate technology in their classes. Although the teachers were familiar to computer technology and they were using technology in their classes for a long time, they experienced various issues in online education. Online teaching was a completely new phenomenon to them and they were going to conduct online lessons for the first time in their carrier. Consequently, they believed that the teacher trainings should not only be restricted to technology use only but there should be pedagogical knowledge, such as technological pedagogical knowledge (TPK) as suggested by Koehler and Mishra (2009), trainings as well, so that they can integrate new pedagogy in ICT based environments. The pedagogical problems that they experienced were related to their teaching methodology, such as integrating technology in teaching in such a way to make their classes interactive, engaging, informative, understandable and easy for all level students.

Moreover, getting familiarity with new teaching methods was another main barrier in their online teaching. Online education was a kind of sudden shift from face-to-face education so it was new to almost everyone, it be either a teacher or a student. This cased the teachers to suffer a lot as they continuously tried various ways to enhance learning of their students and remained unsatisfied at the end, since they were not fully trained for this pedagogical change in the existing educational environment.

Although the study participants were confused about the methodology change in their teaching, they tried to creatively think over it and manage some engaging activities for their students. However, they could not reach this goal to some extent. Therefore, the main problems for them was to engage the students in learning and make them able to participate well during lessons. Teachers were not able to make their classes as interactive as they used to do in face-to-face education. In order to solve this problem, they tried to cope well with the new pedagogy and bring forth new teaching techniques but even then, they did not get the satisfactory response, as the students were keeping them isolated by putting their cameras off and not participating at all.

In online teaching teachers had to pay extra attention and extra time for explanation of their lessons since students were taking more time to learn something in an online teaching environment. Therefore, the teachers could not judge their teaching and learning outcome among the students. They were not able to grade well their students' performance as it was online system and students were not participating in the classes. Therefore, the teachers had to pay extra time on explanation of things so that the students can get their lessons.

As the results of this study stated that the virtual contact between a teacher and student can hinder the level of learning in educational environment. The teachers were not able to look at their students' faces and understand from their expressions whether or not they are learning something as many of them were keeping their cameras off. However, some of the teachers tried to change their teaching pedagogy and put students into smaller groups in channels or breakout rooms so that they could enhance students' participation and engagement in class. This strategy worked a little bit and

they found that the students started participation and gained confidence while communicating with their class mates in smaller groups.

5.2.3 Research Question 3

What kind of technological issues do teachers experience while integrating technology in language classes during the corona virus pandemic?

This study revealed various technological problems that were experienced by teachers in online teaching. The technological problems include, poor internet connections, electricity cut offs, sharing or uploading files in online class system. The unstable internet connection problem seems to be a kind of problem that disturbs ICT based education a lot. The teachers suffered a lot due to this problem, as they had to repeat themselves over and over again if their network connection was slow or unstable, so they had to reconnect if they were disconnected. Hence, such unstable networks disturbed the normal flow of a classroom.

Another affecting factor in online education was electricity cut off. Teachers had to shift their classes at another time to tackle this problem. Such problems often demotivated teachers as well as learners as they had to go against their normal routine or timetable if there is any such problem.

Moreover, there were various screen sharing problems when the teachers tried to go to next page of book and all of sudden the screen got freeze. Similarly, the teachers experienced problems when they tried to upload some materials on system and had to wait for long time to get that document uploaded. This problem also affected students as when they wanted to upload their assignments and they did that but later their assignments were not attached or uploaded so they were graded as if they had not submitted their assignment. In addition, if the students wanted to upload their files, as

assignments and such files were big files then again they found the same problem. Another technical problem, which affected teachers, was audio or video playing. Since this study is about EFL teachers, so normally EFL teachers play audio or video files in their classes for teaching original accent of the target language. The teachers experienced problems related to sound in audio or video files. When they were opening the audio or video file, the students did not hear the sound. Therefore, this also affected teachers a lot.

5.3 Limitations of the Study

The study is limited as it focused on the barriers that were experienced by English language teachers of a university only and did not focus at school or college EFL teachers. The interview questions were predefined based on the literature, thus the study was not a fully exploratory study so this is also a limitation of this study. Another limitation is this that the interviewee and the interviewer both had different mother tongue and English was the medium of communication among them. Therefore, this is highly possible that the interviewee might had said something and the interviewer might had understood it in a different way. Moreover, the eight interviews, which were conducted were from a public sector university teachers only. Consequently, the responses of other private sector university teachers may vary from the findings of this study. Therefore, this is also a limitation of this study. Also, the data was collected during the COVID-19 pandemic time when the usage of ICT was already very much common, thus, this may make the study biased. Hence, due to all these limitations the study findings cannot be generalized globally.

5.4 Implications of the Study

The implications of this study are given as under:

1. This research can guide all stakeholders in online EFL education to gain insight into the problems of online teaching so that they can get prepared better to avoid the proposed problems and would try to work on the solutions of those problems prior to start their online teaching.
2. This study will help expand the phenomenon of factors affecting ICT use in EFL classes by giving new ideas to the researchers to work on various aspect of this issue.
3. This research will help the educational organisations to better serve their audience and empower education by removing the problems that shatter the effectiveness and smoothness of online education for students as well as for teachers.

5.5 Future Suggestions

This study is conducted in the context of EFL teachers of a FLEPS at a university in North Cyprus context, whereas the similar study can be conducted in various other contexts as well. This study focussed at qualitative methodology to investigate the phenomenon but there can be a mix method approach or quantitative research done in the same context to verify the findings of these researches. In addition, the similar research can be conducted in different contexts but with the same methodology or different methodology to compare and contrast the results of those researches in future. Moreover, this research explored problems related to trainings, technological mishaps and other classroom bound problems affecting the ease of ICT based teaching. However, future research studies can focus at teachers' personal attributes stopping them from adoption of technologies with experimental research.

5.6 Summary of the Chapter

This chapter discussed the findings of this research study under four research questions. The chapter also discussed the limitations of the study. Some recommendations were also presented. In addition, the future suggestions were given to investigate this phenomenon broadly with different methodological or context bound considerations. In short, this chapter contained all that was intended behind this study, barriers that hinder the effective use of technologies in EFL classrooms during COVID-19.

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APPENDICES

Appendix A: Interview Questions

1. How long have you been teaching?
2. Were you using ICT in class room before COVID-19?
3. How has been your experience with online teaching during pandemic?
4. What were the very first problems that you faced in online teaching?
5. Were you provided with enough training of computer technology software for online teaching? How often such trainings were given to you?
6. Do you need more training for online teaching? If yes, in what areas? (technological, pedagogical or any other such)
7. How was your overall experience of assessment in pandemic time, as you had to check assignments, projects, tests or exam copies of students online?(Writing comments or uploading students marks on software)
8. Is there any institutional support or training provided to you for making online exams and assessments?
9. Which technical problems did you experience in online class?
10. How did you feel while you were using online tools, such as Microsoft Board, while teaching online?
11. Did you face any pedagogical problems related to your online teaching?
12. During Covid-19 teachers had to shift to online teaching methods. How did you adapt to new method of teaching?
13. How would you describe your experience in terms of pedagogical knowledge in online teaching setup?
14. Do you need any training related to online teaching pedagogy?
15. What strategies do you use to make your online lessons effective, interactive and engaging like face-to-face class?

16. What problems did you face when you tried to make your online class engaging and interactive like face to class? (in terms of technological and pedagogical)
17. If you were to compare face-to-face education to online education, what would you say about student engagement in lessons?
18. What other factors apart from technological knowledge, pedagogical knowledge and training can affect your performance negatively in an online class?
19. Have you experienced any external distractions while teaching online? (your house distractions or students sounds or family interference, pet)
20. To what extent do you think your motivation for online teaching affect your performance in any way?
21. To what extent your students were motivated for online education?
22. How would you comment on students' overall performance in your online class? (Were they eager to learn or were they in class just to mark their attendance?)
23. Can you highlight some successes that you experienced when you were teaching English language to your students in online class?
24. As an experienced EFL teacher what risks do you see in online education for English language teaching classes?
25. Do you have any additional comments?

Thank you for your participation.

Appendix B: Consent Form

CONSENT FORM FOR INTERVIEW

Dear Participants,

I am a master's student in the Information and Communication Technologies in Education program in Department of Computer and Instructional Technology Teacher Education. The subject of my thesis is **Factors influencing EFL teachers' adoption of technologies in classroom practice.**

The aim of this thesis study is to know the factors that negatively affect technology integration in English language teaching classroom. In addition, this study will focus at professional development steps taken by educational institutes for ICT integration in education.

The aim of my thesis is to answer the following questions:

- I. What sort of courses for career development were made available to educators for integration of computer technology in teaching?
- II. What technological support is provided to FLEPS teachers for using ICT in language teaching classes?
- III. What kind of pedagogical issues do teachers face while integrating technology in English teaching during the corona virus pandemic?
- IV. What kind of technological issues do teachers experience while integrating technology in language classes during the corona virus pandemic?

This study will try to find out problems that English language teachers face while integrating ICT in their teaching methodology. Furthermore, it will inquire what sorts of trainings are provided for proper integration of ICT in education; especially in English language teaching classes. The data related to all the issues stated above will be conducted by conducting your interview and this data will not be used for any other research context except this thesis study.

- Sincere answers to interview questions are required and it is important to answer all questions based on facts and figures experienced by the interviewee.
- The interview questions will cover main themes of interview questions. Thus, the interview questions will be about the trainings received by the interview throughout his/her professional career.
- Also, interview will be asked about the technological support provided to him/her by their institute and what kind of technological or pedagogical issues they witnessed in online classes during Covid-19 pandemic.

The interview may take 20-40 minutes and it will be audio recording and /or video recording. You are requested to answer all questions asked. Moreover, you are free to withdraw from study at any time if you want. All data you have provided will be kept confidentially and will only be used for research. For further information or complaint, you can contact me or my thesis supervisor without any hesitation. If you voluntarily

agree and give your consent in participating in this questionnaire survey, please fill and sign the appropriate fields below.

Thank you for your time and participation.

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I have read and understood this form. I have asked my necessary questions and received answers to my questions. I accept to participate in this survey voluntarily.

Name-Surname:

Date:

Signature:

Appendix C: Approval Letter from Ethics Committee

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"Virtue, Knowledge, Advancement"

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Faks/Fax: (+90) 392 630 2919
E-mail: bayek@emu.edu.tr

Etik Kurulu / Ethics Committee


Reference No: ETK00-2021-0054 15.03.2021

Subject: Your application for ethical approval.

Re: Parus Khosa (19500174)
Faculty of Education.

EMU's Scientific Research and Publication Ethics Board (BAYEK) has approved the decision of the Ethics Board of Education (date: 12.03.2021, issue: 2021/87) granting Parus Khosa from the Faculty of Education to pursue with her MA thesis titled "**Factors influencing EFL teachers' adoption of technologies in classroom practice**" supervised by Asst. Prof. Dr İldeniz Özverir.

Best Regards



Prof. Dr. Yücel Vural
Chair, Board of Scientific Research and Publication Ethics - EMU

YV/şk.

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Appendix D: Turnitin Originality Report

Turnitin Originality Report

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Appendix E: Matrix Form of the Data Analysis

Exploring the barriers that hinder the Effective use of Technologies in EFL Classrooms during COVID-19

| Code | Category | Sub Theme | Theme |
|---|---|---|---|
| Low ICT knowledge low ICT usage | Lack of technological awareness | | Insufficient technology support by institute |
| Low ICT knowledge of teacher affects learning process | | | |
| No proper guidance for conducting online lessons | | | |
| Online classes were a challenge | | | |
| Updated trainings needed | Trainings should be given | Continuous trainings | |
| Dearth of technological and pedagogical trainings | | Technological pedagogical trainings for teachers | |
| No trainings given to students for online system | | Technology trainings for students | |
| No trainings for preparation of exams | | Exam administration | |
| No interactive classes, difficulties in engaging students, adopting new pedagogy was a challenge | | | Pedagogical barriers in online teaching |
| Challenges faced due to new teaching pedagogy | Dearth of online teaching pedagogy knowledge | | Insufficient trainings for online teaching pedagogy |
| Problems in incorporating knowledge to all students | | | |
| Teachers need pedagogy training | | | |

| | | | |
|---|---|--|------------------------|
| | | | Technological barriers |
| Unstable networks, low speed or internet | Infrastructure problems | Poor internet connection | |
| Electricity breaks the flow of teaching | | Electricity cut off | |
| Heavy assignments or materials get hanged, storage problems | Technological issues in online teaching | Material sharing | |
| Screen freezing in book opening, | | Displaying problems | |
| Uploading problems, audio or video files sharing problems | | Problems related to instant file sharing | |