

**Using ICT Applications in EFL Teaching: Challenges and Experiences of Novice vs.
Experienced English Teachers**

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Using ICT Applications in EFL teaching: Challenges and Experiences of Novice vs. Experienced English Teachers

Abstract

The aim of this research is to investigate the challenges and experiences of novice vs. experienced English teachers in using ICT applications. The data was gathered through semi-structured, in-depth interviews as part of a qualitative study. The qualitative data were analyzed using thematic analysis. The participants of the study are 20 novice and experienced English teachers of secondary schools. Thematic analysis of the data found that the biggest difference between novice and experienced English teachers is in the variety of ICT applications used, since experienced teachers use government-mandated applications, while novice teachers use different applications, and as well as government-mandated applications. Other than that novice and experienced teachers' experiences and challenges turned out to be quite similar. EFL teachers use ICT applications for various purposes, but most commonly for lesson preparation. The challenges of both teachers were a lack of technology-supported pedagogical courses and a lack of time due to lack of internet connection and technical infrastructure. Implications for future research and recommendations for practice are provided.

Keywords: ICT applications, novice teachers, experienced teachers, teaching English as a foreign language, experiences, challenges.

Жаңадан Бастаушы және Білікті Мұғалімдердің АБТ Қолданбалары арқылы Ағылшын Тілін Үйретудегі Тәжірибелері мен Қиындықтары

Аңдатпа

Бұл зерттеудің мақсаты АБТ қолданбаларын пайдаланудағы жаңадан бастаушы және білікті ағылшын тілі мұғалімдерінің қиындықтары мен тәжірибесін зерттеу. Деректер сапалы зерттеудің бөлігі ретінде жартылай құрылымдық, тереңдетілген сұхбаттар арқылы жиналды. Сапалық деректер тақырыптық талдау арқылы талданды. Зерттеуге орта мектептердің 20 жаңадан бастаушы және білікті ағылшын тілі мұғалімдері қатысты. Деректердің тақырыптық талдауы жаңадан бастаушы және білікті ағылшын тілі мұғалімдерінің арасындағы ең үлкен айырмашылық АБТ қолданбаларының пайдалануындағы әртүрлілігінде екенін анықтады, өйткені білікті мұғалімдер мемлекет бекіткен қолданбаларды ғана пайдаланады, ал жаңадан келген мұғалімдер әртүрлі қолданбаларды, сондай-ақ үкімет бекіткен қолданбаларды пайдаланады. Бұдан басқа, жаңадан бастаушы және білікті мұғалімдердің тәжірибесі мен қиындықтары өте ұқсас болды. Себебі, олар АБТ қолданбаларын әр түрлі мақсатта пайдаланады, соның ішінде сабаққа дайындалу үшін. Екі мұғалімнің де қиындықтары технологияға негізделген педагогикалық курстардың болмауы және ғаламтор мен техникалық инфрақұрылымның болмауына байланысты уақыттың тапшылығы болды. Болашақ зерттеулердің салдары мен тәжірибеге арналған ұсыныстары берілді.

Түйін сөздер: АБТ қолданбалары, жаңадан бастаушы мұғалімдер, білікті мұғалімдер, ағылшын тілін шет тілі ретінде оқыту, тәжірибелер, қиындықтар.

**Использование Приложений ИКТ в Преподавании Английского Языка как
Иностранного: Опыт и Проблемы Начинающих и Опытных Учителей Английского
Языка**

Аннотация

Целью данного исследования является изучение проблем и опыта начинающих и опытных учителей английского языка в использовании приложений ИКТ. Данные были собраны с помощью полуструктурированных глубинных интервью в рамках качественного исследования. Качественные данные были проанализированы с использованием тематического анализа. Участниками исследования стали 20 начинающих и опытных учителей английского языка общеобразовательных школ. Тематический анализ данных показал, что самая большая разница между начинающими и опытными учителями английского языка заключается в разнообразии используемых приложений ИКТ, поскольку опытные учителя используют приложения, утвержденные государством, а учителя-новички используют другие приложения, а также приложения, утвержденные государством. В остальном опыт и проблемы начинающих и опытных учителей оказались весьма схожими. Преподаватели EFL используют приложения ИКТ для различных целей, но чаще всего для подготовки к уроку. Проблемы обоих учителей заключались в отсутствии педагогических курсов с поддержкой технологий и нехватке времени из-за отсутствия подключения к интернету и технической инфраструктуры. Предложены последствия для будущих исследований и рекомендации для практики.

Ключевые слова: приложения ИКТ, начинающие учителя, опытные учителя, преподавание английского языка как иностранного, опыт, проблемы.

CHAPTER 1

Introduction

ICT is a combination of microelectronics, computers, and telecommunications that allows data, such as text, video, and audiovisual signals, to be sent to any location on the earth that can receive digital signals. They include, fixed, wireless, and satellite telecommunications networks as well as applications and broadcasting networks like the internet, database management systems, and multi-media tools. ICT encompasses all technologies that create, store, process, and use data in various formats to enable, facilitate, and encourage communication.

Thus, ICT has had a significant impact on education as well as other areas of life. ICT use in schools generally refers to the use of computing devices such as desktop computers, laptop computers, handheld computers, software, or the internet for educational purposes. It is, however, more specifically concerned with teachers' use of technology for instructional preparation and delivery, as well as technology as a student learning aid. This indicates how ICT has undoubtedly become a critical component of the integration where successful and efficient teaching and learning processes are ensured as it provides essential roles for both teachers and learners, in keeping with the rising digitalization in education.

ICT is intended to be cross-curricular rather than a separate course or topic because the improvement of school teaching and learning should be a top priority in education (Flanagan & Jacobsen, 2003). According to Aduwa-Ogiegbaen (2009), for nearly two decades, schools have been incorporating ICTs into their curricula, and today's teachers need to use ICT in the classroom to make good communication with students and provide students with technology-supported learning opportunities. Technology has the potential to aid education across the curriculum and provide opportunities for better communication between teachers and students.

Teachers are in charge of the teaching and learning process, and they are important to curricular reform. As a result, they should be able to prepare young people for a knowledge society in which the ability to gather and evaluate data using information technology is crucial.

Language learning and teaching, more than any other discipline, clearly necessitates competent planning and design. The teacher, without a doubt, is a significant factor in this. According to Smith and Hanson (2000), teachers are at the center of technology in education. This indicates that unless teachers properly integrate ICT and computers into the classroom, they will remain only technological equipment. Davis (2006) also claimed that computers would not be able to make a major difference without the help of trainers and instructors. As a result, teachers are considered crucial players in implementing ICT in their classrooms.

According to UNESCO (2011), learning basic ICT skills is never enough. In order for the learning process to be as dynamic and responsive to the requirements of the students as feasible, a teacher should be able to use technology in the teaching process. Teachers are viewed as critical participants in incorporating ICT into their regular classes, as well as preparing students for today's digital world. As a result, instructors will be the ones to use ICT to encourage students to be creative learners in a collaborative atmosphere. ICT has stimulated the interest of educational researchers for years because of its potential to shift paradigms, improve instructors' ability to manage and disseminate knowledge, make learning more engaging, and raise teaching effectiveness and productivity (Baydas & Goktas, 2016). Thus, teachers' ability to change or adapt to changing conditions is dependent on them (Ovens, 1999).

The teaching paradigm has shifted as a result of technological advancements. Similarly, the old paradigm of teachers as the sole source of information in the teaching process is no longer true in today's world. Teachers are no longer required to operate as instructors of

information and knowledge, but rather as managers and developers of teaching programs that can assist students in achieving the necessary abilities and competencies as a result of technological advancements. Computers and technology are not seen as a replacement for qualified teachers; rather, they are seen as necessary adjuncts for better teaching and learning. ICT plays an important role by providing teachers with tools to improve their teaching and by providing students with electronic media that make topics more visible and accessible (Unwin, 2009). Thus, teachers transform electronic devices into useful teaching tools for their students.

The most common computer language is English. English is considered the dominant language of technology and computers since most instructions, conversations, and online texts are written in some variant of the English language. If students want to learn even the most basic communication with their computers or understand the information they seek, they need to learn English. Furthermore, English is the most extensively used language among the top ten languages for internet communication and interaction, accounting for around two-thirds of all websites (Albirini, 2006).

Integrating ICT into English language instruction is significant because it meets a real need among students who grew up with technology and are studying English (Chapelle, 2010). In general, research on the relationship between computers and English has found that the direction of effect is from computer use to English success, implying a compelling argument for the fact that using technology and computer-mediated communication tools can impact second or foreign language learning. Consequently, technology increases the visibility of language acquisition and communication (Kenning, 2007). This indicates that today's language and communication are practically integrated with technology, and the two parts are difficult to separate. Because of the simultaneous consequences of globalization and the expansion of the

English language, both English and ICT are now necessary needs for an expanding number of non-native English speakers to properly participate in this century (Jung, 2006).

The use of ICT in English language acquisition has numerous advantages, including quick feedback, instant contact, enhanced motivation, and real-world resources both within and beyond the classroom. Showcross (2004) also listed the following benefits of technology in English language teaching: increased accessibility and flexibility; integration of media and linguistic skills; constant access to authentic material; reaching larger and more remote populations; speech samples and accents; appropriate content; feedback and monitoring; increased learner involvement and enthusiasm; and new classroom dynamics.

The English language is one of the most difficult disciplines to teach, and teachers need to foster an engaging classroom environment in order to keep pupils interested in the subject. So, incorporating technology into a language school can be extremely advantageous (Ofsted, 2004). For example, video, audio, film, the internet, a digital dictionary, PowerPoint, and Microsoft Word, as well as non-web-based technology such as LCD digital projectors, computers, videotapes, and audiotapes, as well as tape recorders and sound systems, can all be utilized in the classroom to teach reading, listening, speaking, and writing.

The use of ICT can help students improve their literacy. Microsoft Word, for example, can help students learn to write. They can have fun while typing in a large number of new words on the computer. It can also aid in the development of students listening and speaking skills. Because students have the opportunity to work together with their peers and teachers. Those students develop the ability to listen to what others have to say as well as articulate their own demands. Students can also improve their reading skills by reading stories available on the internet. As a result, ICT plays a crucial role in the literacy scaffolding process for students.

As a result, there is no denying that ICT has an impact on EFL teachers' roles and practices, in the sense that old methods of language instruction are being replaced with new student-centered techniques, and new roles for both teachers and students are emerging. If EFL teachers can organize and stimulate the ICT-based activity, both whole-class and individual work can be equally productive (Motshegwe, 2005). While there are numerous benefits to employing technology in language instruction, it is vital to remember that technological growth is the way to the future of education.

1.1 Motivation for the study

Teaching English effectively and motivating students is a challenging and important goal for English teachers. So, a promising way to effectively teach English and support the interest of learners can be ICT applications for teaching English. Further, currently, there are a lot of ICT tools and applications for developing English skills that English teachers could use in their work. However, not all EFL teachers make use of the availability of various ICT EFL-teaching applications. Also, not all teachers who use ICT applications in fact use them effectively. The experiences and challenges of English teachers in using ICT applications are not studied extensively. Further, there is limited research on how the experiences in using ICT applications differ between novice and experienced EFL teachers.

1.2 The aim of the research

The research has the following objectives:

1. To explore EFL teachers' experiences in implementing ICT applications in the English language classrooms;
2. To examine the challenges of using ICT applications in the classrooms among novice and experienced EFL teachers;

3. To explore how EFL teachers' teaching experiences influence their use of ICT applications.

1.3 Research questions

1. What are the experiences of English teachers in using ICT applications?
2. What challenges do English teachers face while using ICT applications?
3. How do experiences and challenges in using ICT applications differ by teachers' years of experience?

CHAPTER 2

Literature Review

2.1 The theoretical background of ICT

The term 'computers' was supplanted by 'IT' (Information Technology) near the end of the 1980s, indicating a shift in emphasis away from computing technology and toward the ability to store and retrieve data. Later, as IT became more widely accepted in industry and government, sub-units of those organizations began to incorporate IT departments into their organizational structures. The internet and smart technologies exploded as a result, and the World Wide Web (WWW), connections, online databases, and e-mails were built to connect them all. Thus, the term 'IT' has been abbreviated to 'ICT' to better convey the relationship between technology and its communication affordances as a result of the emphasis on communication using such technologies. The term 'ICT' (Information and Communication Technology) was coined in 1992 when electronic mail was widely accessible to the population.

Any communication or representation of knowledge, such as facts, data, or opinion, in any medium is referred to as 'information.' 'Communication' is an essential component of human life. It is the process of sending information from a sender to a receiver across a channel in which both parties understand the Communication Information. 'Technology' is the application of knowledge or the practical expression of scientific understanding. As a result, ICTs in education are usually defined as a broad range of technical tools and resources used to communicate, produce, distribute, save, and manage information (Bouwer, 1998).

There is no universally accepted definition of ICT because its ideas, methods, and applications are always expanding. ICT can include all the uses of digital technology to help people, businesses, and institutions to use information. Thus, ICT is a sort of technology that aids

information-based tasks. Data collection, processing, storage, and presentation are examples of such tasks, as communication enablement, facilitation, and support. As a result, ICT represents a combination of informatics technology with other, related technologies, especially communication technology.

On the other hand, some scholars have interpreted ICT in a number of ways. Kok (2006) reported that ICT encompasses the provision of internet services, telecommunications equipment and services, information technology equipment and services media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services, and other information and communication activities. Obijiofor and Inyatullah (1998) also reported that ICT includes satellite television, telecommunications, video cassette recorders, and computer-based interactive technologies like electronic messaging systems, Teletext, and videotext. Thus, ICT refers to any device that can store, retrieve, alter, transmit, or receive digital data. Computers, digital television, email, and robotics are just a few instances of technological advancements.

Torero and Braun (2006) defined ICT in a much broader sense, including both hardware and software. They define ICT as the computing industry (hardware, software, networks, the internet, and related services); electronic data processing and display (photocopiers, cash registers, calculators, and scanners, as well as a slew of lesser-known machines specifically tailored to production and manufacturing); telecommunications and related services (such as fixed and cellular telephones, facsimile machines, instant messaging, teleconferencing, and other similar services); and (television, radio, video, DVDs, digital cameras, CD players, MP3 players, and other multimedia supplies and technology).

This indicates how, in a small period of time, ICT has evolved into one of the key building elements of modern civilization.

2.2 ICT in education

As a result of significant advancements in ICT during the preceding decade, education has undergone significant changes. International Institute for Communication and Development (2007) defined four periods in the usage of ICT in education. First, in the late 1970s and early 1980s, the fundamental pedagogical purpose of computer adoption was to help students develop their reasoning and mathematics skills through programming. Second, in the late 1980s and early 1990s, when multifunctional computers with images as well as music applications became accessible, they were employed to aid learning in basic disciplines like math, reading, and writing. Third, with the development of the World Wide Web in the early 1990s, the third part of implementing ICT in education began. The internet's expansion has been aided by the difficulties of upgrading material on CD-ROMs. Finally, pupils were introduced to e-learning in the late 1990s, which mixes computer-based and web-based learning tools. It also increased communication between teachers and students, as well as the students themselves. Additionally, new technologies had the potential to improve education in general by enabling teachers and students to collaborate in previously imagined ways.

Computers first entered classrooms in the early 1980s, and some experts predicted that ICT would continue to play an important role in education for future generations which became true nowadays. As a large quantity of research has demonstrated today ICT has a bunch of benefits to educational quality. In terms of their use in the educational process, ICTs for education and ICTs in education have been divided into two broad categories. ICT integration in education, in general, refers to a technology-based teaching and learning process that is linked to

the usage of educational technologies in schools whereas ICTs for education refers to the development of information and communication technology specifically for teaching/learning purposes. Gwang-Jo Kim (2009) noted that ICT is being utilized in education to restructure the educational system, diversify teaching-learning approaches, engage all stakeholders in education, respond quickly to societal and environmental changes, and improve educational efficiency and output.

There are numerous ways to improve teaching and learning in the classroom using modern technologies. ICT can be used to help students and teachers learn about their subject areas in a variety of ways. ICT has the potential to be a huge help in the classroom. Students can become active learners by incorporating technology into their studies. For example, students benefit from ICT integration since they will not be bound by a limited curriculum or resources; instead, hands-on activities in a technology-based course will be designed to help them understand the subject. This active learning entails self-directed learning. Students will be less reliant on their teachers if they have access to the internet at school. They can search the internet for information, locate what they need, duplicate it, and then search for more. Students become self-managed in their learning process when they use this learning system. Computers, digital technology, and the internet work together to refine learning and teaching processes, allowing students to absorb knowledge and apply it in a proactive, self-directed, and effective way (Hismanoğlu, 2015; Volman & Van Eck, 2001).

ICT also allows students to take an active role in their own learning, to be engaged, relax, and have fun with technology. Thus, the topic of ICT integration in schools, particularly in the classroom, is critical since pupils are comfortable with technology and would learn better in technology-based settings (Jamieson-Procter et al., 2013). This also demonstrates how students

are regarded as a new generation that was born and raised in the internet age, and so are referred to as digital natives. In this case Kandasamy and Shah (2013) also added that for the younger generation, modern technology is becoming increasingly vital. This condition forces teachers to adapt to the preferences of students by incorporating technology into their curriculum, resulting in a more engaging learning environment that improves the learning process and outcomes.

ICT, for example, allows for the development of new teaching methods and the expansion of teaching resources for teachers (Nurshatayeva, 2011, 2020; Nurshatayeva et al., 2020, 2021; Weidman & Nurshatayeva, 2018). Teachers can use ICT to help organize and disseminate knowledge, make learning more relevant, encourage critical thinking, problem-solving, cooperative learning, lifelong learning, and collaborative skills in students, increase their efficacy and productivity in the classroom, and reduce their workload. ICT also aids teachers in creating successful, creative, and engaging lesson plans for students, resulting in active learning. Thus, ICT provides assistance and support for both instructors and students in areas where effective teaching and learning are achieved via the use of computers as teaching and learning aids.

According to Houchine (2011), bringing ICT into the classroom enhances teacher passion and student involvement. So, teachers can build learning activities that help students become more motivated, independent, active, and capable of growing their own knowledge utilizing a range of ICT tools and applications. Castro Sanchez and Aleman (2011) reported that using ICT in the classroom fosters a more student-centered environment. As a result, integrating ICT into the classroom emphasizes teachers' new roles as guides, counselors, and organizers, as well as students' new roles as creators of knowledge rather than passive learners of it.

Lee (2000) noted that internet technology can help with experiential learning, learner motivation, enhanced accomplishment, and individualization. This exemplifies how ICT has changed the educational process. Pelgruim (2001) also reported that ICT is not only the basis of the digital age, but it is an equipment and tool for initiating educational innovations which transform students into educated individuals. This indicates that using ICT applications as new teaching and learning methods would surely enhance students' abilities and develop future employees with sufficient scientific knowledge, sound professional skills, creativity, and discipline.

Moreover, it is clear that technology-based tools and equipment may assist students in learning virtually any subject, including mathematics, science, languages, and other important subjects.

2.3 Teachers' ICT implementation experiences

Specific ICT tools and applications in science education have received a lot of interest. The use of ICT can considerably improve the quality of teaching and the learning experience of students, particularly in science topics. The obvious benefit of utilizing ICT to teach science is that it allows teachers to teach phenomena that would be difficult to describe in a traditional classroom. According to McFarlane and Sakellariou (2002), ICT is a supplement or a replacement for laboratory-based research in specific science difficulties. To make science more engaging and understandable for students, teachers can utilize ICT as a tool, a reference source, a medium of communication, and a means of discovery (Ball, 2003). At numerous levels, ICT can assist students to develop science process skills and conceptual knowledge, as well as expand possibilities for effective science communication. According to research papers, students can

also successfully acquire science ideas through ICT models and simulations (Hogarth, Bennett, Lubben, Campbell, & Robinson, 2006).

Furthermore, students in ICT-enabled science classes receive faster feedback from experiments and have more options for self-directed learning. Teachers benefit from ICT applications because they extend their instructional resources while also empowering students to become active and skilled information seekers rather than passive consumers of scientific knowledge. Students may be encouraged to learn science because ICT allows them to take the direction of their own education by allowing them to study things that they are interested in and that are relevant to their daily lives. According to Steiner and Mendelovitch (2016), ICT benefits science teachers in their classrooms, especially in terms of improving student attention and active learning. When science teachers were asked about their curriculum goals for implementing ICT, they all said the same thing: “to increase learning motivation” (Law & Chow, 2008).

Thus, ICT is a powerful instrument for teaching theoretical concepts and developing scientific comprehension in a range of areas, and it is just as successful as real-world exercises. ICT-based applications that focus on specific areas of difficulty in science can help students learn and teachers teach more effectively.

Mathematics is a key component of all technologies, and technology aids in mathematics teaching. In mathematics, ICT has a higher impact than in any other subject. Technology is essential in the teaching and learning of mathematics (Armah & Apeanti, 2012). ICT improves students' understanding of fundamental concepts and the way mathematics should be taught. Many research has been carried out to determine the advantages of using ICT in mathematics. It also helps students to devote more time to studying tactics and interpretations of answers rather than tedious computational computations. ICT also facilitates constructivist teaching, which

helps students to learn and comprehend mathematical issues using technology. Higher-order thinking and better problem-solving techniques are encouraged by this method. For example, the use of ICT in the mathematics classroom has gained significance as a result of the recent reform-oriented strategy for teaching mathematics, which emphasizes the improvement of students' problem-solving skills over formal mathematical ability (Armah & Apeanti, 2012).

Teachers find it challenging to demonstrate a variety of notions, equations, symbols, figures, graphs, charts, and object transformations on a board or whiteboard. So, ICT-related applications, tools, and software can be used to creatively teach such subjects. Teachers and students can interact, convey, and understand mathematical concepts more effectively by using dynamic, numerical, and visual technological applications. As a result, in order to give successful and relevant mathematics instruction, every teacher needs to employ connected ICT applications, tools, and software. Keong et al. (2005) reported that 89.5 percent of mathematics teachers employ ICT applications in the classroom. The percentages refer to teachers' abilities to use ICT to obtain instructional resources other than textbooks. Thus, Wan Mohd (2003) reported that teachers are better equipped to integrate different ICT applications into their teaching practices as a result of their enhanced ICT application abilities. In addition to this, Kandasamy and Shah (2013) added that teachers believe and use ICT applications since they think that ICT applications are crucial to aiding students.

Despite the benefits outlined above, Kreijns et al. (2013) found that teachers are generally hesitant to adopt ICT. Furthermore, Pamuk and Peker (2009) discovered that teachers' computer skills and knowledge are the biggest barriers to implementing ICT in the classroom. These results indicate that knowledge, abilities, confidence, and views are real hurdles for all teachers, especially science and math teachers. Furthermore, this suggests that teachers are frightened of

technology, unaware of how to integrate it into their classes, or haven't seen examples of it being used well. A lack of resources and the internet are other issues that science and math teachers encounter. Pelgrum (2001) reported that the lack of resources is the most fundamental hindrance to ICT implementation in education. Furthermore, Sicilia (2005) reported that teachers' biggest challenges in using ICT are technical and internet issues. Teachers will be resistant to change if schools are not provided with adequate internet, technical tools, and technical assistance to help them become comfortable with utilizing ICT in the classroom (Mumtaz, 2000).

As a result, training courses, technological support and assistance, and stable internet connection are required to persuade science and math teachers to embrace ICT in the classrooms. This is also necessary to preserve students' enthusiasm for science and math instruction. Teachers should also investigate how technology and applications might be integrated into science and math instruction and learning.

2.4 The use of ICT in the teaching of English as a foreign language

Applications are ICT programs that assist people in performing an activity. Applications can manipulate text, numbers, audio, pictures, and a combination of these elements depending on the activity for which it was created. According to Işman (2012), ICT applications are defined as the interaction between humans and machines, as well as the environment, in which individuals prefer to apply appropriate technical processes to their practical activities.

Pardede (2011) reported that since the 1930s, when teachers began using interactive media techniques to transmit the curriculum in the classroom, pupils have been exposed to the English language and culture through audio and video records, satellite, movies, and technology and this influenced to the creation of the internet and new various applications. Since then, ICT applications have become increasingly commonly used in English teaching.

The English teaching technique has been substantially modified as a result of the significant influences of application development. The usage of applications can significantly improve EFL teachers' teaching style in terms of properly preparing exercises to fulfill both visual and auditory senses, presenting students with a wealth of realistic and interesting learning resources, and enhancing their language production efficiency, collaboration, and confidence (Becker, 2000; Solanki and Shyamlee, 2012; Pourhosein Gilakjani, 2017, Teh, 2021; and Tran et al., 2021). Mouza (2008) also reported that ICT applications can boost students' confidence by facilitating collaboration between them and their teachers. This demonstrates that humans will not only interact with machines, but also with one another. In addition, Lian and Arifah (2014) noted that computer technology and its application in classrooms, in comparison to lecture-based classes, can successfully increase both teaching and learning settings in terms of learners' linguistic knowledge, background information, and interpretation to meet students' educational demands.

This concept can be illustrated by noting that EFL teachers' usage of applications can provide many possibilities for their students to practice social interaction in order to improve their language abilities and life skills in a meaningful and intellectual way. This encourages teachers to use educational materials (Dohn, 2009; Sadykbekova, 2022). This will also prompt teachers to consider how these applications can be used in classroom activities (Pretlow & Jayroe, 2010). For example, using ICT applications in EFL teaching can be classified as enhancing learners' abilities in grammar, vocabulary, and pronunciation, as well as reading, writing, speaking, listening, and cultural knowledge. As Adonis (2006) highlighted ICT applications develop learners' literacy.

The use of ICT in EFL grammar and vocabulary training has been a "traditional" issue for a long time. The majority of these applications utilize a competence and practice approach to processing learner input, diagnosing mistakes, as well as providing feedback (Levy, 2009). Hot Potatoes, for example, is a typical software of this type that offers six simple tutorial tasks for vocabulary and grammatical study that are organized around the word and sentence (Levy, 2009; Stockwell, 2007).

When it comes to improving pronunciation, language comprehension applications frequently use computer-based applications (Chen, 2011). Students frequently use these types of applications to listen to a sample speech provided by native speakers and then practice pronouncing the words on their own. Their performance is recorded and compared to models that provide visual and audio feedback (Godwin-Jones, 2009). The most prominent computer-based software includes *Caroline in the City/CNN Interactive English* (Hebron Soft), *Syracuse English Comprehensive Learning Series* (Syracuse Language), *Tell Me More Pro* (Auralog), *TRACI Talk* (CPI), and *Encarta Interactive English Learning* (Microsoft). The *Acapella* group application also can be used by English teachers to assist their students' pronunciation abilities. Teachers will convert acapella sentences into the required sounds. Teachers can easily teach various pronunciation skills in British and American English while also selecting the appropriate presenter accent and gender using acapella. Chen (2011) noted that learners could be encouraged to improve their pronunciation by using these applications to produce sentences, receive feedback for correction, and follow native-speaker models in a more enjoyable learning environment.

Automatic Speech Recognition Technology (ASRT) has lately been used to produce a number of software applications. These applications are considered to be particularly important

for students who are shy, fearful of losing their faces, or who rarely get the chance to talk with English speakers (Chiu, Liou, & Yeh, 2007). Tanveer (2011) also claimed that when ICT applications are implemented in the classroom, introvert students become more engaged, leading in a more student-centered learning environment. My English Tutor, Candle Talk, and other custom-built web-based chat settings are among these applications (Chen, 2011; Chiu et al., 2007). According to the researchers, these applications have motivated learners to produce more output in a low-anxiety atmosphere by providing a range of tasks.

The most utilized reading applications by EFL teachers are electronic dictionaries and software activities that aim to educate a variety of items, as well as the internet as a source of information for a complete reading (Tangirbergen, 2022, Tlepbergenova, 2022, Yermekkyzy, 2022). These applications provide more information or elaboration to the reader, as well as practice and exposure to longer texts (Levy, 2009). EFL teachers prefer electronic dictionaries because of their simplicity of use, utility, and quickness (Issa & Jamil, 2012). Hypertext, hypermedia, glosses, and annotations in authentic texts are also praised for potential usefulness in giving information and fostering reader-text engagement (Ercetin, 2003). Students are also able to foster their reading abilities while listening to music on the application which is called Booktrack. According to studies students who utilize these applications to increase their English language proficiency and cultural understanding by reading real-world online articles have more control over their reading.

In terms of writing, the most widely used ICT application is Word-processor, which allows for easy drafting and redrafting, as well as the presentation of a professional-quality final output, due to its primary role of assisting flexible text manipulation (Levy, 2009). He also mentioned that track modifications might be utilized to provide immediate feedback and

correction to EFL students' writing assignments. Furthermore, using track modifications help students to revise and write more effectively (Murray, 2008). Email is another web device that is sometimes referred to as the “mother of all applications.” Emails enable actual English language contact, such as writing and exchanging messages with classmates in the classroom or throughout the world. For example, email widens language learning time and location, provides a setting for real-world communication and authentic interaction, supports student-centered language learning, encourages equal opportunity participation, and connects speakers rapidly and affordably.

Finally, PowerPoint presentation software, YouTube, Vodcast, computerized audio-video, and Computer-Mediated Communication (CMC) devices such as voice communication and audio/videoconferences are employed to improve speaking and listening abilities (Stockwell, 2007). EFL teachers use software, often known as computer-mediated communication (CMC), to facilitate authentic and meaningful conversation. As a result, technology may provide learners with a choice of realistic resources and assignments, allowing them to be more independent.

PowerPoint presentations, which are a frequent sort of oral report that requires a logical and analytical framework as well as the accuracy of facts and terminology, as well as audio-video clips, are becoming increasingly popular in EFL teaching. Using this application makes teaching easier and more enjoyable for both teachers and students by involving learners in a more interactive language environment, which encourages them to improve their English abilities (Alkash & Al-Dersi, 2013).

Youtube videos can be utilized in English language classes to help students improve their vocabulary, accents, pronunciation, and a variety of other skills. Based on the pupils' levels, the teacher can choose which videos to show them.

The application Vodcast is formed of the words “vod” and “cast,” which represent “broadcasting” (Kargozari & Tafazoli, 2011). Vodcasts are webcasts that may be accessed on mobile phones, desktop computers, and laptops. Vodcast, often known as a video podcast, has an advantage over podcasts because they can link pictures to sounds. Moreover, EFL teachers can use a range of free podcasts. EFL instructors are also able to make a podcast using microphones and free podcasts. Several multimedia technologies are accessible, including digital radio and digital audio. Both vodcasts and podcasts have the potential to aid English learning in a number of ways such as speaking and listening.

Additionally, computerized video and audio are freely accessible, allowing EFL teachers to upload or save materials for utilizing in teaching students to listen. Finally, audio chat and audio/video conferencing can encourage students to develop their speaking abilities by improving their pragmatic language competence (Murray, 2008). Students are able to record and listen to an audio communication until sharing it via audio chat with their classmates or teachers. Listening to a variety of voices enhances listening skills, promotes students to become more self-directed learners, allows them to hear spontaneous speech, and allows them to read while listening (Tuzi, 1998). So, students can focus on both the form and function of their work.

The most prevalent method for improving cultural awareness is to expose students to real-world online content. A further approach is to involve students in software activities like telecollaboration and international exchanges that include email, chat, and discussion forums, in which internationally dispersed language students use internet resources to facilitate social, intellectual, and intercultural engagement (Helm, 2009). The idea behind these activities is that language and culture are intricately intertwined, and participation in these projects would help students better comprehend English culture.

So, Toumi (2015) claimed that ICT plays an indisputable function in supporting students when it comes to language learning. This indicates that using visual aids in English classes will boost student involvement. Students will not consider English classes as difficult or scary if teachers provide a variety of learning aids to help them learn English fast and enjoyably. In terms of locating references for tasks and displaying content, the presence of technology in English learning has opened a world of possibilities for both teachers and students. It has become crucial in the learning and teaching process, particularly in supporting teachers with language teaching.

Gumbo (2003) claimed that ICT is a valuable tool that an English language teacher can use in the classroom to improve teaching and learning. This highlights how a wide range of ICT applications may help teachers create language-learning activities. Houchine (2011) also identified five ICT-related consequences on EFL teaching. The first is assisting teachers in quickly adapting teaching materials to fit the circumstances, needs, and responses of students. The second is offering online access to authentic materials. The third is allowing users to respond to and utilize recent/daily news, as well as providing real-time web-based information. The fourth is aiding teachers in combining or using abilities in different ways (grammar, pronunciation, vocabulary, etc.).

Furthermore, employing ICT applications in the classroom to teach English makes the classroom more student-centered, reducing teachers' classroom responsibilities. Incorporating ICT into the classroom, for example, will result in a greater diversity of English content, context, and novel pedagogical methods, as well as more interactive, flexible, and innovative learning (Cakici, 2016). As a result, students can arrange, present, and work out their own language problems, grammar mistakes, and efficient communication methods while learning English through ICT applications without the help of EFL teachers.

According to Ahmadi (2018), the use of ICT applications improves language acquisition for a variety of reasons. For learners, it provides rich and multidimensional language learning environments that assist learners in two ways in recognizing and practicing accurate English pronunciation. The first is by including speech recognition in programs or applications, and the second is by allowing learners to participate in video conferences with native English speakers or other language learners via applications such as Skype or Zoom Meeting. Furthermore, it is said that having a videoconferencing allows learners to access quick feedback, which improves their learning performance because their mistakes are remedied directly. The second advantage of implementing ICT applications is that it inspires learners to acquire. Computer keyboard recording, for example, helped language learners not only reflect on and debate their translation work, but also improve their motivation and even excitement for the translation process. The third benefit of ICT is that it encourages pupils to be more creative and self-reliant.

As a result, as curriculum implementers, EFL teachers need to integrate technology into the teaching process as adopting modern teaching methods with ICT will undoubtedly promote students' abilities and produce students with enough scientific knowledge, sound specialized qualifications, inventiveness, and discipline.

However, according to Arnell (2012), some teachers still teach English grammar, and consequently, they should rely on computers to teach the English language in a way that changes the teaching environment. Padurean and Margan (2009) discovered four advantages of adopting ICT in the EFL classroom. To begin with, ICT enables presentation control. Computers unlike books can include both visual and auditory features, as well as text combined with images and photographs. Second, ICT encourages creativity and uniqueness. Third, ICT enables teachers to incorporate a variety of resources into each class. This allows students to get fast feedback on

their responses and remedy errors. Computers not only detect errors but also correct them and provide the appropriate recommendations. Finally, ICT provides more options. Teachers can customize ICT applications to their students' requirements and language levels. ICT applications are more user-friendly than books, which are uniformly printed and should be taught in English language classrooms.

2.5 EFL teachers' challenges in implementing ICT

Despite the increasing expansion of ICT infrastructures, these studies discovered that there is still a gap between teachers' innovation aspirations and their level of ICT use and that connectivity and access to equipment do not guarantee successful or productive ICT use (Granger et al., 2002). ICT adoption is thought to be a complicated and time-consuming process influenced by a number of important factors such as user characteristics such as age and teaching experience, as well as technical challenges that arise in institutions (Levin & Wadmany 2008).

One of the challenges that EFL teachers have when using ICT applications is their lack of experience. According to Bingimlas (2009), one of the main barriers that many teachers have in successfully implementing ICT applications is a lack of sufficient knowledge and abilities. Hew and Brush (2008) also reported that the biggest barriers to EFL teachers implementing ICT applications include a lack of technical understanding and technology-supported pedagogical knowledge. Thus, experienced EFL teachers who lack technical skills are afraid of appearing incompetent and losing their faces in front of the class. In addition, novice EFL teachers who are familiar with technologies but lack technology-supported pedagogical skills face some difficulties while using ICT applications. Consequently, when it comes to computer-based training, teachers' age and years of teaching experience are clearly linked to their knowledge and skills (Davis, 1999). Cuban (2001) also noted that teachers' ability to use ICT varies depending

on their years of experience and age. This suggests that many EFL teachers are unsure how to deal with ICT, which is unfamiliar to them, and incapable to incorporate new technologies into their pedagogical practices.

The use of ICT by teachers has been studied for a long time for two reasons: to identify the difficulties of successful technology integration into the curriculum and to take appropriate actions, such as incorporating courses for teacher training in new technologies (Paraskeva et al., 2008). Ahmadi (2018) also noted that teaching foreign language centers at all levels, as well as private and public schools and colleges, should have suitable technical application training programs with specific methodologies to help teachers reduce stress caused by their lack of technological expertise. According to Akbaba-Altun (2006), one of these concerns is a paucity of in-service training courses for instructors, especially in educational contexts. These in-service training courses are offered by unqualified trainers and are inappropriate for the needs and levels of instructors; they also lack hands-on exercises and are not available to school principals and teachers. Balanskat et al. (2006) also noted that teachers who are not appropriately prepared or confident in their capacity to fully integrate ICT into the classroom receive insufficient or incorrect training.

Schools, in particular, should have an effective technical team that is ready to support EFL teachers in their classrooms as rapidly as necessary to ensure that the lessons are being learned. This indicates that tutors who can teach these teachers about new technologies, as well as IT experts who can set up and manage the system, are needed. Thus, Garrett (1991) claimed that teachers require aid in making well-informed and pedagogically sound decisions on how to use technology in regular classroom activities. As a result, technical expertise and knowledge do not grow rapidly or just because they are available. Instead, it should be learned and practiced

(Schrum, 2000). So, it's apparent that ICT training helps EFL teachers modify their attitudes toward education and technology, as well as their readiness to employ it.

Another issue that EFL teachers have when it comes to employing ICT applications is their age. For example, Prensky (2001) reported that novice teachers are the digital age's ICT natives, with more technology exposure than their elder counterparts. Additionally, most research on teachers' age and teaching experience in utilizing ICT applications found that as teachers get older and have more teaching experience, their usage of ICT decreases, whereas younger teachers utilize ICT tools further than their experienced colleagues (Van Braak et al., 2004; Bebell et al., 2004; Inan & Lowther, 2010). According to Krumsvik et al. (2016), teachers over the age of 50 have a lower level of digital literacy. This demonstrates that EFL teachers under the age of 40 are more adept at integrating ICT applications into their lessons.

However, multiple types of research have discovered that there are no age-related differences among EFL teachers. For example, Jegede (2009) noted that their perspectives on ICT, their ICT skills, and how they used ICT were unaffected by their age. Furthermore, Korthagen (2004) reported that the more inexperienced teachers gain experience, the less enthusiastic they will be about adopting ICT. According to Korthagen (2004), the link between ICT use and teachers' age and experience appears to be universal, motivating a longitudinal study to learn why teachers' willingness to use ICT applications decreases with experience, regardless of educational context or culture. Furthermore, unless the cause of the issue is addressed, novice teachers will lose interest in integrating ICT as they gain experience because field experience and workplace culture are both factors that influence teachers' behavior.

One of the most significant technological challenges in implementing ICT in the classroom is the widespread notion that technology would eventually replace instructors. What

should I do in class if the students have unlimited access to the internet? Will my students regard my role as their instructor as less significant than technology if I employ technology in my class? These are some of the issues that some teachers may be concerned about. Another reason that causes teachers to lose interest in using ICT in the classroom is their fear of being replaced by technology as they gain more experience (Garrett, 1991).

However, Newhouse (2002) stated that teachers will always have the authority to control what their pupils should learn if they use teaching instruction and create a learning environment. Teachers are always role models for pupils when using ICT in the classroom. Thus, it demonstrates that teachers will not be replaced by technology. Teachers will always be needed in education. The role of teachers will be changed. In order to use ICT effectively in the classroom, teachers should take on multiple tasks. This means that teachers will no longer be the sole source of information for their student's learning, but will instead act as advisors, supervisors, and instructional providers.

Despite their age and experience, EFL teachers' enthusiasm for using ICT applications is limited by a lack of technical support, technical assistance, internet connection, and time. Whether teachers have twenty years of experience or are brand new to the classroom, technical challenges obstruct good class delivery (Sicilia, 2005). Aduwa-Ogiegbaen (2009) also noted that the reason they fail to implement ICT in the classroom is due to a lack of effort or resources available for teacher professional development. Out-of-date equipment, a lack of new tools, a lack of ICT rooms that are always booked by other instructors and students, and an inconsistent internet connection are just a few of the challenges faced by EFL teachers when it comes to using ICT applications in the classroom. This highlights how a lack of technical equipment and access to the internet can demotivate EFL teachers, even if they have sufficient knowledge and

skills in the use of technology. For example, teachers who do not have access to the internet are less receptive to ICT inclusion (Mumtaz, 2000).

Furthermore, time is lost due to computer freezes, network problems, and the time it takes for websites and applications to load, all of which discourage EFL teachers from using ICT applications. According to multiple recent surveys, many instructors are educated and confident in using computers in the classroom, but they only utilize them sometimes due to a lack of time. Time constraints and the difficulty of organizing enough computer time for courses were noted by a large number of researchers as a barrier to instructors' use of ICT in their classrooms. According to Sicilia (2005), the most prevalent issue teachers stated was a lack of time to plan technological classes, explore various capabilities of educational software, or analyze multiple internet sites. Thus, teachers confront a time limitation in many aspects of their professions, limiting their ability to complete tasks. Time spent looking for internet help, preparing courses, discovering and practicing with technology, dealing with technical challenges, and acquiring suitable training are all examples of these aspects.

Moreover, regardless of their age and experience, every EFL teacher requires assistance in using ICT applications in the classroom. According to Pelgrum (2001), a lack of technical assistance is one of the major hurdles to ICT adoption in education, according to elementary and secondary teachers. ICT integration in the classroom necessitates the presence of a technician, and if one is not accessible, a lack of technical support might be a barrier (Gomes, 2005). According to Korte & Hüsing (2007), teachers can use ICT applications without wasting time on software and hardware issues with the help of technical personnel in educational institutions. Mumtaz (2000), for example, claimed that teachers will be resistant to change if schools do not provide sufficient time and help for them to become comfortable utilizing ICT in their lessons.

Physical, educational, and philosophical elements all play part in using ICT. Physical constraints included a lack of hardware, software, infrastructure resources, and a poor, unstable internet connection. EFL teachers' dislike of technology, uncertainty in using technology, inability in using applications, and reservations about their utility in the classroom were identified as educational variables. Government and administrative expectations that investing massive sums of money in cutting-edge technology in order to use applications will result in quick educational advantages are at the root of philosophical issues (Yildiz, 2007).

Emotions, abilities, perceptions, goals, and ICT experience all also play a part in teaching. Teachers' perceptions toward technology are one of the most explored technology-related aspects in the literature on ICT use, as positive computer perceptions are thought to enhance technology integration in the classroom. According to attitudinal studies, any successful use of new technology in education needs the cultivation of positive perceptions about it among users. Mumtaz (2000) also claimed that teachers' teaching and learning philosophies and perceptions influenced their usage of ICT. For example, when teachers believe that technology is a tool that can be used by teachers to gain more knowledge and share meaning, they are able to use and adapt it to their classroom (Vrasidas & McIsaac, 2001). EFL teachers who believe that technology can be utilized to improve lessons encourage students, and transform their teaching and techniques are more likely to accept it. In consideration of this, it is reasonable to demonstrate that the teachers who have got positive attitudes of technology tend to adopt them very often, in contrast to the teachers who have got negative attitudes (Angers & Machtmes, 2005).

Thus, Zhao et al. (2002) reported that support from technical specialists, administrators, norms and procedures, suitable technological facilities, and assistance from colleagues are part of

the enabling context needed for teachers' efficacy in integrating technology. Ahmadi (2018) also noted that teachers need to self-study by searching for up-to-date information on teaching and learning English technology integration, as well as learn from their colleagues, to improve their technological application skills using a variety of teaching online programs such as Zoom Cloud Meeting, Microsoft Teams, Vsee, Google Classroom, and Google Hangout, as well as other websites such as Kahoot and Quizzes that assist them in designing fun and attractive interaction activities for students.

However, despite that, educational institutions need to be provided with new equipment, resources and then internet in order to save the time of novice and experienced English teachers in implementing ICT applications in the classrooms.

CHAPTER 3

Methodology

The purpose of the thesis is to investigate the challenges and experiences of novice vs. experienced English teachers in using ICT applications.

3.1 Research methodology

A qualitative research design was used in this study. According to Silverman (2009), some qualitative research is marked by a strong focus on subjectivity and the truthfulness of human experience. Furthermore, Sandelowski (2004) described qualitative research as a broad phrase that encompasses a variety of views toward and techniques to conducting research focused on learning how humans comprehend, experience, interpret, and construct the social environment. As a result, the research's goal is to examine the challenges and experiences of novice vs. experienced English teachers in using ICT applications. Qualitative research is the most effective method for acquiring, exploring deeply, interpreting, and producing knowledge from the insider perspectives of EFL teachers' secondary school experiences.

3.2 Participants

The participants of this study are 20 novices and experienced English teachers of secondary schools in Kazakhstan. Novice teachers are defined here as those who graduated from teacher training university programs recently and who has been teaching English for no more than three years. Experienced English teachers are defined here as those who have more than three years of experience in teaching English.

3.3 Data collection method

A semi-structured interview was done individually with each participant for 15-25 minutes each to obtain qualitative data following the interview methodology. The interview protocol is presented in Appendix.

3.4 The process of data collection

Semi-structured interviews were conducted with the participants using the interview protocol consisting of 12 questions. Participants were given the option of face-to-face or online interviews. Face-to-face interviews were conducted at the participants' workplaces, while online interviews were conducted via Zoom. Each interview was audio and video recorded with the participants' permission for the purpose of subsequent data analysis.

3.5 Ethical consideration

Before the interview the teachers were sent a WhatsApp message with information on the study and its goals, and they were asked if they wanted to participate. Prior to the interview, information sheets and consent forms were sent, and the participants were asked to sign out after learning about the study. The participants' identities and the names of their institutions were completely confidential, and the information acquired from them was only used for the purposes of this study. The participants were given the option of not answering the questions and withdrawing from the study at any time. The participants were provided with a copy of the interview transcripts so they could see how their anonymity was maintained and make modifications to their responses.

3.6 Data analysis

I employed thematic analysis to analyze data. Thematic analysis, which is described as a procedure for finding, interpreting, and reporting themes using data, has been used in many social scientific investigations (Braun & Clarke, 2006). For my research, I

employed thematic analysis because it enables the researcher to see and analyze common or shared meanings and experiences. Furthermore, accessibility and flexibility are essential considerations when selecting whether or not to employ this method. So, after deciding that thematic analysis was the best method for analyzing my data, I worked through each of the six steps.

The first stage is to describe the data, read it several times, and note down preliminary ideas.

The second stage is to systematically code significant data features throughout the data collection and collect data for each code.

The third stage involves grouping codes into possible themes and compiling the necessary data for each one.

The fourth step is to see if the themes worked with the coded extracts and the whole data set, as well as to give each theme clear definitions and names.

The next stage is to define each topic, comprehend its essence, and determine which data and research questions each theme pertained to.

The final stage entails analyzing the data and writing a narrative about it that goes beyond simply defining it to make an argument about the research questions, as well as providing a concise, coherent, logical, non-repetitive, and engaging account of the data.

3.7 Trustworthiness

For qualitative analysis, I used Guba's trustworthiness approach in my study. When it comes to building trustworthiness in research, Guba (1981) identified four variables to consider in a naturalistic paradigm.

The first aspect to consider is credibility. The participants received an emailed copy of their interview transcript to review. I tried to make sure I had appropriately described their experience and presented their different perspective; if there were any inconsistencies, I planned to meet with them in person. There were no inconsistencies in the transcripts that required a follow-up conversation from any of the participants.

While discussing transferability, it was critical to remember that each respondent's experiences are unique to them and cannot be generalized to the entire population. Because the volunteers were carefully chosen, there may be some transferability. It's likely that this method of selection resulted in research overlap.

The phrases dependability and conformability pertain to the data's consistency and interpretation, respectively (Guba, 1981). It also assists in ensuring that all trustworthiness concepts are met by providing a clear audit trail for an external auditor to see how respondents were chosen, data was received, processed, and evaluated (Guba, 1981). During data collection, I retained the overall structure of the interview the same with each subject to guarantee consistency, even though the process and line of questions could have changed depending on the individual.

In terms of conformability, I provided a clear map of data interpretation and was transparent about my biases and assumptions (Guba, 1981). Although it would be unrealistic to claim that I was totally objective throughout the study, I can guarantee that I was honest and forthright throughout and correctly relayed the respondents' experiences.

3.8 Piloting

According to Jairath et al. (2000), pilot research is a small-scale methodological study that is undertaken to prepare for a bigger investigation. Its purpose is to ensure that methods and

plans will work well in future fieldwork. It's also a way to put research questions to the test before starting fieldwork. For example, Kim (2010) reported that by building small replicas of the planned inquiry, piloting can answer methodological questions and guide the design of a research plan. These studies indicate that piloting allows a researcher to modify, narrow, or expand their research topic or research question, as well as define the study's focus.

Thus, I decided to conduct a pilot study with one secondary school's EFL teachers. I expected that by conducting the pilot study, I would be able to obtain key experience conducting interviews; test the data collection approach; identify any potential technical or contextual challenges or factors that may affect the data collecting process; change the research questions depending on the findings of the piloting stage.

Three novice and three experienced secondary school teachers participated in the pilot study, which was done online using Zoom. Before being included in the study, all six participants gave their informed consent. Participants were also told that they could leave the study at any time. The videotaping of the interviews lasted about 15-20 minutes. Making field notes, in which I captured my participants' views, ideas, questions, and comments concerning the interview, proved to be valuable. I also questioned them whether my interview questions and approaches were effective and clear after the interview. All of my interviewees agreed that the questions were simple to understand and that the interviews were not excessively long.

I believe it was a valuable learning experience for me in terms of maintaining a steady interview pace. During the pilot stage, I was able to have a much deeper understanding of how much time I needed to devote to each interview. I became more adept at keeping conversations going when necessary, leading and following the natural flow of the topic while maintaining their concentrated attention. It also gave me the opportunity to test my technological gadgets and

setups in order to acquire high-quality recorded data. I was able to put my transcription skills to the test during the pilot. During the transcription process, I gained confidence in using electronic equipment, particularly in transferring various document formats, and I used the data from the pilot project to strengthen my coding and analytical skills and practices.

I would like to summarize the key advantages I gained from the pilot project. To begin with, I gained experience with setting up the research project and dealing with various issues encountered during fieldwork, such as ensuring participant access, receiving their agreement, and so on. Second, because it was the first time, I had organized this type of fieldwork, I got more familiar with the procedures involved in conducting a research interview. Third, it provided me with the opportunity to comprehend the importance of asking the right questions and being able to respond appropriately to them. Finally, I learned that careful assessment of the information presented to participants on the nature of the research is critical in order to obtain clear, honest, and overt responses. If they don't, their responses may be biased.

CHAPTER 4

Results

The purpose of the interview was to learn about the challenges and experiences of novice vs. experienced English teachers in using ICT applications. A total of 12 questions were asked during the semi-structured interview.

4.1 EFL teachers' experiences in using ICT applications

The following themes emerged from the study of the interview data collected on EFL teachers' experiences in using ICT applications.

4.1.1 EFL teachers use a variety of ICT applications for a variety of purposes

One consistent theme emerging from the participants' responses was that both novice and experienced teachers (n=20) use different ICT applications in the classroom. Quite often, both teachers reported that they have preferred ICT applications for specific things they want to teach. This result suggests that EFL teaching as a profession is likely entering a new stage of embracing more technological applications, leaving behind the era when ICT applications were new and almost exotic. The ubiquitous use of smartphones appears to have contributed to this advancement of ICT applications use in English teaching as most of the applications mentioned by both teachers were mobile versions. The following vignettes illustrate this point:

My top ICT applications are Kahoot, Bamboozle, Quizlet, Quizzes, PowerPoint, YouTube, Notion, and Teachaholic (P2).

I mostly use ESL games, Highlight Kids, Lingo Kids, PBC Kids, British Council games, Wordwall.net, Anglomanacy, and Drawize (P3).

At the same time, older and more experienced teachers (n=5) appear to be less willing to use a lot of ICT applications in the classroom. Only government-mandated ICT applications such as Kundelik.kz and Edupage for classroom management and grading were reported to be in use by the participants who had the longest years of experience. The following vignette provides an illustration:

It is not an obligation to use ICT applications in our school. For example, I only use Edupage to put my students' grades online, give them homework, and send messages to my students and sometimes to their parents about their children's academic performances (P18).

I use an electronic class register called Kundelik.kz. where I and my students work together. For example, I submit my students' grades and they can easily be aware of their performances, I give them daily homework, and my students can find their assignments there, plus I mark their everyday attendance there which is obligatory for us (P16).

4.1.2 ICT applications are increasingly used to support lesson preparation

The participants reported various purposes for which they utilize ICT applications including student assessment, in-class activities, making demo lessons, homework, etc. Yet, interestingly, the most common purpose turned out to be lesson preparation. That is, novice teachers (n=10) and experienced teachers (n=5) reported that ICT applications were very helpful in preparing for everyday classes. Furthermore, both teachers reported that using different ICT applications in preparing for classes seemingly improved their teaching by helping teachers integrate current knowledge and by providing teachers with a bunch of opportunities to learn

various teaching techniques. Both novice and experienced teachers mentioned using English language teaching applications to prepare lesson plans, develop multimedia presentations, and use interactive games to teach four language skills. The following vignettes demonstrate this point:

For example, I can say that Edupage and Notion help me to plan my lessons, to know my schedule, and using them make me always disciplined. For example, Teachaholic helps me to integrate new ideas for my lessons and I also use PowerPoint in my lessons to explain a new topic. For example, the website Teachaholic also really helps me to plan my lessons. If I think that my lessons are becoming traditional, I can find there a lot of activities and ready-made plans for my lessons (P2).

I use Raz-Kids. We use it in our school as an additional home reading because it has got a lot of interesting topics and illustrations which make reading more effective. If they have difficulties in reading, they can listen to the stories and after reading they can make a little quiz like a soul check. I use it once a week in my class to read together and assess my students' reading skills (P4).

4.1.3 Students' engagement and motivation to learn English influence EFL teachers to use ICT applications

The results demonstrate which factors had a significant impact on EFL teachers' willingness to use ICT applications in the classroom. Consequently, in this study teachers' conviction of the benefits of ICT applications in EFL instruction had the greatest impact on their experiences in using ICT applications. Novice teachers (n=10) and experienced teachers (n=5) who use a variety of ICT applications in their teaching gave more extensive awareness of the

many benefits of ICT applications from their teaching experiences. This included the fact that ICT-based applications make lessons more interesting, engaging, and motivating for students by improving students' four language skills and providing them with authentic English materials.

The vignettes below provide this point:

I use Canva for new topics because it has got different colorful designs that make my students engaged in the lesson. Also, Highlight Kids is very helpful in terms of explaining CLIL parts of the textbook because there is a bunch of additional information about science in general. I use Bamboozle to learn new words and grammar since this application has got a lot of flashcards on different topics which is fun to have a vocabulary and grammar battle among students. Kahoot is one of the best applications to prepare quizzes with different funny pictures and GIFs and sometimes they make my students do tests in a funny way. British Council games are very universal for me because there I can find everything from starting to develop language skills till tongue twisters to developing my students' pronunciation skills in a funny way (P13).

I enjoy using Animoto to have fun with students and encourage them to express what they've learned in class. They can demonstrate their understanding by creating and sharing short videos. They enjoy it because it permits them to be creative and to design and add music to their videos. I also enjoy using Chatzy and Socrative applications where I create channels for student dialogue to discuss some topics in English and create some questions for students that they can answer with their tablets and mobile phones. Uh, I use them since they motivate my students' communication and listening skills (P1).

4.2. EFL teachers' challenges in using ICT applications

The following themes emerged from the study of the interview data collected on EFL teachers' challenges in using ICT applications.

4.2.1 Both novice and experienced EFL teachers are open for additional training courses

It was apparent that only a few novice teachers (n=3) and experienced teachers (n=3) received training courses on the integration and implementation of ICT applications in the classroom. Both less and more experienced teachers noted how specific courses they had focused on ICT applications helped them to become really efficient in using various ICT applications in their teaching practices. This demonstrates that both novice and experienced teachers understand the usefulness and are ready to embrace more ICT training courses that would allow them to use ICT applications in their teaching processes. That is, using ICT applications is not viewed as simply being well-versed in technology generally, but also as a specific English teaching skill that needs to be developed likely as part of formal training, be it within undergraduate programs or as on-the-job training. The vignettes below illustrate this:

The first one was called “Interactive tools for education that teachers should know”, and I attended this course in 2020 I liked this course because this course taught me to create tasks on the game Wordcraft. The second one’s name was “Formation of professional competence of teachers in organizing the educational process through distance learning technology”. Uh, the last one was called “The development of digital competence of teachers”. In these courses we learned to work with different platforms and applications like Jamboard, YouTube live lessons, and all the functions of Google yeah, like Google Classroom, Google forms, etc. (P4).

I went to some seminars and workshops where I was taught how to use some technology, but in general, I didn't have any courses on how to use them, especially in teaching English or using different programs related to English. I also can say that the workshops didn't have any relation to my subject, to be honest, and maybe that's why it is still a problem for me to use programs in English (P18).

4.2.2 The internet issue is an obstacle in using ICT applications

The internet issues are considered to be one of the most widespread obstacles to using ICT applications for novice teachers (n=6) and experienced (n=7) teachers in the classroom. The fundamental reason for this is that practically most of the applications rely on the internet and technical equipment of schools. Despite the fact that the schools are located in the city both novice and experienced teachers have got very weak internet connection due to one Wi-Fi for almost all staff of the school. For example, the following vignette demonstrates:

Even if our school is situated in the city, the internet is not stable, because all teachers use the school's Wi-Fi, for this, it works very slowly, that's why I bought a pocket Wi-Fi to use it in my teaching because you cannot rely on the school's internet and lose your time (P4).

Other than that novice and experienced teachers who work in rural areas and use ICT applications on a daily basis have problems with internet access due to the electricity and weather conditions which also prevent and demotivate teachers to use ICT applications in their teaching practices. The following vignette provides an illustration:

As my school is situated out of the city, the internet connection is one of my problems in using ICT applications. When we have bad weather like windy or rainy, we don't have

electricity and because of this the internet becomes unavailable for all students and teachers (P15).

4.2.3 Technical infrastructure at schools limits ICT application use in EFL teaching

While nearly all participants reported that their schools are indeed equipped with computers, smartboards, and projectors, the school's technical infrastructure is still far from being sufficient to support teachers in using ICT applications to teach the English language. Practically, most interviewed novice teachers (n=5) and experienced teachers (n=7) regardless of age and experience, had similar equipment-related challenges when it comes to using ICT applications in the classroom. EFL teachers reported being unable to use applications due to outdated equipment or due to lack of equipment. In most schools where the participants worked, there were only a few classrooms fully equipped with the necessary technology, and most of the time these classrooms tend to be booked by other teachers. The following vignettes serve as illustrations:

Though our school is in the center of the city, most classes are provided with computers, projectors, and smartboards. If we need them, we can take the key from that classroom and use it when we have some special lessons and it is very comfortable (P1).

Our school is located far from the city for that reason we have some problems with the technical tools. Most of our technical tools are out-of-date which don't work well and freeze sometimes. There are no additional ICT rooms with enough equipment like computers, smartboards, and projectors in order to use ICT applications. Even if they are some tools they are always booked by other students and teachers which brings to misunderstanding with them. This is why, I need to bring my own laptop to school, but as

you know it is not enough for all students because of its small screen, and I also cannot ask my students to bring their laptops because some of them haven't got any (P9).

CHAPTER 5

Conclusion

This study qualitatively explored the experiences and challenges in using ICT applications of novice vs. experienced English teachers in secondary schools in Kazakhstan. Specifically, this research reveals that the biggest difference between novice and experienced English teachers is in the variety of ICT applications used. The results demonstrate that more experienced teachers are not familiar with different ICT applications and only use government-mandated applications in the classroom, while novice teachers are familiar with and tend to use a broader range of ICT applications including those that are not only government-mandated.

Other than that novice and experienced teachers' experiences and challenges turned out to be quite similar. The reason for that EFL teachers use ICT tools for various purposes, but most commonly for lesson preparation. The results also demonstrate that technology-supported training courses are needed since most novice and experienced teachers have not received any yet, and they are open to more ICT training courses focused on using specific applications in teaching English. Thus, the result suggests that teacher-training programs should embrace more active ICT courses for English teachers and possibly show how ICT applications may be used in various aspects of teaching. Apart from the training courses, all EFL teachers have to work around the limitations of their schools' internet connection and tech infrastructure to actually save the time and use the ICT applications they want in their teaching.

5.1 Recommendations

Based on the study results, the following recommendations have been made:

1. School authorities should support teachers by arranging technology-supported pedagogical training courses;

2. Schools should have enough funding and provide sufficient facilities for English teachers to be encouraged to use ICT applications in their teaching. This includes sufficient technology and a reliable internet connection.

5.2 Limitations

Firstly, this study is limited to small samples and cannot be generalized to other EFL teachers in various secondary schools, as this study includes the challenges and experiences of only some public school EFL teachers. Secondly, considering geographical diversity in Kazakhstan, its small scale limited this study, since this study was conducted in one city and in its different districts. Thirdly the gender of the participants in this study is limited, as it largely contains women rather than men. As, Ursavaş & Karal (2009) indicated that psychological gender, rather than biological gender, have a stronger impact on computer discomfort and, as a result, technology use. Thus, it's been suggested that computer discomfort is related to gender.

5.3 Suggestions for further research

Firstly, further research on the challenges and experiences of EFL teachers in utilizing ICT applications should be conducted, engaging more teachers from both public and private secondary schools. Secondly, more research is needed in other Kazakhstan cities and districts to fully understand the challenges and experiences of novice vs. experienced English teachers when using ICT applications. Thirdly, as van Braak et al. (2004) claimed gender plays a vital role in the integration of ICT in education, thus future research should include more male participants.

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Appendix A

Participant information sheet

Title:

Using ICT applications in EFL teaching: challenges and experiences of novice vs. experienced English teachers

Invitation:

You are invited to participate in this study. Before you decide, it is critical that you understand why the study is being conducted and what it will involve. Please take the time to thoroughly read the information below, and if you are desired, discuss it with other people. If there is anything unclear, or if you require additional information, please contact me. Take some time to think about whether you want to participate or not. Thank you very much for taking the time to read this.

Purpose of the study:

The purpose of the study is to determine how challenges and experiences in using ICT applications differ by teachers' age of experience.

Why have I been chosen?

You are being invited to participate in this study because you are an English teacher and you teach English at school, and I believe your experience as an EFL teacher will help me to gain a better understanding of what I am researching.

Do I have to participate?

It is entirely up to you whether you want to participate or not. If you want to participate in this study, you will be given a copy of the information sheet and you will be required to sign a consent form. You have the option to leave the study at any moment without giving a reason.

What do I have to do?

All the recordings will be identifiable by a code and they will not be used or made available for any other purpose than this study. At the conclusion of the study, these recordings will be destroyed.

What are the possible disadvantages and risks in participating?

There are no known risks or drawbacks to participating in the study.

What are the possible benefits of participation?

Participating in this study will not provide you with any rewards. I hope that the findings of this research will be useful to others in the future.

Will my participation in this study be kept confidential?

All the information I gather about you during the research will be kept completely confidential. In any reports or publications, you and your institution will not be identified. All data will be identifiable by a code, and they will be maintained in a closed file or secure computer and only I will have access to them.

What will happen to the results of the research study?

The results of the study will be put up as part of Akniyet Yermek's master research thesis and submitted for examination.

Who is doing this research?

The research and interview will be conducted by Akniyet Yermek from Suleyman Demirel University.

Appendix B

Consent Form

Thank you for reading the study's information sheet. Please complete and sign the form below if you accept to participate in this interview.

1. I affirm that I carefully read the [02.10.21] information sheet, and that I had the opportunity to ask questions concerning the study.
2. I consent to participate in the interview and acknowledge that I have the right to decline to answer questions and to leave the interview at any time without giving a reason.
3. I accept that the researcher will not use my name and the name of my institution in any reports based on the information received from the interview and my privacy as a study participant will be protected.
4. I consent to the audio recording of my interview and accept that it will be used solely for research purposes and will not be used in any other way without my explicit consent and that no other than the researcher will have access to the original recording.
5. I consent to the use of the information gathered from me in future studies.
6. I will be given a copy of the transcript of my interview and I will be able to correct any factual errors.
7. I will be given a copy of the consent form.
8. I consent to participate in this interview.

| | | |
|---------------------|------|-----------|
| Name of participant | Date | Signature |
|---------------------|------|-----------|

| | | |
|--------------------|------|-----------|
| Name of researcher | Date | Signature |
|--------------------|------|-----------|

Contact for further information

Email address: yermek.akniet@gmail.com

Appendix C

Interview protocol

1. How old are you?
2. What is the name of your school?
3. How long have you been working as a teacher?
4. Do you use ICT applications in your teaching? Tell me please what applications do you use in your classrooms?
5. How often do you use ICT applications? Tell me please are you comfortable with using ICT applications in your classrooms? (What are your arguments for and against?)
6. Do you find it easy or difficult to use ICT applications in your teaching? (What makes it easy or difficult for you?)
7. How would you describe your experiences in using ICT applications? (How has it been? Did you find it enjoyable?)
8. How has your first experience affected the way you use it now?
9. How confident are you in your abilities and skills to teach English using ICT applications?
10. Have you received any training courses on the integration and implementation of ICT applications in your teaching?
11. What are some of the challenges to using ICT applications in your teaching that you experience?
12. What are the main solutions to those problems? How would you recommend English teachers to avoid or address such issues?