

# A Critical Overview of the Implementation of Language-Immersion Through the Use of Mobile Apps

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**Abstract**—The use of m-learning, also known as mobile learning, allows the new generation of people to have better communication and activities regardless of location and time. The purpose of this research is to understand more about how students learn English using their mobile devices. Mobile technologies are increasingly being used in language teaching and learning. MALL (Mobile Assisted Language Learning) allows anybody to study regardless of their location, job, studies, and time constraints. In mobile learning, smartphones, iPods, tablets, computers, and iPads are utilised to facilitate language acquisition. There are various applications available for persons studying English as a second language. This research looks at how mobile apps are classified for elementary, secondary, and tertiary learners. This research focuses on the implementation, analysis, and assessment of language learning mobile apps. The concept, technique, theoretical, and pedagogical characteristics that drive modern mobile applications are also discussed in this article. Because these applications are designed to help learners improve their language abilities, the focus should be on learning the four important language skills of listening, speaking, reading, and writing using mobile technology. It also reveals that apps are more effective at teaching listening and speaking skills than traditional learning techniques.

**Index Terms**—Smartphone Apps, acquisition, computer assisted language learning, language skills, and mobile assisted language learning

## I. INTRODUCTION

### A. *The Transformation of Technology and the Significance of M-Learning*

Everyone has a portable mobile device in this technological era. They engage with individuals from all around the world using these devices and simple internet connections. People converse or exchange information with one another at all times and in all places. The term “mobile” refers to “capacity”, or the “mobility” to transfer easily and readily from one location to another. The use of mobile gadgets in any field of study is referred to as mobile learning (El-Hussein & Cronje, 2010). Portability and information accessibility are significant aspects of mobile technology that help improve English language teaching and learning.

The learner’s choice may be the most important feature of M-Learning. It is up to the student to choose the location and time for language study (Kukulka-Hulme, 2012). It is increasingly difficult for anyone to arrive at a consistent idea in the domain of mobile learning due to the development of new mobile devices on the market.

In general, mobile learning refers to the mobility of portable, personal, and wireless devices used in the learning of a language, such as laptops, smartphones, personal digital assistants, palmtops, and iPods. There are several natures of mobile learning. “Suppleness of tools”, “Information accessibility”, “Learning Flexibility” are the specialties of mobile learning

Technological mobility refers to mobile devices that have Wi-Fi capabilities and communicate information and learning materials via the internet through the utilisation of the Wireless Application Protocol. M-learning promotes learners’ mobility. Learners may engage in more flexible, accessible, and customised learning with portable and personal mobile devices and techniques regardless of location. Without setting a time constraint, the agility of the learning process is enhanced through mobile learning.

### B. *Adaptation of Mobile-Assisted Language Learning (MALL)*

Mobile-assisted language learning includes both m-learning and computer-assisted language learning. CALL is a term used to represent a range of technologies aimed at enhancing creativity and cooperation, mainly through social networking, according to Beatty (2010). The widespread use of mobile devices in recent years has given rise to the acronym MALL, which varies from CALL in that it emphasises continuity or spontaneity of access across many

contexts of use, whereas CALL emphasises the use of personal, portable devices that enable new kinds of learning (Kukulska-Hulme & Shields, 2008).

According to previous research studies, CALL has various disadvantages, including insufficient in-depth communication, erroneous monitoring, a disrupted learning process, a high workload, and teachers' lack of computer skills (Garrett, 2009). Kukulska-Humle (2009) claimed that MALL can compensate for CALL's inadequacies. The most essential features of mobile devices are Mobility and portability, Social interconnectedness, Individuality, Context sensitivity.

### C. Enhanced Functionality in MALL

Mobile phone usage has changed dramatically. On a single phone, you can do everything from downloading a ringtone to operating many software programmes. Even though mobile learning is not a new idea, the expanded capabilities of contemporary mobile devices have peaked the curiosity of many instructors interested in using this new technology in their classrooms. Godwin-jones (2011) says, "The iPhone, iPod, and iPad, as well as other new portable devices, are powering the most mobile apps ever."

Apps are abbreviations for "application software," which may be downloaded through "app shops such as the Google Play, App Store, BlackBerry App World, and Windows Phone Store." Smartphone applications are software programmes that run on smartphones, tablets, and other mobile devices. Some of the programmes are available for free download, while others require money. Gaming, entertainment, and education are some of the mobile app categories.

## II. CLASSIFICATION OF MOBILE LEARNING APPS

Globally, the number of apps created and downloaded by individuals annually increases exponentially, as evidenced by the mobile application statistics. There are numerous English learning applications available for download in app stores, and selecting the proper app might be a difficult task. The student faces trouble in selecting the proper app, and they do not have clarity over which of the apps is best and which does not match the learner's specific level. Apps to help learners can be classed as follows:

### A. Primary Learners

Initial learners are increasingly using mobile devices as they become more commonplace. Early learners are young children who use mobile devices to connect and play games. Reviewers and teachers have used mobile gadgets with children to develop their learning. Technology for this use yielded effective learning and had favourable outcomes (Liu et al., 2014).

Apps for kids can educate them. There are numerous educational apps accessible in the app store; choosing the proper one for youngsters might be difficult but can influence their perspective on the learning process. The advantages of mobile applications in education are it is more Friendlier, Amusement in learning, Availability and Accessibility, Effective Utilization of Leisure Hours, Alternate modes of learning, Exciting and casual.

According to recent surveys, young children are increasingly using mobile gadgets. They become enthusiastic about utilising these technologies since they provide them with so much delight. Preschool Children, in particular, lack the discernment to judge what is good and bad for them, especially when it comes to mobile technology. It is the responsibility of their parents and teachers to serve as decision-makers in directing them in the selection of appropriate material that does not hurt children while also enhancing their learning (Kim et al., 2015).

Combining a humanoid robot and a smartphone, Kim developed an app for preschoolers to learn English based on theories of child development. They recruited four children aged three to five years and observed them two to three times over the course of two weeks, spending one hour on each kid each time. The robot is treated by children as if it were a friend, and they learn the language naturally and enjoyably.

"Children utilise not just classic, traditional toys, and materials such as blocks, dolls, balls, puzzles, sand, but they also interact regularly with technology such as digital media," says Lee (2015). He further did a case study in which he used iPads in schools in the United States to help young children develop their social skills. He stressed the use of digital tools in conjunction with children's learning. This study has boosted children's engagement in the learning process. The use of iPads makes them attentive in the majority of time and increases their curiosity level. The technology gadget increased these kids' motivation.

Children from 3 to 10 years of age are considered primary learners. Children of this age group begin learning the English language with the alphabet and progress through letter recognition, alphabet sounds, and letter tracing to write. They like to pay attention to lively music, rhymes, and stories. Learning the colours of various items, forms, names of animals, fruits, vegetables, and other things might help them improve their lexical knowledge. Smartphone apps are being created to meet the needs of learners in this age range.

### B. Secondary Learners

Students aged 12 to 17 are classified as secondary-level learners. The use of a mobile device enables you to communicate with learners in a manner that is familiar to them. It places active control over their learning in their hands (Redd, 2011).

Bonnstetter and VanOverbeke (2012) say that the primary classroom establishes the foundation for the curriculum areas and students' future achievement. Apps provide an exciting and dynamic environment for learning, from creative writing to mastery in mathematics. Teachers in primary schools could benefit from the mobile learning environment, according to Tan and Liu (2004). Mobile learning systems and m-Tools (mobile learning applications) were created to manage all learning activities for primary children both inside and outside of the classroom. They did a positive experiment in which they used mobile phones to increase students' learning interests and motivation.

Redd's investigation found that developing a high school student's vocabulary through an app was helpful. She used an iPod to offer a game for these pupils to improve their vocabulary in three weeks. The results indicated a substantial difference between the tests, confirming that the usage of mobile devices is useful in the growth of vocabulary among high school students.

To boost high school students' listening and speaking skills, Liu (2015) developed the HELLO sensor and portable augmented reality. This gadget provides excellent instructional resources to help pupils achieve the desired abilities. The study included about 64 students, and the test results indicated that learners in the targeted group outscored the learners in the control group. The significant difference was indicated by 6 points in the first test, 8.5 points in the second test, and 8 points in the third test.

Equipping learners with learning applications can modify the conventional lecture class and increase their enthusiasm for learning. The secondary learner progresses to the next level as the primary learner masters the language's fundamentals. Students in this class will work on developing their oral and written communication skills, as well as their listening, speaking, reading, and writing abilities. Students, on the other hand, will learn grammar, vocabulary, pronunciation, spelling, and other abilities as part of language acquisition.

### C. Tertiary Learners

Tertiary-level learners include college students and adults. As the creation of English-learning apps for mobile devices has grown in popularity, students' interest has grown as well, and mobile devices have become more popular among college students. According to the findings, mobile-assisted language learning (MALL) can help students enhance both their English skills and their enthusiasm to learn. It appears to be beneficial and effective for college students to learn English on their own utilising mobile devices (Liu & He, 2015). Due to the rapid growth of app technology, these English learning applications may combine diverse media, including text, images, animation, audio, and video, to provide a multimedia instructional resource to prompt students. There are several applications pertaining to English learning that provide college students with simple access to these resources and data. However, the App industry is a veritable jungle. There is an excessive amount of software accessible for college students to select and use. Clearly, there is a dearth of suggestions for relevant apps and advice on how to use them effectively to learn English (Liu & He, 2015). This paper can assist these learners in overcoming the difficulty of selecting the most effective learning software.

An app for Chinese college students was a goal for Li and Zou in light of the educational innovation that is taking place in light of the technological revolution. They used an innovative English learning programme to investigate students' attitudes towards mobile gadgets. They focused on all four fundamental talents and conducted the research in two stages. Both phases indicated that the applications did stimulate the students while also revealing the students' good attitude regarding utilising mobile devices for studying.

Kim (2013) showed in his experimental study that mobile-aided language learning increases students' listening skills. The participants are 44 university students from various disciplines, divided into two groups. The control group had 24 people, whereas the experimental group had 20. The genuine listening content of apps has proven useful in enhancing college students' listening skills. The mean score differed significantly between the experimental and control groups. Thus, analysis of Kim demonstrated that technological intervention improved students' listening skills.

For an experiment, Suwantarathip and Orawiatnakul (2015) engaged 80 college students to use M-learning to learn the language. They divided the first-year students into two groups of 40 students each (control and experimental). The experimental group participated in various activities focused on vocabulary learning through SMS, whereas the control group completed paper-based exercises. The experimental group's scores differed considerably from the scores of the control group, which starkly demonstrates the experimental group's optimistic results in lexical growth.

According to Huang and Sun (2010), listening activities are the initial stage in learning English. They concentrated on the development of listening skills in a mobile learning context by giving repeated listening activities. Liu and He (2015) conducted an experiment with a group of 15 Chinese university students to examine the effects of self-study English language acquisition via mobile devices. Students in China's colleges may benefit from the development of apps and the growing popularity of mobile technology by using them to learn English. Most of the interviewees thought internet tools were extremely useful and were eager to use them.

Ortiz et al. (2015) assure us that the implementation of m-learning involves various pedagogical and technological problems. It goes much beyond basic access to materials (papers, Portable Document Formats, movies, etc.) or the activities, both of which have been available. Tertiary or Postsecondary learners are often college students who are familiar with technical tools. Because they utilise these technologies on a daily basis, they are adept at using them on their own. They use their smartphones to connect with others, notably in the form of text messages, and they can take them with them wherever they go. They may have little issue adapting to the new technique of learning that

incorporates mobile technology. Postsecondary students can benefit from M-learning, according to the studies cited above.

#### *D. Available Mobile Apps for the Different Types of Learners*

Sounds Right, Supiki English Conversation Speaking Practice, Busuu, Open Language, FluentU, Kids Learn to Read, Speech with Milo Apps and Phonetics Focus are some of the apps which are very helpful for learners to improve their speaking as well as their pronunciation. Some of the available vocabulary and language acquisition apps are MindSnacks, Rosetta Stone, Memrise, Duolingo, Learn English with Busuu.com!, WordBook XL- English Dictionary, and Thesaurus for iPad. A Spelling App like Super WHY is available for the enhancement of spelling (Gangaiamaran et al., 2017).

#### *E. Statistics of Mobile Users*

According to the statistics, year after year, the number of smartphone users grows. The worldwide smartphone user base is expected to reach 6.6 billion by 2022, representing a 4.9 percent yearly rise. It is also 2.9 billion, or 79%, higher than the number of smartphone users in 2016, only six years earlier. In fact, from 2016 to 2022, the overall number of worldwide smartphone users increased at a rate of 10.4 percent each year, with 2017 seeing the most growth. The number of smartphone users increased by 20.9 percent that year. According to statistics, the number of smartphone users globally will increase to 6.8 billion by the year 2023. Given an estimated worldwide population of little over eight billion by then, smartphone penetration will be over 85 percent in 2023. In other words, more than eight out of 10 individuals worldwide will have a smartphone (Oberlo, 2022).

### III. PREVIOUS STUDIES AND FINDINGS

This article sought to categorise applications to aid learners of various categories in selecting relevant mobile apps. According to the findings of the evaluated papers and dissertations based on mobile applications, listening and speaking abilities are better developed than other skills. Top-down, bottom-up, and participatory models are the three ways of teaching listening skills. The essence of the reading material as well as the major ideas can be conveyed to the audience through top-down processing. Each word and phrase in bottom-up processing is centred on grasping the topic. "Interactive approaches attempt to establish a pedagogical listening paradigm that incorporates individual, cultural, social, contextualised, effective, strategic, and critical aspects," according to Flowerdew and Miller (2005).

Listening is an essential component of communication. Rost (2002) stresses that to grasp natural English, L2 learners must develop their listening abilities. Huang and Sun (2010) created a listening system that takes advantage of mobile devices. They built a website and added instructional resources like videotapes and visual aids. Podcasts have several advantages: First, learners can benefit from global hearing. Second, they can learn new words and languages. Third, they need to listen to real things and hear different voices.

O'Brien and Hegelheimer (2007) sought to create an approach for improving listening skills by incorporating CALL into a classroom of English. College students utilised the selected English listening course to listen to about 14 podcasts over the course of fifteen weeks. This research received positive feedback from both students and instructors.

The aforementioned research study confirms the conclusion that listening abilities are better learned than any other talent. These studies may be focusing on increasing listening abilities because these sub-skills are often overlooked in the language classroom. Reading and writing skills are more concentrated, as are speaking skills to some extent. Mobile devices provide a wealth of options for learners to improve their listening skills by exposing them to real content such as live streaming, English music, radio, and listening to English news. This review report categorised mobile applications with the goal of assisting ESL learners in selecting the appropriate app. This app classification can improve the utilisation of mobile learning for skill acquisition for language.

### IV. SUGGESTIONS FOR FUTURE RESEARCH

It's hard to imagine our lives without smartphones, iPads, iPods, and laptop computers. Renovating these technologies for language study can help students attain self-regulated learning. From a self-access learning perspective, future research may look into how mobile apps can be researched and enhanced. Smartphones, iPads, iPods, and laptops are commonplace. These gadgets can be used for self-regulated language learning. Future research may examine mobile apps with self-access learning. Students choose what, how, and when to learn to measure their own progress in learning. Students may learn when and where they choose by using online resources with self-access learning.

Another proposal for future study is to determine which age groups can best handle technology depending on the activities that are provided. The third possibility is coping with offline mobile apps in low-income nations. Because of their lack of resources and lack of economic development, a significant number of nations throughout the world remain undeveloped. As a result, many nations are unable to buy or effectively use mobile devices in educational settings. Students can gain more knowledge about these countries through the use of offline apps. The third idea for future study might centre on the teacher's worry when using mobile gadgets to teach English. Teachers must overcome hurdles in utilising technology for successful language education.

## V. CONCLUSION

M-learning provides students a great start in the Information Technology transition by providing them with capabilities that allow them to thrive not just in their academics but also in their future employment and in mastering the English language. It enables students to utilise their laptops or computer for their on-campus studies. M-learning can be adopted because most students currently own portable devices such as smartphones, laptops, iPods, and so on. Furthermore, the supply of broadband infrastructure by telecommunications firms has extended all across the world. As a result, m-learning has begun to play an essential role in education. It is now a reality due to the presence of wireless mobile technology. M-learning is popular because it allows students to learn and gain information in a flexible manner and a modular fashion. Students can learn dynamically. As a result of this research, students will be very much aware of the importance of mobile technology in the learning process and in enhancing language abilities such as listening and speaking. Students will be eager to utilise all sorts of m-learning techniques via computers, smartphones, and tablets so that they may access materials at any time and from any location. However, m-learning will not replace conventional education. It simply gives another method of learning English via the use of modern mobile technologies.

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