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**The use of Educational Mobile Applications in
Learning English as a Foreign Language
Case Study: The Students of English Language at
the University of Ghardaia**

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Dedication

I dedicate this work to my parents who helped me a lot to accomplish this project and whose advice and prayers have given me strength during my research, to my brother Mouad and my sister for their encouragement and support and to my best friends and classmates for their assistance and encouragements.

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Abstract

Due to the development of technology, new innovations have been introduced in education. Nowadays, there are several technological devices that can be used to facilitate and enhance teaching and serve the learners' needs. Therefore, it depends on the desire of the teacher about choosing between employing modern techniques in his work or depending on the use of traditional ways of teaching. The purpose behind this study is to shed light on the role and effectiveness of using educational mobile applications and its importance in the field of EFL teaching and learning. It attempts to explore the most used technological and educational tools .To construct this work, a case study was conducted at the university of Ghardaia , especially, the English department, where the EFL students and teachers were selected as the sample population. A number of research instruments were used to collect data. The questionnaire was addressed to the learners. The data collected were analyzed qualitatively and quantitatively. The findings of the study revealed that teachers and learners support the use of educational mobile applications. The teachers affirmed that they used it as a helpful tool to assist their teaching without neglecting the use of traditional methods. On the other hand, the learners believed that its use helps them a lot. Moreover, all of them recognized the importance of using educational technology and confirmed that it has a significant role in the EFL teaching and learning process.

Keywords: Educational application- Traditional methods-Technology-Modern education - University

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List of Abbreviations

AF : Absolute Frequency

CALL : Computer Assisted Language Learning

EFL: English as a Foreign Language

ICT: Information and communications technology

LMD: Licence, Master, Doctorat diploma system

RF: Relative Frequency

TEFL: Teaching English as a Foreign Language

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General introduction

The significance of English in our society is undeniable; for the past decade, English has become the world's most powerful language in all social areas from tourism to the entertainment industry. English is the language that people use to communicate with others whose mother tongue is different; it is also the one used for travelling; thus, speaking English has become a fundamental requisite in almost every society. Due to its importance in all aspects of life, English has also made its way into other academic areas such as education. The majority of schools have introduced English as a Second Language (ESL) in their curriculum: all students under the age of sixteen in Algeria study English subject every year. There has also been an increasing appearance of academies that teach foreign languages, in particular English. These academies, which can be state or private establishments, allow people from all ages to study English: adults and children have started to learn the language massively. Furthermore, the appearance of technological devices and the Internet have made possible the creation of platforms which offer online courses to learn English. These platforms were created to provide courses remotely for people who could not attend face-to-face lessons. It could be said that technology has been revolutionizing the world of education, and specifically, the learning methodologies. With the creation of applications for learning English, students have found themselves with enough material to start studying the foreign language autonomously. Most of these apps, indeed, offer a great variety of vocabulary and grammar exercises as well as games, quizzes, and chats. Smartphone applications have become a popular way to learn English since students acquire new knowledge without noticing it. Many studies have been carried out to see how these apps work and what effects they have on learning vocabulary and grammar. This study will also contribute to understand not only the effectiveness of applications, but also the opinions that the general population has towards the applications. The study begins by contextualizing the theme of the study; examining the different factors which contribute to the importance of English, and the studies related to apps to learn such language. It will then go on to present the data of the conducted study: the participants and the material used. It will continue presenting the results of the survey, and the answers provided by the participants. Furthermore, it will propose an app

design with the users' contributions. All in all, the study concludes by presenting a discussion of the results, and the importance of using mobile applications in the present study, the educational mobile applications that teachers and students have adopted and describes how it can facilitate the learning and the teaching process

Aim of the study: The present work sheds light on the use of Educational mobile applications by the students of English at the University of Ghardaia. This research explores the extent to which both students and teachers have used the mobile applications in teaching and learning process.

Statement of the problem: In order to have a reliable answer to the **statement**, of problem, the researchers introduce the following **research questions**:

1-**Can** the adopt of using educational mobile applications be replaced with traditional ways of teaching ?

2-**What** are the educational mobile applications that can be used in teaching and learning process?

3-**In what way** do the use of educational mobile application impact on teaching and learning process?

The above mentioned questions led the researchers to propose **the following research hypotheses**:

1-The teachers have found that there is a positive use of new educational mobile applications within the learning process and they can be replaced with traditional ways of teaching.

2-There are a lot of educational mobile applications such as: Newsela which is considered among the best educational mobile applications for Reading and Duolingo which is considered among the most prominent mobile applications for Foreign Languages.

3-The educational mobile applications may impact on teaching and learning by providing some crucial educational mobile applications that teachers and learners can use .

To find out to which extent the hypotheses are true, the researchers designed an exploratory case study research with students at the university of Ghardaia .

Research Methodology:

In order to achieve the objectives of the present study, the researchers depended on the use of

a research instrument which is the questionnaire for the students. Thus, the results will be analyzed quantitatively and qualitatively. Therefore, qualitative and quantitative research methods are adopted. The questionnaire is administered to EFL learners at the department of English at the University of Ghardaia.

Significance of the Study:

This study seeks to shed light on the effectiveness of implementing educational mobile applications in EFL. This new way of learning in EFL is important because it tends to aid through students' freedom of self-expression and autonomous learning. Furthermore, this study seeks to uncover students' and teachers' views regarding its role in replacing the traditional ways in learning EFL.

Structure of the Dissertation:

To carry out this research, the present work is structured into two chapters. The first chapter provides a theoretical overview of educational technology. It aims at setting the importance of using the educational mobile applications in teaching and learning process. It provides an overview of using educational mobile applications teaching and learning and its relation with the teaching methods and learning theories. This chapter also introduces the importance of educational mobile applications and states effectiveness of using educational mobile applications. The second chapter deals with the research design and methodology. It presents the research instruments and gives a detailed description of the informants' profile, research procedures and the data analysis methods. Furthermore, the chapter is concerned with the analysis of the collected data. At the end, it describes the most important results

Chapter one: Literature Review & Definition of the Main Concepts

Introduction

Nowadays, Students of all ages spend a great deal of time interacting with their mobile phones. They use their mobile phones for communication, entertainment and learning.

The smartphone has great importance in the process of learning a foreign or second language; its benefits are not only limited to facilitate the contact but also to pursue knowledge and learn new information. Therefore, the need of different techniques for teaching EFL leads teachers to use technological and educational mobile applications which help them facilitate learning and serve their learners' needs. This chapter deals with the use of technology in EFL teaching and learning theories, the definition of educational mobile applications and their types, the role of educational mobile applications in EFL teaching and the effectiveness of educational technology.

1.1 Technology and educational Learning teaching theories

Today, the huge development of technology has affected a wide range of fields. For instance, in the field of pedagogy and teaching; the instructional device has evolved and the way of teaching has changed due to the fact that technological revolution pushes educators to look for appropriate technologies to suit their learner's needs. Educational era refers to numerous substances used to enhance the studying technique and make the teaching/learning process more enjoyable. It allows studying through using suitable technological methods and resources. It worries the development, enterprise and usage of studying resources (Robinson et al. 2008 p 24). E-learning is a time period associated with Educational Technology; its miles using technological equipments which include computer systems and virtual era (Asta, 2010 p 33). Technology satisfies the visible and auditory senses of the learners. Educational era takes 3 factors into consideration: the extent of students, the hobby and schooling of the trainer and the desires of the institute. With this new manner of teaching, faculties are linked to the internet. Also, sports which include video conferencing make it feasible to convey the sector into the classroom. (Nomass, 2013,p 52)

Technology lies at the center of the economic process; moving education work and culture. The use of English has increased speedily since 1960. Nowadays the role and status of English is that it's the language of social context, political, socio-cultural, business, education, industries, media, library, communication across borders, and key subject in information and language of transmitting education.

Educational era helps EFL teaching through offering actual conditions and contexts. Thus,

technological substances like computers, language labs and audio- visible aids are beneficial for EFL teaching and learning. Technology enables the teacher to improve his way of teaching and lead him/her to be more motivated. Besides, the use of technological equipment is a vital tool in EFL teaching and learning since it makes the learning process less boring and more exciting and turns the teaching process into a fun and a more productive adventure owing to the wide range of technological devices that can be implemented by teachers and learners alike.

1.2.The concept of Educational technology in EFL

The use of educational mobile has practically seen as an important addition in teaching and learning. In fact, there are different points of view regarding its impact on the role of teachers and the level of students. Therefore, due to the development of technology, innovations have been introduced in education(Seliger and Shohamy .1989 p. 46). Educational Technology refers to various materials used to enhance the learning process and make teaching enjoyable. It facilitates learning through the use of appropriate technological processes and resources (Gavi and Hockl, 2007, p 65) .Educational technologies include devices such as tablets, smartphones, laptops, or mobile application software (apps) that could increase and improve learning outcomes. Educational technologies have become an integral part of educational practice in developed countries and its use is becoming more and more widespread in the developing countries. Educational technologies could offer opportunities to improve students' performance and digital skills acquisition. Research suggested that public schools should value the role of educational technologies in promoting student-centered learning and developing technological literacy in the educational context (Kong, Chan, Hunag, & Cheah, 2014 p 71). Educational technologies continue to infiltrate education sectors and transform the landscape of teaching and learning.

According to estimates, more than one million apps were available on the app markets in 2015 (Deng, Offutt, Ammann and Mirzaei, 2017 p, 25). As educators continue to integrate educational apps into classrooms and curriculums, it is critical for educators and administrators to understand the impact of mobile app learning software on students. (Hutchison, Beschoner, and Schmidt Crawford, 2012 p, 37).

1.3 . Technology and Learning Theories

According to Mary, A. W. & Dina, (2012) Learning theory describes students' acquisition, process, and retain knowledge during learning. Cognitive, emotional, and environmental

influences, as well as prior experiences, all play a role in the acquisition or modification of understanding or worldviews and the retention of knowledge and skills .Thus, the first theory is behaviorism which was developed in the beginning of twentieth century and focuses on external behavior. Researchers supporting this theory assert that learning is the acquisition of recent behavior through conditional process (stimulus and response). B.F Skinner who developed this theory of learning believes that people learn through positive reinforcement or punishment. Thus, he developed a system referred to as programmed instruction that consists of many programs that supported this theory of learning. These programs will provide positive reinforcement once a wanted behavior happens and negative reinforcement when a negative desire occurs. For example, the use of on-line activities can provide the learners with positive verbal feedback (Mary & Dina, 2012, p 57).The second theory is referred to as artistic movement, it has been developed within the field of pedagogy which views the teacher as a helper who guides the learners to construct their own language taking into thought a lively setting within which the scholars are engaged in language activities. Therefore, Constructivists believe that students learn by collaborating and analyzing problems. Rakes, et.al. (1999 p 67) believe that the provision of various technological tools and therefore the proficiency of the teacher on the exploitation of these tools are involving the employment of artist methods. They state that "Technology will give the vehicle for accomplishing constructivist teaching practices" (p.3). They ensure that the use of technology can facilitate the learners to enhance their learning by creating different tools available. For example, on-line learning can provide several activities through collaborating work between the learners and lecturers.

1.4.The importance of technology in teaching/learning EFL

All the states of the world are developed and in constant progress thanks to technology, which consequently influences and changes life. In fact, technology is now widely used to improve the education system at all levels the use of educational technology has yet to be explored in order to realize the tremendous benefits it offers in the teaching-learning process.(Gavin & Hockly, 2007, p.44). According to Dudeney and Hockley (2007) technology is becoming increasingly important and will become a common part of English language teaching in the years to come. The reasons given are greater access to the internet and the students who have grown up in the digital age .Thus,It is arguable that there is no need for a theory of technology-enhanced learning. Technology can play an important role in the achievement of

learning outcomes but it seems unnecessary to explain this enhancement with a special account of learning. Rather, the challenge is to describe how the technology allows underlying process common to all learning to function effectively. (Beetham & Sharepe, 2013, p.17)” In this quote, Beetham and Sharepe roughly discuss the importance of generational adoption for English language proficiency. They say that generation has an important feature, but it is very difficult to imagine that generation allows us to ensure that all dominance strategies work. Therefore, it is important to conduct research on the quality of English teaching at this level, particularly on the use of technological tools used in the classroom. Gholamina (2014 p 23) states that there is now a tremendous demand for technology that offers teaching methodologies and resources to create a stimulating, motivating and dynamic environment for language learning. According to Merzifonluoglu and Gonulal (2018), the implementation of technology in teaching has created new opportunities for language learners and teachers. Additionally, the use of educational technology will allow teachers to have more dynamic and interactive EFL classes and students to better prepare for this ever-changing world in which we live (Adel, A. & Leanne, B. 2003p 110).

1.5. Definition of educational mobile application

There's an application for almost everything these days, and education is no different. Technology can be of great help in teaching and learning, and the use of educational applications is changing the way students around the world are learning. Designed for everything from providing advanced learning methods like a flashcard applications, to preventing procrastination, to blocking use of those apps you're constantly immersed in, education applications are revolutionizing the world of education. We're in the 21st century and there's no reason to be afraid of incorporating technology into our studies: used correctly, educational applications can significantly increase your productivity and improve your grades. Access any information from anywhere, anytime makes the possible learning process convenient and easy. In these times of change, accessing information via mobile phones is easy. A mobile phone can make many of your tasks easier and also save you a lot of time. Visiting the library and choosing books, data collection is no longer a challenge. The trend in education is also changing, there is a wave of digitization in education. E-learning is the new need of students. Mobile e-learning apps are growing in popularity every day and that is due to their uniqueness of making learning fun for students. Therefore, using applications on smart devices in the classroom is becoming more and more

common in today's classroom. It can even be argued that they play a much more important role in the education of young learners and will certainly become more important as future generations of students move towards more technology in the classroom. (Traxler, J., & Vosloo, S. 2014, p 81).

Educational software for mobile applications is an integral part of educational technologies. It refers to software programs specifically designed for mobile devices such as desktop computers, smartphones, handheld devices, and tablets that can be easily downloaded from app stores or app marketplaces to be installed on compatible mobile devices for immediate participation and performing a specific function in an educational context (Cherner, et al., 2014; Martin, Sarro, Jia, Zhang, & Harman, 2016, p 19). The market for educational software for mobile applications is growing rapidly. It is estimated that more than one million apps were available on the app markets in 2015 (Deng, Offutt, Ammann & Mirzaei, 2017, p27). Education applications could support education in a variety of functions such as: B. Games, productivity, health and social networks (Bouck, Satsangi and Flanagan, 2016). Hutchison, Beschoner, and Schmidt-Crawford 2012 p.27) found that integration with mobile educational application software such as Doodle Buddy and Popplet taught students to communicate digitally and collaborate creatively. Results showed that students worked in small groups to create visual representations of stories using graphics. This study examined multimedia and presentation skills related to the use of educational applications in categories such as Creative Communicator and Global Contributor.

Mobile app educational software could promote social and interactive learning and share information between individuals. Chiong and Shuler (2010) concluded that well-designed mobile educational software could promote learning to attain literacy. Sessions, Kang and Womack (2016) found that appropriate educational application software to complement teacher instruction could positively impact student learning, particularly the ability to create motion visualization objects. As of June 2010, there were an estimated 30,000 apps classified as “educational” for iPhone, iPod and iPad (Murray and Olcese, 2011). As of January 2015, there were approximately 80,000 mobile education apps in the Apple iTunes Store. All iTunes store software is combined without any particular pattern of organization (Cherner, et al., 2014). 86% of the most popular educational application software listed in the education category of the iTunes Store were not intended for school use (Shuler, 2012). There is a need for a rigorous, standards-based framework to help educators and administrators evaluate and select the appropriate educational mobile application software. \$47 billion has been spent integrating technology tools such as hardware and software into classrooms (Pittman and

Gaines, 2015). The authors found that teachers' attitudes towards the use of technology played a crucial role in the integration of technology.

This study also explored how teachers' perspective of students' technological literacy might be related to the use of mobile learning software

1.6. The effectiveness of educational mobile applications in EFL

None of us ignores the fact that smartphones have become crucial parts of people's modern lives. Their role is becoming increasingly important, especially in times marked by the ubiquitous lockdown due to the corona pandemic. Interactions between people have become virtual, where meetings, celebrations, expressions of condolence, personal training cannot be held or organized. Therefore, smartphone programs are used in a much wider variety of conditions including cyber information.

Smartphones are described as; those cell phones that allow their users to do more than make smartphone calls and send text messages .You can surf the Internet and run software packages like a computer. Their contact monitors make it easy for customers to interact with them . Therefore, the expansion of the numerous functions of the phone has created excellent and limitless possibilities for teachers and students. Additionally, the use of mobile devices in learning environments encourages students to engage in learning activities. Therefore, it can be stated that mobile devices could become a necessity for students and teachers as well (Yılmaz and Akpinar, 2011) One of the benefits of mobile learning is the ability to make learning content accessible outside of class times. Mobile learning management systems can be used for this. In addition, mobile learning content is created based on design principles for qualified interactions. The researchers suggest increasing the access time (Çelik, 2012 p 55). In addition, it is important to determine and report the duration and number of visit sessions in the mobile learning system (Sayın, 2010; Martin and Ertzberger, 2013). According to Anderson, Franklin,2013 and Royle Stager, 2014 They stated that various technical standards for effective learning through mobile learning are proposed, such as B. Fast and wireless Internet network infrastructure, large screen size, and mobile applications in the students' native language so that students are not exposed to extraneous cognitive load is more durable for learning. In addition,. Mobile learning offers advantages such as quicker access to information for students, diverse learning opportunities, contextual learning, control over one's learning, support and encouragement of learning, greater participation in the course, engagement in the course, and clear positive differences in academic learning. Performance taking into account the results of the investigations. (Sayın, Z. 2010 p .38)

1.7. Types of Educational Technology

The wide spread of technology in our daily life makes some materials the essence of education, notably in foreign language teaching; for the reason that it provides authentic language. There are many types of educational technology such as:

1.7.1. Computer Assisted Language Learning

Computer Assisted Language Learning or CALL refers to using the laptop in language publications by instructors and learners given the utility of the laptop in language teaching and learning. Nunan (1999) states that "interactive visible media which computer systems supplied appear to have a completely unique educational functionality for subjects that contain social conditions or trouble fixing, which include interpersonal fixing, overseas language or 2nd language mastering" (p. 26). CALL is a method which is very much used in EFL teaching and learning thanks to its many advantages. It is a method that is used as a useful resource to the instructor inside the classroom. For instance there are exclusive packages to train English pronunciation. CALL is used to help learners due to the fact that learners can increase and manipulate their learning through the use of various supports which include email, digital books and dictionaries. Therefore, the learners may be more self-reliant due to the fact they are able to use the laptop to get facts and experience glad approximately their mastering. (Warschauer & Whittaker, 1997) In the past, EFL learning turned was less enjoyable due to the fact that educators used classical techniques for teaching. Thus, the usage of CALL facilitates the learners to be more motivated, since CALL programs can offer the teachers with methods to teach the language "...through games, lively graphics, and trouble-fixing techniques. As a result, even tedious drills end up greater interesting" (Ravichandran, 2000, p.82). The Computer may be a beneficial device for detecting the learners' errors and offering self-correction (Davies, 2006). However, the computer illiteracy of the learners can cause huge troubles in an EFL teaching and learning environment.

1.7.2. Information and Communication Technologies

.According to Grace and Kenny (2003), information and communication technology (ICT) include audiovisual aids as well as virtual technology such as computer systems and the internet, which can be motivating equipment that can be used outside of the instructional process. ICT provides technological equipment that enables students to gather information and improve the ir level. It boosts the learners' motivation and allows them to interact with one another. Furtherrmore, it allows students to improve their communication skills. ICT allows learners to partici

pate more effectively.

Additionally, Paramskas (1993) stated a listing of web sites for language instructors and learners .As a a result, These web sites challenge troubles of language gaining knowledge of. They use language as a medium of culture. So The learners can talk about facts to provide essays, testimonies or projects and the E-mail is a characteristic of the Internet which may be utilized by overseas language learners to talk with local audio system that assist them to enhance their language capabilities. Moreover, the Internet gives exclusive language sports which can assist the training of the target language (Rakes, G.C., Flowers, B. F., Casey, H. B. & Santana, R. (1999).

1.7.3.Language Laboratories

When it comes to language laboratories, we are in need to this while practicing skills of language. Consequently, according to Singhal, (1997) Language laboratory plays a crucial role in language learning. it's a space that is provided with technological materials for the follow of listening comprehension and talking to facilitate the scholars to master the target Language laboratory consists of audio-visual aids akin to computers, videos, projectors and audio-recorders. .Aditionally, Abdullah (2014) states that "Modern language laboratories are adorned with all the mandatory instrumentation together with computers, headphones, microphones, electronic equipment and heaps of listening materials". Thus, a Language laboratory creates a decent atmosphere. Furthermore, César & Brenes, (2006) asserted that language laboraratories may simplify the process to boost communication and increase their motivation. Hence, A language laboratory supplies totally different technological aids that may help the lecturers to show listening as they can make the learners hear native speakers' oral communication or songs. Besides, the learners will have the chance to pay attention to totally different models. This kind of activity is usually employed by lecturers in oral tests as a result of it offers them the possibility to record the spoken questions. Then, the learners answer them by recording their responses. Later on, the teacher can save his students' answers on a CD or Flash disc and proper them (César & Brenes, 2006)

1.7.4.Audio-visual aids

According to Matthew, N. (2013) audio Visual Aids are also called instructional material. Audio literally means “hearing” and “visual” means that which is found by seeing. So all such aids, which endeavor to make the knowledge clear to us through our sense are called “Audio

Visual Aids” or Instructional Material. Therefore, all these learning material make the learning situations as real as possible and give us firsthand knowledge through the organs of hearing and seeing. So, any device which can be used to make the learning experience more concrete and effective, more realistic and dynamic can be considered audio visual material. He also asserted that there are a lot of styles of audio-visual aids which will be used. Among them, there are pictures, songs, video, projectors and Power point presentations. an image may be a visual or written image. Nowadays, the net offers thousands of images which may be utilized in the classroom. There are alternative ways for presenting a picture; it can be conferred as a slide show on a display screen and on a board by a projector (2014).

Veronika (2007) stated that EFL academics may use songs to draw in their students’ attention to pay attention to the target language. the employment of songs can offer the learners with a large vary of vocabulary. The teacher can check if his students perceive the song when being attentive to it by introducing completely different activities like asking them questions about what the song talks about. Furthermore, the learners can realize it gratifying to listen to completely different songs as a result of it motivates and helps them improve their listening and speaking skills. Hence, Videos become a useful tool within the educational system because they permit the learners to find different people’s life and cultures. According to Lonergan (1995) «video in the room offers exciting prospects for teaching and learning". In fact, academics use videos to create their lessons additional comprehensible. Also, the learners suppose videos to develop their speaking and listening skills by being attentive to the native speakers.

1.7 .Conclusion

Smartphones are attractive tools for the majority of young people particularly university undergraduates. They try to have the newest and most expensive models because of their numerous integrated enhancements. Smartphones' ease of use, usefulness and positive effects on learning encourage, not only students but also instructors to use them in the educational process, especially for online learning .Therefore, The present study can be viewed as an attempt to reveal some of effects that smartphone use can impose on students and students' learning .Hence,. The theoretical chapter focuses on the general explanation of the concept of mobile educational applications and the use of educational technologies in education and training. It defined educational mobile applications and educational technologies. It explained the significant impact of technology on EFL including mobile educational applications in

education. It also describes the effectiveness of mobile applications in EFL and their role in the educational system, followed by an illustration of technologies and learning/teaching theories. At the end of this chapter, we have shown the importance of using mobile applications in teaching and learning process

Chapter two: Research Methodology

Introduction

The second chapter explains the research methodology and design, with a focus on data collection and analysis. It is used to describe a case study about the importance of using mobile applications in EFL. First, it emphasizes the significance of this research. It then goes on to describe the research instruments used in this study. It describes the sample population before moving on to the data analysis methods used in this case study. Finally, this chapter describes the data analysis and provides a discussion of the main findings, as well as the drawn conclusion.

2.1. Research Objectives

The goal of this research is to provide data that can be used to improve the use of educational mobile applications for EFL teaching and learning. It attempts to demonstrate the role and significance of educational mobile applications by providing a broader perspective on the reactions of students and teachers to their use. The purpose of this research is to determine the effectiveness of educational mobile applications used by EFL teachers and students. It also attempts to demonstrate the use of educational technology and whether or not traditional methods of teaching are still used. The primary goal of this research is to collect various perspectives on the use and effectiveness of educational mobile applications for teaching and learning English at the University of Ghardaia.

2.3.The Sample

The informants were University of Ghardaia students. They were chosen to respond to the research instrument that was sent to them. However, the researchers chose a sample population of around thirty (30) students from this large population. In fact, the respondents were chosen at random to represent the entire population because they all had the same chance of being chosen

2.3.2. Learners' Profile

The students involved in this study were LMD students at the English department at the University. They were thirteen (30) students, ten (10) female and twenty (20) male. They were randomly selected to answer a questionnaire about their opinion about the use of educational applications for learning the English language and if they used it in their classroom or not. There were many reasons which led the researcher to choose EFL students.

First, these learners were in touch with the use of mobile applications and educational applications i.e., they used Duolingo and Newsela as applications and language laboratory and audio-visual aids to learn the English language. Further, they had the experience of using such mobile applications because they already used them in their studies. So, they were mindful about the effect of using educational applications for learning the English language.

2.4. The Research Instrument

In this study, the researcher chose one research instrument to collect data for a thorough investigation of EFL teachers' and learners' attitudes toward the use and effectiveness of educational mobile applications. The current work was carried out with the help of a questionnaire.

2.4.1. The Questionnaire

The questionnaire was addressed to thirty (30) EFL college students. It sought to gain their reviews approximately about the use and effectiveness of instructional cell programs and whether or not it stepped forward their language degree or not.

We have conducted a study and gave the students a questionnaire and asked them to answer the questions. It is noteworthy that all but a few open questions were answered. Regarding the forms of questions used in this study, the researchers used closed questions, multiple-choice questions, and open-ended questions. Closed questions restrict respondents to a limited set of answers, often (yes) or (no). In the case of multiple-choice questions, several answers are given, from which respondents must choose the answer that best suits them. Open-ended questions allow respondents to answer freely and without restrictions.

2.5. Data Analysis Methods

The researchers relied on a combination of data analysis methods to analyze the questionnaire, consisting of quantitative and qualitative analysis. In this regard, Dornyei (2007) affirms that "data analysis should be done independently for the quantitative and qualitative stages and the synthesis should be done only in the final interpretation stage". Using a combination of quantitative and qualitative methods helps the researcher to obtain better results. To analyze the data collected during the interview, the researchers used the method of qualitative data analysis

2.5.1. Quantitative Data analysis

Quantitative research is defined as the analysis of phenomena by collecting numerical data that is analyzed using mathematically sound methods .Therefore, quantitative data analysis is used to summarize the results from the sampled population As for Muijs (2004) he states that it is a way of measuring people's thinking from a statistical point of view. As a quantitative method, a questionnaire can be used to collect quantitative data.

2.5.2. Qualitative Data analysis

Unlike the quantitative method, which focuses on measurement, the qualitative method is used to describe human behavior. Therefore, Smith (1997) claims that "qualitative analysis is about forms and patterns before form sequences". Qualitative data can be collected through various research tools such as interviews. Also, Seliger and Shohami (1989) said that it is always in the form of words, either spoken or written The purpose is to understand how people think and feel and why they make certain decisions

2.6.Data Analysis

Since, in collecting data, the researchers have adopted two research instruments which are the questionnaire and in, data analysis was needed for this instrument. Therefore, the researchers made use of quantitative and qualitative data analysis method to analyze the questionnaire while they depended only on the use of qualitative data analysis method for the analysis of the interview.

2.6.1. The Analysis of the Questionnaire

Question one: Do you use educational applications for learning ?

Yes

No

To phonetic

The first question aimed at knowing whether the students used educational applications to learn English. It was noticed that almost all the respondents said Yes , twenty five (25) informants, which represents percentage of (89.3 %) , whereas it was also noticed that some other respondents said No , two informants (2) , which represents percentage of (7.1 %) , while only a few respondents has chosen To phonetic that represents percentage of (3.6 %) , one informant (1) .Accordingly, they shared the same viewpoint and therefore they had

the same attitude i.e., the majority of the respondents stated that they used educational mobile applications to learn English.

The following table illustrates their answers:

Suggestions	A.F	R.F
Yes	25	89.3%
No	2	7.1 %
To phonetic	1	3.6 %

Table 2.1. The students' usage of educational applications

Question two: What are the educational applications do you use the most?

- Wordweb Google translation Duolingo Grammarly

When asking the students what were the educational applications they mostly use, the majority of the respondents, nine-teen (19) informants, which represents percentage of (67.09 %) of the learners expressed that they are using Google translation . Some of other informants , five (5) informants , representing the percentage of (17.9 %) said that they did use Duolingo .and only three (3) informants , which represents percentage of (10.7 %) said that they preferred using Grammarly applications as well as just one (1) of them, that represents percentage of (3.6%) said that they rarely use Wordweb applications.

The following table illustrates their answers:

Suggestions	A.F	R.F
Google translation	19	67.9 %
Duolingo	5	17.9%
Grammarly	3	10.7%
Wordweb	1	3.6%

Table 2.2. Student's use of educational application

Question three :Give some suggestions about some educational applications

The third question tried to ask informants to set some suggestions concerning educational applications ,where almost of them are using Academia, Dictionary box, Cake and You-tube applications , which represent percentage of (14.29 %) , while British council – Websites - Instagram -Tiktok- British Score- Digital dictionaries- Oxford dictionaries- transcribing Apps- To phonetic applications which represents percentage of (7.14 %). That are used infrequent Whereas Elevate-Udemy-Quora-Reddit- Macmillan British Talk-and Cake and Use –it Daily. that are used rarely by learners ,which represent percentage of (3.57 %) .

The table below represents the students' responses:

Suggestions	A.F	R.F
Academia/Dictionary box	4	14.29 %
British Council	2	7.14 %
Cake	4	14.29 %
Cake-Some websites- Instagram-Tiktok	2	7.14%
Digital dictionaries	2	7 .14%
Elevate-Udemy-Quora- Reddit	1	3.57%
English Score	2	7.14%
Macmillan British	1	3.57 %
Oxford dictionary- Transcribing applications	2	7.14 %
Talk-and Cake	1	3.57%
To Phonetic	2	7 .14%
Use –it Daily	1	3.57%
You tube	4	14.29%

Table .2.3. Student's suggestions about the educational applications

Question four: What do you use educational applications for ?

The aim of this question was to identify the goal of using the educational applications . The majority of the respondents ,fourteen informants (14) , representing the percentage of (51.9 %), have been noticed that they are using Checking up the meaning difficult words applications and only five (5) informants , which represents the percentage of (18.5 %),

preferred to use Learning grammar and Checking up the meaning difficult words applications , while three (3) informants , representing (11.1 %) out of 27 ones stated that they rare to use Text correction whereas just a few other two (2) informants , representing (7.4 %) affirmed that they hardly ever use other educational mobile applications and another three respondents (3), representing (11.1 %) said that they seldom use : psychology , higher level English , history , politics and social applications ...

Their responses are illustrated in the following table

Suggestions	A.F	R.F
Checking up the meaning of words	14	51.9 %
Learning grammar	5	18.5 %
Text correction	3	11.1 %
Other users of applications	2	7.4 %
Other respondents	3	11.1 %

Table 2.4. Student’s purpose of educational application

Question five: Do you think that the English department is equipped with enough technological materials?

Yes No

When the students were asked whether their English department was equipped with enough technological materials, the majority of them (28), representing the percentage of (90 %), stated that it was not. and three (3) respondents, representing the percentage of (10 %), said that the English department was equipped with enough technological materials.

Their answers are illustrated in the following table

Suggestions	A.F	R.F
No	25	90.%
Yes	03	10.%

Table 2.5. The students’ opinion about the technological materials used in the department

Therefore, most of the respondents think that the English department is not equipped with enough technological materials.

Question six: Do you use technology such as dictionaries or internet in your phone/tablet as support strategy in your class?

Yes No

The aim of this question was to investigate whether the students used their own technological tools in the class or not. The majority of the students (23), representing (82.1 %) of the population, affirmed that they used their own technological tools such as dictionaries or internet in your phone/tablet as support strategy in the class , whereas five (05) students, representing the percentage of (17.9 %), stated that they did not use it.

Their responses are illustrated in the following table

Suggestions	A.F	R.F
Yes	23	82.1 %
No	5	17.9 %

Table 2.6. the students’ use of their own technological tools in the class

From the above table, one can notice that most of the respondents employ their own technological tools while the remaining respondents do not use it since they stated they did not have such technological tools.

Question seven: Do you think using educational applications in classroom is time consuming?

Yes No

The question seven tried to prove if the learners thought that the use of educational applications in the classroom was time consuming or not. Seventeen (17) students, representing (60.7 %) of the total population, agreed that the use of educational applications in class was not time consuming and the rest, eleven (11), representing the percentage of (39.3%), saw that it was so .

The table below summarizes the students' responses

Suggestions	A.F	R.F
Yes	17	60.7%
No	11	39.3%

Table 2.7. The students' opinion about the use of educational applications for learning
Therefore, most of the informants think that the use of educational applications in class is not time consuming.

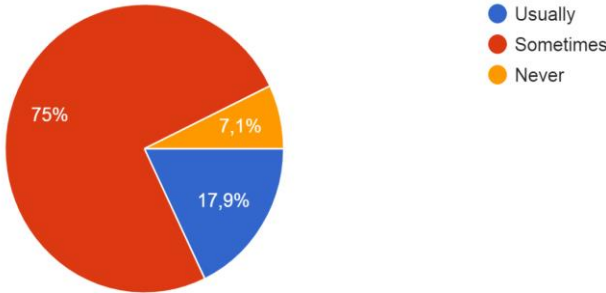
Question eight: How often do you use educational applications in the classroom?

- Usually Sometimes Never

Concerning question eight, most of the students (21), representing the percentage of (75 %) confirmed that they sometimes used educational applications in the classroom. On the other hand, two (02) students, (7.1 %) claimed that they never used it in the classroom. Five (05) students, representing the percentage of (17.9%), said that they usually used it.

The following pie chart gives an idea about the different responses of the informants

8-How often do you use educational applications in classroom?
28 réponses



Pie chart 2.1. Students' use of educational applications in classroom

From the above pie chart, it can be understood that most of the students sometimes use educational applications and a few of them stated that they usually use it.

Question nine: Do you wish to spend more time using educational applications in your classroom?

Yes No

Question nine aimed at identifying if the students preferred to spend more time using educational applications in their classroom. Most of the informants fifteen (15), representing the percentage of (53.6%), answered by "yes" and the remaining, Thirteen (13) students, representing the percentage of(46.4%), said that they did not wish to spend more time using educational applications in their classroom.

The informants’ responses are summarized in the following table:

Suggestions	A.F	R.F
Yes	15	53.6%
No	13	46.4%

Table 2.8. The students’ attitudes towards the use of educational applications in classroom Therefore, most of the informants have the desire of spending more time using educational applications in their classroom.

Question ten: Do you think using educational applications would improve your language skills?

a little a lot

The learners were supposed to explain why the use of educational applications was important for them. Thus, the results obtained demonstrated that fifteen (15) students, (53.6 %) of the total number of the respondents, believed that it enhanced their language level a lot. On the other hand, thirteen (13) students, representing (46.4 %) claimed that the use of educational applications did not enhance their language level.

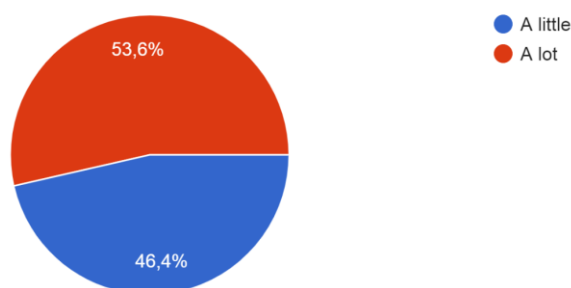
The following table illustrates their answers:

Suggestions	A.F	R.F
A lot	15	53.6 %
A little	13	46.4 %

Table 2.10. The impact of the use of educational applications on the students' level
Therefore , almost half of the respondents believe that the use of educational technology enhances a lot their language skills whereas the remaining respondents feel the reverse.

10-Do you think using educational applications would improve your language skills?

28 réponses



Pie chart.2.5. The impact of the use of educational applications on the students' level

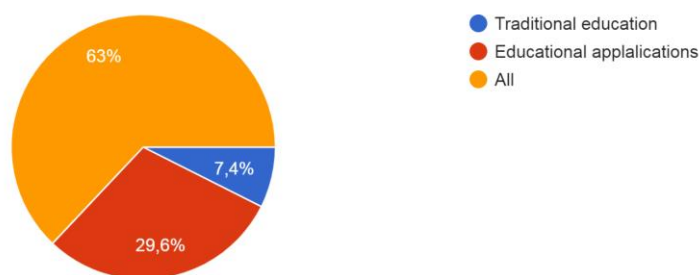
Question eleven: What do you prefer?

Traditional education Educational applications all

When the respondents were asked whether they preferred learning through the traditional way, using new technological tools or both of them, seventeen students (17) , representing (63. %) of the respondents, stated that they preferred the use of all of the methods; it means they enjoyed the use of the traditional method as well as educational technology. On the other hand, eight (8) respondents, representing the percentage of (29.6 %), affirmed that they preferred the use of educational applications rather than traditional education whereas two (02) students, representing the percentage of (7.4 %), said that they preferred traditional education.

The following pie chart describes the students' responses:

11- What do you prefer?
27 réponses



Pie chart 2.6. The students' choice between traditional education and modern technology
From the above pie chart, one can see that most of the respondents like to use educational technology during their studies. However, they do not neglect the use of the traditional method

Question twelve: While doing research, which tool do you use the most?

Books Internet educational applications all

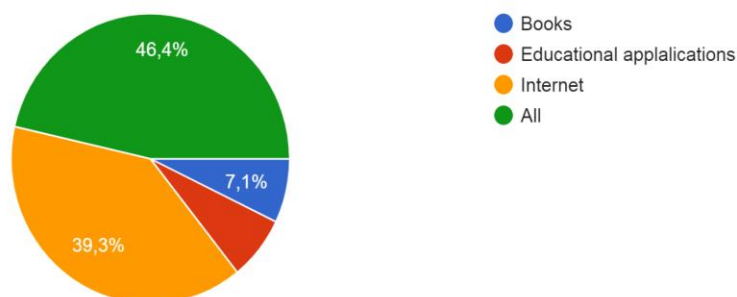
Question twelve was addressed to check whether the students still used books while doing their research or they depended only on the use of the internet. Almost all the students (13), representing the percentage of (46.4 %) affirmed that most of these tools have been used by informants ;

And only eleven (11) students used the internet, representing the percentage of (39.3 %), while two (2) informants, representing the percentage of (7.1 %) stated that they used books as a research tool as well as two (02) respondents, representing the percentage of (7.1 %), said that they depended only on educational applications while doing their research.

The answers are described in the following pie chart

12- While doing a research which tool do you use the most?

28 réponses



Pie chart 2.7. The student' choice among the internet, educational applications and books

Consequently , one can notice that most of the respondents depend only on the use of the web resources along with using these tools when doing a research differently since they offer them information without making any effort.

Question thirteen : Do you have any suggestions to improve the teaching and learning situation at your university?

The last question was an additional question which was addressed to the students to list some suggestions to improve the teaching and learning situation in their university. The results obtained have demonstrated that Seven (07) respondents found no adequate suggestion to improve their learning in general. The rest of the respondents mentioned some suggestions which were:

- ✓ The first thing was that the university should provide more technological materials and provide more sessions using language laboratories.
- ✓ They asked to have more sessions and activities about listening and speaking skills.
- ✓ They suggested having more documents and books in the library.
- ✓ The majority of the students affirmed that they sometimes faced problems with the lack of rooms.
- ✓ Some respondents stated that they preferred to use the data show and computers in all sessions
- ✓ Providing tablets that contain those educational applications for each student
- ✓ Using different technological tools while doing a research

- ✓ They must internet a lot during studying
- ✓ To be more strict in exams (most student cheat)
- ✓ To improve our levels at the university, a special educational application must be created that contain all the information and skills, including digital or audio-visual information , especially in oral and grammar sessions
- ✓ Students wish that teachers would change the way they teach with such as : Doing activities and competitions to learn English and changing the academic way of teaching
- ✓ Adapt the tech (QR codes , Google docs , talking sessions to help people to improve their social skills...etc)
- ✓ Having extra speaking sessions out of the syllabus.
- ✓ Allow students to have access to their phones during classes in order to follow with the session
- ✓ The methods of educating is so boring that's what makes me feel uncomfortable while studying in the university. Therefore, teachers must make us feel
- ✓ Students need to talk and work with theirs skills in this language comfortable

2.7. Discussion of the main results

To expand this present work, the researchers had proposed a set of hypotheses. It was suggested as a first hypothesis that teachers found it more fruitful to use educational mobile applications in education within the learning process rather than depending on traditional materials as opposed to a traditional methods . After analyzing the data collected, the present work proved this hypothesis because the teachers expressed their desire to use such educational mobile applications such as Duolingo and Newsela applications to assist their teaching. Most of the students seemed to be more motivated to use them because they confirmed that it has positive effects and its use enhances their language level. However, the students did not neglect the use of traditional ways of teaching . The teachers believed that nowadays the use of educational mobile applications is important but it cannot totally replace the traditional teaching. They trusted adopting such educational applications that can never replace a teacher

As a second hypothesis, the researchers suggested that there are a lot of educational mobile applications such as Newsela which is considered among the best educational mobile applications for Reading and Duolingo which is considered among the most prominent mobile

applications for Foreign Languages that can be used within the educational system to improve EFL teaching and learning. The findings of this research work revealed that this hypothesis is true. It has been suggested in this hypothesis and was proved to be used in the teaching and learning. Nowadays, most of teachers depend on implementing some mobile applications and to assist their teaching. Some teachers rely on the use of applications in the classroom. Other teachers, especially those involved in teaching speaking and listening skills, also preferred the use of language laboratories and audiovisual materials. Therefore, the majority of students have used a few applications that are used for educational purposes. For example, Checking up the meaning of words, Learning grammar and Text correction applications that are widely used and these are history, politics and social applications and Other users of applications widely used, especially for using e-books and e-dictionaries

The third hypothesis suggested that the use of educational mobile applications enhances teaching and learning by providing numerous educational applications that teachers and learners can use effectively. After the data collection and analysis, the findings had proved this hypothesis. Most of the teachers feel comfortable when they use educational mobile applications to teach their students. They believed that its use helps them a lot such as Cake-Some websites-Instagram-Tiktok, Digital dictionaries, Elevate-Udemy-Quora-Reddit Macmillan British, Oxford dictionary-Transcribing applications, Talk-and Cake To Phonetic and text correction mobile applications, especially the teachers of written, grammar and oral productions module who confirmed adopting the use of these. Most of the students had the feeling of wanting to use educational mobile applications in their classroom. They prefer to use them because it helps them to improve their language level through a fun process.

In conclusion, most English students were in favor of using educational mobile educational applications. They understood the importance of using it. All teachers agreed that today's students are more engaged in the use of educational mobile applications in the university and outside the classroom. Therefore, the use of mobile applications, especially in the field of education, should become standard in classrooms and universities. A teacher should encourage his students to develop their language skills through the use of educational mobile applications. However, teachers and students need professional training on the use of educational applications to avoid usability problems

2.8. Conclusion

This chapter is intended to supply general overview of the research design and data analysis. It was related to the objectives of this present work. It was also about explaining the research instrument and data analysis methods. The purpose was to analyze the data collected and present the results. In fact, the analysis of the survey of students showed that the use of educational mobile applications for teaching and learning English as a foreign language is really important and useful. But some students should learn to use mobile educational applications so that they do not face them and teachers do not neglect the use of traditional education. The next chapter will also have problems in use. Therefore, educational mobile applications for students have a decisive effectiveness, which is devoted to for teachers and students of the university.

General Conclusion

Educational applications have been affecting almost everything in the world for the past few decades. Earlier, education was only related to money. Things have changed over time, and there has been innovation in education systems around the world. The world has witnessed a revolutionary way of providing education. This educational system has changed with the invention of mobile education programs. It took a new form of learning. As in all other sectors, technology has entered the education system and changed the traditional teaching methods. You can do even more with the mobile phones you carry in your pocket. It is more convenient and efficient than the usual traditional approach. Not only smartphones but also tablets have changed the knowledge platform. Students today are equipped with a better understanding of their subject. To increase productivity, educational programs are interactive and useful for attracting students to college. Mobile apps give us access to an endless amount of information and data. This digital technology has revolutionized the education system. EFL teachers and learners depend on the use of different educational applications to make the educational process successful. Taking the role of using educational applications as a medium for EFL teaching and Learning and its impact on the EFL teaching and learning process as the studied issue for this research work, the researchers introduced the following research questions:

- 1-Can the use of educational mobile applications be replaced with traditional ways of teaching ?
- 2-What are the educational mobile applications that can be used for EFL teaching and learning ?
- 3-in what way do the use educational mobile applications enhance teaching and learning process ?

The above mentioned questions led the researchers to propose the following research hypotheses:

- 1-The teachers have found it more fruitful to use new educational mobile applications within the learning process and they can be replaced with traditional ways of teaching rather than depending on them
- 2-There are a lot of educational mobile applications such as: Newsela which is considered among the best educational mobile applications for Reading and Duolingo which is considered among the most prominent mobile applications for Foreign Languages.
- 3- Educational mobile applications enhance teaching and learning by providing some

important educational mobile applications that teachers and learners can use effectively. Therefore, The introductory chapter also discussed the importance and effectiveness in classrooms such as educational mobile applications, whereby the reader will have a clear about these concepts, the researchers mentioned some examples on the educational mobile applications and the impact of educational mobile applications on language teaching and learning.

The second chapter dealt with the collection and analysis of data on the topic of this study. For this study, a questionnaire was used as a research tool to collect data. To analyze the data, a quantitative and qualitative analysis was used. Different samples were randomly selected in terms of study area and participants, particularly English language learners, because they are in contact Educational mobile applications daily.

Based on the feedback of the participants, the researchers tried to prove the research hypotheses. With the tool mentioned above, the researchers asked questions about their attitude towards the use of mobile educational applications and their effectiveness for learning and what can improve learning, such as the importance of education programs. in the classroom, the teacher's opinion about the impact of mobile applications on education and the use of educational mobile applications

The analysis of the collected data showed positive and negative results. Regarding the use of educational mobile applications and their frequent use in and out of the classroom, all participants expressed their attitudes about their usefulness of mobile applications. However, some informants gave negative statements due to some shortcomings. For example, excessive use of study aids can affect student performance. As for the teachers, they showed the same qualities as the students. In terms of negative features, there are reviews of experiences with these tools due to factors such as technical issues and lack of materials

As a final statement, it can be added that this study, we have tried to present the idea of using educational mobile applications by examining many aspects as the main contribution to education that this study attempted and results of adopting educational mobile applications. However, it attempted to highlight future research on education and the future of English language teaching and learning throughout using these educational mobile applications.

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Appendices

Students' Questionnaire

Dear students , we have some questions concerning the use of educational mobile applications as a medium for teaching and learning English as a foreign language. Therefore, you are kindly asked to answer the following questions by putting a cross X on the right response and add your comments when it is necessary:

Question one: Do you use educational applications for learning ?

Yes No To phonetic

Question two: What are the educational applications do you use the most?

Wordweb Google translation Duolingo Grammarly

Question three: Give some suggestions about some educational applications

Question four:What do you use educational applications for?

- learning grammar
- text correction
- checking up the meaning of difficult words
- other (precise)

Question five: Do you think that the English department is equipped with enough technological materials?

Yes No

Question six: Do you use technology such as dictionaries or internet in your phone/tablet as support strategy in your class?

Yes No

Question seven: Do you think using educational applications in classroom is time consuming?

Yes No

Question eight: How often do you use educational applications in the classroom?

Usually Sometimes Never

Question nine: Dou you wish to spend more time using educational applications in your classroom?

Yes No

Question ten: Do you think using educational applications would improve your language

skills?

a little

a lot

Question eleven: What do you prefer?

Traditional education

Educational applications

all

Question twelve: While doing research, which tool do you use the most?

Books

Internet

educational applications

all

Question thirteen : Do you have any suggestions to improve the teaching and learning situation at your university?