

## Review on Use of Mobile Apps for Language Learning

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### Abstract

There is a rapid increase in adoption of mobile technology for language teaching and learning. Mobile Assisted Language Learning (MALL) provides easy access for any learner without the constraints of both place and time. In Mobile Learning, devices like smartphones, iPod, tablet, laptop, iPad are implemented to scaffold language learning. Numerous apps are developed and utilized for those who learn English as a second language. This paper focuses on the classification of mobile apps based on primary, secondary and tertiary learners. Reviewed articles and dissertations were concentrating on implementation, analysis, evaluation of the mobile apps for language learning. These studies also discussed the design, method, theory and pedagogical features that underpin the current mobile apps. Since these apps are developed to enhance the language skills of the learners, emphasis should be primarily made on the acquisition of language skills such as listening, speaking, reading and writing skills through mobile technology. Thus the finding shows that listening skills are better acquired through apps more than that of other language skills.

**Keywords:** Mobile learning, Mobile assisted language learning, Mobile apps, and Language skill

### INTRODUCTION

One of the most attractive technologies is mobile technology which represents a revolutionary approach to education. In recent times mobile devices have been steadily incorporated into learning. The broad use of Smartphones and different transportable and Wi-Fi gadgets has converted the traditional teaching method and learning process (Kukulka-Hulme, 2009). This extensive usage of mobile devices has fetched loads of mobile application in English Language Teaching. Numerous apps are available for language learners to download through easy access to the internet. Learning materials can be accessed easily due to the portability and accessibility of mobile devices.

This review is based on the classification of apps to help users to navigate the jungle of apps and decide which one to use. There is a lack of research about which apps are good and suitable for a particular learner. The learners are divided into the primary, secondary and tertiary level. Apps are classified according to the above -mentioned category of learners that includes children belonging to primary level, school students in the secondary level, college students and adults in tertiary level. The main objectives of this paper are,

- To aid the learners to overcome the difficulties in choosing the suitable English Learning apps.
- To classify apps based on the learners level.
- To identify the effectiveness of teaching LSRW skills through mobile technology.

### THE CONCEPT OF M-LEARNING

In this technological era, everyone has their own handheld mobile devices. Using these devices, with easy access to internet, they interact with people from anywhere in the world. Irrespective of time and place people chat or exchange information with each other. The very term “mobile” stands for the “mobility” or the ability to move freely and easily from one place to another. Mobile learning refers to the implementation of mobile devices in any branch of study. The features of mobile technology such as the portability and information accessibility plays a major role in the enhancement of English language teaching and learning (El-Hussein & Cronje (2010)).

The main characteristic of M-Learning can be the discretion of the learner. It lies in the hands of the learner to decide upon the place and time for language learning (Kukulka-Hulme., 2012). The outbreak in the domain of mobile learning makes it harder for anyone to arrive at a stable concept because of the availability of new mobile devices in the market.

Generally, mobile learning can be defined as mobility of the personal, portable and wireless devices such as the

Smartphone, personal digital assistant (PDA), iPod, palmtop, laptops used in language learning. Mobile learning can be divided into

- “Mobility of technology”
- “Mobility of learner”
- “Mobility of learning”

The Mobility of technology refers to mobile devices with Wi-Fi capacities and Wireless Application Protocol (WAP) that deliver information and learning materials through the internet. According to Hui Guo “Mobile learning increases the mobility of learners. With portable and personal mobile devices, learners could be engaged in more flexible, accessible and personalized learning practices without constraint on places”. Mobile learning enhances the mobility of learning process without time constraint.

### Mobile -Assisted Language Learning (Mall)

Mobile -assisted language learning is the subdivision of both M-Learning and computer-assisted language learning (CALL). Beatty defines CALL as “a term used for the collection of technologies aimed at enhancing creativity and collaboration, particularly through social networking”. In recent years the widespread use of mobile devices led to the abbreviation MALL which “differs from CALL in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access across different contexts of use” (Kukulka-Hulme & Shields, 2008, p.273).

Few research studies have suggested that CALL has some limitations like lack of in-depth communication, false observation, disturbed learning process, the burden of work, educators’ lack of computer knowledge (Garrett, 2009; Golonka, Bowles, Frank, Richardson, & Freynik, 2012; Warschauer, 2004). Kukulka-Hulme (2009) proposed that these shortcomings of CALL can be overcome by MALL. The important characteristics of mobile devices are

- Portability & Mobility
- Social connectivity
- Context sensitivity
- Individuality

These features cannot be offered by desktop computers in CALL.

### Mobile Apps in Mall

The usage of Mobile phones has undergone a drastic change beginning with downloading a ringtone to many software applications in a single phone. Though mobile learning is not

new, latest mobile devices with upgraded features have triggered interest among many instructors for applying this new technology in learning. The iPhones, iPod, iPad, new handheld gadgets are fuelling to the mobile app fever (Godwin-jones, 2011).

Apps are the short form of the phrase “application software” generally downloaded from “app stores such as App Store, Google Play, Windows Phone Store, and BlackBerry App World”. Mobile apps are a software application which is intended to run on iPhones, tablets and other mobile devices. Some of the apps are free to download and some others are paid. Mobile apps categories include gaming, entertainment, and education.

APP Usage Statistics:

- Number of iOS app downloaded (2015)– 25 billion
- Number of Android app downloaded (2015) – 50 billion
- A group of the population between the ages 18 to 24 years averagely spends “90.6 hrs. on Smartphone apps, 34.7 hrs. on tablet apps” monthly.

### Classification of Mobile Learning Apps

The statistical data of mobile apps exhibits the rapid progress in numerous apps being developed and downloaded every year by people around the world. English learning apps available in the app stores are plenty and choosing the right app is definitely a tiresome job. The difficulty lies on the part of the learner to choose the right app and the question lies here is which app is best and suited to the particular level of the learner? To aid the learner's apps can be classified as follows,

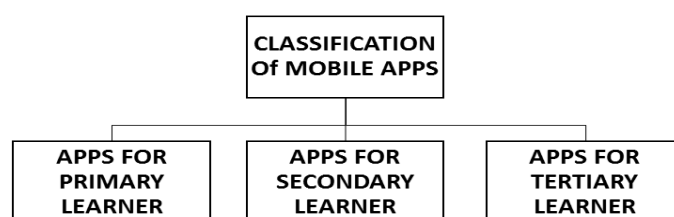


Figure 1: Classification of Apps

### Primary Learners

As mobile devices march toward ubiquity, they are finding their way into the hands of the early learners. Early learners include children of a very young age who use mobile devices to interact and for playing games. Reviewers and instructors have experimented mobile devices with children to uplift their learning (ramya.g&Madhumathi.p, 2016). This integration of technology into learning fetched positive outcome that resulted in effective learning (Liu et al., 2014).

Apps for children have the potential to educate them. There are more educational apps available in the app store, choosing the right one for children can change the way they look at the process of learning. Benefits of mobile application in Education include

- More social
- Entertainment
- Round the Clock Availability
- Effective Utilization of Leisure hours
- Alternate modes of learning
- Fun and informal

Recent studies show a significant increase in the usage of mobile devices among young children. They get excited in using these devices because it gives them a lot of joy. Pre-school children lack the ability of discretion to judge what is good and what is bad for them especially in handling the mobile devices. The duty lies here both with parents and teachers to act as a decision-maker in guiding them in the choice of the correct or suitable content which produces no harm for children but in turns enhances their learning (Kim and Smith, 2015).





Kim and Smith based on the child development theory developed an app for English learning by integrating humanoid robot with a smartphone for pre-school children.







They chose four children in the age group between 3 to 5 years have been observed for 2 to 3 times over a period of two weeks spending one hour for each child for every time. Children treated the robot as their own friend and learned the language naturally in a playful manner.

According to Lena Lee(2015 ) “children use not only traditional, typical toys and materials such as blocks, dolls, balls, puzzles, sand, but also, they interact on a daily basis with technology like digital media”. Lee conducted a case study in developing the social skill of young children with the use of iPads in schools in the United States. He emphasized the combination of the digital tool with learning among children. This study has increased the interaction of children with others. The use of iPad keeps them focused most of the time and also raised the level of interest. The technological tool has motivated the children to a greater extent.

Primary learners include children belonging to the age group 3-10 years. Children of this age group learn the English language beginning with alphabets, later on to recognition of the letters, sounds of the alphabets, tracing the letters to write. They are interested in listening to animated rhymes songs and stories. Learning the Colors of different objects, shapes, name of animals, fruits, vegetables and more can enhance their vocabulary acquisition. Mobile apps are developed to meet the need of the children belonging to this age group. Apps which are good are mentioned in the below table which suits for primary learners,

**Table 1:** Apps for Primary Level Learners

LOGO	NAME OF THE APP	DEVICE	SKILL	PAID / UNPAID
	Pogg — Spelling & Verbs	iPhone and iPad	To Learn Spelling, Language and Vocabulary. [Special Education Like Autism and Speech Therapy Support]	Paid
	Speech with Milo Apps	iPhone, iPad, and iPod touch.	Enhance speaking skill.	Paid
	Phonetics Focus	iPhone, iPad, and iPod touch.	It offers various interactive activities to develop speaking skill.	Paid
	MindSnacks	iOS	It uses fun games to learn new English words.	Paid

	Spell & Listen cards – the talking flashcards for spelling	iPhone, iPad, and iPod touch.	The talking flashcards for spelling support	Paid
	Starfall ABCs	iPhone, iPod Touch.	Letter Recognition, Phonics, and Listening	Free
	Kids Learn to Read	Android	Practicing pronunciation skill	Free
	Super WHY	iPhone, iPad, and iPod touch	Practicing the alphabet, rhyming, spelling, writing and reading	Paid
	123s ABCs Preschool Learn HWOTP Kids Handwriting	iPhone, iPad, and iPod touch.	Writing, reading	Free
	Hooked on Phonics - Learn to Read Program	iPhone, iPad, and iPod touch	Nurture child's reading skill.	Free

### Secondary Learner

Students of age group 12-17 belong to the secondary level of learners. The use of a mobile device affords a way to attain students in a way that they are adapted to. “It gives them active control of their learning in the palm of their hands” (Betsy Redd, 2011).

Bonnstette and VanOverbeke (2012) believed “The elementary classroom builds the basis for the content areas and the future success of students. From writing creative stories to fact mastery in mathematics, apps provide an engaging and interactive platform for learning.” Tan and Liu proposed mobile learning environment-MOBILE for assisting instruction and assessment in elementary school. They introduced the mobile learning system to manage all learning activities and the mobile learning tools (m-Tools) to execute learning activities for elementary students in and outside the classroom. The experiment conducted by them was promising that it enhanced students’ learning interest and motivation with the help of MOBILE.










Vocabulary development of the high school student through an app proved effective in the experiment conducted by Jennifer Betsy Redd. She introduced a gaming app using iPod for these students to enhance the vocabulary in the time period of three weeks. It fetched her the mean score of the pre-test

13.80(SD=2.20) and of the post-test 14.16(SD=2.81) which marked the significant difference between the test that reinforced the fact that the use of mobile device indeed proved effective on the development of vocabulary among high school students.

Liu (2009), to improve listening and speaking skill of the high school students created a sensor and handheld augmented reality called the HELLO. This device provided tremendous learning materials to aid the students in developing the targeted skills. Nearly 64 students were chosen for the study and the test result revealed the fact that the students in the experimental group outperformed than those of the control group. The first test score (F=13.07, P<0.05, d=0.92) specified the significant difference by 6 points, the second test (F=20.17, P<0.05, d=1.14) by 8.5 points, the third test (F=11.8, P<0.05, d=0.87) by 8 points.

Equipping the learning apps can change the regular lecture classroom and students learning interest can increase. As primary learner learn the basics of the language, the secondary will move to the next level of learning the language. Language skills like Listening, speaking, reading, writing skills will be acquired by these learners. On the other hand, they will learn grammar, vocabulary and meanings, pronunciation, spellings and more on the part of language acquisition.

**Table 2:** Apps for Secondary Learners

LOGO	NAME OF THE APP	SYSTEM	SKILL	PAID/ UNPAID
	Rosetta Stone	iOS / Android	Vocabulary Acquisition	Free
	FluentU	iOS Android	Speaking, Vocabulary Acquisition.	Paid
	MindSnacks	iOS	Vocabulary Acquisition.	Paid
	Memrise	iOS /Android	Vocabulary	Free
	Open Language	iOS /Android	Speaking	Paid
	Busuu	iOS / Android	Speaking	Paid
	Duolingo	iOS /Android	Vocabulary	Free
	Magoosh English Video Lessons	iPhone, iPad, and iPod touch	Grammar	Free
	Supiki English Conversation Speaking Practice	iPhone, iPad, and iPod touch	Speaking	Paid

### Tertiary Learners

Tertiary level learners include college students and adults group of learners. With the accelerated development of Apps about learning English and the popularization of mobile devices among college students, students have become increasingly interested in the learning benefits that apps on mobile devices bring. According to the relevant research, the Mobile-Assisted Language Learning (MALL) can not only enhance students' English ability but also increase students' learning motivation. Seemingly, it is helpful and efficient for college students using mobile devices to learn English by themselves (Liu & Xuan He, 2014). The rapid development of app technologies has made these English learning apps have the capability to integrate different media, for example, text, picture, animation, audio and video can be integrated in order to create a multimedia instructional material, as well as prompt students' interest in studying.

There are a lot of apps referring to learning English for college students who have an easy access to these resources and materials. But the reality is that the App market is like a jungle. There is too much software for college students to choice and use. Obviously, there is a lack of recommendation about relevant apps and suggestions about how effectively to use them to learn English (Liu & Xuan He, 2014). This paper can aid these learners to overcome the problem of choosing the right app for learning.

Li and Zou tried to construct an app in order to aid the college students belonging to china keeping in mind the innovation that takes place in the field of education with regard to the technological revolution. They innovatively incorporated the English learning app to explore the students' perspective towards mobile devices. They targeted all the four basics skills and conducted the study in two phases. Both the phase confirmed that the apps did motivate the students and simultaneously revealed the positive attitude of the students towards using mobile devices for learning.

Mobile assisted language learning improves the listening skill of the students which is proved by Kim (2013) in his experimental study. The participants include 44 university students of different discipline who were split into two separate groups. The control group comprised of 24 participants and 20 participants in the experimental group. The authentic listening material of apps proved effective in improving the listening skill of the college students. The mean score had a significant difference ( $M=422.19$ ,  $SD=114.69$  in the control group;  $M=490.00$ ,  $SD=87.09$  in the experimental group,  $p<.05$ ) between the experimental group and the control group. Thus, the analysis proved that technology intervention

enhanced the listening skill of the students.

Ornprapat and Wiwat (2015) chose 80 college students to introduce M-learning into their vocabulary acquisition. They divided the first-year students into two groups (control and experimental group) with had 40 students each. Through SMS the experimental group indulged in various exercises given to them on the basis of vocabulary acquisition whereas the control group performed paper-based exercises. The mean score of the experimental group ( $M = 33.25$ ,  $SD = 5.67$ ) significantly varied from the control group ( $M = 29.70$ ,  $SD = 5.57$ ). This difference in the score vividly proves the positive result in the development of vocabulary among the students in the experimental group.

According to Huang and Sun, "listening exercises are the first step for English language learning". They focused on the listening skill development in mobile learning background by providing repeated exercises on listening. Liu and Xuan He (2014) experimented with 15 college students studying at USST or SDTU, China to examine the effect that college students use mobile devices to learn English by themselves. With the popularization of mobile technology and the explosion of apps, Chinese college students can use mobile apps to improve their English ability. The finding suggests that the undergraduates are willing to use apps to learn English with self-regulated learning approach instead of traditional learning approach. They also analyzed that which online resource is better for the students to improve their speaking, reading and listening skills. The primary data were gathered from the interviews and experiment conducted by the authors. Out of five interviewees three of them considered that online resources were very helpful and they were willing to do it.

According to Ortiz, Alcover, Sánchez, Pastor, and Herrero "the introduction of m-learning presents many pedagogical and technological challenges. It is going far beyond the simple access to information (documents, PDFs, videos, etc.) or the provision of exercises, something that has already been offered for some years via virtual classrooms". The tertiary learners generally include the students at the college level for whom the technological tools are not something new. They know how to handle these tools by themselves since it has become a part of their daily activity. They interact with others especially through their Smartphones which is portable for them to carry anywhere with them. They may not face any difficulty in their exposure to the new method of learning which has incorporated the mobile technology. The aforementioned studies have proved that M-Learning can enhance the language learning among the tertiary learners.

**Table 3:** Apps for Tertiary Level Learners

LOGO	NAME OF THE APP	SYSTEM	SKILL	PAID/ UNPAID
	Sounds Right	iOS, iPad	Enhances the articulation and pronunciation of vowels and diphthongs.	Free
	WordBook XL – English Dictionary & Thesaurus for iPad	iPhone and iPad	Enhances the vocabulary acquisition.	Paid
	Speech Tutor	iPhone, iPad, and iPod touch.	It helps the learner in pronouncing specific letters and phonemes.	Paid
	English Podcast for Learners	Android	Nurture speaking, listening skills through audio.	Free
	Voxy	iOS and Android.	It connects learners with native English speakers to learn English and also through games.	Free
	English Listening and Speaking	iOS and Android.	By conversational stories and transcripts, along with word chain games it helps the learners to identify and assess pronunciation.	Free
	Exam Vocabulary Builder	iPhone, iPad, and iPod	Vocabulary Acquisition through illustrative sentences which helps Learners to understand how each word is used in context	Free
	Learn English with busuu.com!	iPad, iPhone.	Vocabulary Acquisition, Grammar Learning	Free
	Sentence Builder for iPad	iOS, iPad.	Helps the learners to frame sentences without a grammatical error.	Paid
	Learn English, Speak English - Conversation Course with Free Video Lessons - Speaking Pal	Phone, iPad, and iPod touch.	Helps the learner to speak in English with a video character.	Free

## FINDINGS AND CONCLUSION

This review paper aimed to classify the apps in order to assist the learner of different category in choosing the appropriate mobile app. Findings from the reviewed articles and dissertations based on mobile apps show that listening skill is better acquired than that of other skills. There are three approaches to teaching listening skills they are top-down, bottom-up and interactive models. In the top-down processing, listeners get the gist and main ideas of the listening passage. In bottom-up processing, each and every vocabulary and phrases are focused in understanding the concept. Flowerdew and Miller (2005) believe that “interactive models try to introduce a pedagogical listening model that encompasses individual, cultural, social, contextualized, effective, strategic, and critical dimensions”.

Listening plays an important role in communication. Listening is considered as the first skill to be acquired early before other skills, especially with children who are a good listener and grasp the language even before they start to speak [Ghaderpanahi, 12]. Listening is a passive skill and improving listening skills in a second language is not easy since students have to process both content knowledge and linguistic knowledge simultaneously while listening. Listening can be defined as “identifying the sounds of speech and processing them into words and sentences”. One of the aims to teach English listening is to prepare students for understanding actual speech in real communication situations. According to Rost (2002), L2 learners need to improve their listening skills in order to understand natural English speech.

Huang and Sun (2010) designed a system to use mobile devices for listening. They constructed a website which uploaded learning materials including video, and few listening exercise. They studied the capability of mobile technology on English listening skills and concluded that mobile English listening exercise system made students develop English listening abilities to a higher degree. Constantine (2007) summarized the benefits of podcasts: First, students can profit from global listening; second, learners can be opened to the unique expressions and a new language; third, students need to listen to authentic materials and be exposed to various voices.

Podcasting is becoming increasingly popular in educational contexts. Bryan and Hegelheimer (2007) attempted to develop a strategy to enhance the listening skill by combining CALL into an English course. The chosen English listening course was applied to college students who listened to nearly 14 podcasts over a fifteen week period. This study fetched satisfactory result from both the students and the educators.

The aforementioned study conducted by researchers reinforces the findings that listening skills are better acquired than that of any other skills. The reason these studies concentrates on improving the listening skills may be that

these sub-skills related to listening are neglected in the language classroom. Reading and writing skills are more focused and speaking skills to some extent. Mobile devices provide plenty of resources to develop the listening skill of the learners who can be exposed to authentic material like live streams, English songs, radio, listening to English news. This review paper thus classified the mobile apps with the objective of aiding the English language learners to choose the suitable app. This categorization of apps can enhance the use of mobile learning in acquiring different skills of language.

## SUGGESTION FOR FUTURE RESEARCH

Mobile devices like smartphones, iPads, iPods, and laptops have become part of our daily lives. Self-regulated learning can be developed by transforming these devices usage for learning the language. The future research can include how mobile apps can be studied with the perspective of self-access learning. Students choose what they will learn, how they will learn, and decide for themselves how they will assess their own learning. Through self-access learning, the students can determine when and where to learn with the use of online resources.

Another suggestion for future work can be that which age group can handle the technology better based on the activities that are designed. The third can be in dealing with off-line mobile apps in poor economic countries. Many countries around the world are underdeveloped and economically poor, such countries cannot afford or implement the mobile devices effectively in education. The off-line apps can help to uplift the students’ learning of these countries. The final suggestion for future research can focus on the teacher’s anxiety in the use of mobile tools in teaching the English Language. Teachers have to overcome the challenges in implementing technology for effective teaching of the language.

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