

MOBILE TEACHING AND LEARNING ENGLISH – A MULTINATIONAL PERSPECTIVE

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Abstract

The purpose of this paper is to examine how effective mobile devices are in the process of teaching and learning English through the perspective of university students. The research is aimed at finding out whether using mobile apps for learning purposes, in particular, for learning English is of interest for students and look at potential ways of learning the language. It also aims at exploring potential of educational applications downloaded to students' mobile phones in terms of their integration into the classroom activities at university for the purposes of learning English. To fully conceptualize the research in mobile teaching and learning, the authors addressed the mentioned problem by using Google Forms. An online questionnaire was created and sent to students with responses collected in an online spreadsheet and was further analyzed by the authors. 102 representatives from 16 countries who study at 4 universities located in Poland and Ukraine took part in the survey. To link the reported mobile device use obtained from the questionnaire and its actual use for language learning the follow-up interviews for the subset of students were conducted with the relevant conclusions drawn. The issue of using mobile devices in the process of university study as an educational tool was investigated and proposed to potentially expand perceptions of tutorial experience of how we view teaching and learning English.

Keywords: mobile teaching and learning; mobile devices; educational apps; university students

1. Introduction

The importance of learning English nowadays is indisputable. Many scientific articles and studies of individual scholars as well as those of recognized international organisations are devoted to this topic (Council of Europe, 2001; Berns, 1995; Zimmerman, 1997; de Caro, 2009; LaVelle, 1996; Tan, 2016). There are different ways of teaching and learning English. When it comes to the traditional methods they are still adhered to in many universities and schools and often boil down to teacher-centred classroom environment and memorization.

However, nowadays technical devices significantly contribute to our perception of the surrounding world, how we share knowledge and learn enabling us access the required information sources on an on-going basis. We enjoy unprecedented instant access to

expertise, from informal cooking lessons on *YouTube* to online university courses. Every day people around the globe are absorbed in exciting new forms of learning, and yet traditional schools and university systems are still struggling to leverage the many opportunities for innovation in this area (Fabio, 2012).

In our era of technology and the Internet digital aids provide more opportunities for teaching and learning English. Using various technical means has been gaining more and more relevance in the recent years. As it is stated by UNESCO, mobile technology is changing the way we live and it is beginning to change the way we learn (UNESCO, 2017).

Using smartphones for the learning purposes has a number of advantages and beneficial aspects including independency of learning, creating your own curriculum and a schedule of studies, etc. Learning can unfold in a variety of ways: people can use mobile devices to access educational resources, connect with others, or create content, both inside and outside the classroom (UNESCO, 2017). Using mobile devices and apps helps learn English on the go and contributes to making progress in that.

2. Literature review

Much research is devoted to the topic under the present study (Segev, 2014; Norton, 2014; Lynch, 2015), etc. For the purposes of our research, we are going to provide an overview of the literature produced in the past decades and make a synthesis of current thinking in the field.

The term ‘Computer Assisted Language Learning’ (CALL) became established in the early 1980s and is highlighted in a number of works (Levy, 1997; Warschauer, 1996; Gimeno-Sanz & Davies, 2010; Felix, 2008; Hong, 2010; McMurry, Williams, Rich & Hartshorn, 2016). Apart from volumes and journals on the shape of CALL, there are a number of other initiatives in teacher education that demonstrate a growing interest in the use of technology in teaching and learning English (Thomas and Reinders, 1988; Thorne & Smith, 2011; Dubois & Vial, 2000; Smith & Craig, 2013; Jewitt, 2001; Hubbard, 2013; Akobirov, 2004). Many recent studies also explore the said topic by looking at specifically instructed use of technology for completing language tasks and how these instructions are interpreted with more spontaneous, self-initiated use of technology resources (Dooly, 2018), finding out how learners of English use electronic dictionaries with regard to pronunciation practice and improvement (Metruk, 2017).

Currently mobile-assisted language learning (MALL) is a rapidly growing field. Researchers discuss curricular options for the assimilation of mobile devices into settings of

formal learning (Pachler, Cook & Bachmair, 2010), as well as investigate the relevant learning theories underpinning the current mobile apps for English speaking learning and the pedagogic features of these apps (Guo, 2014). Also, previous studies focused on using particular mobile applications in learning a language (e.g., *Duolingo*), exploring the possibilities this app offers for learning a second language (Nushi & Hosein, 2017). Since this app tends to be selected by the majority of the students who participated in the survey below, this is why we paid special attention to the available research in this field as well.

However, the evaluation of using mobile apps for English learning from language learners' perspective is still at the early stage. Most studies investigating the use of mobile devices in language instruction in higher education look at its effectiveness from the perspectives of language professionals and researchers. There are not many studies uncovering the students' perspectives on using the mobile technology. However, the students' input regarding how they perceive mobile apps in their learning process seems to be valued and is to be considered essential for implementation of any instructional intervention. Therefore, in the light of current learning theories this study intends to analyse and evaluate the modern mobile devices and how effective they are for teaching and learning English through the perception of the university students – both based on their declared perception and in practice.

3. Methodology

In this study, we employed a mixed method approach: quantitative (statistical analysis of questionnaire data) and a qualitative analysis of the received replies to address the assumptions under research.

3.1. Objectives and research context

As mentioned above, we explored perceptions of learners of English as a foreign language on using mobile technology in the process of language learning and teaching.

In this paper, the author seeks answers to the following research questions:

1. How do students use mobile apps and educational technology tools inside and outside the classroom?
2. To what extent do they use them?
3. What mobile apps do they prefer?
4. What suggestions do they have regarding using the above for the purposes of learning English?

5. To what extent do the students find their language learning is enhanced by the use of the said technologies in practical terms?

The significance of the study is supported with the assumptions as follows:

- the received findings will make up the basis and support decisions for introducing mobile devices into the process of mastering the language;
- the expected conclusions will help adjust the university approach to teaching and learning in general and English, in particular, through implementation of the initiatives;
- the interpretation of the obtained results will contribute to the creation of the future research design for deeper investigation of the area.

The data under analysis are the responses from the participants for over a period of 14 months (the first *Google Forms* reply was received on February 26, 2017 and the practical use of the mobile learning and teaching English was reviewed on April 22, 2018), which included online and offline communication as well as follow-up interviews completed by the participants.

3.2. Design and procedure

The research was done according to the following step-by-step plan:

Step 1. Creating a questionnaire

Step 2. Disseminating the questionnaire among students

Step 3. Collecting data through the *Google Forms* with their further processing

Step 4. Conducting a follow-up interview with a subset of the students

Step 5. Reviewing the actual use of educational mobile devices/technology tools in language learning against the reported technology use (obtained from the questionnaire data)

Step 6. Analysing the findings and coming up with conclusions on using the mobile device in the teaching and learning English process

As a data collection instrument a survey questionnaire was developed which incorporated questions aimed at finding out some relevant information on the students' habits, opinions and preferences. The research was conducted using *Google Forms*, which were embedded at the beginning of the study to serve as an instrument for creating customized forms, sending them out to students and tracking all their responses in one place.

The students received an email containing instructions related to their participation in the survey as shown in Appendix 1. The questionnaire (Appendix 2) offered the participants a series of open-ended and multiple choice questions. When completed, the questionnaire was

automatically sent to a *Google Drive* research folder, which made it possible to monitor the students' responses. Participation in the survey was on a volunteer basis with 156 students invited to take part in it. As a result 102 participants from 16 countries took part in the survey.

The sampling included the students from several higher educational establishments of Ukraine and Poland:

- University of Economy in Bydgoszcz (Wyższa Szkoła Gospodarki w Bydgoszczy), Poland;
- KROK University of Economics and Law, Ukraine;
- Kyiv National Linguistic University, Ukraine;
- Institute of International Relations Kyiv National Taras Shevchenko University, Ukraine.

Some of the participants of the survey were the researchers' students, others were contacted by the peer colleague from the Institute of International Relations Kyiv National Taras Shevchenko University, Ukraine.

As regards Step 4, conclusions regarding beneficial aspects of the approach in the context of teaching and learning English were drawn based on the findings received through collecting and analysing the survey data.

Step 5 was incorporated into the research procedure to create a link between the modern technology use reported by the students and its actual deployment in the language learning process. For this purpose a subset of the students who make up one group and study law at KROK University of Economics and Law, Ukraine, was randomly selected and contacted by the researcher as part of the tutorials. The subset included 8 participants. In order to make it more meaningful and practically anchored the students received practical tasks including preparing *PowerPoint* presentations on a required topic related to their specialty, reading texts containing professional lexis, translating separate sentences from Ukrainian into English and vice versa. All the exercises mentioned implied applying educational mobile apps and digital technology tools including web-surfing, using online and offline dictionaries, etc. Afterwards, a follow-up interview was conducted with the same subset of the students, which allowed the respondents to express their views in their own ways (the aggregated results are shown in Appendix 3). The current study generated a large amount of data and the follow-up interview was designed to revisit and crosscheck answers to some key questions in our aims. This step enabled the researcher to make certain conclusions regarding practical application of the declared educational mobile devices and technology tools reflected in Step 6.

4. Results and findings

After data analyses were completed, results were presented in Tables with comments on the most important aspects. The information is given in percentage. The results of the questionnaire are subdivided into the following sections:

- Background information
- Habits and opinions in using mobile apps for learning languages
- Preferences and interests in using mobile apps for learning purposes
- Crosscheck of responses to different questions of the survey
- Investigation whether the language learning is enhanced by the use of mobile apps
- Suggestions regarding using mobile devices for learning English

4.1. The background information

A great majority of the students who participated in the survey as volunteers were between 16 to 20 years old (64.6%). At the same time only 12.9 % were middle-aged ones who were over 25 up to 38. Availability of such an age category of respondents is due to the fact that extramural students also took part in the study and their age varied greatly.

As it can be seen in Table 1, a great majority of students who participated in the survey came from subjects on International Information and English Philology.

Table 1. Subjects in which the students are enrolled

Subject under study (the specialty)	%
Economics	7.8
English Philology	14.7
English translation	5.9
Export-oriented Management	3.9
Finance	4.9
International Business	8.8
International Communication	3.9
International Economics	3.9
International Information	24.5
Law	6.9
Tourism and Recreation	3.9
Other	11.0

When it comes to the gender of the respondents there is a significant difference between its male and female participants as 61.8% of the volunteers were female students as opposed to 38.2% of male students. This is so because in the Philology department the number of female students has always been higher. However, at the same time the percentage of male students enrolled in the degrees related to Information Management and International Information, in particular, is traditionally not equivalent to that of female students as predominantly male students choose this area of studies.

As the survey embraced students from different countries the authors wanted to list the countries involved and also the proportion of the respondents from them. Most of the students who answered the questions (75.5%) were from Ukraine, almost 7% and 4% were from Poland and Turkey respectively, 2.0% from India, while 12.0% were from other countries (Azerbaijan, Brazil, Cameroon, Cyprus, Democratic Republic of Congo, India, Moldova, Namibia, Nigeria, Russia, Saudi-Arabia, Syria, Ukraine, Poland, Turkey and Zambia).

The authors knew for sure that all the students participated in the study had access to their smart phones. That fact was supported with their responses as 98% of the respondents answered positively to this question.

4.2. Habits in and opinions about using mobile apps for learning languages

The students were asked how much time they used their mobile devices during a day. It was found out that almost 13% normally use the mobile device 5 hours a day. Almost 11% of the respondents spend all day using these devices. Almost 9% devote 4 hours to using the gadgets. 7% do it for not longer than 2 hours a day. Around 6% declared that they dedicate 10 hours and another 6% reported that they devote 6 hours and yet another 6% claimed that they do it 3 hours a day. As it can be seen in Table 2 the average time the students spend using the mobile devices is, as expected, quite high among the university students. Of course, part of the stated time is dedicated to pure communication purposes such as phone calls, but as we suppose yet a certain percentage of this time could be used to practice English skills.

Table 2. Average time the students use their mobile devices a day

Average time the students use their mobile devices a day	%
1-5	48.9
4-8	4.9

6-10	22.6
12-20	6.0
All day	10.8
No answer	2.9
Other	3.0

In relation to the time spots when students use their mobile devices, if we exclude using them for pure communication purposes, 43.1% of them said that they predominantly do it in the evening. 23.5% stated that this is mostly the afternoon time when the students use their devices. The details are shown in Table 3.

Table 3. Time spots when the students use their mobile devices (apart from calling)

Time of day/night	%
All day	10.8
All day long when I have free time/ use it instead of computer	2.0
At night	9.8
In the morning	6.9
In the afternoon	23.5
In the evening	43.1
Other	4.0

It was interesting to find out where mobile devices are mostly used by students having an idea in mind that the students spend a lot of time travelling to and from between home and the university. This is why it was assumed that a high percentage of them would choose the public transport among other answers suggested. In fact, as it can be seen in Table 4 only 14.7% do use their mobile devices mostly in the public transport. The majority of student poll (38.2%) answered that it is home, more than a quarter of respondents stated that it is the university. Based on the data obtained it is believed that applying mobile devices for educational purposes has a great potential due to the fact that the most frequent places where the students use them are convenient places for learning.

Table 4. The places where mobile devices are mostly used by the students

The places where mobile devices are mostly used by students	%
Everywhere	12.8
At home	38.2

In the public transport	14.7
At work	2.0
At the university	26.5
At cafes, coffee shops or the like	2.0
At home, at the university, in the public transport	2.0
All of the options	2.9

The students were also asked if they have any mobile applications downloaded to their mobile devices and use them for learning purposes. 76.5% answered positively to this question, around 10% were undecided while 13.7% claimed they did not use mobile apps for learning.

4.3. Preferences for and interests in using mobile apps for learning purposes

We also focused our attention on finding out which areas of expertise the students are mostly interested in when learning through their mobile apps. According to Table 5 below 26.5% of those who participated in the survey were interested in languages. Another 9.8% and 4.9% reported English vocabulary and translation respectively as the centre of their main interests. This means that we can benefit from the students' interest in linguistics and encourage them to use their mobile devices for learning purposes in the course of the university lessons. It is also worth mentioning here how diverse the students' interests were, encompassing not only economics and finance, but also social studies, international business, MBA, science, psychology, classical music, art, history, photography, teaching, international relations, news, fashion, law, accounting, marketing, as well as games and so on. Table 5 below gives information on the major areas of expertise the students are mostly interested in.

Table 5. Areas the students are mostly interested while learning through their mobile apps

Areas of expertise	%
Languages	26.5
English vocabulary	9.8
Translation	4.9
Learning foreign languages, communication skills, teaching skills, current events analysis	3.9
Grammar	2.9
Everything	2.0
None	2.0
I can't give an answer	11.8
Other	37.0

It should be pointed out that the English language skills are among those practiced by the students when using educational applications downloaded to their mobile devices for 76.5% of the respondents.

We asked the students how much time they devoted to learning English through the mobile apps. As it can be seen in Table 6, most students (33.3%) devote 10-15 minutes a day to learning English, 20.6% spend 30 minutes and 19.6% dedicate 1 hour a day to the language. If we summarize the above information we can see that 73.6% devote 10-60 minutes a day to learning English.

Table 6. Time devoted to learning English through the mobile apps

Time devoted to learning English through the mobile apps	%
10-15 minutes a day	33.3
30 minutes a day	20.6
1 hour a day	19.6
1 hour a week	4.9
All day	2,9
From time to time	1.0
I don't learn English	1.0
I don't use apps for learning English	3.9
No answer	2.0
Other	9.9
Rarely	2.0

For the research purposes we asked the students what mobile applications they use for learning English. 15.7% said that they do not use any and 11.8% did not give their answer. The rest use various ones including *Lingualeo*, *Reverso context*, *Lingvo*, *Memrise*, *Busuu*, *Google Translate*, podcasts, different dictionaries, *Multitran*, *TED*, *ABBYY Lingvo*, *Lingvo Live*, *CNN*, *Facebook*, *YouTube* and others. As the obtained data show the most popular app is *Duolingo*. The students also use *Memrise* quite often. *Lingvo* and *Lingualeo* are popular ones as well among those students who use mobile apps for learning English.

We also found it useful to see what apps are used by the respondents in the connection with their language proficiency level. *Duolingo* as well as *Memrise* (15.8%) are chosen by those who claimed to have advanced language skills in 31.6% cases. At the same time, beginners and elementary students tend to use *Lingvo* and *Google/Google Translate* (22.2% each).

As regards gender, *Duolingo* again turned out to be the most popular one with 18.4% of the male participants claiming to use it while *Memrise* was the second choice of the students (5.3%). It is interesting to point out that the statistics presented in terms of using mobile apps by the male students is less than the average, i.e.18.4% is less than 20% for *Duolingo* as well as 5.3% is less than the average of 12% for *Memrise*.

At the same time the female students used a wider variety of the mobile apps for language learning purposes. Female respondents also preferred *Duolingo* to other mobile apps. The use of mobile apps by female participants is higher than the average with 23.4% for *Duolingo* and 17.2% for *Memrise* against the said average of 20% and 12% respectively.

Those students with the advanced level of proficiency train various skills through mobile apps like communication (36.8%), reading (31.6%) and listening (15.8%) while beginners and elementary students mainly work on their grammar skills (98%). This question was of a particular importance as it aims at finding out what types of skills that they would mostly like to practise through the mobile devices and the results obtained matched our expectations. As it can be seen in Table 7 communication is the main focus for almost one third of those who participated in the survey (29.4%). We presume nowadays having solid skills of speaking English is a must for those who are concerned about their career, for those who love active travelling which implies interaction with people, etc. The results of the study confirmed that the students are aware of that fact. The same percentage of the respondents voted for grammar and reading – 22.5%, 10.8% answered that listening is a skill they mostly practise and almost 5% of them are interested in enriching their vocabulary. This information should be used in practice by the teachers if they are aimed at applying contemporary technical instruments for teaching English in the classroom.

Table 7. Language skills the students mostly practise through their mobile apps

	%
Communication	29.4
Reading	22.5
Writing	2.0
Grammar	22.5
Listening	10.8
Vocabulary	4.9
Grammar, vocabulary	1.0
All skills in the list	2.9
Other	4.0

As it was mentioned before we found it useful for the purposes of our research to crosscheck responses given by individual respondents to different questions. Thus, we analysed what language skills male and female students were mainly interested in. Most male respondents prefer communication and grammar skills with 34 and 26 % respectively.

When it comes to female students, they have a wider variety of the skills they are interested in as compared to the male students. As the statistics shows, they mainly focus on communication, reading and grammar. Some also state that they practise all language skills using their mobile devices.

4.4. Investigation whether the language learning is enhanced by the use of mobile apps

We also asked the students if they believe that using mobile apps for learning English on a regular basis will contribute to improving their language skills. A great majority of them answered positively (77.5%), only under 9% negatively, while 13.7% were undecided. This shows the potential of the usage of mobile devices for educational purposes.

As regards the students' willingness to use educational mobile apps as part of practical English classes at the university on a periodic basis, 77.5% were in favour of it, 13.7% against while under 9% could not decide.

The participants were also asked to evaluate their level of English. As it can be observed in Table 8, 30.4% of them are intermediate students, meaning there is some room for their English skills improvement.

Table 8. The students' level of English

The students' level of English	%
Advanced	18.6
Upper-intermediate	29.4
Intermediate	30.4
Pre-intermediate	12.7
Elementary	6.9
Beginner	2.0

4.5. The students' suggestions regarding using mobile devices for learning English

Finally, the students shared their thoughts, ideas and suggestions regarding using mobile devices for the purposes of learning English, which are given along with the researchers' comments in the Table 9 below.

Table 9. The students' suggestions, thoughts and ideas

No	The student's statement	The researchers' comment
1	It would be useful if the apps used for learning English reminded you about the progress you've made as well as the time when to carry out some revision. Also, it would be nice if the apps designed were available for Windows Mobile platform as well.	The ideas expressed by the student are important to consider from technical point of view as they imply hints on what is to be introduced to the apps used for learning English by software developers. This information regarding the technical features of apps and operating system used among students is to be considered because it may contribute to designing and implementing of apps as educational resources in the classroom.
2	Slow voice.	As we presume this suggestion is also related to technical improvements of apps, in particular, of those that are aimed at polishing listening skills and/or enlarging vocabulary.
3	It's good for kids. I use it during my private tuitions with my preschool-age students.	As we can see the student is working as a teacher of English for preschool-age students and is using mobile apps for teaching purposes in practice.
4	Update the apps with new content part of famous movies enabling us to choose what they say.	This suggestion is also connected with technical characteristics of educational apps and contains a useful idea for soft developers to be taken into account.
5	Phones are useful for translation, it's good to learn words, read articles and listen to news.	The present comment gives another proof that the use of mobile technology in terms of learning English is increasing.
6	To improve communication between teachers and students, introduce online lessons on some topics.	This one is a practical idea from the student's perspective on how to increase efficiency of the classroom activities motivating students thereby.

5. Analysis of practical application

After conducting a survey on the students' perceptions of English as a foreign language learner on using mobile technology in the process of learning and teaching English we then made a link between the declared view of the students and the practical use of the mobile apps. In order to reach this goal a subset of students of law were encouraged to apply their mobile devices and the educational apps in the course of their language classes at the university.

The subset of the students was a random choice; it included 8 people who provided their responses to the follow-up interview questions. 8 subset students out of 102 respondents make 8% of the entire population of participants. The students were enrolled into KROK University of Economics and Law, Ukraine, and were contacted by the authors in the course of the tutorials scheduled in the spring semester 2018. They were the first-year students who study law as their specialty. A subject of Legal English for law students is included into the curriculum designed to give necessary English skills to work in a legal environment.

The participants of this research procedure received particular practical tasks including using professional vocabulary and preparing PowerPoint Presentations on a given list of

topics related to their specialty, reading texts containing professional lexis, translating separate sentences from Ukrainian into English and vice versa. Afterwards follow-up interviews checking actual use of mobile devices in the course of the language learning were conducted.

The aggregated results of the analyses are presented in Appendix 4. According to them all participants agreed that the use of educational technology and mobile apps in the language classroom increased their motivation and that they can understand language better when the teacher uses digital technology in the classroom. However, at the same time 3 disagreed that different technological devices and/or mobile apps should be used in the class to increase their motivation for learning English with the vast majority expressing their willingness to the opposite. Also, a vast majority believe that computer- and mobile-based teaching activities made the lessons more enjoyable (3 marked this as “strongly agree” and 4 – as “agree”).

We introduced a statement “Technology can be boring and unnecessary” and received answers that fall under all available categories with equal percentage of those who agree (1 “strongly agree”, 3 “agree”) and disagree with it (2 “disagree” and same number of those who “strongly disagree”). This may bring us to a conclusion that using technology in the classroom should be in a reasonable amount to keep the students’ interest and enthusiasm while learning. This conclusion is supported with another statement received from the follow-up interview as all in all 6 out of 8 of the law students agreed that using technology every time makes the lesson long and boring.

Results for the statement that using mobile apps and educational technology tools distract them split into mainly categories of those who support it and disagrees with it. Saying this it is important to point out that totally 6 out of 8 of the respondents express their disagreement with it to a different extent.

Half of the participants agreed that computer- and mobile-based lessons are more enjoyable and effective than traditional lessons with additional 2 participants who strongly agreed with this statement and equally 2 who did not support it. The majority of the students (3 who “strongly agree” and 4 who “agree”) confirmed that the web-surfing they do when preparing for the English classes makes them more active in the learning process. Everybody who had undergone the follow-up interview agreed that using educational technology and mobile apps improves their English skills.

The overall data suggest a need to recognize a large necessity to introduce mobile-based lessons of learning English to support the motivation and interest of students in the subject. At the same time using technology in the classroom should be in a reasonable amount

in order not to make lessons too long and boring. However, an extremely small scale of the follow-up survey (only 8 participants) makes its results more of diagnostic than confirmatory value.

6. Conclusions and further research

In sum, the study demonstrates that over the years the perception of foreign language acquisition has evolved and undergone a remarkable shift from the traditional way of classroom teaching to a wide using of ICTs for the language learning purposes.

The current research aimed at finding out whether the university students will be interested in partial incorporation of their mobile phones into the process of learning English. The study revealed that they use their mobile devices for the learning purposes, and more specifically, for language learning. Also, the students showed their willingness to implement the initiative into the practical English lessons at university.

The survey covered a pool of 102 university students from various countries, yet, as the study suggests, there is a high potential of using mobile devices and apps for the classroom activities of preschool-age students.

We found it useful for the purposes of our research to crosscheck responses given by individual respondents to different questions. As a result, we found out that female respondents use a greater variety of mobile apps and practice more language skills as compared to male students. Also, the students with the advanced level of English focus on several language skills through mobile apps like communication, reading and listening while beginners and elementary students train mainly their grammar skills. We assume that academic teachers may use these conclusions in the classroom in order to improve effectiveness and efficiency of the English learning process.

The data received in the course of the survey gave answers to the initial research questions. The students use mobile apps and educational technology tools in- and outside of the classroom as a large percentage declared that they use their mobile devices at home, university and public transport. This fact gives some room for improvement and flexibility of the classroom lessons and may indicate the necessity for further research in the field.

We also asked what mobile devices the students prefer. We separately checked preferences of the male and female students in this regard. The survey showed that all respondents use *Duolingo* more than any other mobile apps for learning English.

In the course of the study suggestions from the students were received including introduction of online lessons on some topics for the purposes of improving communication

between teachers and students, using phones for translation, learning words, reading articles and listening to news.

We also designed and conducted the follow-up interviews for the subset of students participated in the survey in order to link the reported mobile device use (obtained from the questionnaire) and its actual use for language learning. The received data also showed that technology should be applied in a reasonable amount in order not to make lessons long and boring.

In light of these finding it may be stated that there is a great potential for introduction mobile devices into the process of university studies as an additional educational tool for motivating and encouraging students to learn English.

At the same time certain questions related to the subject of the study remain unanswered or even become more prominent. Since the research was conducted on a relatively small segment of the entire population of students (8% out of the student population volunteered to participate in the survey) more empirical studies should be conducted concerning the effect of mobile learning, the connection between the students' perceptions and the relationship between such perceptions and the actual achievement of specific skills. Such studies may contribute to a future knowledge base that will shape and improve curriculum and instruction mediated by technology.

Also, most of the students who answered the survey questions (75.5%) were from Ukraine. This fact decreases the overall objectivity of the data and as a result, of the conclusions drawn based on the above. Due to this more diverse composition of respondents is recommended in further research.

This study has several limitations as its participants were the students who came from different cultural and educational backgrounds and degrees. The information is self-reported, and factors that may influence student perceptions such as the student ability, prior experience with technology, prior language background and personality type were not considered. Therefore, the research findings may be used as reference data and cannot be universally extrapolated.

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Appendix 1. Instructions to participate in the survey

Dear all,

You are kindly asked to participate in a survey which is organized for the research purposes. The research is aimed at finding out whether using mobile apps for learning purposes, in particular, for learning English is of interest for students and look at potential ways of learning the language. It is proposed on a volunteer basis and is not personalized. The survey consists of questions; it is presumed it will take about 8-10 minutes of your time to answer them. The findings are supposed to be reflected in a publication submitted to a recognized scientific journal.

To participate in the survey please press the button below [the link to the online Google Form is given].

Thank you so much in advance to those who agree to participate in the survey for your time and for your input into the research.

Appendix 2. Questionnaire

1. What specialty are you currently studying?
2. What is your age?
3. What is your gender?
4. What is your country of birth?
5. Do you have access to a tablet or a smart phone in your daily life?
6. Do you use your device to access various apps and contents?
7. How much time on average do you use your mobile devices a day?
8. What are the time spots when you use your mobile devices (apart from calling)?
 - in the morning
 - in the afternoon
 - in the evening
 - at night
9. What are the places where you mostly use your mobile devices?
 - at home
 - in the public transport
 - at the university
 - at cafes and coffee shops
 - other places
10. Do you use any mobile apps downloaded to your mobile devices for the learning purposes?
11. What areas of expertise are you mostly interested in that you are learning through your mobile apps?

12. Are the English language skills among those you are practicing?
13. What mobile apps do you use for learning English? Please give the names.
14. What language skills do you mostly practise through your mobile apps?
 - communication
 - grammar
 - reading
 - writing
 - listening
15. How much time do you devote to learning English through your mobile apps?
 - 10-15 minutes a day
 - 30 minutes a day
 - 1 hour a day
 - 1 hour a week
 - other (please specify)
16. Do you believe that using mobile apps for learning English on a regular basis will contribute to improving your language skills?
17. Would you like to use educational mobile apps as part of your practical English classes at the university on a periodic basis?
18. Do you have any suggestions regarding using your mobile devices for the purposes of learning English?
If yes, please specify below.
19. How would you evaluate your level of English?
 - Beginner
 - Elementary
 - Pre-intermediate
 - Intermediate
 - Upper-intermediate
 - Advanced
 - Native

Appendix 3. Follow up interview

Interest in Using Information Technology and Mobile Apps for the Language Learning

(4 point scale: 4=Strongly agree; 3=Agree; 2=Disagree; 1=Strongly disagree)

1	Use of educational technology and mobile apps in our language classrooms increases my motivation.	
2	Computer-based teaching activities make the lesson more enjoyable.	
3	Technology can be boring and unnecessary.	
4	I can understand language better when my teacher uses technology in the class.	
5	Using mobile apps and educational technology tools distract me.	
6	Different technological devices and/or mobile apps should be used in class to increase my motivation for learning English.	
7	When we use technology all the time, it makes the lesson long and boring.	
8	Computer- and mobile-based lessons are more enjoyable and effective than traditional lessons.	
9	Web-surfing I do when preparing for my English classes makes me more active in the learning process.	
10	Using educational technology and mobile apps improves my English skills.	

Appendix 4. Aggregated results of the follow up interview responses

#	Statement	Strongly agree 4	Agree 3	Disagree 2	Strongly disagree 1
1	Use of educational technology and mobile apps in our language classrooms increases my motivation.	1	3		
2	Computer-based teaching activities make the lesson more enjoyable.	3	4	1	
3	Technology can be boring and unnecessary.	1	3	2	2
4	I can understand language better when my teacher uses technology in the class.	1	7		
5	Using mobile apps and educational technology tools distract me.	1	1	2	4
6	Different technological devices and/or mobile apps should be used in class to increase my motivation for learning English.	3	1	3	
7	When we use technology all the time, it makes the lesson long and boring.	1	5	1	1
8	Computer- and mobile-based lessons are more enjoyable and effective than traditional lessons.	2	4	1	1
9	Web-surfing I do when preparing for my English classes makes me more active in the learning process.	3	4	1	
10	Using educational technology and mobile apps improves my English skills.	4	4		