Smartphone Uses in the Language Classroom for Learning Purposes by EFL College Students[*]

Dr. Mahmoud Ahmad Thabet Al-maqtri·

Associate Professor of Applied Linguistics
Department of English, College of Sciences
and Arts (An-namas)
University of Bisha, KSA &
Department of English, College of Arts, Ibb
University, Ibb, Yemen
E-mail: mmaktri@yahoo.com ;
maktram@gmail.com

Smartphone Uses in the Language Classroom
for Learning Purposes by EFL College Students

Abstract

This study aimed at examining the current uses of smartphones for language learning purposes by the EFL college students outside the classroom with the intention of proposing using these devices for language learning inside the classroom. The study was conducted with students of English in two colleges of Sciences and Arts affiliated to the University of Bisha, An-namas, Saudi Arabia, in 2018-2019. In this mixed-methods descriptive study, a questionnaire was used to collect the data from 77 male and female participants taken from a total population of 142 students. The Questionnaire validity (α= 0.87) and reliability were measured. To analyze the obtained data, the (SPSS) version16.0 was used. Qualitative data from the researcher-instructor's informal observations and colleagues' discussions were used to support data gained from the questionnaire. Results showed that participants have already been using these devices for learning purposes outside the classroom. According to the findings, the five top uses of smartphones by the respondents were (1) in using these devices as dictionaries; (2) for logging in the electronic portal to follow up notices and so on; (3) in spelling check (4) in translating texts, and (5) in looking for answers to difficult questions. Other uses were also given. T-test did not show any significant gender differences in the uses of these devices. Statistics indicated that all participants wanted to use these devices in classroom. The study concluded that these devices could be used in the classroom for language learning purposes. A list of uses and applications was prepared for the purpose. Among the recommendations was to establish a clear policy and rules to be followed by the different parties.
Keywords: Classroom, EFL college students, learning purposes, mixed-methods, smartphone uses, University of Bisha.

استخدام الهواتف الذكية في الفصل الدراسي لأغراض تعليمية من قبل طلبة اللغة الإنجليزية كلغة أجنبية

ملخص الدراسة:

هدفت هذه الدراسة إلى معرفة الاستخدامات الحالية للهواتف الذكية لأغراض تعلُّم اللغة الانجليزية كلغة أجنبية خارج الفصل الدراسي وذلك بهدف تقديم مقترح استخدام هذه الأجهزة لتعليم ولتعلُّم اللغة في الفصل الدراسي. أجريت الدراسة على طلبة قسم اللغة الانجليزية في كليتي العلوم والآداب التابعتين لجامعة بيشة، فرع النماص، المملكة العربية السعودية في 2018-2019. في هذه الدراسة الوصفية، تم أستخدم المنهج المختلط الكمي والكيفي حيث استخدمت في الأول الاستبانة لجمع البيانات من عينة مكونة 77 مشاركًا من الذكور والإناث من أصل 142 طالبًا وطالبة، وتم قياس صدق الأداة   (0.87   α=)وثباتها. وتم استخدام الإصدار 0.16 (SPSS) لتحليل البيانات المعطاة. أما المنهج الكيفي فقد أستخدم للحصول على بيانات من ملاحظات الباحث (المحاضر) ومن المناقشات غير الرسمية مع الزملاء من أعضاء هيئةٍ التدريس. أظهرت النتائج أن المشاركين يستخدمون بالفعل هذه الأجهزة لأغراض التعلُّم خارج الفصل الدراسي. ووفقًا للنتائج، فإن أهم خمسة استخدامات للهواتف الذكية من قبل المشاركين كانت (1) استخدام هذه الأجهزة كمعاجم. (2) لتسجيل الدخول في البوابة الإلكترونية لمتابعة الإشعارات وما إلى ذلك؛ (3) في التدقيق الإملائي (4) في ترجمة النصوص، و(5) في البحث عن إجابات للأسئلة الصعبة. إلى غير ذلك من الاستخدامات. لم يشر اختبار(ت)Tأي اختلافات ذات دلالة إحصائية بين الجنسين في استخدام هذه الأجهزة. بينما أظهرت الإحصاءات أن جميع المشاركين يفضلون استخدام هذه الأجهزة في الفصل الدراسي. انتهت الدراسة بإمكانية استخدام هذه الأجهزة في الفصل الدراسي. تم إعداد قائمة بالاستخدامات والتطبيقات التي يمكن تطبيقها في الفصل الدراسي من قبل كل من الطلبة والمعلمين. من بين التوصيات التي طرحت وضع استراتيجية وقواعد استخدام واضحة لإتباعها من قبل الأطراف المختلفة.

الكلمات المفتاحية: الفصل الدراسي، طلاب اللغة الانجليزية كلغة أجنبية، أغراض التعلُّم، استخدم الهاتف الذكي، المنهج المختلط، جامعة بيشة.

1. Introduction

Modern technology has become so influential in a way that has changed "peoples' behaviors" (Yu, & Conway, 2012) and their life styles transforming societies into "mobile societies" (Chung, Chen, & Kuo, 2015, p. 333). The most important part of this technology has been that of mobile technology including smartphone technology, which is the latest and ubiquitous version of mobile technology. A smartphone is defined as a mobile phone with advanced features and functions beyond traditional functionalities namely sending and receiving calls and text messages. (Gowthami & Kumar, 2016). Nowadays, it is too hard to find a person without one of these smartphones. It was estimated that by 2020 smartphones would become a primary means for the Internet access and communication (Caverly, Ward &Caverly, 2009). Now, we are in the year 2020 and that prediction came true. These devices have become indispensable to people in almost every domain of life including education - higher education in particular.

Smartphones have already penetrated many domains of life among which is that of higher education including language education- English in our case. As we will see in the next section, the EFL students in many parts of the world are using these devices for different types of learning. Using these devices outside the classroom is unquestionable. What is not clear is in using them inside the classroom at least in our situation. While some higher educational institutions permit the use of these devices in classrooms, others do not. The University of Bisha, in Saudi Arabia is one of those institutions in which instructors still ban students from using smartphones in classroom. Though students already use these devices outside classrooms for everyday purposes including learning, they did not use them in classrooms for a number of reasons among which are: (1) these devices have some drawbacks like causing disruption and reducing productivity (Beland& Murphy, 2016). (2) The students use them for matters other than learning like chatting and easy cheating (Ehnle, 2020). (3).Instructors themselves are not aware of the possibility of the uses of these devices for teaching and learning purposes, and (4) instructors' fear that their teaching load will be increased because of the use of these devices (Reinders, 2010).

When conducting online classes as part of blended learning, we found that students used smartphones to follow online activities and

sessions. This was also reinforced during the social lockdown period due to the covid-19 pandemic in the second semester of the academic year 2019-2020, in which instruction was conducted online; it was found that almost all students used smartphones rather than other mobile devices. This strong tendency to use smartphones by EFL college students for learning purposes to follow and interact with their instructors and classmates outside classroom and in online learning, drew the attention of the instructor-researcher's attention to reconsider the banning or rather the reservation from using these devices in face-to- face traditional classes. The question that came to mind was: Why should not we take this opportunity and make use of these devices in the face-to-face classrooms to make the best of them to improve the teaching and learning process for EFL college students? This is the main question that this paper attempted to address. This is in line with what Bingol (2018) said that we have to take advantage of these devices in order to improve the teaching and learning processes.

To answer this main question, we had first to find out the extent of the frequent uses of these devices by the EFL students for learning purposes outside the classroom, and if the students wanted to use these devices in the English classroom. Accordingly, the study would find out whether to recommend the use of these devices in classroom or not. If the answer would be positive, the study would suggest some possible uses and applications of smartphone uses that can be used in the English classroom for more productive and creative language learning.

2. Literature Review

Since they were introduced in 2000 (Alfawareh & Jusoh, 2014), smartphones have evolved from being devices for communication calls and messages to miniature computers that could be kept in pockets and perform different functions such as web browsing, photo and video shooting, online banking, different social media sharing, webinar and online conferences viewing, game playing and many more. Now, users can access knowledge of different types anytime and anywhere (Geddes, 2004; Azizifar&Gowhary, 2015).This anytime anywhere ability is one important function that makes these devices so effective and ubiquitous in different domains of life including education.

2.1 Smartphones and Education

Mobile learning through smartphone devices have revolutionized education in both quality and quantity. Rismark, Solvberg, Stromme, and Hokstad (2007) found that affordance of constant access to LMS (Learning Management System) by mobile phones may represent new learning opportunities in higher education. There is now potential for utilizing mobile devices for teaching and learning as these devices are very popular with young people and with college students in particular. Research shows that more students own these devices and prefer to use them not only at college level but at all stages of education (Bingol, 2018),and with different types of specializations due to their mobility, portability, easy Internet connection, multi-media files and the function of allowing students to personalize their learning etc. (Al-Mashhadani & Al-Rawe 2018; (Pengnate, 2018). In addition to their possible use for teaching and learning processes, it is believed that these devices increase motivation and interaction among students (Nordin, Hamza, Yunus, & Embi, 2010). Moreover, it has been noticed that those devices have a great impact upon the nature of higher education, the advanced learning methods, and learning skills (Al-Mashhadani& Al-Rawe 2018).

University students have already been using these devices for some time in some parts of the world. In Japan, for example, it was found that 93% of Japanese university students were in favor of using these devices as a teaching method (Thornton & Houser, 2004). Even when compared with other smart devices, smartphones came first. Research showed that 56.2% (91) of the respondents used smartphones, 40.7 % (66) used laptops in the lecture room and only 1.2 % (2) used Kindles (Ali, Mbabaz, Lawrence, & Geoffrey, 2017). However, these findings are somehow out dated; at present, one can see that smartphones have already replaced other smart devices. If such studies were conducted at a rather more recent time, smartphones will be found a dominant if not a sole teaching-learning tool.

Research on students' acceptance of mobile device_ smartphones included_ was positive. Bingol's study (2018) with higher education students to find out their acceptance of mobile learning in Northern Iraq found that one-half of the study group had positive attitudes toward these devices. Moreover, his study indicated that most of the participants accepted the idea of using mobile devices as a teaching/learning tool. In our case, students' actual use of smartphones for learning purposes outside the classroom indicates that they already have positive attitudes and accept these devices.

Al-Mashhadani and Al-Rawe (2018) found that more than one-half of the participants in their study had positive attitudes towards using mobile devices for learning. Most of these participants agreed that mobile devices could be used as learning tools. The factors that influence the user's acceptance of mobile learning in higher education according to Abu-Al-Aish and Love (2013) were the learner's performance expectancy, his effort expectancy, the influence of his instructors, the quality of service, and the personal innovativeness. In this study, it was found that 55% of the students accepted mobile learning in higher education. Smartphones were not only found acceptable to students, it was also found that students who were supported with mobile devices were more successful than those who depended only on traditional learning (Saran, Seferoglu, &Cagiltay, 2012). These findings and many more are encouraging to rethink the use of these devices in our EFL classrooms.

2.2 Smartphones and English Learning

One of the major influential uses of smartphones is in the area of language education_ English in particular (Klimova, 2018). If effectively used, smartphones can change the landscape of how a language is taught and learned. This way, they can play a real role in promoting learners' achievement. This is so due to the functions and features of these devices enjoy, and to the advantages referred to in the previous section like their portability, mobility, connectivity, and individuality (Cho, Lee, Joo, & Becker, 2018). Moreover, since learner's autonomy has become a focal point for educators in the recent years, the introduction and implementation of these smart devices supports this autonomy (Kurts, 2012). This is primarily due to their being user friendly.

Research has shown that students did use smartphones for English learning, in particular. Not only that, but they were found to be beneficial to them to learn English to, for example, remember information and do homework (Hidayati & Endayani, 2019; Pahmi, as cited in Thomas & Muñoz, 2016). According to Walker (2013), these devices were helpful to be used creatively in English learning. In this regard, Yurdagül and Öz, (2018, p.5) believed that "it is possible to make language learning more authentic, efficient, relevant, and effective by recognizing and responding to universal mobile technologies." Several ESL and EFL studies showed that smartphones could have benefits for language learning by encouraging the reading and writing processes. Other studies indicated that students of English,

in particular, made much use of smartphones for learning English. This is what was emphasized by Ababneh whose study revealed high usage of smartphones by students in learning English in Jordan (2017).

The results of one of the most recent and relevant studies about the use of smartphones for language learning showed that participants used their smartphones more frequently in English learning in activities related to listening and speaking than in reading and speaking. Not only this, the participants also indicated that smartphones were almost free of negative effects (Şad, Özer, Yakar & Öztürk, 2020).

In examining students' perception in using smartphones for language learning, it was found that the students said that mobile learning helped them perform well in examination, and in learning anytime and anywhere. However, the students reported that though the applications were supportive regarding communication performance, they did not find the teachers' notifications encouraging and they did not use the pronunciation support much. (Klimova, &Polakova, 2020).

A review study by Kacetl, and Klímová (2019) aimed to explore original, peer-reviewed English studies from 2015 to April 2019 and to determine whether mobile applications used in the learning of English as a foreign language are beneficial and elective. The results showed that mobile learning has become a main feature of education, as it is a great opportunity for foreign language learning. The study listed a number of benefits of using smartphones in formal or informal settings such as the enhancement of students' confidence, autonomy and personalized learning.

From these studies and many other relevant ones, one can see that smartphones are already used for language learning outside as well as inside the classroom. Because these devices are equipped with myriad features, the students of English can learn different things in various ways like watching videos, using dictionaries to look up for meaning, reading and writing on online platforms, listening to tracks, narrations, doing exercises and taking tests… etc. This way smartphones can be used for an effective mobile-assisted language learning to introduce learners to skills, concepts, and other activities. This can be done through demonstration, illustration and examples and be assessed through online tests and quizzes (Hussin, Manap, Amir, &Krish, 2012).

2.3 Smartphones Uses in the Saudi Higher Education Context

The Kingdom of Saudi Arabia (KSA), in the application of e-learning and distance education, is one of the leading and promising experiments in the Arab world (Al-Fahad, 2009). This is precisely true about the Saudi universities, which have a long history with Mobile technology; many of them are said to have the highest percentage of mobile users in the world, and teenagers are the highest users among the different ages in the country (Seliaman &Turki, 2012). It is not hard to observe this in everyday life situations. A smartphone has become a companion to people including children in their study. Seliaman &Turki (2012) tried to explore Saudi university students' use of smartphones for learning purposes. They maintained that smartphones could offer great opportunities for improving teaching and learning processes among students. However, the authors observed that success is dependent on the students' intention to use these devices for learning purposes. The study findings were that students' perceived usefulness of mobile learning was closely related to their study courses, materials accessing, searching for information related to their courses, sharing knowledge, and finishing their assignments. One limitation of that study, however, was that it was confined only to males.

Al-Fahad's study (2009) focused on measuring Saudi college students' attitudes and perceptions towards the effectiveness of mobile learning. Results indicated that students were attracted to mobile learning which can be exploited as a good teaching way for improving students' retention due to the advantages this technology offers in that it offers learning anywhere anytime. Not only this, but also this technology has the benefit of enhancing communication between students and instructors.

As we can see, these studies and others did not refer to using mobile devices in classroom. They talked about students' perception attitudes and acceptance of mobile devices for learning purposes in general. They also talked about the general advantages smartphone. It is this untreated area, which will be the focus of the study at hand.

2.4 Negative Uses of Smartphones

Some research findings on smartphone use in education, in general, and in language learning-teaching in classroom, in particular, reveal positive results. Other research findings, however, refer to some adverse effects of these devices including lack of attention, distraction, waste of time …etc. (Dewitt &Siraj, 2010; 2015; Gheytasi et al., 2015; Hwang & Wu, 2014; Kiernan &Aizawa, 2004; Pengnate,

2018). It was found that multitasking in classroom reduced productivity, hindered creativity, and even harmed it (Shellenbarger, 2013; Wiley &Jarosz, 2012). Another problem with using smartphones in classroom is the students' apprehension of the bad quality of networking (Al-Fahad, 2009). However, this will not be a real problem in the classroom, in our case, if students are instructed ahead to be ready with a good internet quality package, which students can afford.

Belandand &Murphy(2015) carried out a study to find out the effect of school banning smartphones on students' performance across different cities in the UK. They compared the gains in test scores across and within schools before and after mobile phone ban was imposed. The result indicated that there was a high increase in the scores after the ban. This showed that smartphones uses in classroom affected learning negatively. Moreover, the use of mobile devices or any new technology has the potential to increase the instructors' workload (Reinders, 2010). Many of these findings are in harmony with some instructors' worries _in our colleges_ about the uses of smartphone in classrooms. However, college students are mature enough, and with some judicious guidance and strict rules, these worries, we hope, will disappear. The same is with the worries of the increase of instructors' load; with clear strategies and planning this can be overcome with time.

Instructors' serious concern is students' possible use of these devices for cheating and in pulling and hazing (Gowthami, Kumar, 2016). It is cheating, which is a common phenomenon among college students and the smartphone will make it even easier. However, these claims are encountered by the argument that when students are engaged in their learning, and they're almost always engaged with their phones when given a choice, they are less likely to succumb to distractions or other types of misbehaving. The goal is to give students ways to use this beloved technology to learn, collaborate, share and create in meaningful ways (Ehnle, 2020). Moreover, instructors can establish strict rules when and when not to use their smartphones in classroom.

Thus, there are many advantages as well as fears of using smartphones in classrooms. To be in different or to reject the use of the devices in classroom seems to be impractical (Grinols, & Rajesh, 2014) especially with the overwhelming and dominance use of these devices in almost all domains of life. It is the responsibility of the instructors to create and make smartphone uses in the classroom

contribute to the learning environment (Grinols, & Rajesh, 2014), and to establish rules to be abided by the students. By doing this, smartphone technology can be used in classroom more effectively, creatively and productively.

3. Statement of the Problem

During blended classes (e-learning and face-to-face) it was found that EFL students in the Colleges of Sciences and Arts in the University of Bisha, Annamas used smartphones outside classrooms for performing different- learning activities including quizzes and assignments. This observation drew the attention of the researcher-instructor to investigate the different uses of these devices outside the classroom with the intention to propose their uses in face-to face classrooms to improve English teaching/ learning processes.

4. A Rationale for the Study

Why should smartphones be recommended in EFL classroom? There are several pedagogical reasons to consider using smartphones in the second language classroom. First, smartphones are social tools that facilitate authentic and relevant communication and collaboration among learners. This makes them ideals tool to support situated learning theory, which states that learning is more likely to take place when information is contextually relevant, and can be put to an immediate use (Lave &Wenger, 1991). Second, using smartphones in classroom gives students control over their own learning. Students can control the use of this medium in a way that instructors can help students' autonomy and independence. An instructor's role is to elaborate how best to use the medium, provide a blueprint for its use, especially during the wide range of daily social activities where smartphones are most likely to be used. Third, when used with appropriate applications, smartphones with proper software can also be highly effective in the classroom in supporting small group collaborative learning without which it is almost impossible to achieve (Saral, 2013;Valdivia & Nussbaum, 2007). Fourth, if wisely used, smartphones can facilitate more interaction between different members of groups. Fifth, smartphones if properly used in active classrooms can improve students' performance and maintain their interest in a course (Valdivia, &Nussbaum, 2007). Finally, smartphone can draw students' attention, provide instant access to information, help students understand feasibly by visualizing abstract

concepts, record everything that happens in the class and make individual learning possible at any time (Yıldırım, Yas¸ar, &Duru, 2016).

5-Significance of the Study

This study was significant in that it proposed the use of smartphones in the English classrooms to make English learning more effective, productive and creative. The students themselves are attached to these beloved devices. They are using them outside the classroom, and allowing them to use their smartphones for learning purposes will help to enhance their motivation and therefore improve their achievement. In addition, this study was the first to address this topic at least at Bisha University where smartphones are still not permitted to be used in classroom. Other educational institutions could benefit from the outcomes of this study and reconsider the issue of banning smartphones in classrooms.

6. Objectives of the Study
The study aims at
1. Finding out the extent of using smartphones outside the classroom by the target students.
2. Examining the target students' reaction to using smartphones in the classroom.
3. Identifying the possible uses and applications of using such devices in the classroom.

7. Study Questions
The study attempted to find answers to the following questions:

1. What are the frequent uses of smartphones by students of English outside the classroom?
2. Is there and statically significant difference between male and female students in the uses of smartphone?
3. What is the students' reaction to the idea of using smartphones in classroom?
4. What are the possible uses of smartphones in the classroom for the target EFL students?

8. The Scope of the Study

The Study limited itself to EFL students in two colleges of Sciences and Arts affiliated to the University of Bisha, Saudi Arabia. It was also limited to the second semester of the Academic year 2018-2019. As for the subject matter, it was limited to the possibility of using smartphones in the English classroom.

9. Term definitions

Smartphones: "A smartphone is a mobile phone running a complete operating system in a manner similar to a traditional computer, which offer advanced computing abilities and connectivity options" (Alfawareh & Jusoh, 2014, p. 321).

Classroom: Classroom here stands for the actual four- walled room in which teaching/ learning takes place.

Smartphone uses: These represent all possible uses, features, and functions that can be used by smartphones devices for teaching-learning purposes.

10. Methods

To find out answers to the study questions, a mix-methods approach was used. A mixed methods design is defined as "a research approach whereby researchers collect and analyze both quantitative and qualitative data within the same study." (Shorten & Smith, 2017, p.2).The quantitative descriptive method was used to deal with data obtained from the survey questionnaire for study questions one, two and three. The qualitative observation method, on the other hand, was used to answer the fourth question (section5). In other words, the answer to the fourth question depended on the answers of the three preceding questions, and on the instructor-researcher's subjective evaluation of the situation because of his daily contact and experience. To put another way, some kind of action research was used. Action research "refers to a disciplined inquiry done by a teacher with the intent that the research will inform and change his or her practices in the future." (Navidinia, Bidaki, & Hekmati, 2016, para. 11). Here, action research took the form of informal observations and note taking during the teaching learning process in both the traditional face-to-face classroom and online teaching/learning sessions and activities. Ideas obtained from discussions with other faculty members together with those from the relevant literature about the feasibility of smartphone uses in classroom were also utilized.

10.1 Participants

The participants were the regular EFL students both males and females in the College of Sciences and Arts, at the University of Bisha, Saudi Arabia. This type of students were selected because they were at the colleges in the same town where the researcher-instructor has been teaching. The total respondents were 77 of both genders (57 out of 57 males and 20 out of 85 females) (Table 1). They were taken from the population of 142 students. Their ages ranged from 19 to 25 years.

Table 1
Participants' Distribution According to Gender

Gender	Frequency	Percentage
Males	57	74.0
Females	20	26.0
Total	77	100.0

10.2 Data Collection

To collect the relevant data, a pen-and-pencil three sections survey questionnaire was used. The first section was about the participants' autobiographic information: related to the participant's name (optional), age, gender and study level; the second one was the main body of the questionnaire and consisted of 17 close items. The 17 items were grouped under one main construct: the uses of the smartphones outside the classroom for language learning purposes. The third section was one single question asking about participants' reaction to the idea of introducing smartphone technology into the classroom. A 5-point Likert scale ranging from 1= strongly disagree to 5= strongly agree was used with this questionnaire.

10.3 Reliability and Validity of the Questionnaire

The questionnaire reliability was measured, and the Cronbach's Alpha value was found ($α= 0.87$) with the study samples (Table 2). This was beyond the recommended value $α= 0.6$ for an instrument to be considered reliable. This indicates that the questionnaire was reliable. Before the questionnaire was administered, it was given to two faculty members to judge for its validity. As a result of their suggestions, one item was deleted and few others were reworded.

Table 2
Reliability Statistics

Pilot Reliability	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N. of Items
Before	**.878**	**.884**	**17**
After	**.859**	**.862**	**17**

10.4 The Procedure

As was mentioned, a questionnaire was used to collect the data about smartphone uses outside the classroom. First, the questionnaire was piloted to 50 students randomly selected from the large population (156) of both males and female students from level 1, 3, 5 and 7 representing the four academic years. Second, after 5 days, the questionnaire was re-administered to the targeted samples selected from the other four levels 2, 4, 6,and 8 representing the four academic years (Table 3). Male participants' sample was selected purposively because of the low numbers of these four study levels. Therefore, all the present students were selected. As for the female sample, the participants were randomly selected from every other student. The questionnaires were distributed to the participants while they were in classrooms. It took them about 10 to 15 minutes to fill them in. The total return rate was 77 copies out of 142 (57 males & 85 females) (Table 3). The returned copies from the females were (20) and those from the males were (57) (Table 2). The low returns of the females was due to the fact that they all were busy with mid-term examinations, and also the researcher was not a faculty member in the girls' college, so he was not able to access their college only through a second party; this explains the girls' low returned copies. It is worth to mention that girls were studying in a separate college, as there is no coeducation the KSA.

Table 3
Participants' Distribution According to Study Level

Academic Year	Frequency	Percentage
Level 2 (1st year)	12	15.6
Level 4 (2nd Year)	15	19.5
Level 6 (3rd Year)	23	29.9
Level 8 (4th year)	27	35.1
Total	**77**	**100.0**

10.5 Data Analysis

To analyze the obtained data from the questionnaire responses, the SPSS (version 16. 0) was used. The referential statistics technique namely (t-test) was used, to find out the genders' significant differences in the uses of smartphones, if any. The descriptive statistics used were the means (Ms), standard deviations (SDs), frequencies and percentages. The purposes of the descriptive statistics was to measure the frequencies of the smartphone uses and the percentage of the students who wanted or not to use smartphones in classroom.

11. Findings

The following tables show the results pertinent to each relevant question.

Question1:

What were the most frequent uses of smartphones for learning purposes outside the classroom?

Table 4 gives details about the frequent uses of smartphones for learning purposes in the classroom.

Table 4
Frequent Uses of Smartphones for Learning Purposes

Item I use the smartphone to…	Mean	SD	Freq.	Percent
look up for word meaning	4.70	.586	74	97.1
login to academic portal	4.61	.710	72	93.5
check for word spelling	4.60	.654	72	93.5
translate texts from and into English	4. 53	.793	70	90.9
look for answers to questions	4.49	.772	70	90.9
check pronunciation	4.39	1.066	66	85.7
check my grades/progress	4.45	.867	65	84.4
exchange study materials with classmates	4.34	1.034	67	87
do and follow up Bb activities	4.35	.970	67	87
do assignments	4.31	.963	64	83.1
download different audiovisual materials	4.10	1.119	61	79.3

follow up social media study-related materials	4.26	1.093	60	77.9
prepare for tests	4.08	1.061	57	74.1
take photos of printed materials	4.01	1.141	56	72.8
watch and listen to study- related materials (i.e. videos & audios)	3.96	1.186	52	67.6
revise lectures	3.88	1.158	52	67.6
take notes after reading or listening to texts/excerpts	3.61	1.349	45	58.5

Table four shows the results of the main section of the questionnaire namely the most frequent uses of smartphones by the participants (section 6.2). There were 17 items under this construct. As can be seen, the items were ordered according to the means, standard deviations, frequency and percentage from the highest to the lowest. It is clear that the highest use of smartphones with a mean of 4.70 (SD .59) was 'to lookup for word meanings.' The second highest use with a mean of 4.61(SD.71) was using smartphones to login to the academic portal (University Electronic Gate) to check attendance, notices, timetables, study plans and so on.

Then came the use of smartphones to check for word spelling with a mean of 4.60 (SD.65). The next three items were using smartphones for translating texts, answering questions, and checking one's grades and progress. The means were 4.53 (SD .79), 4.49, (SD.77) and 4.45 (SD 1.17) respectively. The last three items with the lowest means were watching and listening to study related materials like video and audio recordings (M 3.96, SD 1.19), followed by using smartphones to revise lectures (M 3.88, SD 1.15). Last came taking notes after doing reading activities (M 3.61, SD. 1.35).

Question 2: Was there a significant difference in the mean scores for males and females in their expressed uses of smartphones for learning purposes outside classroom?

Table 5
Independent Samples Test: Frequent Uses of Smartphones

total smart use	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Differen ce	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	2.934	.091	.179	75	.859	.45351	2.53909	4.60462-	5.51 164

To answer this question, an independent-samples t-test was conducted for this purpose. The result (Table 5) showed that there was no significant difference in scores for males ($M = 77.4$, $SD = 10.32$) and females ($M = 77.0$, $SD = 7.9$; $t(75) = 0.179$, $p = .9$, two-tailed). The magnitude of the differences in the means (mean difference = .45, 95% CI: –4.60 to 5.51) was very small (eta squared = .006) (Pallant, 2010, p.143).

Question 3:
What is the participants' reaction to the idea of using smartphones in classroom?

Table 6
Using Smartphones in Classroom

Item	Mean	SD	Freq.	Per cent
Students' reaction to using smartphones in classroom	1	0.01	77	100

According to the values given in Table 6, all participants (100%) of both males and females without exception wanted to use smartphones in the classroom.

Question 4:
What are the possible uses of smartphones in the classroom for the target EFL students?

To answer this question, we had to resort to the informal data derived from the instructor-researcher personal and informal notes, the suggestions from other faculty members about the feasibility of using

smartphones in classroom, and from the relevant literature. All these suggestions are given in Table 7 (Appendix 1). The items are given according to their most frequent possible uses

12. Discussion

The objectives of this study was to find out (1) the participants' frequent uses of smartphones for learning purposes outside the classroom, (2) if there were gender differences between the study groups, (3) The reaction of the participants to introducing smartphones into the classroom for learning purposes, (4) the possible uses of smartphones in classroom.

As for question one (Table 4) about the frequent uses of smartphones outside the classroom, it was found that using smartphone as dictionaries to look up for word meaning came first in the list (97.1%). This means the students were making a lot of use of smartphones as dictionaries. This was also found by Yurdagül and Oz (2018) in which using smartphone uses as dictionaries scored the highest among other uses (55%). This was expected because the students were learning English as a foreign language, and every day they encountered new words, which they did not know. Therefore, one easy way to understand the meanings these words, is to resort to dictionaries on their smartphones. This, in turn, justifies the use of smartphones in classroom.

The second highest scored item was logging in the electronic portal to look for their attendance rates, study and examination schedules, study plans, announcements, and warnings, enrolling in some courses or dropping off others and so on. Therefore, permitting the use of smartphones in classroom could save students' time and effort in following such activities.

Checking spelling got the same percentage just as the second one. This is also expected particularly when students are doing some writing. Therefore, using this feature in classroom is necessary; Instead of using a hard copy dictionary or asking the instructor for correct spelling, the students can check spelling by using online dictionaries via their smartphones. Again, this will save time, and makes things easier for students. This will also help students to depend on themselves and be autonomous.

The item related to translation from and into English was considered an important use of smartphones. Usually, students need to translate texts from English into Arabic to understand English texts

and to understand instructions for doing assignments or other activities. This was because of the problems with understanding difficult texts in English. However, a text translation could sometimes be the opposite_ from Arabic into English. This can be done when dealing with translation courses that were part of the syllabus. Using translation features in classroom could be of a great help to students if regulated by the instructor when, how, and how much to use these features in classroom.

The fifth most frequent use was related to using smartphones to look for answers to questions posed by instructors or in textbooks. Sometimes, students could not answer a question; in this case, they resorted to their smartphones. This action, of course, has a negative side in that students do not exert effort to think for themselves and answer a question. In the classroom, however, the instructor can monitor this and give the students time to think first and only after some mental effort is exerted, they can resort to Google or any other platform to find an answer.

The last five items under this group were as follows: preparing for tests. This means the students take photos of texts or notes they expected in examination questions and study from those materials on their smartphones. Taking photos of printed materials came next. Then came watching and listening to videos and audios related to study courses. The last item with the least frequency was taking notes after reading texts or listening to excerpts. Taking notes is a real problem with these students. Even in traditional classes, many students were not of the habit of taking notes. This could also be a problem with smartphones in classrooms. This is a good opportunity for instructors to train students in the skill of taking notes. This can take time, however. The problem of not taking notes in the classroom is also confirmed by some studies where taking notes were among the last three uses or benefits of smartphones (Ali, Mbabazi, Lawrence, & Geoffery, 2017;Alfawareh&Jusoh, 2014). For this reason, instructors put it number one for classroom smartphone uses (Appendix 1) for its important role in effective language learning.

We have seen in the participants' answer to the fourth question that all the participants of both genders wanted to use smartphones in the classroom. This result may be explained on the ground that students need to use these devices in the classroom because these devices can offer them help to learn due to the easiness of use and

functionality of these devices. For example, if they want to have a copy of what is written on the whiteboard, they can just take a picture using the device camera and this is done in a matter of seconds.

As for the gender differences in the uses of smartphones outside the classroom, no statistically significant difference between males and females was found. This means all students whether males and females used the smartphones for learning purposes, and they do that by probably using the same functions and features. Thus, one can see that students already use smartphones for learning purposes outside the classroom.

Now depending on what has been said on the previous pages, we have reached to an answer to the last study questions (4) about the possible uses of smartphone in the classroom. From the answers of the two questions namely question one and three, from instructor's observations and contact with students, from those of the faculty colleagues (Table 7),and from the relevant literature about the uses of smartphone in classroom, we can say that it possible to propose and use smartphones in classroom. This happens because the students are already using them, and they want to use them in classroom. In addition, and as we have seen the relevant literature, these devices are now used by students in higher education institutions in different parts of the world. Moreover, smartphones have many benefits and can play an important role in improving language learning as we have indicated in the rationale section (4). Therefore, we can say that smartphones can be used in the classroom. For a better use of these devices, a proposed list of uses and features are given in Table 7 (Appendix 1). The list is not inclusive; the suggestions can be guidelines to start using these devices in the classroom. Instructors can adopt and adapt these and other applications, features, and uses and whatever is practical and useful in classroom situations.

Now what about the negative effects of using smartphones in the classroom. We have already indicated that from the relevant literature on the topic that using smartphones are not without their shortcomings. The most important of which are their causing distraction and their use for cheating. We already said that smartphones came to stay. To reject them seems to be impossible. Therefore, we have to accept them and manage with their effects. The best thing is to establish some rules for smartphone uses in the classroom, which the students have to abide by. For example, they have to hide them when not required or not to bring them to class during examination. They should put them off social media

applications during the lectures or during certain activities unless permitted by the instructor. When such rules are violated, some kind of punishment should be applied.

13. Conclusions

1. From what have been said in the preceding pages, we can say that the students' responses indicated that they used smartphones for different learning purposes outside the classroom. If not for the strict rules of banning these devices by instructors, they would have used them in classroom.

2. As the results indicated, all the participants said that they wanted to use these devices in classroom. We have seen these devices had become basic in everyday life including learning, and they were already found to be effective in learning and language learning in particular, and the students themselves wanted to use them in classroom. Therefore, the study findings proposed their use in classroom for effective language learning. Accordingly, a list of uses and applications of smartphones were suggested as guidelines (see appendix 2) for students and instructors to be followed and adjusted as needed.

3. To avoid the negative impact of the uses of these devices in classroom, some rules have to be established and be strictly followed by the students.

14. Recommendations

1. It is recommended that instructors should consider permitting the students use smartphones for learning purposes in the classroom.

2. Regulations for the best uses of smartphones had to be set up to be followed and respected by the students. When these rules are violated, some kind of punishment should be applied.

3. Students should be trained in some necessary applications and features for effective smartphone uses in classroom. For example, the students should be trained to take notes using these devices.

4. Instructors have to be creative in making the best uses of smartphones for learning purposes.

5. The administration of the colleges of Sciences and Arts and other colleges should be informed and convinced of the value of using smartphones in classroom and the rationale behind such a proposal.

15. Suggestions

More extensive studies should be carried out in the use of smartphones for language teaching and learning in which more colleges and universities are included.

16. Limitations

1. One of the shortcomings of this study was the low returns of the questionnaires on the part of the females. The reasons was indicated earlier on this paper.
2. Findings of this study cannot be generalized to other departments, colleges, in Bisha University or other universities, because the current study was conducted only in two colleges.
3. The study was short in using a valid quantities tool to measure the researcher's and faculty members' suggestions and observations regarding the uses of smartphones in classroom.

References

- Ababneh, S. (2017). Using mobile phones in learning English: *The case of Jordan. Journal of Education and Human Development, 6*(4), 120-128.
- Abu-Al-Aish, A. & Love, S. (2013). Factors influencing students' acceptance of m-learning: An investigation in higher education. *The International Review of Research in Open and Distance Learning, 14*(5), 86-111.
- Al-Fahad, F. N. (2009). Students' attitudes and perceptions towards the effectiveness of mobile learning at King Saud University, Saudi Arabia. *Online Submission, 8*(2) 111–119.
- Alfawareh, H. M., &Jusoh, S. (2014). Smartphone usage among university students: Najran University case. *International Journal of Academic Research, 6*(2), 321-326.
- Ali, G., Mbabazi, B. P., Lawrence, N., & Geoffrey, A. (2017). Use of mobile devices by students to support learning in universities: A case of Muni University: *International Journal of Research in Engineering & Technology 5* (6), 69-80.
- Al-Mashhadani, M. A., & Al-Rawe, M. F. (2018). The future role of mobile learning and smartphone applications in Iraqi private universities. *Smart Learning Environments, 5*(1), 28.
- Azizifara, M. G. A., &Gowharya, H. (2015). The effect of smartphone on the reading comprehension proficiency of

Iranian EFL learners. *Procedia-Social and Behavioral Sciences*, *199*, 225-230.

- Beland, L. P., & Murphy, R. (2016). Ill communication: technology, distraction & student performance. *Labour Economics*, *41*, 61-76.

- Bingol, M. A. (2018). Student Preferences for M-Learning in Higher Education Institutions. *Journal of Education in Black Sea Region, 4* (1), 35-43.

- Caverly, D., Ward, A., &Caverly, M. (2009). Techtalk: mobile learning and access. *Journal of Developmental Education, 33*(1), 38-39.

- Chung, H. H., Chen, S. C., & Kuo, M. H. (2015). A study of EFL college students' acceptance of mobile learning. *Procedia-Social and Behavioral Sciences*, *176*, 333-339. Retrieved from https://www.sciencedirect.com/science/article/pii/S1877042815005169?via%3Dihub

- Dewitt, D., &Siraj, S. (2010). Learners' perceptions of technology for design of a collaborative m-learning module. *World Journal on Educational Technology, 2*(3), 169–185.

- Ehnle. K. January 23, (2020).Six ways to use students' smartphones for learning. ISTE. Retrieved fromhttps://www.iste.org/learn/iste-u

- Geddes, S. J. (2004). Mobile learning in the 21st century: Benefit for learners. *Knowledge Tree e-Journal, 30*(3), 214–228.

- Gheytasi, M., Azizifar, A., &Gowhary, H. (2015). The effect of smartphone on the reading comprehension proficiency of Iranian EFL Learners. *Procedia-Social and Behavioral Sciences, 199*, 225–230. doi:10.1016/j.sbspro.2015.07.510

- Gowthami, S., & Kumar, S. V. K. (2016). Impact of smartphone: A pilot study on positive and negative effects. *International Journal of Scientific Engineering and Applied Science (IJSEAS)*, *2*(3), 473-478.

- Grinols, A. B., & Rajesh, R. (2014). Multitasking with smartphones in the college classroom. *Business and Professional Communication Quarterly*, *77*(1), 89-95.

- Hidayati, T., & Endayani, T. (2019). Smartphones to learn English: The use of Android applications by non-English major students in West Aceh. *JurnalIlmiah Peuradeun, 7*(1), 95-112.

− Hussin, S., Manap, M. R., Amir, Z., &Krish, P. (2012). Mobile learning readiness among Malaysian students at higher learning institutes. *Asian Social Science*, *8*(12), 276-283.

− Hwang Ismail, I., Azizan, S. N., &Azman, N. (2013). Mobile phone as pedagogical tools: Are teachers ready*? International Education Studies*, *6*(3), 36–47. doi:10.5539/ies.v6n3p36

− Kacetl, J., &Klímová, B. (2019). Use of smartphone applications in English language learning—A challenge for foreign language education. *Education Sciences*, *9*(3), 1-9.doi:10.3390/educsci9030179

− Kenneth, B. 10 ways to use smartphones in your classroom. Thought Co, Feb. 11, 2020. Retrieved fromthoughtco.com/using-a-smartphone-in-class-1211775

− Kiernan, P. J., &Aizawa, K. (2004). Cell phones in task based learning-Are cell phones useful language learning tools. *ReCALL: the Journal of EUROCALL*, *16*(1), 71-84.

− Klimova, B. (2018). Mobile phones and/or smartphones and their apps for teaching English as a foreign language. *Education and Information Technologies*, *23*(3), 1091–1099.

− Klimova, B., & Polakova, P. (2020). Students' perceptions of an EFL vocabulary learning mobile application. *Education Sciences*, *10*(2), 37-43.https://doi.org/10.3390/educsci10020037

− Kurtz, L. M. (2012). Learning from twenty-first century second language learners: A case study in smartphone use of language learners. M.A. Thesis. Ames, Iowa: Iowa State University.

− Lave, J., and E. Wenger. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

− Navidinia, H., Bidaki, M. Z., & Hekmati, N. (2016). Incorporating e-learning in teaching English language to medical students: exploring its potential contributions. *Medical journal of the Islamic Republic of Iran*, *30*, 462.

− Nordin, N. M., Hamzah, M. I., Yunus, M. M., &Embi, M. A. (2010). The mobile learning environment for the in-service

school administrators. *Procedia-Social and Behavioral Sciences*, *7*, 671-679.

– Pallant, J., & Manual, S. S. (2010). *A step by step guide to data analysis using SPSS*. Berkshire UK: McGraw-Hill Education.

– Pengnate, W. (2018, May). Students' attitudes and problems towards the use of mobileassisted language learning (MALL). In 2018 5th International Conference on Business and Industrial Research (ICBIR) (pp. 590–593). Bangkok, Thailand: IEEE. DOI:10. 1109/ICBIR.2018.8391266

– Reinders, H. (2010).Twenty Ideas for using mobile phones in the language classroom. *English Teaching Forum*, *48*(3), 20-25, 33.

– Rismark, M., Solvbery, A. M., Stromme, A. and Hokstad, L. M. (2007). Using mobile phones to prepare for university lectures: Student's experiences. *The Turkish online Journal of Educational and Technology (JOJET)*, 6(4), 85-89.

– Şad, S. N., Özer, N., Yakar, Ü.,&Öztürk, F. (2020). Mobile or hostile? Using smartphones in learning English as a foreign language1. *Computer Assisted Language Learning*, 1-27. DOI: [10.1080/09588221.2020.1770292](10.1080/09588221.2020.1770292)

– Saral, H. (2013). Integrating mobile setting into modern classroom: A multiuser, platform-independent, mobile content management system. *Procedia - Social and Behavioral Sciences*, *106*, 1523–1531. DOI:10.1016/j.sbspro.2013.12.172

– Saran, M., Seferoglu, G., &Cagiltay, K. (2012). Mobile language learning: Contribution of multimedia messages via mobile phones in consolidating vocabulary. *The Asia-Pacific Education Researcher*, *21*(1), 181-190.

– Seliaman, M. E., & Al-Turki, M. S. (2012). Mobile learning adoption in Saudi Arabia. *World Academy of Science, Engineering and Technology,* 69(9), 391-293.

– Shellenbarger, S. (2013, April 4). Why multitasking blocks your best ideas. *The Wall Street Journal*. Retrieved July26, 2020 from http://blogs.wsj.com/juggle/2013/04/04/why-multitasking-blocksyour-best-ideas/?mod=WSJ_hp_EditorsPicks

− Shorten,A.,& Smith, J.(2017).Mixedmethods research: Expandingthe evidencebase. *Evidence Based Nursing*, *20*(3), 74–75. https://doi. org/10.1136/eb-2017-102699

− Thomas, K., & Muñoz, M. A. (2016). Hold the phone! High school students' perceptions of mobile phone integration in the classroom. *American Secondary Education, 44*(3), 19-37. Retrieved from https://eric.ed.gov/?id=EJ1110299

− Thornton, P & Houser, C. (2004). *Using mobile phones in education.* Proceedings of the 2nd International Workshop on Wireless and Mobile Technologies in Education. JungLi, Taiwan: IEEE Computer Society, 3-10.

− Valdivia, R., & Nussbaum, M. (2007). Face-to-face collaborative learning in computer science classes. *International Journal of Engineering Education*, *23*(3), 434.

− Walker, R. (2013). "I don't think I would be where I am right now". Pupil perspectives on using mobile devices for learning. *Research in learning technology*, *21*, 1-12. DOI: 10.3402/rlt.v21i2.22116

− Wiley, J., &Jarosz, A. F. (2012). Working memory capacity, attentional focus, and problem solving. *Current Directions in Psychological Science*, *21*(4), 258-262.

− Yu, F., & Conway, A. R. (2012). Mobile/smartphone use in higher education. *Proceedings of the 2012 Southwest Decision Sciences Institute*, 831-839.

− Yıldırım, K., Yaşar, Ö.&Duru, M. (2016). Based on the views of teachers and students analysing the usage of smartphones in teaching and learning environments and effects. International Journal of Education, *Science and Technology, 2* (2), 72–84.Retrieved from http://dergipark.gov.tr/download/article-file/ 227994 (Original work published in Turkish).

− Yurdagül, C., & Oz., S. (2018). Attitude towards Mobile Learning in English Language Education. *Education Sciences, 8*(3), 142.

Appendices
Appendix 2: Guidelines for Possible Uses of Smartphones in Classroom
Table 7: Possible Uses of Smartphones in Classroom

Use/Feature	Purpose

Taking notes	This was colleague instructors' first suggested use. Students can do this by using the Notes feature (or any other feature). Students can take notes after instructors.
Checking word meaning (synonyms/antonyms)	This can be by using online thesaurus/ dictionaries and/or visual dictionaries. This is helpful when performing writing or reading.
Checking spelling when needed	By using online dictionaries
Translating	This can be to use Google or any other apps to check or compare one's translation and so on.
Taking online quizzes	This can be done for short quizzes using Bb (Blackboard application).Longer tests can also be given as instructors see fit.
Looking for answers in google	This is useful after a group discussion of a topic, and when there is no consensus for a certain issue or question. When the instructor wants the students to find the answer by themselves.
Discussing a certain topic/ idea	This is done in place of the traditional activity. Instead of using textbooks, they can use smartphones to download a text for discussion decided by instructor.
Polling applications	Polling apps are useful and can be used to check students' opinion and so on. In virtual classes, this has been used successfully.
Using the calendar app	For example, to fix dates for exams, test and homework assignments… etc.
Using the camera feature	In this feature, the students record samples of the target language by taking pictures. They can also take pictures of what is written on the board.
Forming group for WhatsApp's and similar social media applications	This has been found important during using e-learning. Some teachers already have been doing it.
Watching videos	The instructor can ask students down load videos to vary activities and move away from the routine of using textbooks. It can be followed by creative discussions.
Accessing audio	This can be according to the student's own interest

and video sources	as directed by instructor. The students are free to choose the kind of material but within the required task.
Accessing to virtual learning sessions/communities	*This is also important and the students already used it with virtual classes outside classroom.
Taking opportunity of a current event/ situation and ask students search the web for more ideas.	This can be done to make learning more realistic and relevant to establish connection with real everyday life situations.
Presenting power point lectures	This is good to change teaching style instead of using only the whiteboard and the textbook. The whole class follow the presentation on their smartphones.
Using apps for communication activities	Students texting each other through any of the different social media apps.
Play instructive games: gamifications	For example, scrabble or word search and puzzles. The instructor has to do that only if games are instructive and relevant. He has to make sure to tie this to some sort of report back to the class.
Practicing writing	Have students write emails to each other in order to complete a specific task.
Creating narration	This is helpful in literature courses. For example, the instructor can have students choose photos they have taken and write a short story describing the photos they have chosen.
Keeping a Journal	The students can keep a journal and share it with the class. Students can take photos, write descriptions in English, as well as describe their day. This is a good technique for following students' progress in a certain skill.
Doing research	Smartphones can be used comfortably for research purposes. Instructors can guide students to make use of the different of collecting data and references.

Using the Text Messaging feature for circular writing	**This happens where students create a story together by contributing one text message at a time. Each student writes a sentence or two and then sends this on to the next student, who adds another message, and so on until the story is complete. The instructor presents the final product and discussion can follow as needed.
Keeping a blog	**This is good for writing about personal experiences, places visited, and people met, but it can also be used as an activity in which students collect information and report on it like journalists. Teachers can read these blogs and provide feedback, request more information, or ask students to comment on each other's work.
Creating videos	Students can create their own short videos. This can be done in certain courses such as creative and critical thinking… etc.
Developing the four language skills	**Just like the case in traditional classrooms. In many cases, by integrating speaking with listening and reading with writing.

*These features were adopted and adapted from Şad, Özer,Yakar, &Öztürk, (2020)

** These features were adopted and adapted from Reinders, (2010)