

**Teachers' experiences of, challenges, and attitudes towards using mobile applications for
teaching English as a foreign language in Kazakhstan**

Temirbek Tangirbergen

A thesis submitted to the Faculty of Education and Humanities

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in Teaching English as a Foreign Language

Suleyman Demirel University

Department of Language Teacher Education

©Copyright by Temirbek Tangirbergen, 2022

Suleyman Demirel University

Table of Contents

Abstract	1
Аңдатпа	2
Абстракт	3
Chapter1 INTRODUCTION	4
1.1 The aim of the research	6
1.2 Significance of the research	6
1.3 Research questions	6
1.4 Novelty of the research	7
Chapter 2 LITERATURE REVIEW	8
2.1 Theoretical background of mobile learning	8
2.2 Mobile applications for English language learning.....	11
2.3 Advantages of using mobile applications in the teaching process	16
2.4 Challenges of using mobile applications in the teaching process	21
Chapter 3 METHODOLOGY	26
3.1 Data collection method.....	26
3.2 Ethical consideration	27
3.3 Data analysis	27
3.4 Procedure.....	28
Chapter 4 RESULTS	29
4.1 Recognition of the potential of mobile apps to enhance student engagement	29
4.2 Apps that are more familiar are most in use	31
4.3 An advantageous mobile app combines availability with student engagement	34
4.3.1 Applications are used to increase the students' engagement	37
4.3.2 Apps help English teachers use teaching time more effectively	38

4.4 Tech issues major challenge in using mobile apps	39
4.4.1 The Internet connection issues are an obstacle in using mobile apps	40
4.4.2 Tech issues with mobile devices in using apps	43
4.4.3 Monitoring issue in using apps	45
Chapter 5 CONCLUSION	47
References	49
Appendix A	60
Appendix B	61

Teachers' experiences of, challenges, and attitudes towards using mobile applications for teaching English as a foreign language in Kazakhstan

Abstract

The study aims to explore Kazakhstani English language teachers' attitudes towards mobile applications, their experiences, and challenges in using them. Semi-structured interviews were conducted with 20 EFL teachers who work in private and public secondary schools and universities in Kazakhstan. Thematic analysis of the data suggested that EFL teachers' views on teaching English with the help of mobile language learning applications are overall positive. The data revealed that the EFL teachers use various mobile applications in teaching English. The findings suggest that the EFL teachers value availability and student engagement offered by mobile apps. The challenges of using mobile apps tend to be beyond teachers' control and include internet issues or lack of equipment. Policy implications for teacher training and professional development are discussed.

Keywords: *mobile applications, teaching English as a foreign language, teacher cognition, perceptions, challenges.*

Аңдатпа

Зерттеудің мақсаты Қазақстандық ағылшын тілі мұғалімдерінің мобильді қосымшаларға қатынасын, олардың тәжірибесі мен оларды пайдаланудағы қиындықтарды зерттеу болып табылады. Қазақстанның жеке және мемлекеттік орта мектептері мен университеттерінде жұмыс істейтін 20 ағылшын тілі оқытушыларымен жартылай құрылымдалған сұхбат жүргізілді. Деректерді тақырыптық талдау ағылшын тілі оқытушыларының тілді үйренуге арналған мобильді қосымшалар арқылы ағылшын тілін оқытуға деген көзқарастары оң екенін көрсетті. Деректер ағылшын тілі оқытушылары ағылшын тілін оқытуда әртүрлі мобильді қосымшаларды қолданатындығын көрсетті. Алынған нәтижелер ағылшын тілі оқытушылары мобильді қосымшалар ұсынатын оқушылардың қол жетімділігі мен қатысуын бағалайтындығын көрсетеді. Мобильді қосымшаларды қолданумен байланысты мәселелер әдетте мұғалімдердің бақылауынан тыс және интернет немесе аппараттық құралдардың жетіспеушілігін қамтиды. Мұғалімдерді даярлау мен кәсіби дамытудың саяси салдары талқыланады.

Кілт сөздер: *мобильді қосымшалар, шет тілі ретінде ағылшын тілі, оқытушыны тану, қабылдау, проблемалар.*

Аннотация

Целью исследования является изучение отношения Казахстанских учителей английского языка к мобильным приложениям, их опыта и проблем в их использовании. Были проведены полуструктурированные интервью с 20 преподавателями английского языка, которые работают в частных и государственных средних школах и университетах Казахстана. Тематический анализ данных показал, что взгляды преподавателей английского на преподавание английского языка с помощью мобильных приложений для изучения языка в целом позитивны. Данные показали, что преподаватели английского используют различные мобильные приложения при обучении английскому языку. Полученные результаты свидетельствуют о том, что преподаватели английского ценят доступность и вовлеченность учащихся, предлагаемые мобильными приложениями. Проблемы, связанные с использованием мобильных приложений, как правило, находятся вне контроля учителей и включают проблемы с Интернетом или нехватку оборудования. Обсуждаются политические последствия для подготовки и профессионального развития учителей.

Ключевые слова: *мобильные приложения, английский как иностранный язык, познание преподавателя, восприятие, проблемы.*

Chapter 1

Introduction

In the present day, the development of informatics technologies and technology gadgets has accelerated in the sphere of education. Since the quick integration of technologies in education is increasing day-to-day, the use of technologies is becoming more preferable to the traditional method of teaching. This led to the creation of a new concept of E-learning.

The idea of m-learning provides technical advancement in education with the help of today's mobile technologies to e-learning under the d-learning (distance learning) paradigm. Although e-learning offers many advantages over traditional education techniques, several shortcomings have led the scientific community to pursue new avenues. The evolution of mobile technologies, as well as the necessity to push technology in education to new heights, have given rise to the new concept of m-learning.

The concept of M-learning (mobile learning) implies utilizing mobile and portable devices such as PDA (Personal Digital Assistants), smartphones, cellphones, laptops, and tablets in the teaching and learning process. Among these devices, smartphones or other mobile devices are mostly used by learners. The rapid growth of mobile gadgets is evidenced in modern society and education is not an exception. According to Laura Silver (2019), the number of people who use mobile gadgets in the world is above 5 billion people have mobile gadgets and half of them are smartphones. The researcher discovered that in the USA 88% of American adults use smartphones, 10% of American adults use cell phones and the rest 2% do not use mobile gadgets at all. Nowadays, 6.37 billion smartphones are used, which means that 80.69 % of people in the world own smartphones. According to S. O'Dea (2021), the number of smartphones is expected to grow up to 7.49 billion by 2025. A majority of higher education

institutions are utilizing mobile learning to provide flexibility in the teaching and learning process (Crillo et.al, 2021). With the growth of wireless gadgets and technology, it is projected that this will continue to be a growing trend. The next wave of mobile learning is expected to be pervasive, with learners becoming more mobile and capable of studying across several gadgets (Ally & Prieto-Blázquez, 2014). This type of learning is attractive because it allows learners to access knowledge, interact and communicate while on the move. In addition, recruiting a distance student can enhance higher-order thinking skills by facilitating one-to-one learning. Considering people's interest in mobile technology, mobile learning with a combination of technology, pedagogy, and context can revolutionize the way we teach and learn. This can lead to a paradigm shift those benefits everyone (Sönmez et al., 2018)

Mobile learning is being considered a modern and approved way of teaching by the EFL teachers, due to the sharp increase in mobile devices and mobile language learning applications. This method aids the learners to be able to improve their EFL skills using mobile gadgets and language learning applications. Such improvements also depend on how the teachers implement mobile gadgets and applications into their teaching process.

The growth of mobile devices led to the creation of multifarious mobile language learning applications. Mobile language learning applications are currently being used by educators and learners in the world. The rapid growth of mobile language learning applications attracts ESL teachers to implement them in their teaching process. The language learning applications might be helpful to improve ESL learners' vocabulary, pronunciation, grammar, and speaking (Almasri, 2013). Several language learning applications are accessible for learners to download via convenient internet access. For instance, with the advance in ICT (Information Communications Technology), students can use mobile devices for searching the meaning of the words on their devices (Mthethwa, 2014).

1.1 The aim of the research

The main focus of this study is to investigate Kazakhstani ESL teachers' perceptions, experiences, and challenges in using mobile language learning applications. Therefore, the objectives of this study are:

- To examine the teachers' perceptions of implementing mobile applications in the teaching process;
- To explore teachers' experiences of using mobile applications in teaching process;
- To investigate teachers' challenges of using mobile applications in teaching process.

1.1 Significance of the research

At present, numerous mobile applications for learning English are available and often freely. Using mobile applications for learning English has many advantages for learners. Specifically, mobile apps allow learners to study English at any time and anywhere at no cost. In other words, mobile apps can serve as a useful English language learning tool. Yet in Kazakhstan, the potential of English language learning mobile apps is underutilized. As some of the schools in Kazakhstan still use a traditional approach to teaching English than using mobile language learning applications, the applications are not mostly used due to a lack of methods, and challenges in integrating them into the teaching and learning process. Experiences, challenges, and attitudes of English teachers towards mobile apps for learning English may be one of the reasons why such mobile apps are not so frequently used in Kazakhstani education.

1.2 Research questions

RQ 1 - What are English teachers' experiences in using English learning mobile applications?

RQ 2 - What are English teachers' challenges in using English learning mobile applications?

RQ 3 - What are English teachers' attitudes towards using English learning mobile applications?

1.3 Novelty of the research

The scientific novelty of the research lies in the fact that the study examines Kazakhstani EFL teachers' perceptions, experiences and challenges of using mobile devices or language learning applications in the teaching process.

Chapter 2

Literature review

2.1 Theoretical background of mobile learning

The theory of mobile learning has become widespread. The UNESCO Institute for Information Technologies in Education prepared the "UNESCO Policy Guidelines for Mobile Education" (Kraut, 2013). The document provides a succinct definition of the term mobile learning (M-learning). Mobile learning involves the use of mobile technology, both individually and in conjunction with other information and communication technologies, to organize the learning process regardless of place and time. Learning can take many forms, with the help of mobile devices, students can access educational resources, connect with other users, and create content in the classroom and beyond. Mobile learning includes activities necessary to achieve learning goals, such as effective management of school systems, and improving the interaction between educational institutions and families of students.

Mobile learning is based on the premise that learning should transcend both geography and time limits by allowing learners to access knowledge asynchronously and regardless of where they are (Crescente & Lee, 2011). When considering the function of mobility and communication in learning contexts, a mobile learning theory is required (Sharples et.al, 2009). Students learn across location and time through mobile learning, moving from topic to topic. Learners move in and out of interaction with technology, much as in a hybrid setting. The learner, not the technology, is mobile, according to mobile learning theory (Shuler, 2009). Because electronics are so common, learning may be integrated into everyday activities. Control over mobile learning environments may be spread, and learners generate context through their interactions with devices and with one another. They recognize that mobile

learning may both complement and clash with traditional education and that it presents ethical concerns about privacy and ownership. The fast advancement of information technologies in our day has boosted technology's interest in meeting people's demands. While in the past, technical items and their use were subject to a certain environment or place, environment and location now have their specialties in recent times.

The original research on the subject identified mobile language learning as a tool that combined the online component of learning with the face-to-face environment, and it was initially explored in terms of content delivery. Indeed, with access to Wi-Fi networks both inside and outside of school, students and instructors may access the internet whenever and wherever they need to. They can search for information, access teachers' and students' online notes, read books, share links, and engage in ongoing courses. They can also access material while they are not connected to the internet. Furthermore, mobile devices offer learners technical help in addition to the traditional teacher-learner support.

It is claimed that the first person who create the concept of mobile learning was Alan Kay in the 1970s. He and his team came up with an idea to create “Dynabook” which is a portable computer. Due to the lack of supporting technologies at that time, they were not able to complete their idea as it was a time when the technology had not developed properly yet. However, the first smartphone called “IBM Simon” which was created by Mitsubishi in 1997 started defining itself as the first portable computer in that period (Berge & Muilenburg, 2013). From then, technology companies started to create various portable computers which were later called “smartphones”.

The fast growth of mobile technologies, particularly mobile phones influenced the creation of a new discipline known as MALL (Mobile assisted language learning). MALL is considered to be a part of CALL (Computer Assisted Language Learning) (Yang, 2013).

MALL is implemented with the help of handheld mobile gadgets (Shield & Kukulska-Hulme, 2008). With the rising usage of various portable devices such as mobile phones (cell phones), MP3 and MP4 players, PDA's, smartphones such as iPhones, and tablets such as iPad, Mobile Assisted Language Learning (MALL) has been developed to assist the students' language learning. One of the main features of MALL is the ability to access language learning resources and communicate with tutors at any place. Another main feature of MALL is that it gives the students opportunities to gain benefits from learning English using mobile phones and mobile language learning applications (Tangirbergen, 2022, Yermekkyzy, 2022; Zeng & Luyegu 2011).

The central question driving mobile-assisted language learning research in education is whether mobile technologies enable educators and students to do things in second language education settings that they would not be able to do otherwise, from both the standpoints of language teaching and language learning. Mobile assisted language learning has been identified as having a variety of characteristics; on the one hand, it appears not to innovate the classroom environment because the content is simply transferred from books or paper documents to smartphones or tablets; on the other hand, it entails a significant change in the language classroom because it revolutionizes the way learning is delivered, conceived, and experienced (Kukulska-Hulme, 2010)

Nowadays mobile learning is approved as a new approach. This approach has been used for nearly two decades and provides a technique of learning that can be done at any time and from any location (Klimova, Poulova 2016). The majority of the students around the world have got smartphones, even some learners have got more than one device (Cheung, 2015). One of the most spread mobile devices is the smartphone. Smartphones appear to be the most popular mobile device among young people. Young individuals between the ages of 18 and 29 are the most likely to use and possess a smartphone (Smith, 2018). Other research

investigations done among university students have also supported this phenomenon (Klimova & Poulouva, 2015).

2.2 Mobile applications for English language learning

The increased availability of mobile phones in the recent decade spurred the development of an immense number of mobile applications for learning any language. A simple search for the key phrase 'learning English' on an app store can generate hundreds of programs, both free and premium. Some programs specialize in certain language skills, whilst others provide a mix of numerous skills. Furthermore, there are apps tailored to specific types of learners, such as elementary, secondary, and adult learners (Gangaiamaran & Pasupathi, 2017). Having a mobile phone and having an access to join to the internet makes communication easier for individuals around the world. Also, mobile technology capabilities like portability and access to information always possess a key role in English.

While paid applications have more features, free ones can also be very useful learning tools, especially if they are chosen based on the criteria that lead to meaningful language learning, such as being easy to use, interactive, culturally acceptable, and meaningful to students' needs, enabling sharing and collaboration, providing feedback, and developing thinking skills (Eppard, Nasser, Reddy, 2016)

The number of mobile applications which are used to learn English is increasing rapidly. Darsih and Asikin (2020) conducted research in which 96 Indonesian students (68 female and 28 male students) attended as participants. During a questionnaire process, the researchers asked the participants' thoughts on mobile applications. Moreover, they were asked about their choice of English learning applications that they downloaded and use on a day-to-

day basis to improve their English. The result showed that the majority of the students possess lots of applications for learning English on their smartphones. It was also revealed that the students use a total of 15 mobile applications for learning English such as Google Translate, Grammar test, English Idiomatic, U dictionary, YouTube, Elsa speak, Duolingo, Quizlet, and so on.

The research was done by Kusmaryani et.,al (2019) examined the students' preferability of English learning applications and they revealed that the students divided mobile language learning applications into four groups. As an example, they named them as applications for speaking, applications for testing the students' critical thinking ability, authentic language learning applications, and the applications that can be used to discuss between the students outside of the classroom. For speaking applications, they mentioned were online dictionaries, google translator, English speaking, English grammar, and text-speech. For authentic language learning applications, they named YouTube, Google, and Weebly. The applications which the students mostly used outside of the classroom were WhatsApp and Email.

In his research about the mobile English language learning application called Duolingo, Pilar Munday (2016) stated that Duolingo has desktop and mobile versions. Both the desktop and mobile version has various functions that can assist the learners to improve their second language acquisition (SLA). Duolingo provides the learners to improve their English knowledge by learning new words and phrases related to the themes which the students can choose. The choice of the themes is significant. The application has 329 lessons, 66 skills (themes), and 1571 words. For each completed lesson the students will be given points (10 points for each completed lesson). However, unlike the desktop version, the mobile version has fewer functions. Even having fewer functions, Duolingo is considered one of the best language learning applications in the current era. Furthermore, the researcher surveyed 46 students with level A2 and 16 students with level B1 to see whether the learners are satisfied to use both

versions of Duolingo (desktop and mobile versions). The result of this survey indicated that the majority of students were satisfied with Duolingo. They claimed that Duolingo was easy to use, comfortable to learn English and other languages too, and enjoyed learning languages with Duolingo.

The application Quizlet is considered to be one of the most useful applications to improve the students' vocabulary skills. The Quizlet application contains a humongous number of colorful flashcards which assist the students to learn new words (Ashcroft & Imrie, 2014). The Quizlet application can run on the desktop version and it has a mobile application too (Wright, 2016). Abdullah Al-Malki (2020) highlighted that Quizlet has various modes such as Learn, Flashcard, Write, Spell, Test, Match, Gravity, and Live. All of these modes are entertaining to the students which makes the learning process enjoyable and entertaining. For instance, "Live" mode is a mode in which the students have to answer multiple questions using the desktop version, "Match" mode is a game where the students need to match the words with the definitions, etc. However, the mobile application does not have all of these modes, as some of these modes are comfortable to run on desktop mode. Another researcher Wright (2016) conducted research by examining the "Quizlet" and he mentioned that this application can improve the ESL learners' vocabulary comprehension by using various flash cards with a custom design which the teachers can choose to represent the cards to the students. It is, also reported that the main advantage of this mobile language learning application is increased students' performance, and engaging lessons and activities. Next, the autonomy which the students can complete the tasks alone without being assisted by other students. Furthermore, a variability of the choice where the students cannot only their vocabulary comprehension and the English language itself, they can take other subjects too. They can also be motivated to learn the particular subject further as the application has got lots of functions (Anjaniputra & Salsabila 2018). The games with the help of this application can be played too. Besides, the

students are allowed to use it on both the desktop version and mobile versions which is beneficial for all learners of different ages.

Zhao (2019) researched examining the effects of Quizizz on the learners' learning comprehension. To do the research the participants used Quizizz in a classroom and each participant provided feedback about this application. The results revealed that the learners had beliefs that Quizizz is simple to use. In addition, they claimed that integrating Quizizz for in-class exercises is enjoyable; Moreover, the application assisted them to recall course content and piques their interest in learning. The participants engaged with the app's features, particularly the leaderboard, which displays a live ranking of their performance and motivates them to study. The vast majority of participants agreed that Quizizz helped them to focus in class and decreases exam anxiety. The participants also claimed that they prefer to perform in-class tasks on Quizizz rather than on paper. The same research had been done by the researcher Yan et.al, (2018). The findings of their research revealed that Quizizz is a teaching instrument to make the learners more engaged and more focused in the teaching and learning process.

Kahoot is a popular e-learning program that may be simply utilized to provide metacognitive assistance, liveliness in class, and student attendance in higher education where lecturers and student education are limited. Kahoot is considered one of the best applications which can make the teaching and learning process engaging and interesting. This is because the application possesses various modes in which the teachers can create engaging activities, tasks, assignments, quizzes, etc. There have been numerous researches about the positive sides of the language learning application Kahoot. One of the researches was done by Bicen & Kocakoyun (2018). In their research, they invited 65 learners (55 female and 10 male) from Preschool Teaching at the Ataturk Faculty of Education to take part in the research. The findings of the research revealed that the learners were positive towards Kahoot as it has positive impacts on the learners. The participants claimed that Kahoot engaged them and helped them to be

motivated to study further. In addition, the participants pointed out that the competitive setting in Kahoot elicited a variety of positive emotions, including enthusiasm, a desire to participate in class, and an eagerness and readiness to attend class. Moreover, they responded that since Kahoot possesses various engaging features the learning process was engaging, and the collaborative learning with the help of this application as well. Another researcher Fotaris et al., (2016) also wrote about the positive sides of this application. The results of their research indicated that the gamified method had several good benefits, including greater class attendance, fewer late arrivals to class, higher downloads of course material, enhanced classroom dynamics, and a higher final grade.

To evaluate the positive sides of using the mobile application WhatsApp, the researchers Nuraeni & Nurmalia (2020) researched to check whether WhatsApp can support English Language Learning (ELL) activities. To achieve the data the researchers used the case study method and classroom observation. To provide the research, the researchers invited 100 participants (53 females and 47 males) to take part in the research process. The findings of this research revealed that the vast of learners are positive about the application, as the application provides affords many features to help the gaining knowledge of the procedure for sharing records such as sending and getting hold of texts, snapshots, audios, videos and documents to the teacher and their classmates. In addition, WhatsApp can create an interactive ELL surrounding via easy interaction visual and verbal. After analyzing the data from the responses, the researchers concluded that WhatsApp has many positive sides such as using it as an alternative way to engage in E-learning; working with learners in spurring understudies to learn English, particularly recorded as writing abilities; assisting the learning with overcoming their feeling of fear toward using the language through sharing data and conversation; assisting the learners with trusting in their capacities and to have beliefs to themselves and providing peer assessment between the learners. However, the researchers pointed out that despite WhatsApp

having positive sides, the application possesses drawbacks too. For instance, the learners needed extra hours to prepare the materials. Furthermore, the learners participated passively in the discussion as some of the learners were silent readers. In addition, academic behavior was indicated among the learners as the learners cheated during completing tasks or doing activities. Moreover, the researchers claimed that the learners did not pay much attention to the learning materials; therefore, the learners faced difficulties in learning new materials. Finally, the teachers faced difficulties with controlling the learners during the teaching process.

2.3 Advantages of using mobile applications in teaching

There are multifarious benefits of language learning applications in the teaching process. Kukulska-Hulme (2009) estimated that cell phones, among any other digital devices, are much richer in terms of communication rather than email, because, even though they have got a technological weakness, they can operate as a learning device. In her early research, she found out that the learner can control the learning process with such a learning device and advance. Also, her research suggested that learning a language using a mobile phone gives the learners an advantage such as an opportunity to learn away from the classroom. Furthermore, in her research, there was an explanation that the learners can learn the language at home, in or out of the transport, at work, etc. which means that they can learn language everywhere they want.

Another possible benefit might be entertaining lessons. Given the importance of motivating English learners (Nurshatayeva, 2020; Nurshatayeva & Page, 2020), making the lessons more fun and enjoyable has considerable importance. With the help of mobile applications, it is usually easy to make the learning process entertaining. Moreover, it is possible to make competitions among the learners, since a majority of the applications are

game-based. As an example, the teachers can use Kahoot, because this application is based on providing lessons with attractive designs and games that this application possesses.

Mobile learning allows learners to participate in the learning process in both a synchronous and asynchronous environment, and it has helped engage a new generation of learners through game-based learning approaches. Students are connected to possibly perpetual learning by integrating learning opportunities directly into games that they may play on the fly. This constant access has also helped link students in rural, underprivileged, and remote regions by allowing them to interact with other students in an online learning environment. Students in these places can connect to resources and material that they would not have had access to otherwise by using the Internet (Valconi, 2018).

In the examination of the effectiveness of integrating mobile devices into the teaching process, Aamri (2016) did research among 100 male and female scholars who had been invited from different colleges at Sultan Qaboos University. The learner's behavior, attitude, and challenges of integrating their mobile gadgets to learn English were the main focus of the researcher. The findings revealed that the learners liked using their cell phones in the classroom, but professors did not allow them to do so. The findings also found that cell phones were seen as useful learning tools provided students utilized them correctly. The research at the end of the research advised taking this teaching methodology seriously, as this method of learning contains benefits that can be suitable for all.

During the investigation, Abbasi and Hashemi (2013) mentioned about impact of integrating mobile phones on vocabulary retention, as well as the gender retention when integrating mobile devices. The result of the investigation among 180 students (105 males, 75 females) who are third-grade school students and aged from 16 to 18 years old revealed that the mobile phone indeed affected vocabulary retention. The findings, also demonstrated that gender did not affect the participants' vocabulary skills. Another research about the

effectiveness of mobile language learning applications in teaching vocabulary was explored by researchers Basal, Tanriverdi, and Sari (2016). For four weeks the researchers examined the positive sides of mobile language learning applications on teaching idioms and compared them with traditional and

Kanchana and Saha (2015) investigated the benefits of mobile devices in teaching English in India. They discovered that integrating mobile phones into the teaching process can improve the effectiveness of teaching English to learners. They encouraged the ESL teachers to adapt their approaches and practices in response to the internet connection and educational applications on mobile phones. Furthermore, the researchers claimed that utilizing mobile devices made the learners enthusiastic to learn independently.

Leis and Tohei (2015) examined the positive sides of integrating mobile phones in ESL classrooms. To do the research, the researchers split the group into two teams. One team was not allowed to use mobile phones in the classroom, while the other team had permission to utilize them in the classroom. The findings revealed that the learners who were in the second group were encouraged to utilize their mobile phones outside the classroom and were more independent than the students who were in the first group. At the end of the research, the researchers' advised ESL teachers to motivate the students to use mobile devices while learning English in the classroom.

Rana (2014) organized the research to demonstrate how mobile devices play an essential part in the educational process. Therefore, for investigation, he invited 25 teachers and 100 students from different faculty and they were given a questionnaire related to the research. The findings revealed that the use of mobile apps varies from person to person. For instance, the researchers asked the teachers if they use mobile gadgets for educational purposes. The majority of teachers claimed that they use mobile devices for alerting the students and collaborating with other academic researchers. Besides, the students were asked

for which purposes they use mobile devices. They highlighted that they mostly use mobile software for calling and texting each other.

In the research investigating the learners' perceptions of using mobile devices in learning English at Aljouf University Nalliveettil and Alenazi (2016) mentioned that the participants consisted of fifty-two undergraduates who were EFL students who participated in the research. To investigate the participants' attitudes about the effectiveness of this method, the researchers used self-reports and questionnaires. The researchers, depending on their findings advised the instructors and practitioners to present new approaches and materials for teaching English. The findings revealed that both learners and instructors were positive in terms of integrating mobile gadgets in the EFL classroom.

Similar research was provided by Elfeky and Masadeh (2016) who examined the positive sides of m-learning in the advancement of educational achievement and conversational abilities. The researchers split the participants into two teams one group was the control group and the other was the experimental group. For this research, the researchers invited fifty students to participate in the research. The findings revealed that utilizing smartphones to learn English has a favorable impact on the participants' accomplishments and abilities. Depending on the findings, the researchers asserted that smartphones can be useful in teaching and learning English in the classroom.

In addition, Alkhezzi and Al-Dousary (2016), studied the merits of mobile applications in learning grammar, vocabulary, and writing. The results of their study based on observations showed that teaching grammar and vocabulary using mobile learning applications has advantages and positively affects the students' performance. Also, they claimed that the students might be able to use mobile learning applications to improve their vocabulary outside of school or high institutions. Moreover, Basal, Yilmaz, Tanriverdi, and Sari (2012) examined whether the traditional approach of teaching 40 idioms using activities in 4 weeks is better

compared with teaching using the same number of idioms with mobile phones applications. For their research, they asked the participants to complete the tests to accomplish their goals. The result of the research was that the group which used mobile applications made much better results than those who used traditional ways of teaching. The researchers suggested using mobile software for teaching vocabulary.

Machmud and Abdulah (2017) explored the impact of smartphone use on the English teaching and learning process. The researchers invited 63 participants to this research. Based on the questionnaire about foreign language anxiety the researchers divided the participants into two teams. The results revealed that either the high anxiety group of students or the low anxiety group of students who utilized the smartphones achieved high scores comparing the same results in the traditional approach to teaching. The study indicated that utilizing smartphones in the classroom lessens learners' nervousness.

Farrah and Abu-Dawood (2018) evaluated the use of mobile language learning applications in educational processes to identify the benefits, drawbacks, and challenges of utilizing smartphones. They provided a questionnaire to check the learners' attitudes towards the effectiveness of utilizing mobile phones in the classroom. In addition to the questionnaire, the researchers provided the interview among the participants to demonstrate the participants' opinions regarding the problems of using mobile devices in the classroom. According to the findings of the research, a plethora of students responded answered favorably to the use of mobile language learning applications in their learning process. Furthermore, the findings revealed that the student's language learning proficiency is higher when they are utilizing their mobile devices and language learning applications.

2.4 Challenges of using mobile language learning applications

Despite having positive sides to integrating mobile applications into both learning and teaching processes, the obstacles that teachers and learners might face difficulties during the implementation of using mobile learning applications are normally faced by the teachers. One of the most widespread challenges of integration is related to smartphones. According to the research provided by Khaddage, Cristoph, and Bray (2016), the challenges of using mobile learning applications are usually seen in the teaching-learning process. As an example, they claimed that most mobile devices do not provide appropriate wide screens, therefore, sometimes it gives both learners and teachers some discomfort to read and type. They also, noted that the approaches to integrating mobile language learning applications are still in process of integration, as most the countries are still using a traditional way of teaching. As an experiment, they interviewed ESL teachers to find out about their experiences of using mobile language learning applications and they revealed that despite having the advantages of implementing mobile gadgets in a classroom, they criticized that they were not accustomed to working with mobile devices and language learning applications and without proper control the learners instead of completing the assignments given by the teacher, they end up playing games or using social networks, communicating via messengers, sending pictures, or surfing the internet. Such actions will waste teachers' time when preparing meaningful tasks for students.

Country restriction can also be an obstacle to integrating mobile language learning applications. As an example, the researchers Kőrösi and Esztelecki (2016) highlighted that using mobile devices at school is banned in some countries like Serbia. In most countries, because of the restriction from school, most learners are not allowed to bring mobile phones and use the applications during the lesson process. The main reason for doing that is not having proper approaches to work with devices and applications.

During the research on the possible disadvantage of mobile learning Mingyong (2015) noted that distraction is one of the widespread negative sides of using mobile applications. The researcher explained that mobile devices may divert the students' concentration from the main emphasis of both the teaching and learning process, as the learners might utilize the devices for various purposes inside and outside of the classroom. In his article, Vinikas (2021) pointed out that despite mobile learning having the advantage of studying at any place, the learners can easily be distracted. That is because the mobile device possesses mobile applications which are not related to the educational sphere. He mentioned that the social media applications, such as Facebook, Instagram, and Twitter can distract the learners from the learning process. A similar data has McPheat (2021) has claimed that the learners, who study with the help of mobile devices, tend to be hyper-connected to the device and the learner might receive SMS, or push notifications from the applications and this usually diminishes the learner's sensation of isolation, which may lessen the learner's degree of involvement when compared to a classroom experience.

Technical issues can also be considered a challenge in integrating mobile devices into both teaching and learning processes. According to Cervantes (2019), the main technical problem can be weak battery optimization in mobile devices. Some mobile device developers assemble the devices with a small capacity of batteries and this led to use for a short time. This problem can be seen among not only learners but also among learners too. In situations when the learners need to use their mobile devices, they end up with a low percentage of battery.

One of the reasons for this is considered a maximizing the screen brightness. Most users tend to use mobile phones with high brightness, as it allows seeing the screen clearly; however, maximizing the screen brightness drains the battery and can shorten the battery life of mobile devices. In addition, maximizing the screen resolution can damage the eyesight of the users. According to Green (2019), average users of mobile devices spend more than 7-8 hours

with mobile phones in a single day. Spending the majority of time using mobile devices and mobile applications in front of the screen the users tend to have headaches, and problems with eyesight, back, neck and others. To prevent the damage to eyesight, most mobile developers integrate with their smartphones a blue light filter, this filter can prevent the eyesight from being damaged; however, it is proven that having a blue light filter in mobile phones can also damage the eyesight. Another considerable issue can be memory storage. Rapidly growing the number of mobile learning applications and their demands on mobile devices are increasing. For instance, most mobile applications weigh more than 50-100 megabytes and they can take enough place on mobile devices. Some mobile phones are still assembled with low memory storage; therefore, the learners tend to face difficulties in terms of installing new mobile language learning applications into their mobile phones. Simultaneously downloading mobile language learning applications can fill the memory of mobile devices (Cervantes, 2021).

The learners' addition to the mobile devices is one of the reasons why did the learners' eyesight get worse, this case was seen during pandemic COVID -19 when all of the schools and other educational centers shifted to the online format of education. The learners had to spend the vast majority of their time studying online. Some families who had only one computer or laptop faced difficulties with studying the lessons, as in one family there are approximately 2-3 children (Abrahamsson & Davila Lopez, 2021). Most children had to use mobile devices to study and do the given assignments by the teacher. Despite using the mobile gadget is simple and comfortable, it might addict the learners to the mobile phones. The addiction to the mobile phones may lead to these disadvantages: lowering the concentration; stressfulness; cognition can be reduced; anxiety; insomnia; sleep deficit and low grades (Gomez & Smith-Slade, 2021)

The learners of the pandemic Covid-19 situation in the world had Emotional and mental health problems during the lockdown. During the quarantine, the learners had to stay at home

and continue to study online using laptops, mobile devices, and language learning applications. Quarantine, itself is often described as an unpleasant experience for those who suffer it and can involve uncertainty about the situation and boredom (Brooks et al., 2020; Cava et al., 2005). It is also linked to significant psychological discomfort, depressive symptoms, post-traumatic stress, and unpleasant emotional states including wrath, bewilderment, sorrow, disgust, fear, or anxiousness, among other things (Brooks et al., 2020; Hawryluck et al., 2004). University students cited detrimental effects on their mental health and emotions in research conducted during the COVID-19 lockdown. During the COVID-19 epidemic, students' stress, anxiety, and depression levels have often increased (Aslan et al., 2020; Odriozola-González et al., 2020; Saravanan et al., 2020; Son et al., 2020).

The cost of the Internet packages and the availability of the Internet to the learners influence the continuation of online learning. A majority of researchers had discovered that the availability of the Internet depends on the country. In some underdeveloped countries in Africa and South Asia, the learners had restricted Internet access due to their geographical location and lack of funds to acquire the internet packages. The literacy level of students, as well as their capacity to access online learning, is also critical to the efficacy of online learning. According to Hazwani et al. (2020), the internet connection was the most important element influencing the efficiency of e-learning. The researcher pointed out that the management professionals have to upgrade dormitory spaces to ensure that all students have access to the internet. Similar research has been done by Basar et al. (2021) and they did research among 99 pupils aged between 15-16 from secondary school. The findings revealed that 61% of learners had problems with the internet connection and weak signals. They also added that 14% of respondents did not have problems with the internet connection; however, they had issues with the cost of the internet providers. According to research done by Norfarahi, Mohd Isa, and Khadijah (2020) at a polytechnic in Malaysia's southern zone, the students' biggest problems

were allocating time to attend online lectures and complete assignments. They claimed that the online projects assigned by professors require more time to complete, and students' dedication is critical to their success.

In the research on the possible benefits and challenges of integrating mobile applications in the teaching process in Nigeria, the researcher Edeh Onyema (2019) carried out the research and in his research paper, he mentioned that the learners and the teachers normally face network issues. Such issues are normally evidenced in underdeveloped countries. Because of this issue, the teachers often had trouble with organizing activities for the learners, as students had to wait an amount of time to connect properly. Also, he added that although buying mobile phones is affordable in the present era, most families cannot afford to buy mobile phones for their children, as most families live in poverty.

Chapter 3

METHODOLOGY

A qualitative research design was chosen for this research. This methodology allows participants to think about their replies and provide more information than those obtained purely through quantitative methods (Mollaei & Riasati, 2013). When the study is centered on conducting interviews, qualitative research is used. When a researcher seeks to understand people's thoughts and causes for certain phenomena, he or she will do qualitative research. Qualitative research is also influenced by social science disciplines such as psychology, sociology, and anthropology. As a result, qualitative research approaches enable more in-depth probing and questioning of respondents based on their responses, with the interviewer/researcher attempting to understand their intent and sentiments. (Bhat, 2021)

3.1 Data collection method

To identify teachers' attitudes, experiences, and challenges of using mobile language learning applications the semi-structured interview method was used. This method advances. The semi-structured interview was implemented to collect the data from participants. This method is normally used when the questions are predefined and the rest of the questions are unplanned in advance.

Participants

For this research, the researcher invited 30 EFL teachers from Kazakhstan; however, only 20 EFL teachers who are currently working in private and state schools in Kazakhstan agreed to take part in the interview. The respondents for the interview were aged from 23 years old to 40 years old. In the research, the data was collected from 12 teachers from state schools and 8 teachers from private schools in Kazakhstan. According to the interview data, a majority

of the respondents (n=17) in the research were female, while only a few men (n=3) attended the research. The respondents in the research were from different cities in Kazakhstan. 10 respondents were from Qyzylorda town, while 7 respondents were from Almaty city and 3 respondents were from different parts of Kazakhstan.

Trustworthiness & credibility

For the trustworthiness of the research, the researcher used the member check technique. After taking the interviews and analyzing the data from the interview process, the researcher to check the trustworthiness and credibility of the data politely asked the respondents to explain the replies to the interview questions which were unclear to analyze. After having the interview data checked, the interviewer provided interviewees with the interview data to check and verify their answers. The interviewees verified the data without changing it.

3.2 Ethical considerations

Before the interview process, the researcher had informed the respondents about the research and the objectives of the research. Next, the respondents had been informed that the interview would be recorded and analyzed by the researchers. During the interview process, to follow the ethical rules the participants had a right to stop the interview process and refuse to give the interview when they feel discomfort. They had also been informed that the recordings of the interviews would be kept anonymously and the privacy of the participants was guaranteed.

3.3 Data analysis

Thematic analysis was used as data analysis in this research. Thematic analysis is typically used to describe a group of texts, such as interview transcripts. The researcher studies

the data carefully to uncover recurring themes — subjects, ideas, and patterns of meaning (Caulfield, 2021).

3.4 Procedure

After sending a consent letter to the participants, the participants were divided into 2 teams. The respondents, who live in other cities agreed to take the interview online, while the respondents from Qyzylorda agreed to take the interview in an offline format. To collect data from the interviews, in the online format, the researcher conducted the interview process with the help of software Zoom, WebEx, and WhatsApp. In an offline format, the researcher used face-to-face interviews and used voice recording applications and notes to gather the data. The interview in both online and offline formats was conducted individually and was audio recorded. Each interview, both in an online and offline format, took up approximately 15-20 minutes.

After the interviews, the data which was collected from the interviews were transcribed manually into the document. The researcher used the coding technique in the interview transcripts to reveal the important codes and the similar codes in the interview transcripts were merged to create new themes. With the help of coding techniques, the researcher could create new themes for the research and use them in the research process.

Chapter 4

RESULTS

4.1 Recognition of the potential of mobile apps to enhance student engagement

According to the data, the majority of the respondents were highly positive about using mobile applications. However, some respondents had mixed feelings and negative about using mobile applications in teaching English.

The respondents' general perceptions towards using mobile applications are positive. Most of the respondents admitted that mobile applications have become a useful tool that can be used in teaching English to learners. Some respondents claimed that mobile applications allow the students to get acquainted with the languages. In addition, another respondent claimed that since the new generation is familiar with the technologies, it is convenient and easy to use mobile applications. The vignettes below demonstrate this point:

I have a positive attitude towards the proposal of mobile applications in learning, as the new generation in our time (zoomers) are very adapted to them, and even sometimes learn better with the help of new technologies (participant 3).

We are living in the age of technology and as teachers, we also should integrate new technologies and applications into our lessons to improve the quality of our lessons. So, if you are asking about my attitude then it is positive (participant 11).

There is the claim that with the help of mobile applications it is possible to create a new way of teaching English rather than the traditional approach. This is because mobile applications possess various functions which can make teaching more engaging than a traditional approach to teaching English. Since the mobile applications are used by the learners anyway, it is easy to involve them in the teaching process and the applications can assist the teachers in terms of making the teaching process more interactive and organized. Furthermore,

another reason why the teachers were positive about using mobile applications was that mobile applications can save the teachers' time. The following extracts demonstrate that:

In my opinion, mobile applications make my teaching varied, and different from traditional classes so I think it is one of the new forms/ways of conducting lessons these days (participant 13).

Frankly speaking, my impression of mobile applications is good, I do feel positive while I employ mobile applications since this helps me to save time. In addition, my students also enjoy using mobile apps (participant 1)

On the other hand, it was pointed out that using mobile applications in the teaching process might be beneficial for teachers; however, using mobile applications might have disadvantages as well as advantages. The vignette below illustrates this point:

My perception of using mobile applications is negative. Even though using mobile applications might be beneficial for teachers in teaching English, it is sometimes challenging to use them in the teaching process. As I have some experience working with mobile applications, I can say that the negative side of mobile applications is that there is no proper instruction or approach for teachers and learners on how to use the applications properly. Sometimes, I faced difficulties with the internet and monitoring the learners. In the end, I decided not to use mobile applications (participant 18).

Despite having negative sides to using mobile applications, the positive sides of using them outweighed the disadvantages for the participants. The vignette below illustrates these points:

As an English teacher, I think using mobile applications is a great idea. they do have disadvantages, but it all depends on the individual; in my situation, it is all up to me. For example, I believe that if I always strive to manage their activities while using smartphones in the classroom and steer them on the appropriate path, I believe that using mobile applications is well worth it because they offer us the incredible potential to re-design the way we teach languages (participant 16).

4.2 Apps that are more familiar are most in use

During the interview, the researcher asked the respondents whether they use mobile applications in teaching English and which mobile applications they use and they responded that they use different kinds of mobile applications.

Since the mobile applications are designed to make the teachers use their teaching time effectively, the majority of mobile application developers are attempting to include their applications with useful functions so that the teachers can make their time to be used appropriately. Having various types of mobile applications is one of the benefits that the interviewees mentioned in the teaching process. As the number of mobile applications for teaching and learning English is increasing, the teachers can choose mobile applications which are suitable for their needs. According to the interviewees, the majority of the applications are available to be downloaded via Play Store (if the smartphone is based on Android OS), or AppStore (if it is based on iOS). The applications downloaded from both Play Store and AppStore have no differences between them. Because both Play Store and AppStore are capable of downloading mobile applications, the mobile applications have no differences at all, although they are designed on specific operating systems. Having different types of applications make the teaching process diverse since the EFL teachers can choose the applications according to their needs. The vignettes below illustrate this point:

In my classroom, I use a variety of apps to make my lessons more successful, entertaining, and inspiring (participant 2).

During my teaching process, I try to integrate various mobile applications, since on the internet several types of smartphones can be used in the teaching process. There is not necessary to choose the most favorite ones, it is possible to integrate different types of mobile applications. The variety of mobile applications gives me a chance to choose the most suitable applications for me myself and for my students' needs (participant 12)

The respondents claimed that they selected specific applications to use in their teaching based on various rationales. Most commonly, they were using the applications they knew how to use. The know-how came from either learning from colleagues or from teacher training seminars they attended in the past. This suggests that teacher-training professional development is an important channel through which policy-makers may influence technology use by English teachers. This also suggests that there is an unmet need for technology training among EFL teachers.

According to the interview data, it is revealed that the mobile applications such as Kahoot, Quizzes, and Quizlet are frequently used by the respondents. The reason why these mobile applications are more frequently used than the other ones is that the respondents, during the interview process, claimed these applications are the most usable, available and preferable by most teachers. The extracts below demonstrate:

I use Kahoot and Bamboozle since they save me time in the first place. When I need to verify my students' understanding of a topic, I create some quizzes on Kahoot, or if I don't have time, I can just find ready-made quizzes on the topic there (participant 20).

Mostly I use Quizlet in my teaching process since with the help of this application I usually save my time and with its functions, I can create interesting quizzes for my students since they like using this application (participant 8)

Moreover, some respondents stated that most mobile applications possess both desktop and mobile versions. This can make the teaching and learning process convenient for both teachers and learners. Mobile versions of applications give an opportunity to complete, give or check the assignments at any place they feel like doing so. The following vignettes illustrate:

Quizlet has desktop and mobile versions and the students can join the sessions when I give them the link. I mostly use the mobile version of this application since it is convenient to use for me and my learners. In the application, I chose a topic regarding my lesson plan and copy the link in the application and send them so that they could complete the given assignments. I also, ask them to complete the given assignments outside of the classroom, so that they could use the applications at any places where they are located (participate 17)

Especially I love quizzes as it has an automated feedback function. When I was a student, I always wanted to get immediate feedback as I was eager to know why a particular answer was correct. So, first students tick the answer, and after they get feedback with an explanation (participant 11).

Quizlet, Quizziz, and Kahoot are not the only mobile applications that the respondents listed during the interview process. As stated by the respondents, they intend to integrate other mobile applications into teaching to see whether these applications can perform as well as the Quizziz, Quizlet, and Kahoot. As an example, even though Kahoot, Quizziz, and Quizlet are considered to be the most usable applications among the teachers, the other applications are also used by the EFL teachers. Some respondents claimed that they try to integrate various mobile applications in teaching English to make the teaching process diverse. The vignettes below illustrate these points:

I use Bamboozle for vocabulary since it has a lot of flashcards on every topic in English, which is fun to guess with kids or to have a vocabulary battle among students (participant 6).

I prefer using YouTube in my teaching process. YouTube is a great application for teaching grammar or listening assignments. Especially, with students who have pre-intermediate or higher levels, we watch ted talks videos and discuss general information or details (participant 14).

Utilizing mobile social media applications in teaching English has been considered a new trend in teaching English. Since social media has somehow influenced peoples' lives, teachers tend to use social media applications in the process of teaching English. The participants claimed about utilizing social media applications can make the teaching process

engaging for both teachers and students, too. According to the data gathered from the interview, it is revealed that participants prefer to use Instagram. The extract below demonstrates:

I sometimes use the social media application Instagram in my teaching process. With the help of this app, I give my students various engaging assignments. As an example, I give them to shoot a video inside the building where they need to create a dialogue between themselves and post it on Instagram. Another assignment, which I usually ask them to do, is about taking pictures of themselves or nature and writing a description in English. Such assignments make the students' engagement arise since the students are familiar with social media and tend to use them every day (participant 17).

Instagram has a positive influence on teenage students. Since the majority of my students are teenagers, I try to use Instagram to make their learning process inspiring. I gave them a plethora of tasks so that they could do them on their mobile phone. Once I asked them to make a short video about the given topic and post it on Instagram with a description in English (participant 9).

4.3 An advantageous mobile app combines availability with student engagement

The teachers who participated in this study found that the availability of mobile apps made them so advantageous to use. Being easily and freely downloadable, having an easy interface, and features that are easily usable in teaching were valued by all participants. Thus, availability is what mattered most to the participants.

According to the interview data, the participants affirmed that using mobile applications can increase and engage the learners' language learning process, this is because the learners are familiar with the mobile gadgets. The extract below illustrates this point:

Using mobile applications in the teaching process has several benefits for us. As an example, they can increase children's interest in learning languages, they can also improve their learning habits (participant 14)

During the interview process, the interviewees agreed that mobile applications are convenient to use since the majority of the teachers and learners have at least one smartphone and understand how to utilize them appropriately. Moreover, the participants highlighted the convenience of using mobile applications with the claim that both teachers and learners can bring their mobile devices into the classroom. Since they are familiar with mobile gadgets the teachers have no issues with instructing the learners on how to use each application properly. Furthermore, adopting mobile applications in the teaching process is met positively for teachers, as the mobile language learning applications can increase the engagement of students' learning process and make the teaching process dynamic and inspiring. The extracts below demonstrate:

The learners are more engaged in the learning process since they are very familiar with the mobile apps and adapt quickly to using them (participant 3).

The applications can make lessons more dynamic and interesting, learners become engaged. They are keen on technologies, so instead of writing on the boards and copybooks, they prefer quick methods by using their mobiles and apps there (participant 7).

Another key benefit of using mobile applications is their mobility. The teachers, in their teaching experience, asserted that the mobile language learning applications can be utilized either inside the classroom or outside of the classroom. To illustrate this, the participants mentioned that both the teachers and their students apart from using the applications inside the classroom, utilize the mobile applications in the libraries, campus, or other buildings. The interviewees stated that mobile devices, on which the learners and teachers use mobile language learning applications, can be brought to the lessons easily since the devices are designed to be easily carried into the pockets, bags, etc. Also, the feature of mobility allows teachers to ask their learners to complete the given assignments via mobile applications, and the learners, on the other hand, can accomplish the tasks not only in the classroom with

teachers' monitoring, but they can also complete tasks online while sitting at home, library, etc. According to the interview data, two interviewees stated that they normally ask their students to bring their mobile gadgets into the classroom, so that the learners can complete the given assignments with the help of mobile applications. The vignettes below illustrate this point:

Mobility, in my opinion, is the advantage of mobile applications. It doesn't matter where you are; all that matters is that you have a device connected to the Internet (participant 8).

For me, mobile applications are great in terms of using them whenever you want. The learners can do the assignments while they are at home, and the teachers can give them assignments with the help of mobile applications. As an example, I used a mobile application called Quiziz and asked my student to accomplish the task. The students reported to me that only some of them completed the task inside the class, whereas the others completed them outside of the classroom (participant 15)

Next, all teachers highlighted that availability alone doesn't make mobile apps useful in teaching English. Rather, it is a combination of availability and opportunities to enhance student engagement that turn mobile apps into powerful tools teachers choose to use in class and beyond. Moreover, the respondents pointed out the potential use of mobile applications. According to the interview data, the participants revealed that implementing mobile language learning applications as learning materials for a long period can be possible if the materials are designed properly for the student's level of English. In addition, the interviewees highlighted that the majority of mobile applications are designed in game mode. The mobile applications that possess with game mode design can easily attract the learner's attention; hence, the teachers, with the help of mobile language learning applications, normally implement competitive activities between the learners to make the teaching and learning process more entertaining. Consequently, the learners want to improve their English level by using mobile language learning applications. The extract below demonstrates this:

They are accessible. They are good for long material retention on the condition that it is used appropriately to the level of learners. It's on the phone so they are practical to use. I mean you can use it on the way somewhere or while eating, waiting for someone, etc. Most of them are also in-game mode. I believe it makes the process more enjoyable as students get competitive while learning and want to win. So, it's a win situation for me (participant 9).

4.3.1 Applications are used to increase students' engagement

When the respondents were asked which aspect of using mobile applications, they consider positive, they asserted that one of the most widespread benefits of using mobile applications in the teaching process lies in the fact that the applications are capable of making both the teaching and learning process inspiring and engaging. Remarking on the positive sides of using mobile applications, the interviewees considered the fact that since the learners are inspired to complete the given assignments with the help of mobile applications, they complete the given tasks with enhanced motivation. The extracts below demonstrate that:

Mobile apps can make your lessons more engaging since students are motivated to win or complete the task (participant 1).

Mobile applications due to their great potential can make the teaching process engaging since the learners like competing with each other (Participant 15).

Another respondent noted that using mobile language learning applications allows the teachers to observe the students' learning progress by assessing their performances.

I got such benefits from using mobile applications as observing the progress of my students, assessing students according to their performances, making students speak, and conducting interesting and inspiring lessons (participant 4)

Because the majority of mobile applications have a gaming design, integrating the gamification method in the teaching process is effortless for the teachers. As stated by the respondents, integrating the gamification method in the teaching process is approved by the

EFL teachers, as most of the mobile applications are created on a game basis. EFL teachers can make the competitive activities by dividing the class into two teams. Next, competitive activities are not the only activities that can be implemented in mobile applications. On the other hand, other interactive activities can be implemented by mobile applications. Contemplating the other activities that can be implemented by the mobile applications, the interviewees stated that they normally take tests, quizzes, exams, listening, and speaking assignments with the help of mobile applications. In most cases, the assignments can be accomplished on Quizziz, Quizlet, and Kahoot. The interviewees asserted that these applications are designed properly to create interesting assignments. Rather, it is a combination of various visual images, a combination of music, and modes that can be used to create the assignments. The vignettes below illustrate these points:

From my own experience, I can say that the use of mobile applications in teaching English has the following positive sides: encouraging students with gamification and visibility (attracting students' attention and engaging their interests) (Participant 5)

With the help of mobile applications, we could make the teaching process engaging...as an example we normally utilize Kahoot and Quizziz to implement lots of interesting and engaging quizzes and divide the students into groups making them compete with each other.... (Participant 14)

4.3.2 Apps help English teachers use teaching time more effectively

Effectively time usage of mobile applications is considered to be one of the positive sides of utilizing mobile applications in the teaching process. The mobile applications, according to interviewees, are being used as learning materials by EFL teachers. With this statement, the interviewees stated that using mobile applications as learning materials can make the EFL teachers use teaching time more effectively. During the interview process, the respondents complained that printing out the worksheets, assignments, lesson plans, tests, and

exam papers usually makes use of the teaching time ineffectively. Preparing the assignments, taking exams, and making activity lessons in mobile applications can help EFL teachers to use their teaching time constructively. Furthermore, the interviewees made claims that using mobile language learning applications as learning materials can be beneficial for EFL teachers in terms of saving the papers from incongruous use. The next claim lies in the fact that avoiding the incongruous use of papers can save money for the school budget. Thus, using teaching time effectively is always positive for EFL teachers. The following vignettes demonstrate:

First of all, mobile apps help you as a teacher to save time (participant 1).

Different applications, on the other hand, help in the planning of my lessons, the preparation of useful materials or lessons, and, of course, the saving of my time. Because everything is available in different applications, I don't make any resources such as worksheets, flashcards, or slides by myself (participant 2).

4.4 Tech issues major challenge in using mobile apps

The challenges teachers experienced in using mobile apps turned out all to be related to technology issues. The most commonly mentioned ones were the internet connection issues and some students not having mobile phones. Apart from these issues, the interviewees mentioned the additional challenges that they confront in the teaching process. To illustrate the potential challenges of using mobile applications as a teaching tool, the interviewees declared that EFL teachers usually experience difficulties with access to the Internet (n=12), and tech issues with mobile devices. Being unable to monitor the teaching process (n=8) and difficulties with using applications were also mentioned during the interview process. Thus, all teachers who participated in the study experienced internet connection or access issues. Even mobile data passes wouldn't solve these difficulties. Interruptions caused by the slow or intermittent internet often disrupted class or even forced teachers to switch away from mobile apps.

4.4.1 The Internet connection issues are an obstacle in using mobile apps

Problems accessing the Internet connection are considered to be one of the most widespread obstacles to using mobile applications in teaching English. The interviewees were asked the reason why the EFL teachers face the Internet issues and they described the type of internet issues that they tend to face in using mobile applications.

Mentioning the issues with the Internet connection, the interviewees claimed that the challenges with accessing the internet connection lead EFL teachers to use their teaching time inefficiently. Possessing the latest models of gadgets does not guarantee to have a stable and strong internet connection. Moreover, the majority of schools are not provided with stable and fast internet connections. Even, with having a stable internet connection, the students are unable to use it since some schools do not allow the learners to use the internet. This issue is met negatively by EFL teachers since the current mobile language learning applications require a stable and fast connection. Due to having unstable internet access, it is difficult to work with mobile applications. The vignettes below illustrate these points:

There are some common problems with using mobile applications like low internet connection (Participant 1)

Since all these mobile applications work only via the Internet, respectively, the most difficult part is the problems with Internet access or connection. Also, as we know, it's no secret that we can't always provide our students with a good quality Internet connection. This can affect the teaching and learning processes (Participant 10).

The data that was revealed from the interview process, it is indicated that this obstacle enhanced dramatically at that time when the pandemic COVID-19 was at its peak and most of the state/private schools, and universities shifted from offline to online learning. To conduct the lessons, both EFL teachers and learners had to own stable and strong internet connections;

however, most of the learners had dealt with problems connecting to the lessons and doing the assignments. Because of having unstable and weak internet connections teachers had to wait for a long time until the students joined the lesson, the consequence of this issue was that this issue made the EFL teachers use their teaching time ineffectively by waiting for other students. The following extracts highlight:

During the pandemic, especially, and sometimes in the classrooms, too, the students might have poor connection or problems with connecting to the application (technical, internet, etc.) (Participant 13).

The Internet connection, especially during a pandemic situation in Kazakhstan, was in most cases weak and poor. It sometimes gave us some problems with connecting to the lessons. As an example, we used Microsoft Teams for online lessons. Sometimes we had to wait until other students join to the lesson. Despite being able to connect to the session, the students were kicked from the online lessons, because of having a low and poor connection (Participant 17)

Furthermore, EFL teachers in rural areas in Kazakhstan are experiencing more trouble with Internet access than the teachers who work in cities. Admitting the fact that some of the EFL teachers work in rural areas, they do have issues with access to the Internet. The participants mentioned that compared to urbanized cities where the EFL teachers are provided with a fast and stable internet connection. This is because, in urbanized cities, the network is provided effectively; hence, all of the schools have got access to the internet connection. This is not the case for EFL teachers from rural areas. Provided with a weak internet connection make both teachers and learners use their time profitless. The extract below demonstrates:

The first issue which I faced during a teaching in the village was having an unstable internet connection. Most of the students, despite having mobile devices, had

problems with connecting to the applications, as most rural areas are not provided with strong and stable internet connections (Participant 20).

What's more, since the majority of the state, private schools, or universities do not permit their learners to use the internet, the learners are needed to use a cellular network (3G/4G/5G) to get access to the internet and use mobile language learning applications. The reason for that lies in the fact that the number of students in schools and universities is immeasurable and it will be expensive enough for the schools and universities for providing both students and teachers with stable internet connection. Cellular networks are needed to be used to work with mobile language learning applications. It is believed that using a cellular network for using mobile applications is possible. Occasionally, the interview data demonstrates that both EFL teachers and learners use mobile networks to get connected to the applications. On the other hand, using a mobile network may lead to ineffective use of mobile data since there are various types of mobile networking. The high price of mobile networks is considered to be expensive and challenging for most learners. During the interview, the respondents claimed that sometimes, it is difficult for families to provide their children with a good, stable, and fast internet connection, due to the high price of the tariff plans. Because of this issue, most students are not able to use mobile applications during English lessons at school. The vignette below demonstrates:

The first challenge for me was that not all students have an access to the internet. In most cases, to make the teaching process engaging and inspiring I tend to use mobile applications to teach English to students. Sometimes, the learners could not use the internet due to insufficient mobile data. The learners claimed that they are not always provided with the internet, as their parents aren't able to pay for their internet every month. Even, if they have it, they use only the cheapest internet packages, which are slower than expensive ones (Participant 18).

4.4.2 Tech issues with mobile devices in using apps

Yet all teachers would still continue using mobile apps despite the internet issues. Nevertheless, facing challenges with smartphones can also be considered one of the widespread disadvantages of using mobile applications in the teaching process. The challenges with integrating mobile gadgets in the teaching process are always being discussed by EFL teachers. From the analyzing the data, it is indicated that some EFL teachers and learners sometimes possess outdated, or old mobile phones. The dramatic increase of mobile applications on the internet challenges outdated smartphones. To substantiate this statement, the interviewees claimed that the reason for this issue is considered to be having smartphones with small screens, small keyboards, etc. Consequently, it is difficult to work with gadgets that have small screens, as the inconvenience can occur. Hence, the EFL teachers may have problems with typing on small screens. Such devices provide weak performance and it will be difficult to work with them, as mobile applications on low-quality smartphones demonstrate a weak performance and they often freeze during teaching English. The following vignette shows:

The first issue could be out-of-date devices because they don't perform well and freeze when I try to use certain applications (participant 2 AKN)

The reason why some students possess out-of-date smartphones lies in the fact that the families which have low incomes in most cases are not able to provide their children with high-quality, expensive mobile devices, which work faster and more conveniently than the oldest models of mobile phones. The following extracts illustrate:

Having out-of-date smartphones is one of the widespread challenges which I am facing in the teaching process. The majority of the students possess low-quality mobile phones, due to the low income of their families. They claimed that they cannot afford to buy the latest model of smartphones because of this issue. Since

they use old mobile phones, it sometimes gives me the challenge to work with mobile phones with the help of their mobile phones (Participant 20)

Another difficulty is the lack of modern technology to download these applications (Participant 12)

Another issue that occurs with old models of smartphones is the low capacity of RAM (Random-access memory), this is because the mobile applications are updated day-to-day basis and their size is also increasing which might lead to insufficient memory on the phone and not being able to use the application properly. The data revealed that the interviewees made complaints that they are not able to install the mobile applications on their mobile phones as the memory capacity of mobile gadgets might be insufficient. Uninstalling the other applications from the mobile phone can sometimes be effective for the learners; however, it might effective only for a short time. This is because mobile applications are being updated regularly and the size of the applications is enhanced with updating the mobile applications. Thus, the consequence of this issue is that both teachers and learners always need to uninstall the other applications or other important materials (video/pictures/files) to be able to download the applications which they use for teaching and learning English.

Sometimes students face difficulties with installing the applications from the internet. The reason for this might be having insufficient memory capacities in their mobile phones. As some students still possess out-of-date mobile phones with low memory capacity, they find it difficult to install the applications for my lessons. This usually takes a lot of time, since the learners had to remove some applications from their mobile phones (participant 16).

4.4.3 Monitoring issues in using apps

Another tech challenge was simply a distraction. Rather, it is simply losing concentration when the learners use mobile applications. The interviewees supported the phenomenon that the learners tend to lose their concentration on the lessons. Moreover, instead of being concentrated more on the lessons, the learners tend to use their mobile phones for their own needs. With the inability of monitoring the learners' activities on mobile applications, the EFL teachers are experiencing challenges. According to the respondents, there were cases when the students instead of using completing the given assignments on the mobile applications, tend to misuse their mobile devices appropriately. As an example, the learners are caught during the teaching process using social media, playing games, and chatting with each other in messengers. Leaving out the learners without control, they can use their mobile phones inappropriately. The extracts below illustrate this:

Some learners once the teacher does not pay attention, they start chatting online with their friends, scrolling Instagram pages, and taking photos. It is hard to manage sometimes (Participant 7)

There were cases when I allowed my learners to work in teams and do online research on a particular topic. Unfortunately, some students distracted others by using mobile for peripheral purposes and checking their social media, like Instagram, and TikTok (Participant 6).

Academic misbehavior is also considered to be a serious issue and it occurs when the learners are not paid proper attention by the teachers. Stating the fact that with the help of mobile language learning applications the students tend to complete the assignments, the learners could easily commit academic misbehavior. To complete the assignments, the learners use mobile devices as it is easy for them to cheat since, with the help of smartphones, the

learners could skip the mobile applications and check the answers on the internet or plagiarize the ready work from the internet.

More than half of the students wrote with the help of translators, and some even quite brazenly sent someone's work on the Internet (Participant 8).

Another issue that I faced during the use of mobile applications in teaching English was cheating. Once I took an examination from my students using a mobile application called Quizziz. I asked my students to use their mobile phones, as it is convenient to use and everyone possesses smartphones. However, during the examination, some of the learners tried to cheat. It was difficult to control the students therefore they managed to cheat by minimizing the application and looking up some information on the internet (Participant 14).

Chapter 5

CONCLUSION

This research qualitatively investigated EFL teachers' attitudes, their experiences, and their challenges in using mobile applications in the teaching process. The research with the help of semi-structured interviews and data from the interview process was able to answer the research questions. The study concluded that the EFL teachers feel positive about using mobile applications, they indicated and listed possible advantages of using mobile applications and the challenges of using them in the teaching process.

The thematic analysis showed that teachers recognize the student engagement potential of mobile apps. That is, if mobile apps are not used as much as the policy-makers expect, it is not because teachers do not understand the value of mobile apps. Their perceptions of availability along with engagement potential indicate that teachers are also very practical in utilizing apps in teaching, that is, they are far from using mobile apps just for the sake of using them. Rather, they are considerably savvy about what they expect from mobile apps. Further, the fact that teachers select apps they know something about or know how to use indicates that teacher training is key in promoting the use of mobile apps in teaching English. The exploration of challenges teachers faced suggests that tech issues pose the biggest challenges. This is quite surprising as it's not teachers' lack of training or tech expertise but the tech issues beyond their control that make the use of mobile apps difficult. This also suggests that teacher training programs are likely doing a good job in preparing teachers to use the apps. It is the tech infrastructure that fails to support their efforts in utilizing the apps.

In the future, it is recommended that research on mobile applications and technology used for English language teaching focus more on recent technological developments such as chatbots providing text messaging support to students, for example, the mobile chatbots

explored in Nurshatayeva et al. (2020, 2021). Another important avenue for research in this direction will be to study how technology and mobile applications, in particular, are used in English-medium instruction, which has been shown to be successfully implemented in Kazakhstani secondary and tertiary educational institutions (Sadykbekova, 2022a, 2022b; Kozha, 2022; Tlepbergenova, 2022).

The research has limitations. As with any qualitative research, the findings cannot be generalized easily to other contexts. More research is recommended in different contexts across and beyond Kazakhstan to provide generalizable findings on how teachers use mobile apps. Yet the current findings shed light on the important aspect of how English is taught in Kazakhstan and provide important policy-relevant findings.

References

- Abdullah Al-Malki, M. (2020). Quizlet: An Online Application to Enhance EFL Foundation Students' Vocabulary Acquisition at Rustaq College of Education, Oman. *Arab World English Journal*, 6, 332–343. <https://doi.org/10.24093/awej/call6.22>
- Abrahamsson, S., & Dávila López, M. (2021). Comparison of online learning designs during the COVID-19 pandemic within bioinformatics courses in higher education. *Bioinformatics*, 37(Supplement_1), i9–i15. <https://doi.org/10.1093/bioinformatics/btab304>
- Alkhezzi, F., & Al-Dousari, W. (2016). The Impact of Mobile Learning on ESP Learners' Performance. *The Journal of Educators Online*, 13(2). <https://doi.org/10.9743/jeo.2016.2.4>
- Ally, M., & Prieto-Blázquez, J. (2014). What is the future of mobile learning in education? *RUSC. Journal of University and Knowledge Society*, 11(1), 142. <https://doi.org/10.7238/rusc.v11i1.2033>
- Almasri, R. (2021, December). *The use of mobile technology in education by international students in United States universities: Perceptions regarding mobile applications for English language learning*. (Ph.D. thesis). Robert Morris University. <https://www.learntechlib.org/p/118299/>
- Anjaniputra, A. G., & Salsabila, V. A. (2018). The merits of Quizlet for vocabulary learning at tertiary level. *Indonesian EFL Journal*, 4(2), 1-11. <http://doi.org/10.25134/ieflj.v4i2.1370>
- Ashcroft, R. J., Cvitkovic, R., & Praver, M. (2018). *Digital flashcard L2 Vocabulary learning out-performs traditional flashcards at lower proficiency levels: A mixed-methods study of 139 Japanese university students* (Vol. 26, Issue 1). Universitat Politècnica de Valencia. <https://doi.org/10.4995/eurocall.2018.7881>

- Aslan, I., Ochnik, D., & Çınar, O. (2020). Exploring perceived stress among students in Turkey during the covid-19 pandemic. *International Journal of Environmental Research and Public Health*, 17(23), 8961. <https://doi.org/10.3390/ijerph17238961>
- Basal, A., Yilmaz, S., Tanriverdi, A., & Sari, L. (2016). Effectiveness of Mobile Applications in Vocabulary Teaching. *Contemporary Educational Technology*, 7(1). <https://doi.org/10.30935/cedtech/6162>
- Berge, Z. L., & Muilenburg, L. Y. (2013). *Handbook of Mobile Learning* (1st Edition) [E-book]. Routledge. <https://doi.org/10.4324/9780203118764>
- Bhat, A. (2021, December 17). *Qualitative Research: Definition, Types, Methods and Examples*. QuestionPro. <https://www.questionpro.com/blog/qualitative-research-methods/>
- Bicen, H., & Kocakoyun, S. (2018). Perceptions of Students for Gamification Approach: Kahoot as a Case Study. *International Journal of Emerging Technologies in Learning (iJET)*, 13(02), 72. <https://doi.org/10.3991/ijet.v13i02.7467>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Brown, S. (2018). An investigation of faculty perceptions about mobile learning in higher education (Doctoral dissertation, Nova Southeastern University).
- Caulfield, J. (2022, March 10). How to do thematic analysis. Scribbr. <https://www.scribbr.com/methodology/thematic-analysis/>
- Cava, M. A., Fay, K. E., Beanlands, H. J., McCay, E. A., & Wignall, R. (2005). The Experience of Quarantine for Individuals Affected by SARS in Toronto. *Public Health Nursing*, 22(5), 398–406. <https://doi.org/10.1111/j.0737-1209.2005.220504.x>

- Cervantes, E. (2022, January 26). *Why is my phone's battery draining so fast?* Android Authority. <https://www.androidauthority.com/smartphone-battery-draining-fast-fix-1052999/>
- Cheung, S. K. S. (2015). A Case Study on the Students' Attitude and Acceptance of Mobile Learning. *Communications in Computer and Information Science*, 45–54. https://doi.org/10.1007/978-3-662-46158-7_5
- Cohen, L., Manion, L., & Morrison, K. R. B. (2007b). *Research Methods in Education* (Sixth edition). Routledge. <https://doi.org/10.4324/9781315456539>
- Crescente, M. L., & Lee, D. (2011). Critical issues of m-learning: design models, adoption processes, and future trends. *Journal of the Chinese Institute of Industrial Engineers*, 28(2), 111–123. <https://doi.org/10.1080/10170669.2010.548856>
- Darsih, E., & Asikin, N. A. (2020). MOBILE ASSISTED LANGUAGE LEARNING: EFL LEARNERS PERCEPTIONS TOWARD THE USE OF MOBILE APPLICATIONS IN LEARNING ENGLISH. *English Review: Journal of English Education*, 8(2), 19. <https://doi.org/10.25134/erjee.v8i2.2999>
- Elfeky, A. I. M., & Yakoub Masadeh, T. S. (2016). The Effect of Mobile Learning on Students' Achievement and Conversational Skills. *International Journal of Higher Education*, 5(3). <https://doi.org/10.5430/ijhe.v5n3p20>
- Eppard, J., Nasser, O., & Reddy, P. (2016). The Next Generation of Technology: Mobile Apps in the English Language Classroom. *International Journal of Emerging Technologies in Learning (IJET)*, 11(04), 21. <https://doi.org/10.3991/ijet.v11i04.5293>
- Farrah, A. P. D. M., & Abu-Dawood, A. K. (2018). Using Mobile Phone Applications in Teaching and Learning Process. *International Journal of Research in English Education*, 3(2), 48–68. <https://doi.org/10.29252/ijree.3.2.48>

- Fotaris, P., Mastoras, T., Leinfellner, R., & Rosunally, Y. (2016). Climbing Up the Leaderboard: An Empirical Study of Applying Gamification Techniques to a Computer Programming Class. *Electronic Journal of E-Learning*, 14(2), 95–110. https://www.researchgate.net/publication/293816223_Climbing_Up_the_Leaderboard_An_Empirical_Study_of_Applying_Gamification_Techniques_to_a_Computer_Programming_Class
- Gábor, K., & Péter, E. (2015). Implementation of mobile phones in education. *Research in Pedagogy*, 5(2), 94–104. <https://doi.org/10.17810/2015.08>
- Gan, C. L., & Balakrishnan, V. (2014). Determinants of mobile wireless technology for promoting interactivity in lecture sessions: an empirical analysis. *Journal of Computing in Higher Education*, 26(2), 159–181. <https://doi.org/10.1007/s12528-014-9082-1>
- Gangaiamaran, R., & Pasupathi, M. (2017). Review on Use of Mobile Apps for Language Learning. *International Journal of Applied Engineering Research*, 12(21), 11242–11251. <https://journal.uniku.ac.id/index.php/ERJEE>
- Gomez, S., & Smith-Slade, D. (2021, December 17). *Phone Addiction: Warning Signs and Treatment*. Addiction Center. <https://www.addictioncenter.com/drugs/phone-addiction/>
- Green, K. (2019, July 25). *How do smart phones damage your eyes? | Optimax*. Optimax Eye Surgery. <https://www.optimax.co.uk/blog/smart-phones-damage-eyes/>
- Hashemi, M., & Abbasi, M. (2013). The Role of the Teacher in Alleviating Anxiety in Language Classes. *International Research Journal of Applied and Basic Sciences*, 4(3), 640–646. https://irjabs.com/files_site/paperlist/r_726_130328102911.pdf
- Hawryluck, L., Gold, W. L., Robinson, S., Pogorski, S., Galea, S., & Styra, R. (2004). SARS control and psychological effects of quarantine, Toronto, Canada. *Emerging Infectious Diseases*, 10(7), 1206–1212. <https://doi.org/10.3201/eid1007.030703>

- Kanchana, S., & Saha, P. R. (2015). Integrating Smart Phones in Teaching Listening, Speaking, Reading and Writing Skills. *International Journal of English Language, Literature and Translation Studies*, 2(1), 8–11. <http://www.ijelr.in/Vol.2.S1/8-11%20S.%20KANCHANA.pdf>
- Khaddage, F., Lattemann, C., & Bray, E. (2011, March). *Mobile Apps Integration for Teaching and Learning. (Are Teachers Ready to Re-blend?)* (M. Koehler & P. Mishra, Eds.; pp. 2545–2552). <https://www.learntechlib.org/p/36694>.
- Klimova, B. (2019). Impact of Mobile Learning on Students' Achievement Results. *Education Sciences*, 9(2), 90. <https://doi.org/10.3390/educsci9020090>
- Klimova, B., & Poulova, P. (2015). Mobile learning and its potential for engineering education. *2015 IEEE Global Engineering Education Conference (EDUCON)*. <https://doi.org/10.1109/educon.2015.7095949>
- Kozha, M. (2022). Exploring academic and non-academic impacts of single-gender versus coeducational schooling. SocArXiv working paper. <https://doi.org/10.31235/osf.io/kwxqs>
- Kraut, R. (2013). *Policy Guidelines for Mobile Learning*. United Nations Educational, Scientific and Cultural Organization.
- Kukulska-Hulme, A. (2009). Will mobile learning change language learning? *ReCALL*, 21(2), 157–165. <https://doi.org/10.1017/s0958344009000202>
- Kukulska-Hulme, A. (2010). Mobile learning as a catalyst for change. *Open Learning: The Journal of Open, Distance and e-Learning*, 25(3), 181–185. <https://doi.org/10.1080/02680513.2010.511945>
- Kukulska-Hulme, Agnes (2016). Mobile Assistance in Language Learning: A critical appraisal. In: Palalas, Agnieszka and Ally, Mohamed eds. *The International Handbook of Mobile-*

- Assisted Language Learning. Beijing: China Central Radio & TV University Press Co., Ltd., pp. 138–160. <http://www.crtvup.com.cn/zyxz/dj.asp?id=9>
- Kusmaryani, W., Musthafa, B., & Purnawarman, P. (2019). The influence of mobile applications on students' speaking skill and critical thinking in English language learning. *Journal of Physics: Conference Series*, 1193, 012008. <https://doi.org/10.1088/1742-6596/1193/1/012008>
- Leis, A., Tohei, A., & Cooke, S. D. (2015). Smartphone Assisted Language Learning and Autonomy. *International Journal of Computer-Assisted Language Learning and Teaching*, 5(3), 75–88. <https://doi.org/10.4018/ijcallt.2015070105>
- Lewis, A. (1994). Oppenheim, A. (1992). Questionnaire Design, Interviewing and Attitude Measurement, London, Pinter. Pp 303. £14.99 paperback, £39.50 hardback. ISBN 185567 0445 (pb), 185567 0437 (hb). *Journal of Community & Applied Social Psychology*, 4(5), 371–372. <https://doi.org/10.1002/casp.2450040506>
- Machmud, K. (2018). The Smartphone Use in Indonesian Schools: The High School Students' Perspectives. *Journal of Arts and Humanities*, 7(3), 33. <https://doi.org/10.18533/journal.v7i3.1354>
- McPheat, S. (2022, February 16). The Advantages and Disadvantages of Mobile Learning. *Skillshub.Com*. <https://www.skillshub.com/bespoke-elearning/advantages-disadvantages-mobile-learning/>
- Michael Onyema, E. (2019). Opportunities and challenges of the use of mobile phone technology in teaching and learning in Nigeria- A Review. *International Journal of Research in Engineering and Innovation*, 3(6), 352–358. <https://doi.org/10.36037/ijrei.2019.3601>
- Mingyong, Z. (2015). Empirical research into the effect of blended learning on English writing learning in institutions of higher vocational education. *2015 2nd International*

Conference on Electronics and Communication Systems (ICECS).

<https://doi.org/10.1109/ecs.2015.7124800>

Mohd Basar, Z., Mansor, A. N., Jamaludin, K. A., & Alias, B. S. (2021). The Effectiveness and Challenges of Online Learning for Secondary School Students – A Case Study. *Asian Journal of University Education*, 17(3), 119. <https://doi.org/10.24191/ajue.v17i3.14514>

Mthethwa, P. M. (2014). Examining the Impact and Cognition of Technology on Preservice Teachers of English in Swaziland. *The Journal of Technology Studies*, 40(1).

<https://doi.org/10.21061/jots.v40i1.a.3>

Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29–48. <https://doi.org/10.1080/01587910500081269>

Munday, P. (2015). THE CASE FOR USING DUOLINGO AS PART OF THE LANGUAGE CLASSROOM EXPERIENCE. *RIED. Revista Iberoamericana de Educación a Distancia*, 19(1). <https://doi.org/10.5944/ried.19.1.14581>

Nalliveetil, G. M., & Alenazi, T. H. K. (2016). The Impact of Mobile Phones on English Language Learning: Perceptions of EFL Undergraduates. *Journal of Language Teaching and Research*, 7(2), 264. <https://doi.org/10.17507/jltr.0702.04>

Nuraeni, C., & Nurmalia, L. (2020). Utilizing WhatsApp Application in English Language Learning Classroom. *Metathesis: Journal of English Language, Literature, and Teaching*, 4(1), 89. <https://doi.org/10.31002/metathesis.v4i1.2289>

Nurshatayeva, A. (2020). Essays in Higher Education (Doctoral dissertation, University of Pittsburgh).

Nurshatayeva, A., & Page, L. C. (2020). Effects of the shift to English-only instruction on college outcomes: Evidence from Central Asia. *Journal of Research on Educational Effectiveness*, 13(1), 92-120.

- Nurshatayeva, A., Page, L. C., White, C. C., & Gehlbach, H. (2020). Proactive student support using artificially intelligent conversational chatbots: The importance of targeting the technology. *EdWorking paper, Annenberg University* <https://www.edworkingpapers.com/sites/default/files/ai20-208.pdf>
- Nurshatayeva, A., Page, L. C., White, C. C., & Gehlbach, H. (2021). Are Artificially Intelligent Conversational Chatbots Uniformly Effective in Reducing Summer Melt? Evidence from a Randomized Controlled Trial. *Research in Higher Education*, 62(3), 392-402.
- O'Dea, S. (2021, September 10). Smartphones - Statistics & Facts. *Statista*.
<https://www.statista.com/topics/840/smartphones/>
- Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, 290, 113108.
<https://doi.org/10.1016/j.psychres.2020.113108>
- Oz, H. (2014). Prospective English Teachers' Ownership and Usage of Mobile Devices as M-learning Tools. *Procedia - Social and Behavioral Sciences*, 141, 1031–1041.
<https://doi.org/10.1016/j.sbspro.2014.05.173>
- Rana, S. S. (2014). A Study of Use of Mobile Phones for Teaching & Learning Purpose. *International Journal of Science and Research*, 3(6), 2765–2767.
https://www.ijsr.net/get_abstract.php?paper_id=2014834
- Sadykbekova, A. (2022a). Linguistic situation in Kazakhstan. SSRN working paper.
Sadykbekova, Aigerim, Linguistic situation in Kazakhstan (May 22, 2022). Available at SSRN: <https://ssrn.com/abstract=4116759>

- Sadykbekova, A. (2022b). Differences by Mother Tongue in Studying English: The Case of Kazakhstani Secondary Students. SSRN working paper.
<http://dx.doi.org/10.2139/ssrn.4116726>
- Saravanan, C., Mahmoud, I., Elshami, W., & Taha, M. H. (2020). Knowledge, Anxiety, Fear, and Psychological Distress About COVID-19 Among University Students in the United Arab Emirates. *Frontiers in Psychiatry*, 11, 582189.
<https://doi.org/10.3389/fpsy.2020.58218>
- Sharples, M., Arnedillo-Sánchez, I., Milrad, M., & Vavoula, G. (2009). Mobile Learning. *Technology-Enhanced Learning*, 233–249. https://doi.org/10.1007/978-1-4020-9827-7_14
- Şenel, E. (2016). Foreign language anxiety of students studying English Language and Literature: A Sample from Turkey. *Educational Research and Reviews*, 11(6), 219–228. <https://doi.org/10.5897/err2015.2507>
- Shield, L., & Kukulska-Hulme, A. (2008). Editorial. *ReCALL*, 20(3), 249–252.
<https://doi.org/10.1017/s095834400800013x>
- Shuler, C. (2009). Pockets of potential: Using mobile technologies to promote children’s learning. New York: The Joan Ganz Cooney Center at Sesame Workshop.
- Silver, L. (2019, February 5). Smartphone Ownership Is Growing Rapidly Around the World, but Not Always Equally. *Pew Research Center’s Global Attitudes Project*.
<https://www.pewresearch.org/global/2019/02/05/smartphone-ownership-is-growing-rapidly-around-the-world-but-not-always-equally/>
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students’ mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, 22(9), e21279. <https://doi.org/10.2196/21279>

- Sönmez, A., Göçmez, L., Uygun, D., & Ataizi, M. (2018). A review of Current Studies of Mobile Learning. *Journal of Educational Technology and Online Learning*, 1(1), 12–27. <https://doi.org/10.31681/jetol.378241>
- Smith, A. (2017, January 12). *Record shares of Americans now own smartphones, have home broadband*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2017/01/12/evolution-of-technology/>
- Tangirbergen, T. (2022). EFL Teachers' Perceptions and Challenges of Using Mobile Language Learning Applications. EdArXiv working paper. <https://doi.org/10.35542/osf.io/yxgdp>
- Tlepbergenova, A. (2022). Learning English in and out of school in Kazakhstan. SocArXiv working paper. <https://doi.org/10.31235/osf.io/upq26>
- Valconi, R. (2018, July 9). *Principles and Applications of Mobile Learning and Technologies – Technology and the Curriculum: Summer 2018*. Pressbooks. [https://techandcurriculum.pressbooks.com/chapter/principles-and-applications-of-mlearning/#:%7E:text=Mobile%20learning%20is%20rooted%20in,Crescente%20%26%20Lee%2C%202011\).](https://techandcurriculum.pressbooks.com/chapter/principles-and-applications-of-mlearning/#:%7E:text=Mobile%20learning%20is%20rooted%20in,Crescente%20%26%20Lee%2C%202011).)
- Vinikas, I. (2021, July 25). The advantages and disadvantages of Mobile Learning | Kultura. Retrieved March 15, 2022, from <https://corp.kultura.com/blog/mobile-learning-advantages-disadvantages/>
- Wright, B.A. (2016). Transforming vocabulary learning with Quizlet. In P. Clements, A. Krause, & H. Brown (Eds.), *Transformation in language education*. Tokyo: JALT.
- Yan Mei, S., Yan Ju, S., & Adam, Z. (2018). Implementing Quizizz as Game Based Learning in the Arabic Classroom. *European Journal of Social Science Education and Research*, 5(1), 194–198. <https://doi.org/10.2478/ejser-2018-0022>

- Yang, J. (2013). Mobile Assisted Language Learning: Review of the Recent Applications of Emerging Mobile Technologies. *English Language Teaching*, 6(7).
<https://doi.org/10.5539/elt.v6n7p19>
- Yermekkyzy, A. (2022). Experiences and Challenges of Novice and Experienced English Teachers in Using ICT Applications. EdArXiv working paper.
<https://doi.org/10.35542/osf.io/w2egn>
- Zeng, R., & Luyegu, E. (2012). Mobile Learning in Higher Education. *Informed Design of Educational Technologies in Higher Education*, 292–306.
<https://doi.org/10.4018/978-1-61350-080-4.ch015>
- Zhao, F. (2019). Using Quizizz to Integrate Fun Multiplayer Activity in the Accounting Classroom. *International Journal of Higher Education*, 8(1), 37.
<https://doi.org/10.5430/ijhe.v8n1p37>
- Zulkifli, N., Hamzah, M. I., & Abdul Razak, K. (2020). “Issues and Challenges of Using MOOCs in the Teaching and Learning Process.” *Journal Of Research, Policy & Practice of Teachers & Teacher Education*, 10(1), 78–95.
<https://doi.org/10.37134/jrpptte.vol10.1.6.2020>

*Appendix A**Interview protocol*

1. Please briefly describe your English teaching experience.
[Probe: How long have you been working as an EFL teacher?]
2. What do you think about using mobile applications for learning English in your teaching?
3. [Probe: Could you give examples from your teaching practice that illustrate this point?]
What are the mobile applications for learning English that you use in your teaching?
4. Please describe how the switch to online instruction during the COVID-19 pandemic influenced your use of mobile apps in your teaching.
[Probe: Please tell a story to give an example to illustrate this.]
5. What do you consider to be the positive sides of using mobile language learning applications in your teaching?
6. What challenges did or do you have in using mobile language learning applications to teach your students?
[Probe: Please tell a story to give an example to illustrate this.]
7. What do you do to overcome the challenges of using mobile apps in teaching English?
[Probe: What advice would you give other teachers to make the use of mobile apps more efficient?]
8. What aspects of your personal background do you think were helpful in helping you better use mobile apps in English teaching?

Appendix B

Informed consent form

Teachers' experiences of, challenges, and attitudes towards using mobile applications for teaching English as a foreign language in Kazakhstan

Date _____

Dear _____

Purpose: You are invited to participate in an interview that explores English language teachers' attitudes, experiences, and challenges of using mobile applications

Time involvement: It will take approximately 20-30 minutes.

Risks and benefits: Minimal risks are associated with the present study. Your answers regarding the understanding and the use of authentic texts will not be utilized to make judgements about the school/university that you work. As for the benefits, you will deeply reflect on your own practice in teaching reading of authentic texts and challenges or benefits that you face while using them.

Participant's rights: Your participation is voluntary. Therefore, you have rights to refuse to answer particular questions, withdraw your consent and discontinue participation at any time without giving any reasons. The results of this study may be published in scientific journals or presented at scientific meetings.

Contact: If you have any questions, complaints, concerns about this research or your rights as a participant, you can contact me, Temirbek Tangirbergen +7 776 858 7818 (mobile phone) or tanirbergen.temirbek@gmail.com

If you agree to participate in this study, please sign this consent form.

- I carefully read all the information.
- I was aware of the purpose and procedure of the study.
- I have informed that confidential information will not be used publicly. The collected data will have access only to the researcher and her scientific advisor.
- I have the right to leave the study at any time without giving reasons.
- Knowing all the above, I agree to participate in the study voluntarily.

Signature: _____

Date: _____