Research Article

Ruixia Liu*

Analysis of multimedia technology and mobile learning in English teaching in colleges and universities

https://doi.org/10.1515/nleng-2022-0300
received April 30, 2023; accepted June 10, 2023

Abstract: Multimedia and mobile learning are effective teaching tools because of their many useful characteristics. Transmission of educational material to students is facilitated by technology in both multimedia and mobile learning environments. A more interesting and engaging learning experience may be achieved by combining text, graphics, music, video, and animation. Media-rich classrooms are often referred to as “multimedia learning.” In contrast, students who use mobile learning may access their courses from any place with an internet connection and a mobile device such as a smartphone or a tablet. Whenever this involves commonplace technological needs, its cellular gadget and notably its clever telephone take the cake. Smartphone gadgets have a very wide range of potential applications and uses. Some ethical considerations are preventing media from reinforcing stereotypes or prejudice in the communities where they are utilized. Student information are gathered and used in a way that protects their privacy, with materials required for students to engage in mobile learning, and respecting intellectual property and copyright regulations while using multimedia language-learning tools. This importance of learning cannot be overstated but when such results come, mobile devices have increasingly been used in schools. This question of whether mobile devices have an impact on education remains open. Because of such “mobile gaining knowledge,” along with an overall phrase describing researching where different devices could be utilized in combination to enhance schooling, mobile devices had become more popular. Because today’s kids utilize their mobile devices frequently, studies on their effect on word learning are immediately required. This pilot research seeks to understand why school learners think via smartphone-based L2 exercises. In particular, this study collects data about several plenty applications using cell phones in linguistic research. Two hundred and ninety-four college children from one top Turkish institution participated in this research. This project uses some hybrid reporting models and relies on description analysis over its methodology. Their results show that users place one high value on obtaining ready accessibility to materials while studying some foreign language. Respondents not only remarked about their cellphone’s portability but also proposed new applications for enhancing their learning in other countries.

Keywords: cellphone, multimedia, mobile gaining knowledge, smartphone education

1 Introduction

According to Abbas et al. [1], both multimedia and mobile learning can be personalized to the individual learner’s needs and preferences. Multimedia learning can be adapted to suit different learning styles, such as visual or auditory learners, while mobile learning can provide learners with access to learning materials at their own pace and convenience. Cellphones and other portable electronics are by far perhaps the greatest and most prevalent form of technology utilized throughout everyday life. It has been almost three decades since things first entered common use. When smartphones initially appeared during the early nineties, they could only make or receive telephone calls or text messages. Since innovation advances at almost rapid rates, devices decreased their dimensions and also acquired sophistication. Smartphones, along with the freedom of mobility they offered, replaced desktops and portable PCs. Another reason they have been successful is that cellphones have “handheld communications tools that integrate compact components resembling something, particularly computers plus a wireless handset, featuring reasonably sizable display interface.”

Cellphones were the first form of wireless communication. Because innovation advances at an increasingly
accelerated rate, devices also reduced their dimensions and acquired functionality. As a result of that shift, educational institutions from all stripes were reconsidering whether to best effectively use the existing online profiles Abdykhalykova et al. [2]. The phrase “mobile teaching” was created due to the very fast growth of smartphone technology and its subsequent application for classrooms. Yet, research shows that several of those businesses fail regarding achieving their goals since they do not have one interpersonal medium method within a place that is built alongside consumers aimed beyond the brain. It is very important to keep in mind that the term “mobile teaching” refers to more than just schooling that takes place mainly using smartphones. According to this concept, “mobile teaching” places an emphasis on the mobility of students within the curriculum rather than on the mobility of computers. The utilization of multimedia resources has the potential to dramatically improve students’ proficiency in English. Keeping pupils motivated and engaged is crucial to their success in learning a new language. Multimedia tools including films, interactive software, and audio recordings may help students enhance their communication skills. Students may be better equipped to meet their unique needs in language learning if they have access to personalized instruction and feedback made possible by multimedia technology.

This tendency has fastened the increasing spread of smartphones including increasing popularity with smart innovation. Voice-guided guidance for both walkers among bicycles was only one of its many features that was provided. Other options include accessibility through networking platforms such as 3G/4G calls, internet surfing, digital finances, group shot/video obtain/sharing applications, and even gaming. Ahmad et al. [3] state that mobile devices, however, have streamlined basic user displays even as they add new features. As well as in the school, universities, and colleges for completing assignments, the online class system was profoundly affected by a new major societal shift that occurred at the turn of the century. Higher expectations put on candidates as a consequence of universities’ expanding internationalization and the plentiful career prospects generated by their widespread use of contemporary technologies have intensified competition amongst institutions. The area of teaching English to students who speak a language other than English has been profoundly impacted by multimedia technologies. As a result, educators now have access to a multitude of online tools designed to pique their students’ interests and allow for a more participatory classroom experience. Modern students have access to a wide variety of media – from movies and audiobooks to games and interactive software – to supplement their language studies. Multimedia tools have allowed teachers to better address the individual learning styles of their students.

Even as both skills increase, their usefulness and ease of use remain unchanged. Instead of worrying about how to get accessibility for assets, consumers should focus on determining whether such assets are valued using individuals. Relations along with professional interaction alike find them more useful. Smart gadgets facilitate mobility and deliver a wide variety of other benefits well. Just one couple of instance has an instantaneous nature about data retrieval along with its mobility afforded by ubiquitous figuring out (or “always-on”) within some course about some research project. Smartphones and tablets have allowed individuals to browse online internet from anywhere, while waiting during public transportation and inside dining, because personal computers limit how as well as what knowledge can be accessed, which is the viable option conducted by Amin et al. [4].

Given each of these fantastic smartphone advantages seems possible to speculate concerning how extensively smartphones might have been used for educational reasons within their afterward, smartphone gadgets and tablets have become largely used primarily for recreation, knowledge data, and linking into virtual networking services throughout free hours; nevertheless, there were many possible academic perks and rewards. A study claims that because those get value as well as perks associated with mobile schooling along with smartphone technology, a lot of informative structures along with entities started examining portable methods to be a fresh developing substance about the possible present period over either pupil or along with teachers. Barus et al. [5] stated that the trend now is toward digital learning. The youngsters now, note, seem very adept at using digital technology. Thus, encouraging learners to implement their smartphone gadgets for educational reasons is essential. Regardless of smartphone systems’ affordability, simple use, better comprehension of instructional content, greater enthusiasm for learners, as well as adaptability to several developing methods, they have not been widely adopted in schools.

Therefore, one’s elementary purpose of this informative study serves to inquire into the outlook that university-level English language learners have from their use of mobile computing gadgets. Their goal is to inspire original thinking amongst the general public, which may then be used to guide the creation of cutting-edge apps for smartphones, notably in the field of English voice recognition. This is achieved by applying extensive and thorough language learning methodologies, as well as collecting important background data from users’ encounters with mobile devices. This investigation sets out to address all main investigation topics towards fulfilling that target.
These opinions are for individuals who are currently enrolled in higher education or university from digital education:

- Was there any significant difference between the way males and females think when reacting to digital learning?
- What do teachers worry about regarding learners utilizing their mobile devices like cell phones along with laptops while they are learning?
- Was there some benefit for children in elementary education to use mobile devices like handsets?
- In what way was this technique of instructing younger children with any secondary languages with cell phones benefit?
- How might pupil throughout fundamental education access webpages when apps are geared toward English education?
- What do pupils from elementary education believe about the use of digital devices for English education?

2 Literature review

According to Olowoyeye et al. [6], smartphone education has emerged as a promising tool within English as a second language (ESL) classrooms in the past few decades, giving participants exposure regarding lessons and exercises in any place. Students' attitudes strongly affect the overall drive, interest, and success with portable courses. According to Falola and Jolayemi [7], this has become essential for understanding how learners feel about using smartphones in ESL classes. During such a study, researchers should analyze the overall existing research regarding that topic, paying special attention to whether actual attitudes of ESLs toward smartphone education have evolved as years passed, as designed by Fan [8]. Multimedia resources may be utilized to offer English language students a wide range of visual, aural, and kinesthetic instructional resources and exercises. Those who learn best via hearing may benefit from listening to lectures and recordings, while those who learn best through seeing might benefit from watching videos and playing games. Participatory games and simulations designed for language acquisition may be useful for kinesthetic learners. Teachers may be able to better accommodate their students' wide range of demands if they provide a variety of multimedia learning alternatives.

We next discuss aspects affecting the perception of smartphone education.

2.1 Recognized effectiveness

How students feel about such smartphone education could assist individuals meet education objectives is referred to as effectiveness as argued by Gao [9] in accordance with another research, and students' attitudes regarding smartphone education are significantly predicted by what advantages they believe will be obtained. It was discovered that the students' views regarding mobile education were less favorable when they saw the technology designed by Liu et al. [10] as beneficial.

2.2 Apparent comfort with utilization

According to Luo [11], this level of known trainees considers smartphone education as being a simple known operation and referred to as overall apparent comfort with utilization. According to research, pupils who considered smartphone education to be simple and employed possessed additional favorable opinions regarding it. Students who thought smartphone education was hard to utilize, however, expressed greater unfavorable opinions of it.

2.3 Reported pleasure

The measure of students' perception of smartphone education as intriguing, exciting, or enjoyable is commonly referred to as reported pleasure. According to the variety and research, students' perceptions of pleasure possess a very substantial role in predicting how they would feel about smartphone education. For instance, the research discovered that students who considered smartphone education fun showed higher favorable sentiments designed by Onishchuk et al. [12].

2.4 Specific variations

The views of students regarding smart education may vary depending on personal characteristics including age, race, and past exposure to smartphone technologies in the research by Motiwalla [13]. For example, the researchers discovered that junior students exhibited less favorable views about smartphone education than adults. Further, students were more probable to view smartphone education favorably if they had previously been utilizing smartphones or tablets.

According to Warschauer [14], there are several benefits to using smartphone devices when studying another second language. Pupils may access all given types of...
materials upon speech study anywhere as well as in a single moment owing to having constant online connectivity. Xin [15] claim that improving voice recognition and adaption, which leads to more natural, efficient, and globally important language learning, is attainable when we take into account the vast potential of smartphone technology in language acquisition. As a result, it is critical that the trainees are given access to real-world, modern educational situations via the use of smartphone technology benefits. In addition, contend that smartphone devices are advantageous for effective speech acquisition because authors think that speech acquisition is exceedingly closely tied to the environment and particular scenarios during how communication takes place as designed by Yu et al. [16].

Zawacki-Richter [17] mentioned in his research that by incorporating multimedia into ESL lessons, teachers may help students better communicate and understand ideas from other cultures.
- Facilitating the acquisition of genuine examples of art produced in English-speaking countries.
- The utilization of video conferences and online collaboration technologies has the potential to open up new avenues for language study and cultural immersion.
- Students will be prompted to examine and reconsider their own cultural biases via discussions and collaborative projects.
- Encouraging introspective consideration of the role that linguistic, cultural, and communicative elements play in cultural similarities and differences.

Learners frequently require immediate access to language data, such as looking upward at your significance in phrases and bind/collocations, knowledge appears that developers about smartphone informative uses have become more and more intriguing within external speech studying. To save energy and money, basic qualitative attitude research is required when creating smartphone education apps on a chosen topic. Çelik [18] considered effectiveness, usability, satisfaction, along with interpersonal variances some of the aspects that affect students' attitudes regarding using smartphones for English speech training. In order to better improve students' perspectives towards and involvement without devices, instructors must take those variables into account while creating or executing smartphone education programs. Further studies might examine how social and socioeconomic variables affect participants' views regarding mobile teaching throughout a setting for English language instruction argued by Pasternak et al. [19].

There are still many gaps in our knowledge of how to effectively use multimedia technologies in the classroom: Investigating the effectiveness of diverse multimedia resources and methods for teaching a second language to a wide range of pupils, exploring the effect of learning on mobile tools on students' motivation and success in learning a foreign language. Researchers are looking at how mobile learning might help underprivileged students acquire a second language and the role of teacher support and training in facilitating the efficient use of multimedia tools for ESL instruction is under investigation.

3 Methodology

This research aims to describe what English learners with high university degrees think about digital learning. The purpose of such an experiment was to determine the best possible collection of elements over individual subjects by using some multi-pronged, hybrid inquiry approaches. The hybrid design makes it possible to gather together statistical and emotional information, acquired using the same way as this serial versus consecutive hybrid layout, but with some generous information (qualitative along with statistical) playing another supportive function for each other. The greatest important component of the called integrated designing method includes combining subjective mixed statistical knowledge about similar topics with those equal periods (or even within a very given sequence) for the conclusion.

Using mobile learning technology in EFL classrooms allows students to learn a language online at their own convenience using a variety of resources, students may collaborate and gain new knowledge from one another via discussion boards, language exchanges, and group projects, providing students with the opportunity to get assistance and teaching in language acquisition that is specifically customized to their requirements and empowering students to take responsibility for their own learning by providing them with the means to establish and monitor their own language acquisition objectives.

"Including empirical material within formal designs" describes this least typical approach from combining primary information both empirical and statistical. The research was performed to enhance while augmenting given conclusions drawn from our source facts, which seems reasonable when that initial kind of knowledge may be emotional along with statistical. For rounding out that main analytical information location, that investigation also made use of another independent emotional
knowledge supply. This smartphone learner’s mindset increase ministry of labour and social affairs (MLAS) inquiry has been used to collect relevant statistical data. Through basic statistical detail performance, pupils’ produced answers are collected through given subjective results.

The following are some suggestions for enhancing English language classes via the use of mobile learning technologies: ensuring that educators and students have enough tools at their disposal to master new technologies, using mobile learning resources and activities to boost student engagement and achieve course goals, providing several chances for evaluation and criticism to track student progress and make appropriate pedagogical changes, and increasing synergy between reading, writing, and other foundational skills and mobile learning technologies.

3.1 Samples and technique

Near Eastern Technological University (METU) is considered among the greatest universities in Turkish territory, and 294 undergraduates from this institution participated in their research. Individuals who attend some “prep schools” receive intense foreign instruction in languages through preparation over their initial semester from university. These include 156 females along with 138 males, spanning these years from 18 to 30 (refer to Figure 1 shown in this article regarding more description of those generation groups). Common multimedia resources used in mobile learning include the following:

- There are various language-learning programs such as Babbel, Duolingo, and Memrise.
- A few examples of video conferencing apps include Skype, Zoom, and Google Meet.
- Content that can be played on an audio player, such as radio broadcasts and podcasts.
- Blackboard, Moodle, Canvas, interactive whiteboards, and more are just a few of the online classroom technologies available today.

Convenient selections were used to compile this information. To guarantee that the material is still appropriate for beginning English students, it was selected using just those criteria. The following were carried out to ensure that there might be little linguistic diversity through courses: giving opportunities to practice oral and auditory communication via mediums including podcasts, films, online discussion boards, online articles, eBooks, and digital newspapers, together with interactive reading tests and activities; helping students improve their writing abilities via the use of online resources such as digital feedback, collaborative writing exercises, revision tools, and more and access to multimedia resources that integrate several language abilities into a single setting, such as viewing a film; and then discussing it in a virtual classroom, may help enhance language integration. That quantitative investigation relied on using Smartphone Learners Orientation Scales (MLAS) while the descriptive study made use of basic personal detail forms including mixed tight while flexible inquiries. Think about the context of mobile education as you evaluate the quality, pros, negatives, and usability from a student’s point of view. Using a 5-point scale from “completely agree” to “strongly disagree,” this evaluation covers a wide variety of issues. Following much thoughts including consultation with several subject matter professionals, they settled upon every label for their variables which would represent each aggregate element that makes up each element. The reliability of this MLAS was established by demonstrating its ability to distinguish between those who have optimistic from pessimistic worldviews. This MLAS seems possible since its dependability has been shown to be extremely good (Cronbach’s alpha = 0.88).

To collect this information, their investigators devised a quiz that inquiries about individuals’ sex, age, employment, presence of smart devices when Web usage. Several open-ended comments seemed to be comprised with round out their data. Concerns were designed to generate data from why word learners might want to apply portable gadgets, what kinds of smartphone services are currently applied over vocabulary education, what kinds of advancements could be made regarding their layout along with such software, along with what kinds of portable developing conditions are most effective. The results of a retrospective study (14/x = 0.88) were also included in the assessment by peers. To collect this information, individual investigators devised another poll that inquiries about the individuals’ sex, age, employment, presence of smart devices when Website usage. To complement their numerical information, they have several free-form inquiries. There were questions about other benefits of portable studying settings, various types of smart software employed among phrase learners,
including various reasons behind studying another target language through smartphones.

The effectiveness of mobile learning technology in the context of English language instruction is assessed by: the comparison of exam scores before and after language study, examining the effects of Mobile Learning on Student Motivation, collect user and expert perspectives on the efficacy of mobile learning aids in achieving language learning objectives and mobile learning’s long-term efficacy can only be gauged by monitoring pupils’ growth and development over time.

3.2 Analyzing and measuring

So that addresses the software investigation’s inquiry objectives, using one-sided analysis of variance (ANOVA), which along with individual sample t-tests seemed conducted using their analytical package Pc. Qualitative statistical approaches are used during gathering demographic data (which are referred to as aging sex, instructors, and the field). Every single Statistics release was used. Document analytics were used from sifting through these open-ended replies from their statistics survey. Content analytics was used to obtain individuals’ comments about their topics which motivated our investigation. As such an outcome, non-unique decoding techniques were used. Rather, supporting qualitative data was based upon carefully chosen comments by individuals that encompassed when suitable throughout their conclusions. The use of multimedia in the English classroom may provide a number of difficulties for educators, inadequate experience or education using technical tools, finding multimedia resources that are appropriate for their teaching goals and the requirements of their students may be difficult, worries that students and teachers will have fewer chances to interact on a deeper level due to greater usage of technology in the classroom and the value of dividing one’s time evenly between computer use and more conventional approaches to language study, such as reading and writing.

4 Results

4.1 Statistics about the population

A total of 295 high school seniors (157 females and 138 males) were involved in this research. They were 21 years old (Figure 1); however, individuals varied widely between 20 and 29. Learners may be broken down into three groups by analyzing their distribution across departments. As shown in Figure 2, the Technology Department had 99 students (34%) whereas the Economics and Administration Department had 38 (13%), the Learning Department had 69 (24%), and the Construction College had 15 students (5%).

4.2 Outcomes of analyzing qualitative data

So, in an attempt to get one good quantitative representation of how many hours people spend web regularly, researchers requested individuals to answer this inquiry regarding individual network application patterns. They did these to seek more about how they use your Internet hence may be you might create more effective wireless study language software. It is an open question as to whether or not the shift to digital educational settings has significantly altered the status quo. People are divided into numerous categories based on how much time they spend online daily: less than half a minute, between one and two hours, approximately three to four hours, between four and 5 hours, or more than 5 hours. The details are given in Figure 3. Sixty-two users check in about several with 50 occasions in all (50%), while another 78 spent greater than 50 moments online in a single week (23%).

Figure 2: Faculty distribution of students.

Figure 3: Daily internet use of students.
In addition, questions were posed to individuals regarding their proportion during our overall hours spent online that occurred using wireless phones. These are being conducted because you might determine the online frequency with which consumers connected with mobile devices online. Subsequently, it was discovered that 16 individuals depended just upon their portable gadgets overall during their online requirements, 23 individuals utilized their cell equipment across 9% alongside 40% during the online requirements, and 43 individuals depended upon their smartphone gadgets across 40%, respectively, while half during the online requirements, 58 humans depended upon their smartphone gadgets over across one half alongside 75% during those online requirements, while 61 individuals depended with their smartphone gadgets with among 70% along with 90% during their online requirements. This suggests that most students like utilizing their own mobile devices to connect to the web. Results showed that 72 percent of respondents relied on their mobile devices for more than 90 percent of their time spent online. In addition, 6 people depended on their mobile devices for more than 75% of their online activities, while 60 people used their mobile devices for more than 80% of their online activities. The results are shown in Figure 4 below. Unmistakable evidence shows that the vast majority of learners would rather do world wide web-related assignments using smart equipment. Students at 4-year institutions may get more out of their English lessons if they take use of mobile learning gadgets. Students have access to a wide selection of technical innovations and multimedia materials meant to facilitate language study. If teachers can deliver more personalized feedback and instruction to their students using mobile learning technologies, then everyone wins. Now more than ever, kids can get their hands on language-study materials whenever and wherever they want.

Furthermore, the utilization of smartphone and tablet computers for interaction, and internet-based learning, along with other purposes was elicited from pupils. Smartphones were utilized by a total of 2 for interactions, 251 individuals for networking sites, and 187 individuals for learning purposes. This indicates that pupils choose to use their handheld gadgets mainly for communication and interacting with others. Figure 5 shows why nearly all respondents say cell phones facilitate rapid access (44%) as well as simple access (26%) and are learning

**Figure 4:** Student’s percentage of internet use by smartphones.

**Figure 5:** Student’s aims of using smartphones in learning language.
support (10%). Even though both groups are identical, they are separate. Those have “helpful for studying” as well as “supportive when studying English.” Mobile devices can be used to learn anything, regardless of whether it pertains to a program or not, which is why those groups were divided. Consequently, “beneficial for English studying” just means about beneficial benefits of using smartphones during English study, while “supportive for teaching” is related to educational experiences in broad. Teachers use the following strategies to create engaging mobile lessons for teaching English. It is crucial to identify their learning goals and then match them with suitable mobile learning resources and applications, include a wide range of interactive activities and multimedia resources to keep students interested and engaged as they learn the language, through the utilization of group projects, peer review, and online discussion boards, students may learn and collaborate in an environment tailored to them and evaluate your students’ progress toward their objectives and make any necessary changes to the language program based on the findings.

4.3 Conclusions from numerical evaluation processing data

The proposed unilateral t-test revealed any substantial variance in men and female pupil opinions on smartphone instruction ($M = 2.83, SD = 0.63$) and ($M = 2.72, SD = 0.56$) ($t(292) = 1.52, p = 0.13$) mentioned in Table 1. The goal of the search analysis was to improve and see if there were any substantial differences in how male and female students felt about mobile learning. To find whether learners had statistically various points of view on smartphone education based on their educational departments is discussed in Table 2. The evaluation of variation was performed only in each direction. $F(4,285) = 2.49$, $p = 0.05$, and $2 = 0.03$ in the ANOVA show that students’ perceptions of smartphone education vary significantly among academic departments mention as shown in Table 3.

5 Concluding remarks and questions

In an attempt to better comprehend the overall viewpoint of college and university students, our research aims to examine their views regarding smartphone education while creating any constructing smartphone apps promoting speech development. The subjects were given a demographics questionnaire and an electronic training satisfaction assessment. Analyzing this numerical as well as anecdotal information collected with these tools led to the development of five study hypotheses which act as the investigation’s backbone. Along with a discussion of the study’s results, we also answer these additional inquiries:

- Was there any significant difference between the way males and females think when they react to digital learning?

  Results show both male and female students’ perceptions of smartphone education were not significantly different. There are no discernible variations regarding the way male and female students view smartphone education, according to earlier research. There were significantly meaningful variations among male and female participants’ judgments of educational education systems, as investigated by their study of this topic. There were also no discernible variations in cell phone use between the sexes.

  Still, some studies contradict this, showing that male and female students approach mobile learning differently. Female students were more enthusiastic about

<table>
<thead>
<tr>
<th>Gender</th>
<th>$n$</th>
<th>Mean</th>
<th>SD</th>
<th>$t$-cal</th>
<th>$t$-crit</th>
<th>df</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>157</td>
<td>2.72</td>
<td>0.56</td>
<td>−1.52</td>
<td>1.96</td>
<td>292</td>
<td>0.13</td>
</tr>
<tr>
<td>Male</td>
<td>137</td>
<td>2.83</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Gender differences in perspectives on mobile learning as shown by a t-test

<table>
<thead>
<tr>
<th>Courses</th>
<th>Mean</th>
<th>SD</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Architecture</td>
<td>2.77</td>
<td>0.46</td>
<td>15</td>
</tr>
<tr>
<td>Faculty of Arts and Science</td>
<td>2.60</td>
<td>0.61</td>
<td>69</td>
</tr>
<tr>
<td>Faculty of Economics and Administrative Sciences</td>
<td>2.71</td>
<td>0.63</td>
<td>38</td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>2.89</td>
<td>0.52</td>
<td>69</td>
</tr>
<tr>
<td>Faculty of Engineering</td>
<td>2.82</td>
<td>0.61</td>
<td>99</td>
</tr>
</tbody>
</table>

Table 2: Assignment of teachers to courses

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Group</td>
<td>3.44</td>
<td>4</td>
<td>0.86</td>
<td>2.49*</td>
<td>0.03</td>
</tr>
<tr>
<td>Error</td>
<td>98.34</td>
<td>285</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.78</td>
<td>289</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
mobile phone use than male students, according to the studies reported. Women are more likely to send text messages than males, but men are more likely to make voice calls, according to research. The researchers found this out. Perhaps this is why most men would rather have a conversation than put their thoughts down on paper. It was discovered that men and women valued distinct features in their mobile phones, with men giving more weight to technology and women to social features. Also, it showed that cellular phone preferences differ by country.

- Why do teachers worry about learners utilizing their mobile devices like cell phones along with laptops while they are during category?

The findings revealed a large variation in students’ perspectives about mobile learning based on their teachers. In particular, it was shown that students majoring in the faculty of education have a more positive outlook than students majoring in any other faculty of arts and science. The usage of mobile applications with a focus on language acquisition appears to be more common among students in the faculty of education than among those in the faculty of arts and sciences; however, this cannot be determined with any certainty. However, no statistically significant differences were found in students’ attitudes toward mobile learning based on their chosen fields of study. It showed that, when broken down by year, students in their first and second years of college were more likely to use mobile devices than students in their third and fourth years. Students in their first year of college are the focus of this study; therefore, the findings are consistent with those of the previous study.

- Was some benefit for children in elementary education to use mobile devices like handsets?

The most frequently utilized apps were those linked to communication and social networking. Participants' use of mobile devices for educational purposes is also undeniable. The study’s findings that mobile technology is becoming increasingly important bolster in playing games, making purchases, reading PDFs, watching videos, listening to music, provide amusement, and taking pictures, just to name a few uses. Participants not only emphasized the aforementioned benefits of mobile technology but also the ease and speed with which any kind of information can be accessed at any time and from any place. Consistent with these findings, it concludes that “mobile technologies are more flexible and enable students greater freedom of learning any place, at any time.” These findings are supported by the research conducted.

- In what way widespread was this technique of instructing younger children with any secondary languages with cell phones?

Different motivations for using mobile devices for language study and practice were demonstrated. There are many applications for the study and practice of languages. The following categories classify various facets of these functions: Use of a dictionary, listening to audio files designed for language study, repetition of previously taught material, etc. The best ways to learn a new language are by exposure to the language in all its forms, including music, films, writing exercises, collocation drills, research, reading exercises, translation, pronunciation, apps, and conversations with native speakers. In addition, having the opportunity to talk to and compete against one’s friends while learning a foreign language led to a better sense of camaraderie and fun among the students. Mobile devices were seen as effective learning tools by students because of the convenience with which material could be shared and retrieved. This conclusion is consistent with the work.

- How might pupils throughout fundamental education access webpages when apps are geared toward English education?

Students prefer using Google Translate, Tureng, Quizlet, TED, and the Turkish-made online dictionary website Sesli Sozluk. The British Council’s materials, as well as those of the Cambridge Dictionary, Oxford Dictionary, Memorize, and others, were also heavily used by preschoolers. It appears that the vast majority of the time when students are exposed to English language teaching, they use smartphones to search for the definitions of English words. Students do not just rely on textbooks and internet resources for language practice, as the results of the study demonstrate. The language quizzes on Duolingo and Onscreen allow users to test their knowledge with both multiple choice questions with fill-in-the-blank questions. Niche engaging mediums for communication study besides popular with pre-university students. This demonstrates how students would rather have open-ended discussions and Q&A sessions with native speakers than complete textbook-based activities.

- What do pupils from elementary education believe about the use of digital devices for English education?

Even though conventional means of education may be more efficient and beneficial in the long run, research suggests that students are particularly interested in and in need of vocabulary-learning apps. In addition, they worked on improving their listening comprehension and familiarity with collocations. Students also showed a strong preference for interactive applications and circumstances, such as gaming, dialogue, and competition, when it came to learning and practicing English. It is important to consider the usage of gaming or competitions as a sort of
interactive entertainment for participants who are interested in these language-learning environments.

The results of this study provide support to the idea that students make regular and effective use of vocabulary-building resources like mobile applications and online dictionaries. This may lead people creating mobile language-learning apps to infer that vocab growth is the most important feature for students to focus on. To accomplish this, a mobile application is now under development that will provide word definitions, word collocations, word pronunciation aids, and example sentence usage. After observing or listening to short conversations from various movies, chapters, and television shows, students were able to participate in language quiz shows that included different quiz types such as multiple-choice, fill-in-the-blanks, matching, drag-and-drop items, and translation questions. Therefore, the problem of vocabulary and translation poses a significant obstacle for the design community in the field of second language acquisition. Designers of mobile language learning environments need to take into account students’ desire to have a good time while learning the language. Given the prevalence of mobile English language learning, researchers may wish to include a wider range of students in their samples, such as those from other institutions. This allows them to compare their results to those of other investigations. A follow-up study or a systematic review study that looks at studies covering a wide range of conditions could be done to assess whether it is observed in this study and is indicative of a bigger phenomenon.

Future ESOL (English for Speakers of Other Languages) programs at universities will be further revolutionized by mobile learning technology. To “gamify” language teaching and provide students with more individualized educational experiences will pave the way for the introduction of interactive mobile apps and games. When combined, AR and VR provide a more lifelike setting in which language learners may immerse themselves. People will also use their mobile devices to coordinate efforts and share information in larger groups. Voice recognition technologies and chatbots will help with conversational practice and language development. These developments will define the future of ESL teaching by making the language more accessible, interesting, and relevant to students’ everyday lives.

Data availability statement: Upon request, the corresponding author can provide access to the data.

References


