Significance of Mobile Assisted Language Learning (MALL) for English Language Learning in Digital Age: A Review

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Abstract

The transformation of CALL (Computer Assisted Language Learning) into MALL (Mobile Assisted Language Learning) has raised the significance of language learning through technology. Basics concepts reveal the smart and remote learning of a language through MALL. The emergence of MALL has raised the question of the availability of the Internet, skills and attraction. The study is based on a literature review to understand the significance of MALL in changing language learning styles. The study found that trends has transformed the ways and means of language learning. Through MALL, one can easily access knowledge, key language practices, and pragmatics across different cultures. It is also found that besides feasibility, the major issue Aare time management. MALL also provides opportunities for various applications to be created and used in the changing global spectrum of English language learning too.

Key Terms: Mobile Assisted Language Learning, English Language Learning, Digital Learning

1 Introduction

The most widely recognized and globally used language is the English language, which has made it the language of preference learning among the masses. The English language came into the sub-continent with the arrival of Britishers, and later, it became a global language due to its extensive use in technology, science, and higher education. Pakistan was part of the subcontinent before the partition, so the English language is given high prestige in this country due to its flow. English is a compulsory subject up to graduation level in Pakistan (Rehman, 1996). The English language is the official language of Pakistan Graddol (2014) says that it is less crucial in other regional countries of the subcontinent than in Pakistan as it is the official language of Pakistan .

English is recognized as an official language in Pakistan. It has no formal standing in other South Asian countries, although it has been extensively used as a means of international communication throughout its reign from British Raj. It is spoken as a second language in Pakistan. Although English has been designated as a second language in Pakistan, yet it is nevertheless more important than any other language on the subcontinent.

In Pakistan, English Language is taught as a required subject from primary school through graduation. Although the language must be learned, the attitude and linguistic apprehension

regarding English as a foreign language is evident. The rules and grammatical structures differ from the original language because English is Pakistan's official language, it must be learned carefully. Language related challenges cause stress among new learners (Javaid et al., 2024). ESL learners feel difficulty in vocabulary comprehension (Ikramullah et al., 2023).

The apps and technologies of mobiles have become an essential part of learning at the moment. Learning foreign languages is also included in their learning (Gangaiamaran & Pasupathi, 2017). The current method of use is called "M-Learning" (Mobile Learning). E-learning is expanded by M-Learning. It has promoted active and autonomous learning. It has also endorsed changing institutions of education. In short, there have not been any barriers in centers of learning (Kuimova, et, al. 2018). Along the same line, the new slice of "Computer Assisted Language Learning" (CALL) is the "Mobile Assisted Language Learning (MALL)" (Klimova, 2019). In traditional mobile phones, the smartphone provides adroitness. For that reason, "Smartphone Assisted Language Learning" (SPALL) is a new shortening endorsed by (Leis et al., 2015).

The major features that make learning effective are internationalism and the ubiquity of mobile devices, custom-made learning, autonomous learning according to time and place, and collaboration with students and teachers in formal and informal learning atmospheres (Klimova, 2019). Collaborative strategies used by teachers are effective and learning can be enjoyable with positive attitude (Ramzan et al., 2023; Javaid et al., 2023). Mobile phones and their apps help learn a foreign language. This all has been done because of the encouragement of teachers, positive feedback, and inimitable features (portability, interactivity, and ubiquity) of mobile phones. This research has been shown in "Mobile Assisted Language Learning" (Klimova, 2019). Positive feedback can help students engage well (Javaid et al., 2024). However, "Mobile Assisted Language Learning" also has some drawbacks, such as the mobile being multi-tasking and students not paying proper attention to learning objectives. Second, there is a deficiency of apps suitable for "English for Specific Purposes" (ESP) and the proficiency of different levels. Other issues are connections and access to the internet, deficiency of head-on contact, and small screen size (Klimova, 2019).

Furthermore, the function of feedback in apps is restricted (Andersen, 2013). Whereas, in connection with apps in foreign languages, most apps are de-contextualized. They focus only on individual word learning rather than authentic speech production, all four language skills (listening, speaking, reading, and writing).

1.2   Statement of the Problem

The emergence of online and digital learning gave birth to new apps and platforms for English language learning. Mobile Mobile-assisted language learning has gained significance due to the vast storage of knowledge and the variety of knowledge. Till recent times, mobile technology has been considered an obstacle to language learning. However, the emergence of new apps, various knowledge, mobile exercises, and all English language skills tools made the stakeholders transform their attention from offline learning towards online learning as Mobile Assisted Language Learning.

1.3   Research Objective

- To understand the significance of Mobile Assisted Language Learning for English Language Learning.

1.4   Research Question

1. How can mobile-assisted language learning be helpful for English language learning in Pakistan?

1.5   Significance of the Study

The present study is based on the literature review, which can help understand the existing studies on English language learning. The study can propose precise findings and the significance of MALL due to the changing world's thoughts. The study can help the stakeholders of the English language learning process to input such apps in the learning process, which can reinforce and prove in the shape of effective learning.

2   Research Methodology

The present study is descriptive and qualitative, and is based on a review of the literature. A descriptive qualitative study is based on current issues (Gay et al., 2012). The literature review study is based on the already existing studies through which the results are generalized and adopted for future implications (Parajuli, 2020). The literature review study is authentic and reliable as it is conducted based on the particular research purposes and placement in the existing fields.

3   Literature Review and Discussion

3.1   The Concept of Mobile Learning (M-Learning)

Handheld mobiles are in everyone's hands, and through these devices, access to the internet is easy as the person can interact with anyone in any corner of the world. The time and the place do not mean interaction with another person for information changes. The term "Mobile" stands for the word "mobility," which means enabling a person to move freely from one person to another. Mobile Learning (ML) refers to the implementation or usability of mobile technology in learning. The significant features of mobile phones in this regard are "portability" and "accessibility of information," which play an integral part in enhancing the English language and teaching process (ElHussein & Cronje, 2010).

The main characteristic of M-learning is the learners' discretion, which interact with the learning towards learning based on their choices (Kukulska-Hulme., 2012). The stable concept of the mobile is also missing in this regard, as many of the new versions of the apps and mobiles are mostly available in the market. In this regard, mobile learning can be referred to as the learning mobility of the person with devices such as laptops, Personal Digital Assistants, palmtops, iPods,

smartphones, and other learning devices. M-learning can be divided into three parts: mobility of technology, mobility of learner, and mobility of learning.

Mobility of Technology refers to the capacity of Wifi and WAP (Wireless Application Protocol) by which the learning material and information are delivered via internet accessibility. Hui Gue says that the learners' mobility is increased by mobile learning as the engagement of the maximum number of students can be increased through portable devices and mobile devices, which reinforce and enable the learning capability of the learners through practice. There is no role of time in constraining learning mobility through mobile.

3.2   Mobile Assisted Language Learning (MALL)

MALL is the subdivision of M-Learning and CALL (Computer Assisted Language Learning). CALL is the technology through which creativity, collaboration, social networking, and effectiveness can be increased. Kukulska-Hulme & Shields (2008) said that the enhancement and advancement of mobile devices led to the transformation of physical work to portable devices, which emphasizes the continuity or spontaneity of the work.

There can be certain limitations in adopting mobile technology in language learning, such as the depth of communication, the disturbed learning process, false observations, workload, lack of computer knowledge, and false observation (Ewa et al., 2012). Kukulska-Humle (2009) thinks that in the future, CALL will be replaced by MALL in the educational field as there are some unique characteristics of mobile devices: Mobility, Connectivity, Social Networking, Portability, Individuality, and Context Sensitivity. The mentioned features cannot be replaced through the Desktop either.

3.2.1   Mobile Apps in MALL

A drastic change has been occurred in mobile phones from downloading ringtones to their own choice of software and applications. Mobile technology is also more familiar than technology, which has the latest features that can trigger people's interest by applying this technology to educational purposes. Specific devices like iPods, iPads, and iPhones have triggered more compatibility with mobiles (Godwin-Jones, 2011). The shorter form of mobile application software is mobile apps, which can be downloaded from different sites such as App Store, Google Play and BlackBerry App World, etc. Many of the apps are free of cost, while different have to be paid in this regard, including different categories such as gaming, education, and entertainment.

3.3   English Language Learning in the Age of Digitalization

English language learning is given high prestige due to the language of science, technology, and global communication. Many research articles by individuals and organizations have been devoted to English language learning (Tan, 2016). There are different ways of teaching and learning the English language, from traditional to up-to-date teaching, including teaching English through online sources, widely employed in schools and colleges. Recently, the use of technological devices has become widely recognized, as many of the applications and software are there to enhance English language competency. Communication can help learn well and teacher's

mindfulness also impacts (Javaid et al., 2023). Social media usage significantly improved academic motivation (Ramzan et al., 2023). Social media helps connect and promote diverse working (Khan & Javaid, 2023). Remote work and learning improves efficiency (Fatima et al., 2024). At the same time, media sensitisation can impact perception and learning (Iqbal et al., 2024). It has been observed that, when students are in higher education face difficulty in any of the topics, they tend to use YouTube lectures to understand the topics. Colleges and universities in higher education are adopting new forms of learning and teaching (Nascimbeni & Burgos, 2016). There are more opportunities, and the ways of learning are widely recognized worldwide with the expansion of new technologies. In recent years, more relevance has been observed in the online learning and teaching process as technology is changing the lives of people from traditional ways to digital learning (UNESCO, 2017). Smartphones have given tremendous and adequate advantages to teaching in the present era. New learning schedules and curriculums have been developed recently. New ways of learning and exploration have been highlighted recently, and new content and classroom trends are required (UNESCO, 2017). The use of apps and mobile devices has made many contributions to progress in English language learning.

3.4 Transformation of Language Learning from Computer to Mobile Learning

Much research has been done on the CALL and MALL (Lynch, 2015), and so on. The term' Computer Assisted Language Learning' (CALL) was first used in the early 1980s and has been cited in other articles ever since. In addition to CALL-related publications, journals, and several additional projects in teacher education demonstrate the growing interest in using technology in English teaching and learning (Hubbard, 2013). Several studies conducted recently have examined how English language learners use electronic dictionaries to practice and improve their pronunciation, as well as how they interpret instructions to use technology more spontaneously and self-initiated for language tasks (Dooly, 2018).

The subject of Mobile-Assisted Language Learning (MALL) is now proliferating. Scholars investigate the pedagogical characteristics of modern mobile apps for English language learning and curriculum approaches for incorporating mobile devices into formal learning contexts (Guo et al., 2014). Furthermore, many studies concentrated on using particular smartphone apps for language learning, such as Duolingo, and the possibilities this program presents for picking up a second language (Nushi & Hosein, 2017).

However, from the standpoint of language learners, the evaluation of using mobile apps for English learning is still in its early stages. Most studies looking into the usefulness of mobile devices in language training in higher education do so from the perspectives of language experts and scholars. Few studies look into pupils' perspectives on using mobile technologies. On the other hand, students' opinions on how they perceive mobile apps in their learning process are respected. They should be regarded as necessary for any instructional intervention to be implemented.

3.5 Effective Learning and Learning through Technology

Learning is the process in which the individual can be served relatively at the stage of presenting behaviour. Significantly, few learning behaviours can be observed outside the scenario. Teaching

is the process of changing the behaviour of the students by instructions. A teacher changes the behaviour of the student through instruction and makes easy complex things. The teaching and learning processes are the two sides of one coin, and the change in the behaviour of the students is known as the learning process.

Learning is a necessary part of human life, which is a necessity as a need. The formal education system is a planned and mannered in educational system. Despite higher education and learning processes, many deficiencies still need to be improved. Effective learning is the process required by the parents and the stakeholders of the educational process, so there is a high need for time-changing requirements as well as the necessities of life. To resolve the learning deficiencies, teachers must consider such aspects, which could fulfill the time-changing requirements to create an effective learning environment. For completing and enhancing an effective environment, there is a need to fulfill such the steps life equipment of the teaching tools and the learning environment. Oral (2007) conducted a research study and concluded that audio-video aids can enhance learning outcomes.

Nowadays, technology is connected to plans, implementations, evaluation, and testing of the teaching and learning environment. The methodological concerns and the content-based orientation have also been changed due to the emergence of technology in the dimensions of the teaching and learning process (Saban, 2007).

Every country is linked to educational development and the enhancement of progress due to the role of technology. It is also sad to keep the education system away from information and technological development when every walk of life and the fields of life are under the evolutionary process due to technology. The primary role of technology is linked with the technological association of the teacher. Using technology and technological tools in the educational process can enhance the teaching and learning process faster. The use of technology can enhance the teaching and learning process as well as enhance feelings of job satisfaction. Vural (2004) conducted a research study and concluded that the possibility of audio-visual aids in the multimedia environment can enhance the recalling rate by up to 90%.

Vural (2004) views that the educational software would be used by the native country's Ministry of Education, which would be compatible with the program curriculum, would be easy to use, would encourage students to learn, and would include audio, videos, and other dimensions in the educational process.

Serhan (2009) says that it is impossible to connect the previous and next learning strategies, so diversity of education can be the hurdle to having the same results in the educational fields. The study's primary objective should be engaging the learning and teaching outputs with the learning strategies.

It was also found in much of the research that the researchers take videos of the old versions, and the new versions are the least available in this regard. The teaching and learning process changes occasionally as the videos are of the old versions. The recent changes in the modern era are changing from the growing and enhancing part of life. The videos of foreign languages are mostly of past experiences, yet new trends are also required in this field.

Gunday (2015) views that the subject areas are not covered by the videos. The subject areas are needed to be covered at the initial level from 1 to 2 minutes, later 3 to 5 minutes, and at the advanced stage, it must be 10 to 15-minute videos.

3.6   Related Studies

Khaddage et al. (2011) conducted a study on "*Mobile Apps Integration for Teaching and Learning: Are Teachers Ready to Re-blend?*" The primary goal of this study was to outline the procedures required to create an effective educational mobile learning environment and examine the process of meaningful app integration that can encourage student and teacher collaboration and coordination. The study was conducted for university teachers to help them better understand mobile apps, educational mobile multimedia, and social networking, as well as to build knowledge and confidence in their ability to integrate these technologies in a way that promotes an effective and flexible learning environment. The integration of apps can serve as a link between two fields: educational technology and computer science. Collecting and synthesizing knowledge from these two professions can be very beneficial and relevant during the integration process. The findings may apply to universities and other educational sectors such as VET (Vocational Education and Training), secondary schools, and elementary schools. This study is comprehensive since; attempted to address several important topics, challenges, and suggestions, as we strongly feel that mobile App integration is effective, efficient, and multidisciplinary for education internationally.

Metruk (2021) studied "*The Use of Smartphone English Language Learning Apps in the Process of Learning English: Slovak EFL Students' Perspectives.*" The study mentioned that in recent years, there has been a noticeable transition from traditional desktop computers to using smartphones for language learning purposes. This study aimed to investigate Slovak EFL learners' attitudes and opinions regarding English language learning applications (ELLA) about practicing and learning the language, which aligns with recent developments. Furthermore, the differences in ELLA perceptions between research participants who were male and female were investigated. 158 Slovak university EFL students, 48 of whom were male and 110 of whom were female, made up the target audience. They were asked to indicate how much they agreed with statements using a 5-point Likert scale. The tool had thirty statements covering everything from app perception to app usage. EFL learners typically practice language systems and skills to varying degrees, and participants' attitudes and views of ELLA range from neutral to positive, according to the computed averages. In addition, thirty independent-sample t-tests were run to examine the differences in attitudes and perceptions between men and women. The findings demonstrated a substantial variation in 50% of claims about the use and perception of apps, suggesting notable gender differences in these areas. The acquired results further shed light on mobile language learning. This topic merits further scientific inquiry and complements other studies on using cell phones and ELLA in EFL learning. The results showed that although English apps are becoming increasingly common among EFL students worldwide, they are still a relatively recent development that practitioners and researchers should be aware of. Therefore, more research in this area is crucial since there is still much to learn about general mobile learning research and smartphone apps. Discoveries and insights will add to the body of knowledge.

Rezaei, Neo & Pesaranghader (2014) investigated the effectiveness and usage of apps in learning English vocabulary. A significant part of learning a language is the procurement of vocabulary. The existing setting in the world's education has been improved by technological advancement over the last few years. The extensive usage of mobile wireless technologies has made more chances to shift the old-style academic environment to mobile learning. For education and communication, a great way is interactive multimedia. In this study, the learner's performance in English at the intermediate level has been introduced in the study group as an intervention after and before using different apps. Multimedia courseware has been found to influence vocabulary acquisition in a second language. They used questionnaire analysis and quantitative data for this purpose. The findings indicated that the change in the performance of learners is favorable. Further, using apps helped boost vocabulary learning, participation in class, and confidence.

Leis et al. (2015) discussed the benefits of using Smartphones in learning English as a foreign language (EFL) classrooms from a motivational perspective and autonomy amongst learners. Two groups of students at a Japanese university were compared with the question "Do they have permission to use their smartphones in the classroom? Further, have they been encouraged to use a smartphone for the purpose of education or not?" Also, they have concentrated on whether those using smartphones in their "EFL" lessons would display predispositions toward being autonomous in their language studies". The results revealed that students stimulated to use their smartphones in class were motivated to study more in their leisure time. The signs of autonomy are shown by taking charge of their learning and providing ways to improve their study habits and English skills. They conclude that learners and teachers of language should be encouraged to use smartphones in classrooms. Because of this, the environment would be more productive, and they would have more desire to learn.

Zou and Li (2015) studied *"Exploring Mobile Apps for English Language Teaching and Learning"*. This study aimed to determine what kinds of tasks could be used to help students advance their EFL skills and how mobile apps might be included in English language teaching and learning. The researchers created instructional software that could be used inside and outside the classroom for teaching and learning English. Interviews and questionnaires were used to learn more about the students' opinions regarding the app. The findings showed that mobile learning may be used in English classes and for self-study by students. Students could practice English in and out of class with the app's help, which supplied lesson-related resources. Students who took part in the study exhibited enthusiasm for mobile learning.

Heil et al. (2016) observed the application of "Mobile language learning" and had the potential to change the mode of languages that have been learned. This study inspected the fifty applications of learning language for mobile phones that have been commercially available and mostly famous and also evaluated along with an extensive range of criteria. They found three key trends. 1st is that applications do not teach related contexts but tend to teach vocabulary in isolated units. 2nd, applications for personalized learning are slightly adapted to suit sets of skills. 3rd, for learners, applications provide explanatory remedial feedback hardly. These applications have been behaviourist in nature, even with a pedagogical move toward more methods of communication to learning language.

Mindog (2016) explored the utilization of smartphone applications. Students were taken from four Japanese universities to learn English as a Foreign Language (EFL). Data was condcuted through interviews. Results indicated that the learners of intermediate language use applications to communicate and access content on social networking services. Also, it is not keen on studying distinct parts of language. In addition, using applications helps with four language skills (reading, writing, listening, speaking): spelling, grammar, and vocabulary. The usages of applications (frequency, duration, location) are determined by a personal desire to use, preference, and chance.

Gangaiamaran & Pasupathi (2017) conducted a "*Review on the Use of Mobile Apps for Language Learning*." According to research, mobile devices are increasingly used to teach and learn languages. Any student can easily access Mobile Assisted Language Learning (MALL), regardless of location or schedule. In mobile learning, iPads, iPods, tablets, laptops, and smartphones scaffold language acquisition. Numerous apps have been created and used by those learning English as a second language. This study examines the classification of mobile applications for elementary, secondary, and postsecondary education students. Peer-reviewed articles and dissertations focused on using, evaluating, and analyzing mobile apps for language acquisition. This study also looked at popular mobile apps' pedagogical, methodological, design, and philosophical aspects. The emphasis should be on using mobile technology to study language skills like speaking, listening, reading, and writing because these apps are meant to assist learners in developing their language abilities. Consequently, the results indicate that listening comprehension is easier to learn using apps than other language skills.

Kuimova et al. (2018) reviewed the challenges and advantages of mobile learning and its expectations from foreign language learning. The study used the method of assessing students' achievement. They experimented on first-year English students (as a foreign language at National Research Tomsk Polytechnic University). Four groups were taken. Two were control groups, and the other two were experimental groups. Ten students were included in every group; their ages ranged from 17 to 22. This experiment was for ten weeks. The level of English was pre-intermediate. The control groups used old-style teaching, while the others used old-style teaching and M-learning to improve the learning process. The results indicated that mobile learning could help quicken learning. Also, it provides experiences of collaborative and independent learning. Further, it enhances the chances for language rehearsal, promotes lifelong learning, and gives valuable interactions.

Wan (2019) researched "*The Application Research of the Mobile Learning App "English Fluency" in College English Oral Teaching*." According to the study's findings, school teachers must blend the characteristics of this era, disregard personal style, and stay up with the times to incorporate the current trend. Based on the background of mobile learning apps, they may play an active part in the oral English of college students in everyday life, but they also require and continue to improve in order for this learning mode to reach its optimal condition.

Loewen et al. (2020) investigated the usefulness of a single app for fostering the development of oral communicative competence in a second language and linguistic knowledge of vocabulary and grammar. 54 English language learners were registered for classes that used apps. The training lasted 12 weeks, with a daily study goal of about 10 minutes. In addition to completing pre-and post-tests, participants supplied information about their motivation for language learning. The

findings demonstrated that students might improve their oral communication skills and their knowledge of grammar and vocabulary. The most significant predictor of development in oral communication ability across all three measures was the length of study time, followed by motivation to learn a language.

Ali et al. (2020) researched "*The Acceptance of Mobile Assisted Language Learning as a Primary Learning Tool for COVID-19 Learners*". The study discovered that the mobile phone is one of the unique machines designed to link people but has now been utilized for various other functions. Mobile phone users are in the millions and billions today. For the study, an online survey was undertaken, with 100 students receiving a purposefully planned and ordered questionnaire. According to the findings, students at public colleges were deemed to be at ease, lively, and upbeat. MALL was a fun way for them to learn English. Additionally, learning English through MALL assists students in gaining confidence in other areas. In comparison to other technical tools, MALL can be an effective technological integration in Pakistani private sector institutions and classrooms if appropriately managed, according to the findings of this study.

Naz et al. (2021) conducted a study on "*The Role of Smartphones in Learning English: A Study of Learners' Perspectives*". This was a descriptive study, and data was collected using a mixed-method technique. Students completed self-reported questionnaires to obtain data. The questionnaires were delivered to 480 students in their last year of BS and MA English at six universities in Punjab, Pakistan. The sample was chosen using a simple cluster sampling technique. Statistical Package for Social Sciences (SPSS 22.0) was used to evaluate the data, which included frequency, percentage, mean score, standard deviation, independent sample t-test, and One-way ANOVA. The study's findings suggested that MALL could be a promising method for learning English. Students were shown to be eager and motivated to learn English using their smartphones. Based on the findings, the researcher concluded that smartphones can help students learn English. Most pupils were enthusiastic about the significance of smartphones in English language learning. This study is significant for ESL students since it provides a novel teaching method but requires vital pedagogical infrastructure and training. It was suggested that it be an effective learning aid in ESL schools to help students learn English. Experiments on the effectiveness of smartphones for learning English can also be conducted.

In Malaysia, Jamal et al. (2021) researched "*The Use of Mobile Apps as Strategies in Teaching Vocabulary among English Teachers*." According to the study, investigations have shown that proficient English users need to learn a diverse English vocabulary. ESL students can use various learning methodologies to learn vocabulary, and ESL teachers play an essential role. Integrating technology into the learning process is one of the most effective methods. Despite the widespread usage of computers in education, the role of mobile phones and mobile applications is growing more prominent. This paper examines English instructors' usage of mobile applications (apps) as vocabularies-teaching tools. Many studies have shown that using mobile applications in the classroom can pique students' attention and boost their participation in the learning process. As a result, compared to traditional teaching methods, pupils can acquire more vocabulary. Teachers and educators, on the other hand, must be well-versed in effectively conducting mobile app-based learning and considering students' social and economic backgrounds.

Kilmova (2021) conducted a research study, "*Evaluating Impact of Mobile Applications on EFL University Learners' Vocabulary Learning - a Review Study.*" The study revealed that because of its unique qualities, mobile applications are now widely employed in higher education, especially for students studying English as a foreign language (e.g., portability, multimodality, interaction, or ubiquity). In contrast to traditional classroom learning, learning using smartphones and mobile apps is, on the one hand, notably learner-centered in the sense of autonomous and personalized learning. However, it requires students who want to improve their academic performance to be proactive and responsible. In order to ascertain whether EFL mobile apps have a substantial, moderate, or no influence on learners' vocabulary augmentation, the purpose of this review article is to ascertain whether these applications impact the vocabulary learning of EFL university learners. The methodology of this study is based on a search for papers on the research problem, which is the impact of mobile applications on the vocabulary development of EFL university students, using the global databases Web of Science, Scopus, and Google Scholar. The period covered by the search was January 1, 2017, to July 31, 2020. After carefully evaluating the inclusion and exclusion criteria, five research studies were finally selected. The results of this study indicate that mobile applications are suitable, practical, and efficient learning aids for memorizing and using new language. They enable the input interaction-feedback presentation style to replicate standard classroom instruction.

On the other hand, only two researchers used the mobile apps on their own; they were mainly used as an addition to conventional training. The results also demonstrate that an effective learning process can only be achieved through these apps' carefully planned and regulated implementation. Extensive research should employ carefully designed empirical investigations, especially concerning methodology.

4   Conclusion

The transformation of physical learning into digital learning raised questions of effectiveness and the alternatives. The emergence of Mobile-Assisted Language Learning (MALL) provides the opportunity for language skills enhancement and offers a vast range of practices and networking opportunities. New and innovative practices can only be held through MALL. Though the devices are easy to take, the only issue is the guide. The methodology is favoured in the case of pandemics and remote education, but the challenges that can occur are the feasibility of the facilities, internet connection, and time management.

4.1   Findings

- The significant features of mobile phones in this regard are "portability" and "accessibility of information," which play an integral part in enhancing the English language and teaching process.
- The advancement of mobile devices led to the transformation of physical work to portable devices, which emphasizes the continuity or spontaneity of the work.
- MALL will replace CALL in the educational field as mobile devices have some unique characteristics: Mobility, connectivity, social networking, portability, individuality, and context sensitivity. The mentioned features cannot be replaced through the Desktop either.

- The use of apps and mobile devices has made many contributions to progress in the English language learning.
- English language learners use electronic dictionaries to practice and improve their pronunciation, as well as how they interpret instructions to use technology more spontaneously and self-initiated for language tasks.
- Audio-video aids can enhance learning outcomes.
- The use of technology can enhance the teaching and learning process as well as enhance feelings of learning satisfaction.
- The recent changes in the modern era are changing from the growing and enhancing part of life. The videos of foreign languages are mostly of past experiences, yet new trends are also required in this field.
- The integration of apps can serve as a link between two fields: educational technology and computer science.
- Collecting and synthesizing knowledge from these two professions can be beneficial and relevant during integration.
- Discoveries and insights can add to the body of knowledge.
- The extensive usage of mobile wireless technologies has made more chances to shift the old-style academic environment to mobile learning.
- The change in the performance of learners is favourable. Further, using apps helped boost vocabulary learning, participation in class, and confidence.
- Learners and teachers of language should be encouraged to use smartphones in classrooms. Because of this, the environment would be more productive, and they would have more desire to learn.
- Mobile learning may be used in English classes and for self-study by students. Students could practice English in and out of class with the app's help, which supplied lesson-related resources. Students who took part in the study exhibited enthusiasm for mobile learning.
- These applications have been behaviourist in nature, even with a pedagogical move toward more methods of communication to learning language.
- Listening comprehension is easier to learn using apps than other language skills.
- MALL provides experiences of collaborative and independent learning, enhances the chances for language rehearsal, promotes lifelong learning, and provides valuable interactions.
- School teachers must blend the characteristics of this era, disregard personal style, and stay up with the times to incorporate the current trend. Based on the background of mobile learning apps, they may play an active part in the oral English of college students in everyday life. Still, they also require and continue to improve for this learning mode to reach its optimal condition.
- Students might improve their oral communication skills and their knowledge of grammar and vocabulary. The most significant predictor of development in oral communication ability across all three measures was the length of study time, followed by motivation to learn a language.
- Learning English through MALL assists students in gaining confidence in other areas too.
- An effective learning aid in ESL schools to help students learn English. Experiments on the effectiveness of smartphones for learning English can also be conducted.

- Teachers and educators, on the other hand, must be well-versed in effectively conducting mobile app-based learning and considering students' social and economic backgrounds.
- Mobile applications are suitable, practical, and efficient learning aids for memorizing and using new language. They enable the input interaction-feedback presentation style to replicate standard classroom instruction.

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