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THESIS:

**The use of smartphones in improving students' vocabulary learning – A
case study in Prishtina**

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The use of smartphones in improving students'
vocabulary learning – A case study in Prishtina

“ Përdorimi i telefonave të menqur në përmirësimin e të
mesuarit të fjalëve në gjuhën angleze- Një studim rasti
në Prishtinë”

“Употребатанапаметнитеелефонизаподобрувањенаво
кабуларотвоанглискијазик - Студија на случај во
Приштина”

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Abstract

This MA thesis is focused on the usage of the smartphones to help ESL/EFL students to improve vocabulary skills. The purpose of this research is to enhance the process of learning and teaching in schools of Kosova. This research describes procedures on how the methodology was built, the data analyzed and conclusion and recommendations offered.

The topic is relatively a new topic in the sense that it analyses the role of smartphones on improving vocabulary of ESL/EFL students. Related to this, SKELL that is a Sketch Engine for Language Learning can serve as a simple tool for students and teachers of English language to quickly check the usage of different phrases or words used by non-native speakers of English.

The participants for the questionnaire are sixty students of the tenth grade of High School “ Sami Frasheri ” , in Prishtina. The participants for the study are sixty randomly chosen students of the tenth grade all of them of the Albanian nationality.

The study results shows that technology is not yet being used at maximum capacity on supporting teaching and learning in schools, and the language teaching materials are still out of date. Moreover, in literature review it is found that technological improvements related on improving vocabulary have been in rise over the years. Also the performed test results are going to be applicable and related to the used empirical evidences.

Keywords: *Vocabulary, Smartphone, SKELL, Technology, Applications, Second*

Abstrakt

Ky studim fokusohet kryesisht në përdorimin e telefonave të menqur për të ndihmuar nxënësit që mësojnë Gjuhën Angleze të përmirësojnë dhe pasurojnë fjalorin. Qëllimi i këtij hulumtimi është avancimi i procesit të të nxënës dhe mësimdhënies në shkollat e Kosovës. Kjo është një temë relativisht e re në kuptimin që analizon rolin e telefonave të menqur në përmirësimin e fjalorit të studentëve që mësojnë Gjuhën Angleze si një gjuhë të dytë.

Pjesëmarrës në pyetësor janë gjashtëdhjetë nxënës të klasës së dhjetë të shkollës së mesme “Sami Frashëri”, në Prishtinë. Ndërsa, pjesëmarrës në studim janë poashtu gjashtëdhjetë nxënës të klasës së dhjetë të zgjedhur rastësisht, të gjithë nxënësit janë të kombësisë shqiptare.

Rezultatet e studimit tregojnë se teknologjia ende nuk po shfrytëzohet në kapacitet maksimal për të mbështetur mësimdhënien dhe mësimnxënien në shkolla dhe materialet e përdorura janë kryesisht të vjetra. Për më tepër, në rishikimin e literaturës dhe studimet e bëra më herët në vende të ndryshme të botës është gjetur se përparimet teknologjike në lidhje me përmirësimin e fjalorit kanë qenë në rritje ndër vite dhe kanë ndikuar pozitivisht në përmirësimin dhe pasurimin e fjalorit.

Fjalë kyçe: Fjalor, Telefona të menqur, SKELL, Teknologji, Aplikacion, Gjuhë Angleze,

Dytësore

List of Acronyms

ESL - English as a Second Language

EFL – English as a Foreign Language

SKELL – Sketch Engine for Language Learning

Table of Contents

THESIS:	I
Acknowledgments.....	III
Abstract.....	IV
Abstrakt.....	V
List of Acronyms.....	VI
ESL - English as a Second Language	VI
EFL – English as a Foreign Language	VI
SKELL – Sketch Engine for Language Learning	VI
Table of Contents.....	1
Table of figures	3
Chapter I: Introduction	4
1.1 Purpose and Significance of the Study	6
1.2 Hypotheses	7
1.3 Structure of Thesis	8
Chapter II: Literature review	10
2.1.1 Phone calls	14
2.1.2 Calendar	14
2.1.3 Address Book (contacts)	15
2.1.4. Music/Video Player	15
2.1.5.TextMessaging	15
2.1.6.Internet access &Email	15
2.1.7 Bluetooth	15
2.1.8 GPS	16
2.1.9. Office-typePrograms.....	16
2.1.10. Keyboard	16
2.1.11. What are “Apps”	16
2.2. Mobile based language learning	17
2.3.1.Data sources	20
2.3.2. Features of SkELL	20
2.3.3. Examples in context–concordance	21
2.3.4. How it works	21

2.3.5. Word Sketch – collocations	22
2.3.6. Synonyms and similar words–thesaurus	23
2.4. Teaching Vocabulary	24
2.4.1. The Definition of Vocabulary	24
2.4.2. How words are remembered.....	28
2.4.3. Working memory	28
2.4.4. Long –term memory	29
2.5. Other important factors in language learning process	30
Hypotheses.....	31
3.1 Instruments	31
3.1.2 Participants.....	32
3.1.3. Procedure	32
3.1.4. Conducting the study (quantitative method)	33
Chapter IV: Findings	35
4.1.1 Questionnaire Results.....	35
4.1.2.The use of Smartphones (Part 1)	35
4.1.3. Questionnaire result (Part 2)	38
4.1.4 Diagnostic Test Results	40
4.1.5. Pre-Assessment Test Results	44
4.1.6.Post-Assessment TestResults	45
Chapter V: Discussion	47
Hypothesis I.....	47
Hypothesis II.....	47
Hypothesis III.....	48
Chapter V: Conclusion.....	49
6.1 Limitations.....	51
6.2 Recommendations	51
References	52
Appendix	54
Appendix 1. Part one of Questionnaire.....	54
Appendix2: Part two of Questionnaire:.....	55
Appendix 3: Diagnostic Test.....	56
Diagnostic Test.....	56

Appendix 4: Pre-Assessment Test.....	59
Pre-Assessment Test	59
Appendix 5: Post-Assessment Test	61
Post-Assessment Test	61

Table of figures

Figure 1. The difference between a Mobile phone and Smart phone	14
Figure 2. Skell web page	21
Figure 3. Examples in context - concordance	22
Figure 4. EXAMPLE OF WORD SKETCH – COLLOCATIONS.....	23
Figure 5. EXAMPLE OF SYNONYMS AND SIMILAR WORDS THESAURUS	24
Figure 6. Mobile phone owning and usage statistics	36
Figure 7. Mobile phone usage purposes.....	37
Figure 8. Frequency of students' mobile phone usage in classroom	38
Figure 9. Students' perceptions of interactivity in english lessons	40
Figure 10: Students perceptions of english lesson.....	41
Figure 11. Diagnostic test results.....	44
Figure 12. Pre-assessment test results	46
Figure 13. Post-assessment test results.....	47

Chapter I: Introduction

The use of smartphones has increased tremendously, becoming one of the most present devices for everyone. Use of smartphones has made our lives easier, but at the same time more complicated. Since the first call, the world of telephony has advanced leading to the launch of what we now call smartphones. Having a smartphone means communicating, texting, having fun, getting information, learning, memorizing beautiful moments during the day, taking notes, and much more. Of all the technological advances of the 20th century, the one that has continued to have the greatest cultural impact is the smartphone. For most of us, life is hard to imagine without one. They are just as important as the wallet or the keys to the house.

Ministry of Education Science and Technology, being based on the global trends of today's life and education, as well in European competences for education, one of which is the use of technology has set as a priority the integration of technology in teaching and learning process. Integration of smartphones in teaching and learning implies the use of internet and networks for teaching and learning purposes.

The use of smartphones in all life processes has become necessity. Even in education, as in every area of life. The use of smartphones has brought a radical turn in developing a culture of learning and making knowledge more accessible to all students.

Technology is part of our daily life. With this in mind even teachers cannot exclude usage of technology in order to achieve effective learning techniques. Using technology during lessons makes the process of learning and teaching easier, such as: it makes the student more interested in the learning topic, reduces learning time and offers opportunities to learn in a non-traditional way.

When learning or teaching a foreign language, we can choose a lot from the world of technology: TV, CD Rom, Computers, Electronic Dictionary, Power Point, DVD's or Videos and Smartphones. The last two decades have been a revolution in the field of technology, many changes has occurred on the dynamics of various industries, and the way people communicate and work in the society. This development of information technology has given better pattern to seek new teaching models. As a result the use of technology has

an important role in English teaching. Using smartphones to teach and learn has its unique advantages.

This MA Thesis analyzes the necessity use of smartphones in language teaching and learning. Another objective is to make English teachers aware how to use the new strategies in an effective manner. With the increasing in popularity of English language, the need for qualified teachers has also increased. It is undeniable that there are teachers who use technology in teaching, but still it is the majority of teachers who teach in the traditional manner. In fact traditional manners are not damaging the students, but when using technology there are more opportunities for students to learn, practice and become more confident.

Despite increasing accessibility of technology in schools and appreciable potentials, teachers often are portrayed as skeptical and reluctant technology users. A type of technology that is being used now days by many teachers is through smartphones.

Smartphones are built on a mobile operating system, with more advanced connectivity and capability than regular phones. Recent models have the functionality of high resolution, touch screens, media players, also web browsers which display standard web pages like: Learning ESL Vocabulary with Smartphones (Wu, 2014). By using this kind of technology there are provided better opportunities for learners to gain more information and knowledge. But, how can mobile phones be used by students and teachers to support the process of learning a second language? Mobile phones can simply allow students to learn a language in many ways such as: by reading, listening and using vocabulary applications.

For example, when a student is listening music in a mobile phone, directly he/she is involved on listening process, while listening to the music the student can face new words that he/she has not heard before, so this is the first stage when the student becomes interested to learn the meaning of a particular word.

Moreover, when a student is reading a text in a foreign language he may find words that are unknown to him, but when having the mobile phone he can search for that specified word in the online vocabulary.

So, based on these examples we can say that smartphones are the adequate devices on supporting to learn new words and improve students' vocabulary skills, make them more interested in learning, and most important offering opportunity to learn in a non-traditional way.

1.1 Purpose and Significance of the Study

As we move forward there are many development on technology and teaching. To be more rational it is suggested to incorporate different developments for different aims. For example, combination of different teaching methods and using smartphones in the same time is made available because of developments in technology. By using smartphones it is concluded to have more productivity on learning process because a new relation is created between the teacher and students.

We know that information technology is not yet being used at maximum capacity on supporting teaching and learning in schools. The topic is relatively a new topic in the sense that it analyses the role of smartphones on improving vocabulary of ESL/EFL students. Related to this, SKELL that is a Sketch Engine for Language Learning can serve as a simple tool for students and teachers of English language to quickly check the usage of different phrases or words used by non-native speakers of English.

This research will be helpful for teachers, students, researchers to gain more information about how smartphones help in improving vocabulary of EFL students, also it will result in effective teaching and learning. Additionally, it will increase acceptance between students and teachers about learning with smartphones.

This research aims to answers the following questions:

1. What are students' attitudes about the effectiveness of Smartphones in improving vocabulary skills?
2. Would it be beneficial for students using Smartphones for vocabulary activities during lessons?

3. Does the use of SKELL (Sketch Engine for Language Learning) accelerate or hinder English language learning abilities?

The first question aims to investigate students' perspectives about the effectiveness of Smartphones in improving their vocabulary skills also it investigates students interest in using learning apps. The second question aims to investigate the effectiveness of mobile applications during lessons, would it be beneficial or not the use of smartphones during vocabulary activities and how smartphones would contribute on developing language learning abilities. The third question tends to investigate the SKELLS' impact on learning vocabulary whether it accelerates or hinder English language learning abilities.

So, this research will be helpful for teachers, students, researchers to gain more information about how smartphones help in improving vocabulary of EFL students, how effective is teaching and learning with smartphones and what is the contribute of smartphones on language learning abilities.

1.2 Hypotheses

The three hypotheses of this research have been formulated as the most convenient answers to the research questions. Their accuracy will be approved or disproved later in the study.

Hypotheses I:

Use of the Smartphones is crucial in improving vocabulary skills.

Hypotheses II:

Use of Smartphones for vocabulary activities during lessons contribute on improving vocabulary skills.

Hypotheses III:

Integrating SKELL (Sketch Engine for Language Learning) while learning ESL students will improve their vocabulary learning. The expected results are depended on frequency usage of smartphones for learning purposes.

1.3 Structure of Thesis

This study is consisted of six chapters in total. The chapters are the following:

Chapter I

Highlights the introduction of the topic and is followed by a brief explanation of this Master thesis. The focus also will be on purpose and significance of the study and research questions.

Chapter II

Includes literature review. A deeper understanding regarding this research topic is accomplished by reviewing literary articles and relevant books about the topic of the thesis.

Moreover, a critical evaluation is conducted on the previous and researches that are done in this field.

Chapter III

Includes methodology. For this research will be used both qualitative and quantitative method.

Chapter IV

Underlines the results of the research. In this chapter, the gathered results from the questionnaire, and the study are presented. The analyzed data assist in approving or disproving the previously-mentioned hypotheses and give a better clarification of research questions.

Chapter V

Gives importance to the analysis and interpretations of the results. At this stage of the study the gathered results are analyzed and discussed.

Chapter VI

Is the concluding part of the thesis which provides conclusions and certain assumptions, achieved results and additional implication issues.

Chapter II: Literature review

It is very important to investigate students' perspective because their perspective would indicate acceptance for using smartphones as an essential part of learning and teaching process. Many researchers approved that the use of mobile phones while learning is very productive but teachers still need to be convinced about smart phone potential as an essential learning teaching tool. In educational contexts, unprecedented advancements in technology have changed how teachers teach, and students learn.

Teachers employ technology for different type of educational tasks, including instruction, along with administration purposes, while students use technology to do classwork. In this digital age, teaching cannot be imagined without the application of technology.

The invention of smartphones is one of the biggest feats in technological upheavals, which has significantly revolutionized the way teachers and students communicate and share information with each other. According to Kanchana and Saha, (2015) using mobile phones in teaching and learning process makes teaching more productive. They concluded that EFL teachers need to change their strategies and teaching style to benefit from technology in classroom. Using smartphones helps students to work independently and teachers are only the facilitators to help them when they need.

Wu (2015) as cited in Basal et al. (2016) made a research with Word Learning-CET6, which is a mobile application to teach vocabulary, he made the research with a group of 70 Chinese college students. The experimental group used the application and the control group was only allowed to study the vocabulary by themselves via text messages. The results at the end showed that experimental group had better performance than the control group.

Similarly, according to (Basoglu and Akdemir, 2010, as cited in Basal et al.2016) who conducted a research about vocabulary learning to see the difference of use of flashcards and use of smart phones. The control group learned words with flashcards while the experimental group with mobile application, each group had six weeks. The results at the end showed that experimental group achieved better results than the control group on the multiple-choice posttest.

In a very broad sense, for as long as formal instruction has existed there has been an interest in freeing learning from the constraints of time and place. Clay tablets, scrolls, then much later printed books were the first technologies employed to meet this challenge. In the latter part of the 20th century desktop computers, laptops, netbooks, and web-based applications greatly facilitated flexible access to language learning materials. The advent of hand-held computer-based devices gave rise to Mobile- Assisted Language Learning as we know it today. Since the mid-1990s, the focus has been on the exploitation of five mobile technologies: pocket electronic dictionaries, personal digital assistants (PDAs), Smartphones, MP3 players, and most recently ultra-portable tablet PCs. (Burston, 2013).

“Mobile learning has been more useful outside of the classroom with such activities that enable learning to be more directly connected with the real world experience. Moreover, learning through mobile phones leads students to use them on their free time and even develop their learning skills” (Kukulska - Hulme, 2009).

The purpose of this study is to get an overview about how smartphones can help the process of learning a foreign language with specific emphasis on vocabulary. In order to come to conclusion there are conducted questionnaires with particular questions that guide us to the final results and help us to get an overview about the effectiveness of using smartphones in classroom to improve vocabulary.

Regarding type of the questionnaire used for this study, it is mainly the same procedure as (Schmitt, 1997) used in his research, the purpose of his study was to know if the usage of devices helps students to find the meaning of a new words easily.

However, the same method was also used on his study by (Cojocnean, 2015) the aim of his study was to define learners’ digital engagement, which included not only smartphones but also computers. He came to conclusion that vocabulary apps are the most used apps on students’ smartphones for educational purpose usage on their phone.

Questionnaires were also applied by (Cadergren & Hellman, 2012). According to their gathered results from the questionnaires, the use of smartphones nowadays is used in different purposes, such us social media, communication, and common use of installed apps. According to the study results about the use of smartphones in classroom it is found that almost all the students that have been part of the research owned a smartphone

mainly with the apps that are used for communication such as social media. The reasons of using these apps more often is because make communication more easier and natural.

In their research (Wang & Shih, 2015), used smartphones for two groups of students. They came to conclusion that the group who used smartphones has achieved higher results than the group who used traditional learning materials, our study also reviled the same phenomena where the most participants claimed that paper-based techniques are out of date and not motivating for learning. This proves that use of smartphones in learning process is considered as a productively way to achieve better results.

Basoglu & Akdemir (2010) in their study compared traditional flashcards on paper with digital flashcards. 60 students participated and the results revealed that the students who used the smartphones application had achieved better results than those who used traditional learning methods.

Regarding the features and type of the questionnaires used for study purpose, it is almost the same procedure as (Schmitt, 1997) proposed and used on his study for the study purposes, where this study purpose was to know the usage of devices and ways which helped to find the meaning of a new word by using a device. However, the method used on the study is also used by (Cojocnean, 2015) to define learners' digital engagement, but it included not only mobile phones but also computer assisted language learning.

The application of questionnaires was applied by (Cadergren & Hellman, 2012) at Thorildsplans Gymnasium who could help us to gather students for questionnaires, focus groups and prototype testing. According to the results gathered from the questionnaires, there was found that the usage of smartphones nowadays is very extensive with different purposes of usage, such us communication, social media, and common use of installed apps.

According to the study results regarding the use of smartphones it is found that most of the students who have been part of the study owned a smartphone with the apps that are mostly used for communication and other purposes, such as social media. The reasons why these apps are used is because apps make communication more efficient and natural, the app supports core and basic vocabulary groupings, advanced word prediction, and vocabulary customization (Apple, 2013). Our study results also, suggest that the most of

the interviewed students are common users of smartphones only of communication and social media.

So, comparing with other researches I can conclude that in Kosova students mainly use smartphones only for communication and social media, in schools technology is not yet being used at maximum capacity, even in some cases students are not allowed to use their smartphones. On the other hand the language teaching materials are out of date and not interactive for students. The experiment with SKELL showed that if teachers integrate smartphones in teaching and learning process students would achieve better results in improving their vocabulary skills. So, technological innovations have an important role in promoting learning in different contexts. Learning from smartphones enables students to learn in a non-classroom environment, they can learn when they are at home in the bus, outside or wherever they are. In fact, they can learn everywhere they are and every time.

2.1 Definition of smartphone

The fast spread of smartphones and its feature to connect with the internet from anywhere has changed our lives. By using these applications people have the opportunity to access convenient services. For example now people has easy access to information, news, entertainment and communication with family and friends. Also the opportunity to pay, shop and connect to banking from any place and many other possibilities is made possible through smartphones. As current mobile trends develop, it has become apparent that smartphones cannot be ignored in education any longer.

There are still many different views about the key features which define a smartphone. Smartphone is described by Oxford Dictionary as a mobile phone which performs many functions of a computer, typically having a touch screen interface, internet access, and an operating system of running of downloading apps. (Lexico Dictionaty, n.d.).

Function	Mobile phone	Smart phone
Making phone calls	Yes	Yes
Send texts	Yes	Yes
Surfing the internet	No	Yes
Download apps	No	Yes
Key board	Usually physical	Yes
Camera	No	Yes
Calendar	No	Yes
Video recording	No	Yes
Bluetooth	No	Yes
Office programs	No	Yes
Email	No	Yes
GPS	No	Yes

FIGURE 1. THE DIFFERENCE BETWEEN A MOBILE PHONE AND SMART PHONE

(What is the difference between Mobile phone and Smartphone, n.d).

What do all these features mean on Smartphone:

2.1.1 Phone calls

The main function of these devices is to provide outgoing and incoming calls. All smartphones have the optional “speaker phone” calls. Smartphones also have the message service missed calls.

2.1.2 Calendar

The calendar is included in all smartphones. In calendar you can make and edit appointments, create agendas, invite friends on different events, get informed and most important you do everything on time.

2.1.3 Address Book (contacts)

In a Smartphone, you can add all your contacts, delete anytime and edit them just like in a computer. Smartphones can be rapid to create a new contact in your Address Book after contacting with a person you have not communicate before.

2.1.4. Music/Video Player

All smartphones have very clear screens and can play videos and music with sound, as well as the recorded videos. Smartphones also can integrate features of a digital music player called an “MP3 Player” in which you can include songs and listen to music like a traditional MP3 Player.

2.1.5. Text Messaging

Smartphones have the option of text messaging. People can receive and send messages through messages app. What people really appreciate about smartphones is the keyboard which is designed like computer’s keyboard.

2.1.6. Internet access &Email

IEEE 802.11 [4] is an American standard for wireless local area networks (WLAN). Nowadays is very popular as based on commercials available devices.

Defined by the standard there are two network architectures: 219 infrastructure network, with no wired elements, d - ad-hoc network, with access points which is a bridge among wired and wireless network segments.

Smartphones act very much like a desktop or laptop computer. Smartphones include a Web Browser program just like a conventional computer. By using Wi-Fi abilities, Smartphones users can search everything just like the computer can. (Wireless Access, n.d.).

2.1.7 Bluetooth

Bluetooth allows devices to connect with each other without wires or cables. Bluetooth technology offers the opportunity to for two different devices to communicate with each other. Many smartphones have Bluetooth technology so a wireless earpiece can be worn for “hands-free” cell phone use. (Understanding Bluetooth, 2010).

2.1.8 GPS

GPS stands for “Global Positioning System”. Having GPS on Smartphone makes it possible to detect your specific location of phone.

GPS enables Smartphones also provide a way for the owner of Smartphone to turn GPS on and off when desired. For many people this is a minor inconvenience especially those who are privacy conscious. (Hildenbrand, 2020).

2.1.9. Office-type Programs

“Office-type Programs” are computer programs used in office settings, such as Spreadsheet, Word Processing, and Presentations. In smartphones you can read, create, read and edit this kind of files. But because of the size of screen and smartphones keyboard, many people find this kind of computing very difficult and do not use it very often. (Microsoft Office, 2010).

2.1.10. Keyboard

All Smartphones have a full keyboard. Sometimes the keyboard is physical, covering the lower half of the front of the phone. Sometimes the keyboard is a software keyboard and displayed on the screen only when you activate it.

2.1.11. What are “Apps”

Apps are the same as “Programs”, on a computer. There are “Apps” which are available for free. “Apps” are directly downloaded on the Smartphone using a pre-installed “App” called “Play Store” for Android and “App Store” for Apple. There are “Apps” which are authorized by the Smartphone manufacturer, while others are not authorized. Non-authorized Apps carry more infections than Market Apps, and should be considered carefully. (Microsoft Office, 2010).

2.2. Mobile based language learning

Many scholars concluded that mobile learning is a process of gaining knowledge through conversations between people and using interactive technologies with main focus in context. (Bachore,2015).

In this process the technology include mobile devices such as personal digital assistants, pads, cell phones, pods, etc. Others interpret it as the use of smartphones in process of language learning, especially in cases where device portability gives specific advantages. Mobile assisted learning incorporate devices starting from smart phones, MP3/MP4 players, and e-book readers, laptop and tablet computers. (Bachore, 2015).

Mobile language learning is a field that every day is being used more and more. Nowadays there are many researches in this field that highlights the different ways in which mobile devices may be used in teaching process. Researches shed a very positive light on the potential of mobile devices potential that play on the process of teaching and learning. However, there are several areas that need consideration in their implementation.

The main features of mobile learning are situating instructional activities, interactivity, immediacy and accessibility.(Ogata & Yano, 2005).

Nowadays most of the learners are using technology in the place they are living. Technology is being available in many places, so the learners have the opportunity to learn immediately. Learners have the opportunity to communicate with each other around the globe with their colleagues and professionals in distant areas through smartphones which have various applications.

Instructions in classroom are expected to be contextual. Thus, using mobile devices constitutes prospect to contextual leaning that the connection provides. (Bachore, 2015).

There are different studies that have been conducted about mobile based language learning and their contributions in the process of language teaching and learning. In addition, researchers gave their opinions about the significance of mobiles to improve learners' language skills.

Through various mobile phone apps similar to websites, a great amount of authentic materials can be used for language learning. Teachers and students can access online authentic materials from radio or TV programs for teaching and practice (Mosquera,

2001). In other words, students can even use mobile phones to download the applications for learning, which create more chances to be exposed to a target language, and encourage them to actively participate in learning.

Overall, in accordance with those findings of the empirical studies, smartphone is useful and effective as it provides a means for ESL students to get access to 'authentic' materials. Although mobile learning is a teaching and learning strategy with a great potential, attention needs to be paid in applying it in an ESL setting.

Therefore, if language teachers are planning to use mobile learning to foster students' language skills, it is better to see the advantages and limitations of the method. In addition, they should introduce themselves with the features and characteristics of mobile based learning. They should also verify that the language content which they are planning teach fits with the approach (mobile based learning) or not. Even, it's also important to check the nature of the students' mobile and its compatibility with the required applications.

Language education includes three main steps. These steps are described as multiple literacies. Communicative linguistic proficiencies, competence and cross-cultural experiences. Communicative competence is defined as the main competition through students with accents to communicate in their relations and divergent views. Also it is so called as the fluency of other languages. (Mortazavi, et al., 2021).

Jeong,(n.d) recommended a qualitative study about the impact of multimedia assisted language technology on improving communication skills for foreign language learners. Multimedia assisted language materials of learning can help students to learn how to enhance their understanding skills of foreign language learning and become more motivated. He demonstrated the influence of multimedia assisted language learning materials incorporated with instructional strategies to improve their communicative competence in language skills. So, according to the results from the researches in EFL students' in one Korean university, multimedia assisted language learning materials were more entertaining for students, so, using mobile devices it can help students to improve their communicative competence of foreign language. Moreover they concluded that this is a very effective tool to have more efficient and practical ways of learning foreign languages. (Mortazavi, et al., 2021).

On the other hand, there are also disadvantages related to mobile based learning because many of the smartphones are not designed for teaching and learning purposes. This is because of some initial design of such devices. Also those smartphones which are appropriate for particular learning tasks are expensive for the learners to buy. So, teachers should be conscious of what kinds of tools learners should have, and then adapt or chose resources consistent to such tools. This is partly due to the initial design of such devices, and partly due to non-existence of such developed mobile phones. However, those devices which are appropriate for specific learning tasks are too expensive for most of the learners to buy. Thus, teachers should be aware of what kinds of tools learners have, and then set to choose or adapt resources compatible to such tools. Other disadvantages include small screen size, limited presentation of graphics and dependence on networks that may not always provide very high transmission capacity and may be subject to disturbances of many kinds. (Albers & Kim, 2001).

Teachers also should verify which language content that they are planning to teach fits with the approach (mobile based learning) or no. It is also important to look over the students' mobiles and their compatibility with the necessary applications.

2.3. SKELL

SKELL (Sketch Engine for Language Learning) is a simple application for teachers and students of English language to easily check whether a specific word or a phrase is used by real English speakers. There is no payment or registration required. Just type the word and then click the button.

SKELL is a free uncomplicated interface of Sketch Engine created for the needs of English learners. Sketch Engine is a corpus query system that has in 85+ languages and 400+ text corpora. Sketch Engine is used by lexicographers, linguists, lexicographers, lexicologists and many researchers to learn how language works.

Sketch Engine has about 150 TB (terabytes) of data at an extraordinary speed. Also it is designed to hold morphologically languages such as Spanish, Russian, or Japanese. (Baisa&Suchomel, 2014).

2.3.1. Data sources

All results in SKELL are a product of smart algorithms analyzing automatically multi-billion word samples of text which is called text corpora. No manual work is involved to generate the examples, collocations or thesaurus results. (Baisa&Suchomel, 2014).

2.3.2. Features of SKELL

SKELL offers three ways to explore the SKELL corpus. The first one is the concordance where for the given word or phrase, 40 example sentences can be discovered. The second is the word sketch where typical collocates for a given word can be explored, and the third one is (thesaurus) where words that are similar are listed. Word that are the same are visualized with a word cloud.

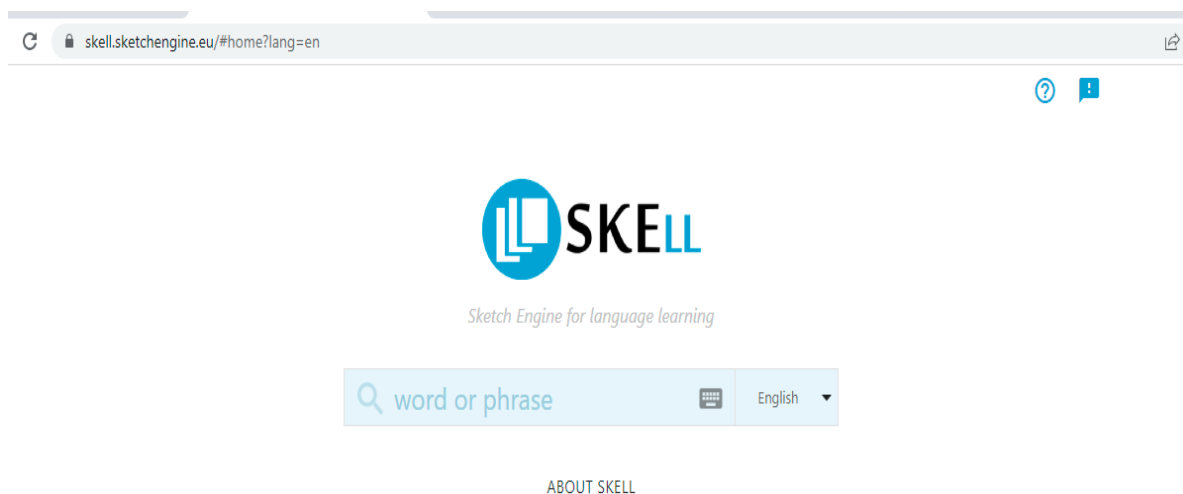


FIGURE 2. SKELL WEB PAGE

(SKELL, 2022).

2.3.3. Examples in context—concordance

Concordance provides a very powerful full-text search tool. Where for the given word or phrase, 40 example sentences can be discovered. Concordance feature is very convenient for discovering how words or phrases behave in English.

The search is case insensitive, i.e. the same results will be yield for *Rutherford* and *rutherford*. Also the results may include a word or a phrase “the query” in a derived word form. For *mouse* (lemma) sentences with *mice* will be find. The result for *mice* will contain various set of sentences: only for *mice* occurrences. (Baisa & Suchomel, 2014).

2.3.4. How it works

- Searching is case-insensitive.
- The same results will be shown for Rutherford and Rutherford.
- Base form will find its derived forms too, e.g. for mouse will be shown the word mice.

However, when you search for mice in plural form, not in a base form the examples of mice (not mouse) will be found.

- All parts of speech can be found.

If you are searching for *player*, it will show sentences with *player* as a noun and as a verb and both in different word forms.

The screenshot shows the SKELL interface with a search bar containing 'educational system'. Below the search bar, there are tabs for 'Examples', 'Word sketch', and 'Similar words'. The 'Examples' tab is selected, displaying a list of 13 sentences where 'educational system' is highlighted in red. The sentences are numbered 1 through 13. The interface also shows '1.93 hits per million' and an information icon.

1. The corrupt **educational system** continued to exist unchanged.
2. They developed separate **educational systems** for each.
3. Our present **educational systems** are all paramilitary.
4. Accountability within **educational systems** includes all professionals working within those systems.
5. It was becoming a literary **educational system** .
6. Federal laws enforce uniformity across provinces throughout the **educational system** .
7. Traveller children often grow up outside **educational systems** .
8. Who is holding the **educational system** accountable ?
9. That was the **educational system** until 1964.
10. Russia's **educational system** has produced nearly 100% literacy.
11. Many European countries are already exercising such successful **educational systems** .
12. The Turkish **educational system** is highly centralized.
13. The French **educational system** is highly centralised.

FIGUR3. EXAMPLES IN CONTEXT – CONCORDANCE

(SKELL, 2022)

2.3.5. Word Sketch – collocations

Collocation is the combination of two words. When using collocations correctly you make the language natural, advanced and correct. Using collocations incorrectly will not cause misunderstanding but will be considered unnatural and incorrect. Collocations must be learned they cannot be guessed. This is the reason why in SKELL "Word Sketch" is a valuable tool.

In SKELL "Word Sketch" is available for all kinds of words, i.e. verbs, adverbs, noun, and adjective.

How it works

- Typing a word in its base form and then click Word Sketch.
- Typing mice will not, typing mouse will work.
- Clicking the collocation to look examples in context.
- The most common parts of speech (verb, noun, adjective, etc.) are appeared

first. Then to see a Word Sketch for a different part of speech you just have to click the link. (Baisa & Suchomel, 2014).

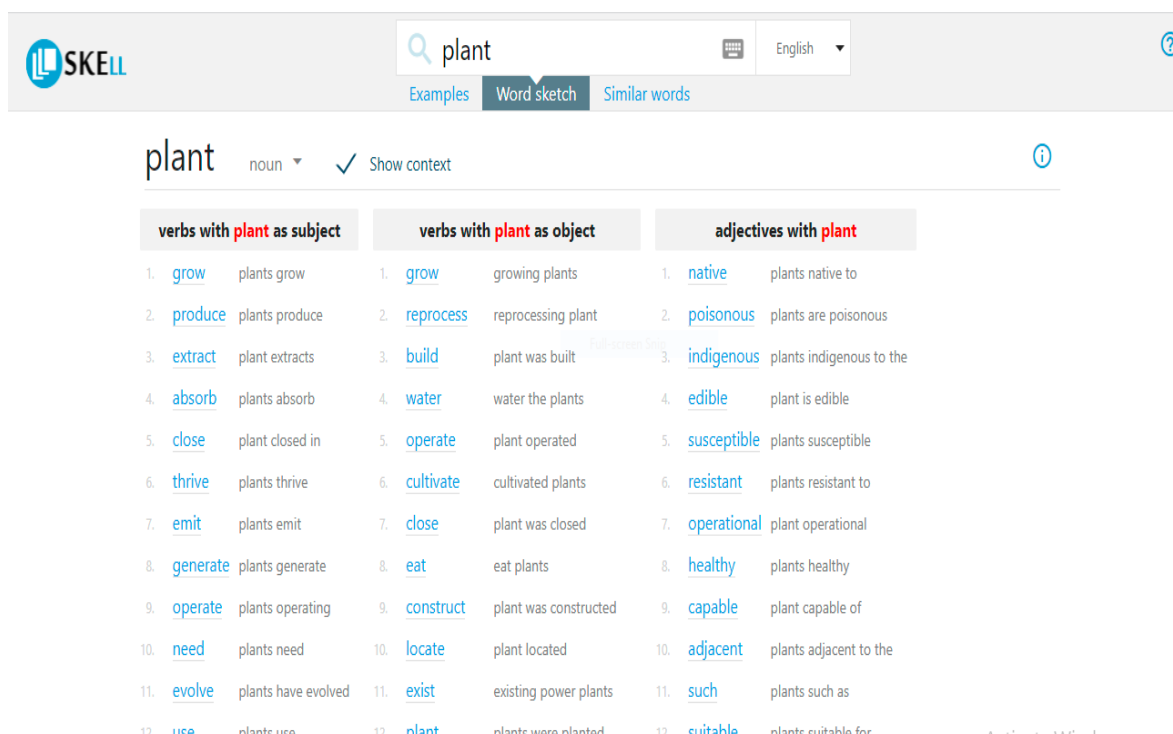


FIGURE 4. EXAMPLE OF WORD SKETCH – COLLOCATIONS

(SKELL, 2022)

2.3.6. Synonyms and similar words–thesaurus

The third function serves to find words that are similar (not only synonyms) to a search word. Word that are the same are visualized with a word cloud. For one word SKELL will show a list of up to 40 similar words (Baisa & Suchomel, 2014).

Sometimes many words which are not similar will be included in the results. this happens because computers cannot tell the exact meaning of the word. Thesaurus uses specific technology to identify synonyms. It finds words that tend to combine with the searched word. In the screenshot for bake you can notice that that cook is in the center because is very similar to cook. Also both bake and cook combine with words like: roast, steam, boil, fry etc. Sometimes inappropriate words may appear, but the list is still very important and useful. (Baisa & Suchomel, 2014).

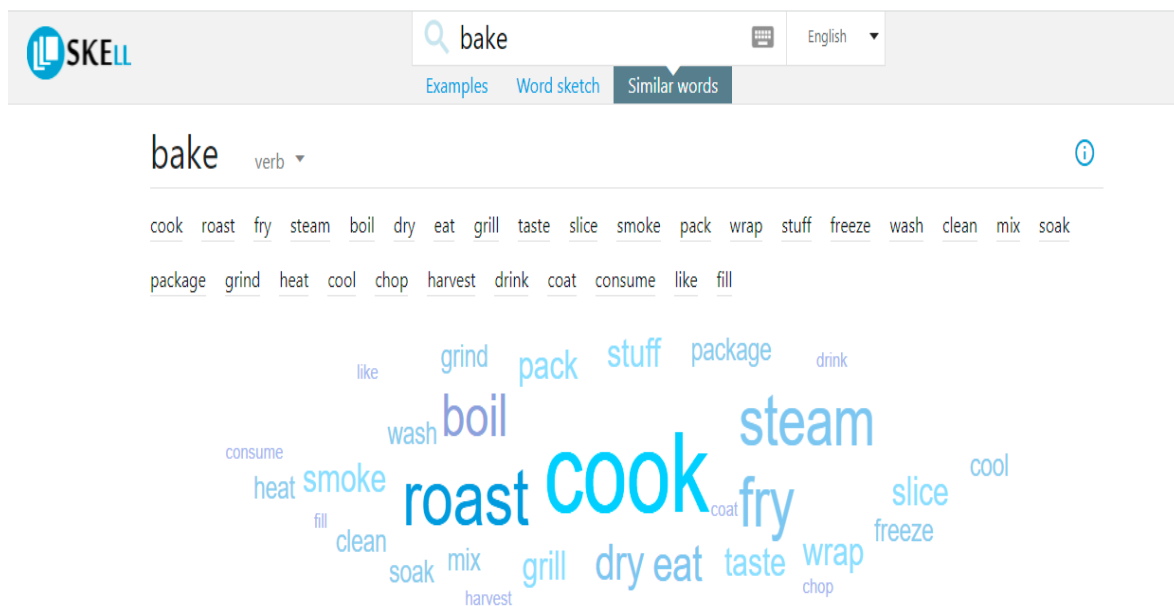


FIGURE 5. EXAMPLE OF SYNONYMS AND SIMILAR WORDS THESAURUS (SKELL, 2022)

2.4. Teaching Vocabulary

Principles of learning and teaching vocabulary

There are many theories about vocabulary learning process and it still remains the matter of memory. Thus, to have a successful teaching there are several general principles, which are valid for every method. Vocabulary is one of the most important components of a language. Students, who want to learn a foreign language, have to learn those elements.

2.4.1. The Definition of Vocabulary

In this research there are different definitions about vocabulary.(Donna Young, 2020)
explains vocabulary as the study of:

- ## 1. The meanings of words

Many words have different meanings, study parts of the speech and the basic meanings of the words.

- ## 2. Root words, prefixes, suffixes

Studying these will help in the study of vocabulary.

3. How words are used

Study the meaning of words in context; practice what you have learned by writing sentences with your own words.

4. Analogies

This is when you compare two pairs of words and choose the pair that goes together.

(What is Vocabulary, n.d).

“Vocabulary is the number of all words used that make up a language”. This definition explain us that there are not only rules for combining words but also the number of words that one knows to make up a language. So, this means that vocabulary include knowing the meaning of words and the use of those in context.

According to Wallace (1988) there are five principles of teaching and learning vocabulary:

1) **Aim**

The teacher has to be clear about his or her aims:

How many of the things listed does the teacher expect the students to be able to do.

2) **Quantity**

The teachers should decide about the number of vocabulary items to be learnt. How many words in a lesson can students learn, what if there are too many words, the students may become confused, discouraged, and frustrated.

3) **Need**

The teachers may have to choose the vocabulary that will be taught to the students. The students should be put in a situation where they have to communicate and get the words they need it.

4) **Frequent exposure and repetition**

It is seldom to remember a new word simply by hearing at the first time. Wallace (1988) says that there has to be a certain amount of repetition until there is evidence that the student has learned the target.

5) Situation presentation

The choice of words can vary according to the situation in which we are speaking and how well we know the person, to whom we are speaking. So, students should learn words in the situation, in which they are appropriate.

Learning vocabulary is a complicated process. The purpose of students to reach when learning vocabulary is to recognize the word in its written and spoken form. In general, to know a word involves knowing its meaning at the basic level and its form. (Harmer, 1993).

According to him Learning vocabulary also means the abilities to know its: Meaning, i.e. relating the word to an appropriate context or object; Word formation, i.e. capability to pronounce and spell words correctly also to know derivation; Grammar, i.e. using the appropriate grammatical form; Usage, i.e. learning its metaphors; idioms and collocations; also register and style to be aware of associations and connotations that one the word may have.

Everybody is different, either their characteristic of personality. It is very important to treat students with different treatments in order to make them convenient, e.g, teaching English language elementary school students is different with teaching student of higher levels of English.

There are some characteristics of elementary English language children:

- They are developing as thinkers.
- They are learning to read and write in their own language
- They understand the difference between the imaginary and real.
- They can plan and organize how to carry out an activity.
- They can work with others and learn from others.
- They can be reliable and take responsibility for class activities and routines.
- They can tell difference between fact and fiction.
- They love to play and learn best when they enjoy themselves. But they also take themselves seriously and like to think what they are doing in real work
- They rely on the spoken as the physical would convey and understanding
- They are able to work with others and learn from others

- They own understanding comes through eyes, hands and ears. The physical world is dominant at all times.
- They have very short attention concentration. They are enthusiastic and positive about learning.

From the characteristics above, we can conclude that elementary school students are enthusiastic and unique in understanding and learning everything. They lost easily interest but they like to cooperate with others by having other children around them. This means that the teacher does not have to follow the lesson plan strictly but teach process based on the encountered situation. The teacher should provide a fun, cheerful, incorporate technology and provide an appropriate technique in order to be able to attain a successful lesson. (What is Vocabulary, n.d).

Teaching English is not easy, moreover teaching English of students of higher levels. Teachers at this level should create a lesson plan with a varied activities that would enhance their English vocabulary, so the classroom becomes fun and enjoyable. Teachers are also required to be careful in choosing teaching strategy. As a teacher, there are activities that can be done especially when a teacher is teaching students with higher level of English:

- Encourage them to read in English (stories, comics, reading games)
- Encourage them to work meanings out for themselves
- Explain things about language, but only simple things
- Use vocabulary apps to get faster meaning of unknown words.
- Encourage creative writing and help them to experiment with language
- Explain your intentions and ask them to help with organization of activities. By doing activities above, it helps the teacher to manage classroom well and the students feel comfort in the class.
- Make learning English enjoyable and fun
- Don't worry about mistake, be encouraging; make sure children feel comfortable and not afraid to take part.
- Use a lot of gestures, action, pictures to demonstrate what you mean.
- Talk a lot to them use English, especially about things they can see.

- Play game, sing a song, and say rhymes and chants together.
- Tell simple stories in English, use pictures and act with different voices.

2.4.2. How words are remembered

Unlike of grammar learning, which is a rule based system, vocabulary knowledge includes accumulating individual items. During the process of teaching and learning vocabulary a crucial problem takes place: How the memory works? About the working of memory many researchers distinguished the following systems. (Thornbury, 2002). They are: short-term memory, working memory and long-term memory.

Short term memory

Short-term memory, also known as primary memory, is the ability to store a limited number of information in memory and keep it in mind for a short period of time.

Short-term memory is very limited and brief. It is also suggested that short-term memory can store only seven items, plus or minus two. Short term memory is the kind of memory when you repeat a word that you have just heard the teacher saying. To have successful vocabulary learning involves more than keeping in mind words for a few seconds. Integrating words into long - term memory it is needed to subject different kinds of operations.

2.4.3. Working memory

Working memory is the limited amount of information which you can held in mind and use to execute cognitive tasks. In working memory information remains for about twenty seconds. It works like audio tape going round a round repeatedly. The capability of holding a word in working memory is a great predictor of language learning capacity. So, the capacity to hold words in working memory makes the process of learning foreign languages more easier.

2.4.4. Long –term memory

Unlike short term store and working memory, which have no long lasting content and limited capacity, in this kind of memory the contents are durable over the time and has an enormous capacity.

Long-term memory can be seen as kind of filling system. However, to ensure moving new materials into permanent long-term memory, requires number of principles to be followed, described by (Thornbury, 2002):

- Repetition - repetition of encounters with a word is very important, useful and effective. If the word is met several times over space interval during reading activities, students have a very good chance to remember it for a long time.
- Retrieval - another kind of repetition. Activities, which require retrieval, such as using the new items in written tasks, help students to be able to recall it again in the future.
- Spacing - it is useful to split memory work over a period of time rather than to mass it together in a single block.
- Pacing – to respect different learning styles and pace, students should be ideally given the respect to different learning styles and pace, students should be ideally given the opportunity to do memory work individually.
- Use - putting words to use, preferably in an interesting way, is the best way of ensuring “attractive it or lose it” principle.
- Cognitive depth - the more decisions students make about the word and the more cognitively demanding these decisions are, the better the word is remembered.
- Personal organizing - personalization significantly increased the probability that students will remember new items. It is achieved mainly through conversation and role- playing activities.
- Imaging – easily visualized words are better memorable than those that do not evoke with any pictures. Even abstract words can be associated with some mental image.

- Mnemonics – tricks to help retrieve items or rules that are stored in memory. The best kinds of mnemonics are visuals and keyword techniques.
- Motivation - strong motivation itself does not ensure that words will be remembered. Even unmotivated students remember words if they have to face appropriate tasks.
- Attention - it is not possible to improve vocabulary without a certain degree of conscious attention.

2.5. Other important factors in language learning process

Learning is one of the most important factor in human life from birth to death. Learning takes place in different situations and places in formal and non formal ways. Using different types of learning styles, or appropriate educational and cultural traditions are very important aspects in process of learning but at the same time there are much more fundamental factors that decide success in language learning: According to many educationists the basic factors involved in process of learning are: physical and mental differences; Motivation- motivation can be achieved when the students see the outcomes of the whole development. They should be aware that first they will get the degree, then job and then that job will become their identity in the future; Environment factors which plays a huge role in process of learning , because that enable students to invent their abilities through formal and informal system of education.

Finally, parents' economic and social status is an important aspect in learning process is the economic and social status of family. i.e, when the family has good financial status the children will have more opportunity to learn in different ways than the poor family children. If parents of students are educated, they will have clear way for their children in process of learning. It is also a fact that there are students of uneducated and poor parents but they have achieved great successes in their life through education. (Factors in learning process, 2020).

Chapter III: Methodology

This chapter describes the methodology of this research including the research questions, participants, instruments and procedure in general.

Research questions are:

1. What are students' perspectives about the effectiveness of Smartphones in improving vocabulary skills?
2. Would it be beneficial for students using Smartphones for vocabulary activities during lessons?
3. Does the use of SKELL (Sketch Engine for Language Learning) accelerate or hinder English language learning abilities?

Hypotheses

The three hypotheses of this research have been formulated as the most convenient answers to the research questions. Their accuracy will be approved or disproved later in the study.

Hypotheses I: Use of the Smartphones is crucial in improving vocabulary skills.

Hypotheses II: Use of Smartphones for vocabulary activities during lessons contribute on developing language learning abilities and improving vocabulary skills.

Hypotheses III: Integrating SKELL (Sketch Engine for Language Learning) while learning ESL students will improve their vocabulary learning. The expected results are depended on frequency usage of smartphones for learning purposes.

3.1 Instruments

For this research are used both qualitative and quantitative methods. The quantitative research method is a questionnaire which shows more detailed information about the participants' perceptions about the use of smartphones in education. The qualitative method it has been a study on Diagnostic test, Pre-Assessment Vocabulary Test and

Post-Assessment Vocabulary Test. The data is analyzed in order to check for the results which are going to confirm or reject the hypothesis.

3.1.2 Participants

The participants for this research were sixty students of the tenth grade of High School “Sami Frasheri”, in Prishtina. The participants for the study are sixty randomly chosen students of the tenth grade all of them of the Albanian nationality.

When it comes to approving or disapproving the hypothesis tests and questionnaires of 60 students were analyzed.

In terms of questionnaire and study 60 students, both male and females, engaged in answering questions that helped us understand how much smartphones are used in English lessons and does the use of SKELL accelerate or hinder English learning abilities.

3.1.3. Procedure

Conducting the Questionnaire (qualitative method)

The questionnaire was held in the High School “Sami Frasheri” in Prishtina and there were a total of twenty questions. The questionnaire was anonymous and the only data collected that relate to the person are only the gender and age. The questions will be divided into two categories of questions.

For the first category of questions, which is the first paper, the goal is to get an overview about how they use their phone, how often they use it, for what they use it and when they use it.

The second category included questions related to their language learning experiences and also get general information about English classes. Questions that they were asked are about different learning techniques and English classes.

3.1.4. Conducting the study (quantitative method)

The study is structured in three steps. In first step, there is a diagnostic examination where all the participants were part of it. The purpose of this step is to identify the level of the participants and to select participants with the same score for the other step. The second part was Pre-Assessment Vocabulary Test. The Pre-Assessment Test measure the participants' vocabulary level before they begin the SKELL project.

The third step is an introduction to SKELL on Smartphone and the learning options that are offered from SKELL. It was held a practical part for two hours of self- learning of 60 words. 20 words were part of Pre-Assessment test and also Post-Assessment test. The aim of this step is to gather the data to analyze and compare the effectiveness of SKELL on Smartphone.

In the beginning was the introduction part. This is where the aim of the study were presented, along with a description of the thesis, also the rights to anonymity were presented. The first part was the Diagnostic Vocabulary Test. The purpose of Diagnostic Test is to determine the appropriate vocabulary level of the participants. The Diagnostic Test has 42 questions. There are 6 questions taken from each level, and the questions increased in difficulty.

Students with the same score on the Diagnostic Test were chosen for the second part of the study.

The second part was Pre-Assessment Vocabulary Test. The Pre-Assessment Test measures the participants' vocabulary level before they began the SKELL project.

In the third part of the study participants were introduced with the techniques and tools that were going to be used for the study. The tools that were used are a Smartphone and a notebook for each and the internet connectivity was also provided. The technique is all the options provided by SKELL.

The instructions how to use SKELL were given and the participants was free to use it. Pre- Assessment test, included 20 words which also appeared on Post-Assessment test.

The Post-Assessment test was three days after the implementation of SKELL. Post-Assessment Vocabulary Test was designed with the same questions as Pre-Assessment test.

Chapter IV: Findings

In this chapter are presented all the data that is collected by using the methods that are described in the previous chapter. The data is gathered from students, so the answers are important in terms of creating the idea of what type of language learning students are. Questionnaire Results, include responses of 60 students. Also, it appears that phone is used throughout the day mostly for communication. *Study Results* provides an insight into how SKELL works in the learning vocabulary.

4.1.1 Questionnaire Results

A descriptive analysis was carried out to analyze results from the [student](#) questionnaire. The questionnaire was completed by 60 participants in total : 28 boys and 32 girls. The age varied from 15 to 16 years. The questionnaire contains two parts: Students' experiences with the use of smartphones and their perceptions of English language learning. The results are presented under the categories used in the questionnaire.

4.1.2. The use of Smartphones (Part 1)

From the first part of the students' questionnaire it can be recognized that all the students who participated in the study owned a mobile phone only 2 female students did not have because they thought that using Smartphone is a disturbing factor for them. Students were asked questions about their mobile using during the lessons, and it is concluded that, they must keep them off during the lessons. Sometimes these students were not even allowed to carry their Smartphones with them during lessons.

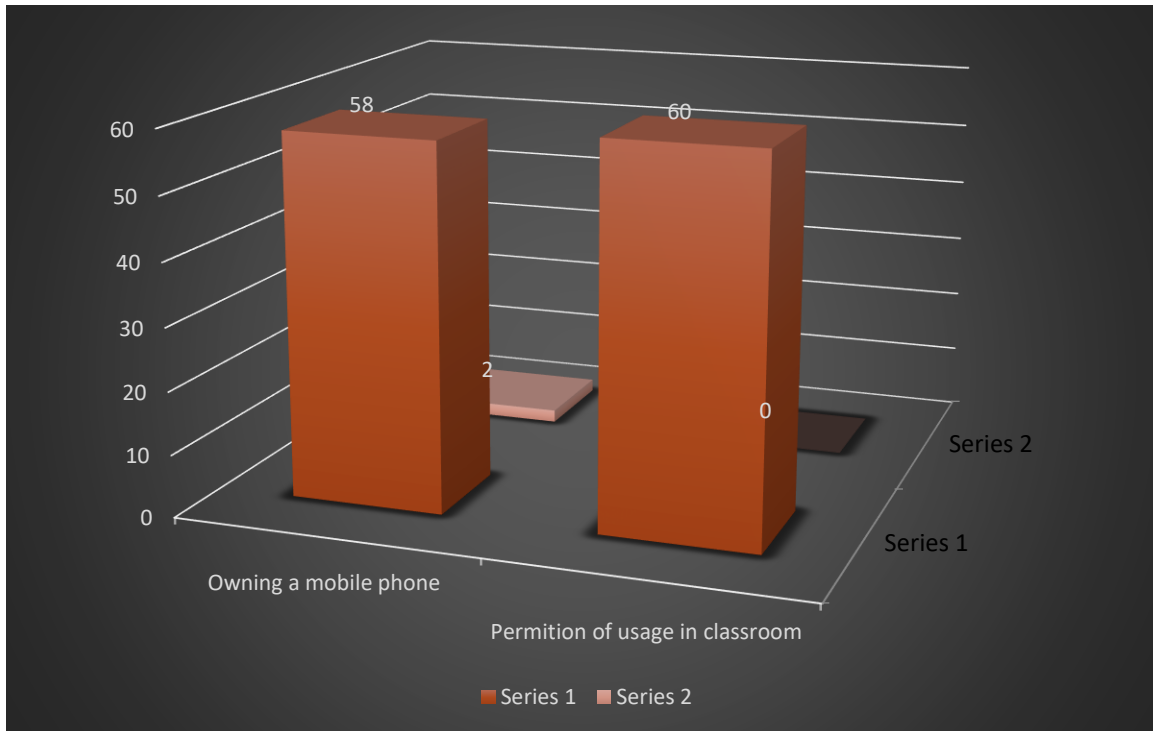


FIGURE 6. MOBILE PHONE OWNING AND USAGE STATISTICS

Almost all the students were familiar with all the operations of smartphones. 46 of the students use smartphones more than two hours daily, 2 students use smartphones only 20 minutes on daily basis also 2 use smartphones 1 hour daily. 2 participants, use their phone only in the morning, 20 in the afternoon and 28 in the evening. Generally, they use smartphones for social media 38, for communication 21 and 1 for learning purposes, which is the least used on the phone.

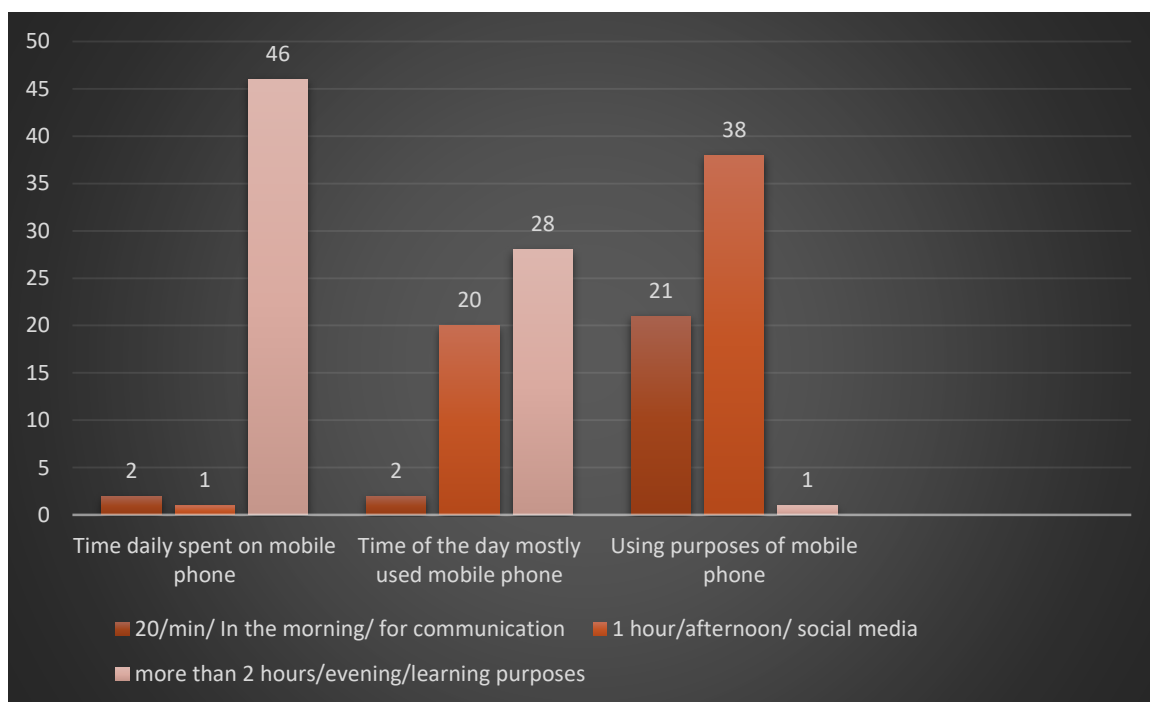


FIGURE 7. MOBILE PHONE USAGE PURPOSES

Vocabulary apps are not used very much on smartphones as 27 of students replied that they use vocabulary apps sometimes to learn new words, 10 students often use smartphones and 23 replied never. Students sometimes used audio for listening activities as 35 students replied sometimes, 18 often and 7 never. On the other hand, 22 students replied sometimes for practicing English on smartphone 20 of the students replied often and 18 never. 23 of the students replied that they sometimes use Apps for learning languages, 13 replied often 24 replied never.

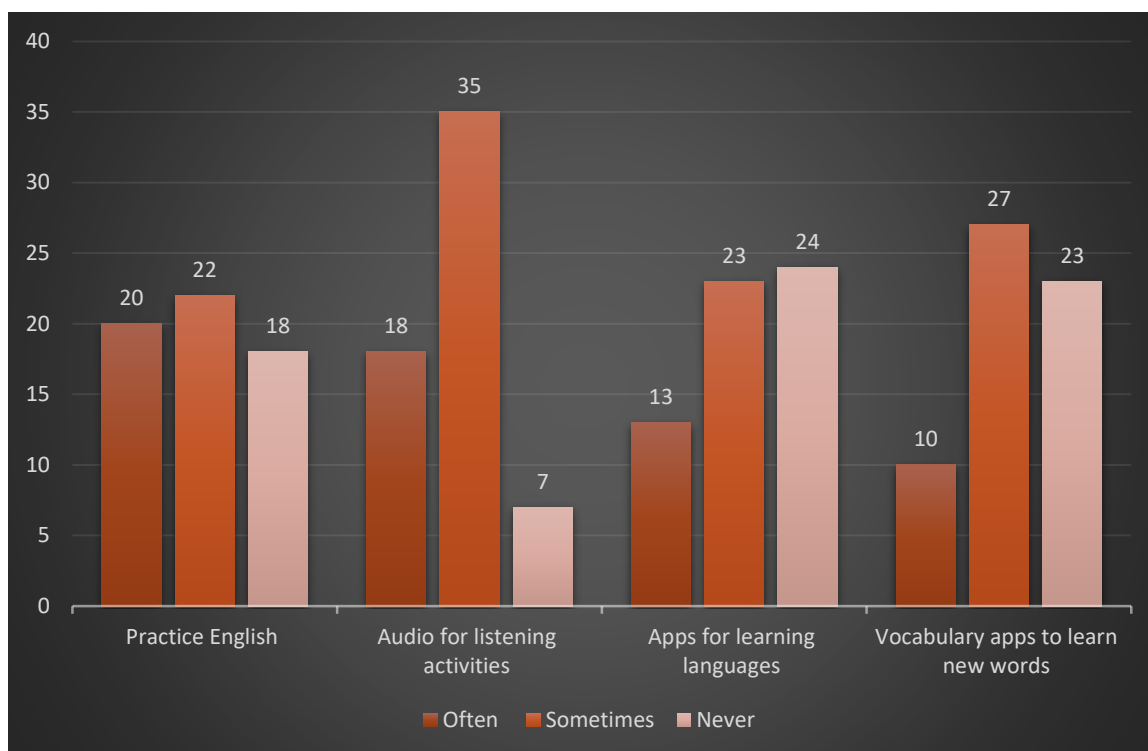


FIGURE 8. FREQUENCY OF STUDENTS' MOBILE PHONE USAGE IN CLASSROOM

4.1.3. Questionnaire result (Part 2)

The questions of the second part of the questionnaire were related to the present status of teaching English in the High School " Sami Frasheri" in Prishtina.

According to the results, almost all the students think that English language is not difficult as 5 students replied yes and only 45 no the language teaching materials are still out of date as 42 of the students answered in the questionnaire and 18 think language materials are modern. Students deal with many number of books that include fictions, articles and novels, without any benefit in terms of learning English. All the students answered that language teaching materials are all paper-based. So, students feel less motivated to learn English except when they have lessons with audio materials, which in many cases are not used from the teachers.

There are a few teachers who use multimedia in classroom only 18 of participants think that English language classes are interactive and 42 think that are not interactive. Also 15 students think that teachers use multimedia in classroom often and 45 think that teachers never use multimedia in classroom.

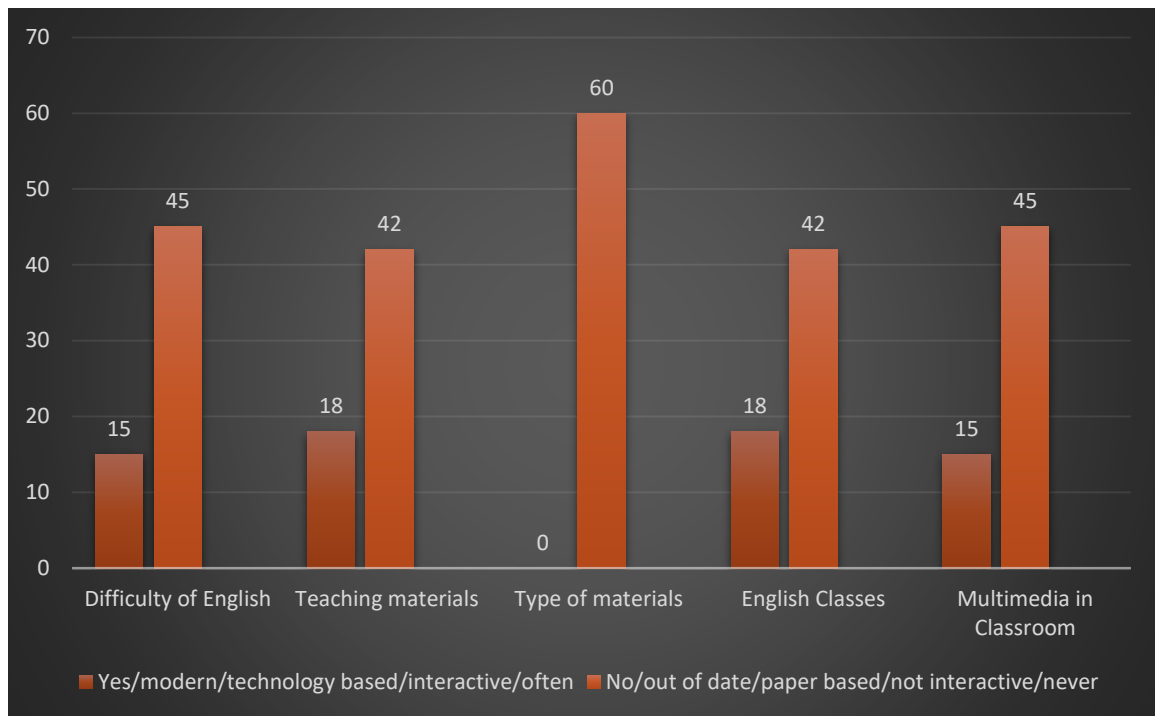


FIGURE 9. STUDENTS' PERCEPTIONS OF INTERACTIVITY IN ENGLISH LESSONS

Results from the questionnaire tell us that all the students feel interested in language lessons as 60 of them replied yes, but they do not have technical support as 45 of them think that is insufficient 5 think that is sufficient and 10 meet the demand. Also, they think that learning materials are tedious as 45 of them think that are tedious and only 15 think that are interesting.

Participants also think that English lessons are not interesting as 48 of them replied no and only 12 yes. And, they response in classroom often as 40 of them replied yes, 12, seldom and 8 never.

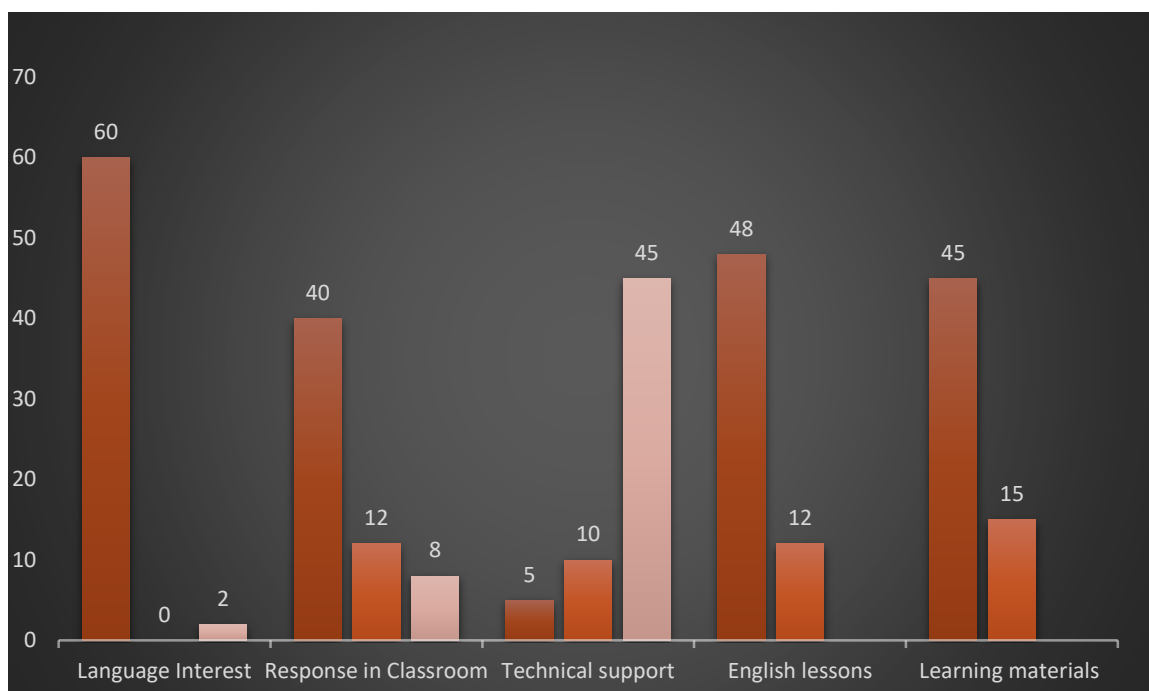


FIGURE 10: STUDENTS PERCEPTIONS OF ENGLISH LESSONS

So, the gathered results from the questionnaire confirm us that information technology is not yet being used on supporting teaching and learning in schools, students are not allowed to use their smartphones in the English lessons, also the language teaching materials are still out of date without any benefit in language learning English. So, this is the reason why students can feel less motivated to learn English except in some rare cases when audio materials are used.

4.1.4 Diagnostic Test Results

The aim of Diagnostic Test is to analyze the level of students' English vocabulary. The length of the test was 45 minutes. First students were introduced with the main point of the test and also they were instructed to stop answering the questions when they need to guess the right answer of three questions in a row.

In the table below are presented the results.

Students: 1,3,4,5,8,10,11,13,14,16,17,18,21,26,27,28,30,31,33,34 has scored approximately same points in the Diagnostic Test and they are all level 4. So they are chosen for the next step which is Pre - Assessment test. The results of other students are:

Level 1: Four students

Level 2: Nine students

Level 3: Eight students

Level 4: Twenty students (the group chosen for next step)

Level 5: Twelve students and

Level 6: Seven students.

Table 1.Diagnostic Test Results

Diagnostic Test Results	Points	Percentage	Level
Student 1	22/42	52%	4
Student 2	20/42	47%	2
Student 3	25/42	59%	4
Student 4	25/42	59%	4
Student 5	27/42	64%	4
Student 7	32/42	76%	5
Student 8	25/42	59%	4
Student 9	35/42	83%	3
Student 10	25/42	59%	4
Student 11	28/42	66%	5
Student 12	37/42	88%	6
Student 13	24/42	57%	4
Student 14	25/42	59%	4

Student 15	32/42	76%	5
Student 16	28/42	66%	4
Student 17	24/42	57%	4
Student 18	25/42	59%	4
Student 19	30/42	71%	5
Student 20	32/42	76%	5
Student 21	30/42	71%	5
Student 21	25/42	59%	4
Student 22	20/42	47%	3
Student 23	8/42	19%	2
Student 24	15/42	35%	3
Student 25	10/42	23%	2
Student 26	28/42	66%	4
Student 27	24/42	57%	4
Student 28	25/42	59%	4
Student 29	31/42	73%	5
Student 30	27/42	64%	4
Student 31	23/42	54%	4
Student 32	25/42	59%	4
Student 33	24/42	57%	4
Student 34	28/42	66%	4
Student 35	32/42	76%	5
Student 36	19/42	45%	3
Student 37	18/42	42%	2

Student 38	18/42	42%	2
Student 39	38/42	90%	6
Student 40	31/42	73%	5
Student 41	31/42	73%	5
Student 42	15/42	35%	1
Student 43	40/42	95%	6
Student 44	38/42	90%	6
Student 45	40/42	95%	6
Student 46	17/42	40%	3
Student 47	9/42	21%	2
Student 48	7/42	16%	1
Student 49	31/42	73%	5
Student 50	31/42	73%	5
Student 51	9/42	21%	2
Student 52	14/42	33%	2
Student 53	17/42	40%	3
Student 54	7/42	16%	1
Student 55	14/42	33%	2
Student 56	7/42	16%	1
Student 57	40/42	95%	6
Student 58	41/42	97%	6
Student 59	17/42	40%	3
Student 60	17/42	40%	3

FIGURE 11. DIAGNOSTIC TEST RESULTS

After the Diagnostic Test results, Students

1,3,4,5,8,10,11,13,14,16,17,18,21,26,27,28,30,31,33,34 were chosen for the next study steps.

4.1.5. Pre-Assessment Test Results

Pre-Assessment test had 20 questions of the level 4. The Participants were student 1,3,4,5,8,10,11,13,14,16,17,18,21,26,27,28,30,31,33,34 who reached the same level in the Diagnostic Test. The length of the test was 45 minutes. They were told to answer all the questions.

For the time of 40 minutes, the highest percentage that students achieved is 60% and the lowest 25%.

Table 2. Pre-Assessment Test Results

Pre-Assessment Test Results	Points	Percentage
Student 1	5/20	25%
Student 3	9/20	45%
Student 4	8/20	40%
Student 5	9/20	45%
Student 8	9/20	45%
Student 10	8/20	40%
Student 11	7/20	35%
Student 13	8/20	40%
Student 14	9/20	45%
Student 16	11/20	55%
Student 17	12/20	60%
Student 18	12/20	60%

Student 21	11/20	55%
Student 26	10/20	50%
Student 27	5/20	25%
Student 28	9/20	45%
Student 30	12/20	60%
Student 31	11/20	55%
Student 33	7/20	35%
Student 34	8/20	40%

FIGURE12. PRE-ASSESSMENT TEST RESULTS

4.1.6. Post-Assessment Test Results

Post-Assessment Test had the same questions as Pre-Assessment test. The purpose of this test was to compare the results before and after the implementation of SKELL. Post-Assessment Test was held three days after students were presented with SKELL. The length of the test was 45minutes. Results for the Post-Assessment test are presented below. So, as we can see students have achieved great results after the implementation of SKELL the highest percentage is 100% and the lowest is 80% compared with the Pre-Assessment Test were the highest percentage was 60% and the lowest 25%.

Table 3. Post-Assessment Test Results

Pre-Assessment Test Results	Points	Percentage
Student 1	17/20	85%
Student 3	16/20	80%

Student 4	18/20	90%
Student 5	18/20	90%
Student 8	19/20	95%
Student 10	17/20	85%
Student 11	16/20	80%
Student 13	18/20	90%
Student 14	19/20	95%
Student 16	18/20	90%
Student 17	19/20	95%
Student 18	17/20	85%
Student 21	17/20	85%
Student 26	16/20	80%
Student 27	18/20	19%
Student 28	19/20	95%
Student 30	20/20	100%
Student 31	20/20	100%
Student 33	19/20	95%
Student 34	18/20	90%

FIGURE 13. POST-ASSESSMENT TEST RESULTS

So, the use of SKELL which is Sketch Engine for Language Learning proved that use of smartphones and vocabulary apps is crucial in improving vocabulary skills the results in Post-Assessment Test shows that students improved their performance in test by achieving higher scores than in the Pre-Assessment Test.

Chapter V: Discussion

This part of discussion mainly has to do with the gathered results from the above sections. At this stage of the study, collected results from the instruments used are discussed.

Hypothesis I

Vocabulary is an important part of the English teaching process. It is supposed to be a very effective communicative device as it carries the highest level of importance within peoples' verbal interaction.

One of the most important factor that has been analyzed is the role of smartphones in improving vocabulary. The first hypothesis which is "Use of smartphones is crucial in improving vocabulary skills" reflected upon the high role that smartphones have in improving vocabulary skills. The research that has been conducted in this study through the questionnaires and tests strongly approves the hypothesis. The experiment test conducted with students showed that almost all the students improved their scores in test when they started to use the Vocabulary app "SKELL". The review of literature showed that other researchers agree with this hypothesis. The analyzed data proved smartphones effectiveness for vocabulary learning by incorporating SKELL (Sketch Engine for language learning). In other words, in line with more communicative approaches to foreign language teaching and learning, more integrative methodologies should be addressed where the language is viewed holistically, and smartphones are integrated into foreign language learning as a whole, not merely applied to a single language skill.

Hypothesis II

The second hypothesis which stated that "Use of smartphones in Vocabulary activities during lessons contribute on developing language learning abilities and improving vocabulary skills" is also, strongly approved. The gathered results and the literature review shows that students who use the smartphones applications achieve better results than those who use traditional learning methods. This proves that use of smartphones in learning process is considered as a productively way to develop language learning abilities and improve vocabulary skills.

Hypothesis III

The third hypothesis which states that "Integrating SKELL (Sketch engine for language learning) while learning ESL students will improve their vocabulary learning. The expected results are depended on frequency usage of smartphones for learning purposes".

The analyzed data support this hypotheses of this thesis. The use of SKELL which is (Sketch Engine for Language Learning) proved that use of smartphones and vocabulary apps in this case SKELL is crucial in improving vocabulary skills.

Practical part was realized as an experiment in the classroom. I presented the same target language for students, using the same approach for everyone. Experiment consists of diagnostic test, pre-assignment test and post-assignment test. The main goal was to assess the effectiveness of SKELL platform on improving vocabulary. The results show that when SKELL was implemented in Post-Assessment Test students improved their performance in test by achieving higher scores than in the Pre-Assessment Test.

Chapter V: Conclusion

The purpose of this thesis is to show the benefits of using Smartphones in learning English as a second language. The first part of this study includes the theoretical background of Smartphones, mobile-based learning, SKELL and vocabulary teaching. It starts with the definition of Smartphone, which provides a detailed overview of Smartphone and its components and then continues with literature on the Mobile-based language learning. Then, an overview how SKELL works and how it can be used as vocabulary learning platform is illustrated.

Regarding the first research question "What are students' perspectives about the effectiveness of Smartphones in improving vocabulary skills?", the questionnaire results confirm that information technology is not yet being used at maximum capacity on supporting teaching and learning in schools, students are not allowed to use their smartphones in the English lessons.

The language teaching materials are still out of date and there are only few teachers who use multimedia in the classroom. Students deal with many number of books that include fictions, articles and novels, without any benefit in terms of learning English and teaching materials are all paper-based. So, students feel less motivated to learn English except audio materials, which in many cases are not used from the teachers.

Regarding the second research question: Would it be beneficial for students using Smartphones for vocabulary activities during lessons? The gathered results and the literature reviewed shows that use the smartphones applications for vocabulary activities during lessons results with better performance of students.

The use of SKELL in Post – Assessment Test proves that use of smartphones in learning process is considered as a productively way to develop language learning abilities and improve vocabulary skills.

Regarding the third research question: Does the use of SKELL (Sketch Engine for Language Learning) accelerate or hinder English language learning abilities?

Practical part was realized as an experiment in the classroom. Experiment consisted of diagnostic test, pre-assignment test, post - assignment test. The main goal was to assess

the effectiveness of SKELL platform on improving vocabulary. The analyzed data support hypotheses of this thesis, the use of SKELL which is Sketch Engine for Language Learning proved that use of smartphones and vocabulary apps in this case SKELL is crucial in improving vocabulary skills. When SKELL was implemented in Post-Assessment Test students, students improved their performance in test by achieving higher scores than in the Pre-Assessment Test.

The purpose of this research is to enhance the process of learning and teaching in schools of Kosova. The topic is relatively a new topic in the sense that it analyses the role of smartphones on improving vocabulary of ESL/EFL students. Related to this, SKELL that is a Sketch Engine for Language Learning can serve as a simple tool which can serve students and teachers of English to quickly check the usage of different phrases or words used by non-native speakers of English.

To conclude, the results of this study may encourage future researchers and instructors in the related field to develop broader and deeper studies into vocabulary of the mobile-based instructional design.

Most of the teachers lack the ability to adapt mobile devices on teaching materials or develop mobile learning tools for pedagogical purposes. Considering that it exists little research on mobile-based vocabulary skills with the smart phone apps, the findings from the present study provide valuable insights into the area of foreign language vocabulary research and practical implication for second language vocabulary classrooms.

6.1 Limitations

The only limitation that I had was conducting the questionnaire and the experiment with SKELL. The time when I did the questionnaire was in the end of the first period of the school, so it was the time of tests and projects and the length of the classes were 35 minutes. As a result there appeared to be times when teachers because of the limited time did not allowed me to enter in the class and do the questionnaires and the experiment, so, I had to go several times in the school and find the appropriate time to do the questionnaire and the experiment.

6.2 Recommendations

A very important recommendation for any other research on this type of topic is to find the appropriate time to do the questionnaire and the experiment, it would be more appropriate to do it in the beginning of the semester and not in the time when students have tests and projects. Also, because students would show better involvement especially when doing the SKELL experiment because they need to have time and prepare for Post-Assessment Test.

Another recommendation that can influence positively effectiveness of English lessons is to not use old methods of teaching but engage in learning process different apps for learning purposes, also create more creative activities, use technology more to make students more motivated and in the same time to make the process of teaching and learning more easier.

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Appendix

Appendix 1. Part one of Questionnaire

Intro: Hello, and thank you for taking the time to take the questionnaire. I do these questions in connection with my thesis and the goal is that I'll get a better understanding of students' attitudes towards smartphones.

You can retire anytime from the questionnaire and you can also choose to not answer questions if you like. The questionnaire will be presented anonymously in the thesis and there is nothing that can be traced back to you.

Gender: Male/ Female

Age:

1. Do you own a mobile phone? Yes/No
2. Do your teachers permit you to use your mobile phones in class? Yes/No
3. How much time daily do you spent on your mobile phone? 20 min/ 1hour/ more than 2hours
4. What time of the day do you mostly use your mobile phone? In the morning/ afternoon/Evening.
5. Most of the time you use mobile phone for communication/ social media/ learning purposes.
6. You use your mobile phone to practice your English: Often/ sometimes/ never.
7. You listen to mobile audio for listening activities: Often/ sometimes/never
8. You use your mobile Apps for learning languages: often/ sometimes/never
9. You use vocabulary Apps to learn new words: Often/ sometimes/never

Closure:

Thank you for taking the time to participate.

Appendix2: Part two of Questionnaire:

The present status of ESL Classroom in Sami Frasheri High School

Intro: Hello, and thank you for taking the time to take the questionnaire. I do these questions in connection with my thesis and the goal is that I'll get a better understanding of students' attitudes towards smartphones.

You can retire anytime from the questionnaire and you can also choose to not answer questions if you like. The questionnaire will be presented anonymously in the thesis and there is nothing that can be traced back to you.

Gender: Male/Female

Age:

1. Do you feel English language still difficult? Yes/no
2. Do you feel interested in your language class? Yes/No
3. You response in the classroom: Often/seldom/Never
4. The technical support in your classroom: Sufficient/ meet the demand/ insufficient.
5. Your teachers use the language teaching materials Technology-based/Paper-based
6. Your language learning materials are: Interesting/tedious
7. Your language learning materials are: Modern /out of date
8. Do you feel the English lessons interesting? Yes/No
9. Your teachers use multimedia in the classroom: Often/Seldom/Never
10. Do you think your English language classes are interactive?Yes/No

Closure: Thank you for taking the time to participate.

Appendix 3: Diagnostic Test

Name: _____ Date: _____

Diagnostic Test

Choose the answer or phrase that best answers the question.

- What part of your body allows you to **chew**?
(A) your teeth
(B) your nose
(C) your lips
(D) your eyes
- The construction crew was working on the **base** of the building. Where are they working?
(A) on the roof of the building
(B) on the third floor of the building
(C) in the hallways of the building
(D) on the bottom part of the building
- Keisha loves to **travel**. Which of these things would be a good present for her?
(A) a plant
(B) a video game
(C) a plane ticket
(D) a necklace
- If you say someone is **weak**, you mean:
(A) He is not strong.
(B) He is very smart.
(C) He is big.
(D) He is young.
- The kids had to guess how many gumballs were in the jar. There were 98. Which kid is only **slightly** wrong?
(A) Paul guessed that there were 96 gumballs in the jar.
(B) Claire guessed that there were 136 gumballs in the jar.
(C) Mayte guessed that there were 137 gumballs in the jar.
(D) Brett guessed that there were two gumballs in the jar.
- When Nora took the clothes out of the dryer, they were **damp**. What does that mean?
(A) They were a little wet.
(B) They were too small.
(C) They smelled nice.
(D) They were hot and dry.
- What is the **opposite** of light?
(A) the sun
(B) turning on a lamp
(C) sleeping
(D) darkness
- Which would be the most **brilliant**?
(A) the sun on a summer day
(B) a candle going out
(C) a spider crawling on the ground
(D) a light bulb
- If someone finds the **solution** to a problem, what do they do?
(A) They get the answer.
(B) They work by themselves.
(C) They paint on a ceiling.
(D) They do extra homework.
- What would happen if you read a book **gradually**?
(A) You would remember every line.
(B) You would read a little bit each day.
(C) You would read it backwards.
(D) You would have to read it for school.
- How would you **journey** from one country to another?
(A) call someone on the phone
(B) watch the t.v.
(C) ride your skateboard
(D) take a plane
- If someone has a **theory**, what does she have?
(A) a thick book
(B) a big idea
(C) a talk with their teacher
(D) the wrong answer
- Which of the following is an example of the word **"practice"**?
(A) a team of programmers making a new video game
(B) a caterpillar growing into a beautiful butterfly
(C) a man working on a machine in a factory
(D) a basketball team working on their shots before the game

14. If Jasmine can **afford** a watch, that means she
(A) could buy a watch
(B) won a free watch
(C) keeps losing her watch
(D) already owns a watch
15. What would you use to **tidy** the kitchen?
(A) a broom
(B) a plate
(C) a table
(D) a fork
16. Which of the following is an example of the word "**annual**"?
(A) a bird
(B) a week
(C) a birthday
(D) a hamburger
17. Which of these is **surface** damage on a car?
(A) a flat tire
(B) a dead battery
(C) a broken radio
(D) a scratch in the paint
18. Which of these is a **disaster**?
(A) a funny movie
(B) a tornado
(C) a lunch food
(D) a board game
19. What does a **pedestrian** use for transportation?
(A) a car
(B) a train
(C) a bike
(D) her feet
20. On which day is it most common for people to cause **mischief**?
(A) the Fourth of July
(B) April Fool's Day
(C) Thanksgiving
(D) Presidents' Day
21. What is a **negative** way to get attention?
(A) telling your mom she looks pretty when she doesn't
(B) punching someone in the arm
(C) winning the lottery
(D) performing in a school play
22. Which of these is a way in which someone is usually **compensated**?
(A) an umbrella
(B) a paycheck
(C) the flu
(D) an excuse
23. Which of these things cannot be **budged**?
(A) a bicycle
(B) a mountain
(C) a box of tissues
(D) a lion
24. Which of the following is an example of the word "**approximate**"?
(A) I didn't have a watch on, but I guessed that it was about three o' clock.
(B) Things have been quiet around here since the bandits left town.
(C) Mindy felt totally exhausted after staying up all night.
(D) The tailor created a beautiful new outfit for the king's visit to Germany.
25. Which of the following things **mimics** something else?
(A) a parrot
(B) an eagle
(C) an elephant
(D) a goldfish
26. Amber has great **negotiation** skills. She is good at
(A) changing her story
(B) getting things done
(C) making deals
(D) working hard
27. Bridget **loathes** peanut butter. She
(A) loves it
(B) promises to eat it
(C) can't stand it
(D) expects it
28. In the alphabet, what is the **subsequent** letter to W?
(A) V
(B) X
(C) U
(D) Y

29. Ben experienced a **deluge** of happiness after he graduated. He was
(A) extremely sad
(B) pretty sad
(C) extremely happy
(D) pretty happy
30. Brenda's parents felt that the school **stifled** her creativity. They felt the school
(A) encouraged it
(B) limited it
(C) ignored it
(D) mourned it
31. Which of these items can **quench** a fire?
(A) smoke
(B) wood
(C) matches
(D) water
32. If I told you a **saga**, I would be telling you a(n)
(A) lie
(B) joke
(C) story
(D) apology
33. On a **lavish** date, you would be most likely to
(A) watch a movie at home
(B) take a long walk in a park
(C) eat at an expensive restaurant
(D) go bowling at midnight
34. Which phrase is a **reprimand**?
(A) "Great job!"
(B) "I'm sorry."
(C) "Behave yourself!"
(D) "Let's go."
35. Someone who **devours** Count Basie CDs
(A) has not heard of Count Basie
(B) can't stand Count Basie
(C) works for Count Basie
(D) listens to Count Basie frequently
36. Which would be most useful for a **vocation**?
(A) a travel agent
(B) a college education
(C) a guide to restaurants
(D) a map
37. Ricardo was **vying** for a nomination for student council president. He was
(A) hoping he wouldn't get nominated
(B) submitting a nomination for his friend
(C) fighting to win a nomination
(D) sabotaging another candidate
38. Lina **vilified** Hiro when she
(A) robbed him
(B) spoke unfavorably of him
(C) grabbed him
(D) bought him a sandwich
39. Which of the following sentences best demonstrates the meaning of the word **assimilate**?
(A) Jim divided the money in three.
(B) After moving to Oakland, Sreng slowly learned to like baseball.
(C) John stepped between the two arguing customers.
(D) Keith baked a cake every Saturday.
40. The students were **sweltering**. They were
(A) failing their class
(B) arguing with each other
(C) sweating a lot
(D) becoming weak
41. Kyron was known for his **disposition** or
(A) personality
(B) fear
(C) wealth
(D) looks
42. A **disgruntled** employee is
(A) fed up with her job
(B) better than all the others
(C) someone who is doing her job first
(D) skilled at her job

Appendix 4: Pre-Assessment Test

Name: _____ Date: _____

Pre-Assessment Test

Choose the answer or phrase that best answers the question.

1. What would help someone **navigate**?
(A) a hairbrush
(B) a clock
(C) a map
(D) a calculator
2. Which of the following is an example of the word **"access"**?
(A) a trick your class plays on your teacher
(B) a friend who has been in your life for a long time
(C) a pool of water in the middle of the desert
(D) an open gate that leads to the beach
3. On which day is it most common for people to cause **mischief**?
(A) the Fourth of July
(B) April Fool's Day
(C) Thanksgiving
(D) Presidents' Day
4. Who would most likely live the most **solitary** life?
(A) a prisoner
(B) a police officer
(C) a factory worker
(D) a movie star
5. What would be a **luxury** for a dog?
(A) a crate
(B) a leash
(C) a steak dinner
(D) a visit to the veterinarian
6. If you **dedicate** a book to someone, you
(A) give the book to them
(B) show that you wrote it with them in mind
(C) send it back to the bookstore for a refund
(D) write them a really long letter
7. You can usually **assume** that a person with a beard is
(A) a pirate
(B) hot
(C) itchy
(D) a man
8. Where would the **altitude** be the highest?
(A) in the Amazon rainforest
(B) at the top of Mount Rushmore
(C) in the middle of the Atlantic Ocean
(D) in the Sahara desert at noontime
9. It would be useful to know the **route** if you were
(A) thinking about buying something
(B) planning to play outside
(C) traveling to a new place
(D) learning a new card game
10. Why would a person **dictate** a novel?
(A) They hated books.
(B) They loved to read.
(C) They owned a bookstore.
(D) They didn't know how to type.
11. Which activity requires the most **strategy**?
(A) tying your shoes
(B) jumping into cold water
(C) playing chess
(D) making change for a dollar

12. Which is an example of the word **visible**?
(A) That lunch was delicious because David is such a great cook.
(B) Beatrice is such a talented swimmer; no one can beat her in the pool!
(C) Some people think Jessica is cold, but she's always been nice to me.
(D) The scar on Malcolm's chin was easy for all to see.
13. Which of these phrases would most likely be at the beginning of a **myth**?
(A) "Once upon a time..."
(B) "The following is a true story."
(C) "Do not try this at home."
(D) "I pledge allegiance to the flag..."
14. What is the **prefix** of the word "rerun"?
(A) run
(B) re
(C) reran
(D) ruin
15. Which of these is a **homonym** of the word "higher"?
(A) hire
(B) high
(C) er
(D) tiger
16. Who gets paid to **astound** people?
(A) a doctor
(B) a principal
(C) a magician
(D) a taxi driver
17. **Talons** would be good for
(A) swinging on vines
(B) grasping onto tree limbs
(C) playing the trumpet
(D) swimming
18. An example of an important **occasion** is
(A) the Empire State Building
(B) science
(C) President John F. Kennedy
(D) high school graduation
19. Which is **portable**?
(A) a cell phone
(B) a movie theater
(C) a couch
(D) the Grand Canyon
20. Which would **exert** the most energy?
(A) sleeping
(B) plugging in a light
(C) running 10 miles
(D) eating a candy bar

Appendix 5: Post-Assessment Test

Name: _____ Date: _____

Post-Assessment Test

Choose the answer or phrase that best answers the question.

1. What would help someone **navigate**?
(A) a hairbrush
(B) a clock
(C) a map
(D) a calculator
2. Which of the following is an example of the word **"access"**?
(A) a trick your class plays on your teacher
(B) a friend who has been in your life for a long time
(C) a pool of water in the middle of the desert
(D) an open gate that leads to the beach
3. On which day is it most common for people to cause **mischief**?
(A) the Fourth of July
(B) April Fool's Day
(C) Thanksgiving
(D) Presidents' Day
4. Who would most likely live the most **solitary** life?
(A) a prisoner
(B) a police officer
(C) a factory worker
(D) a movie star
5. What would be a **luxury** for a dog?
(A) a crate
(B) a leash
(C) a steak dinner
(D) a visit to the veterinarian
6. If you **dedicate** a book to someone, you
(A) give the book to them
(B) show that you wrote it with them in mind
(C) send it back to the bookstore for a refund
(D) write them a really long letter
7. You can usually **assume** that a person with a beard is
(A) a pirate
(B) hot
(C) itchy
(D) a man
8. Where would the **altitude** be the highest?
(A) in the Amazon rainforest
(B) at the top of Mount Rushmore
(C) in the middle of the Atlantic Ocean
(D) in the Sahara desert at noontime
9. It would be useful to know the **route** if you were
(A) thinking about buying something
(B) planning to play outside
(C) traveling to a new place
(D) learning a new card game
10. Why would a person **dictate** a novel?
(A) They hated books.
(B) They loved to read.
(C) They owned a bookstore.
(D) They didn't know how to type.
11. Which activity requires the most **strategy**?
(A) tying your shoes
(B) jumping into cold water
(C) playing chess
(D) making change for a dollar

12. Which is an example of the word **visible**?
(A) That lunch was delicious because David is such a great cook.
(B) Beatrice is such a talented swimmer; no one can beat her in the pool!
(C) Some people think Jessica is cold, but she's always been nice to me.
(D) The scar on Malcolm's chin was easy for all to see.
13. Which of these phrases would most likely be at the beginning of a **myth**?
(A) "Once upon a time..."
(B) "The following is a true story."
(C) "Do not try this at home."
(D) "I pledge allegiance to the flag..."
14. What is the **prefix** of the word "rerun"?
(A) run
(B) re
(C) reran
(D) ruin
15. Which of these is a **homonym** of the word "higher"?
(A) hire
(B) high
(C) er
(D) tiger
16. Who gets paid to **astound** people?
(A) a doctor
(B) a principal
(C) a magician
(D) a taxi driver
17. **Talons** would be good for
(A) swinging on vines
(B) grasping onto tree limbs
(C) playing the trumpet
(D) swimming
18. An example of an important **occasion** is
(A) the Empire State Building
(B) science
(C) President John F. Kennedy
(D) high school graduation
19. Which is **portable**?
(A) a cell phone
(B) a movie theater
(C) a couch
(D) the Grand Canyon
20. Which would **exert** the most energy?
(A) sleeping
(B) plugging in a light
(C) running 10 miles
(D) eating a candy bar