MOBILE ASSISTED LANGUAGE LEARNING (TECHNOLOGY INTEGRATION IN ENGLISH LANGUAGE CLASSROOMS)

By

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ABSTRACT

In the world of digitalization, the importance of English language education has its own pivotal space. Compared to other languages in the world, the English language is considered an international language either to get an admission into various universities through international tests or for better communication in enhancing one's career ladder. The learners have better access to learning the English language through the best source, called Mobile Assisted Language Learning (MALL), which is one of the latest usages and is being touted as one of the best, easiest, and most interesting options for learning a language for the last decade in India. This paper aims to investigate the effectiveness of MALL in enhancing the speaking skills of language learners, besides providing personalized learning with instructions and feedback to language learners. The usage of technology in MALL mediates in enhancing language learners' oral proficiency and develops and evaluates new MALL tools and materials that could be implemented for improving language learners' speaking skills. The paper aims at assessing the impact of MALL on language learners' speaking skills by focusing on prioritizing and developing accuracy and fluency, diction, pronunciation, and also one's comprehensive skills so as to investigate the effectiveness of different types of MALL activities and software related to it.

Keywords: MALL Applications, Speaking Skills, Language Learners, Fluency Development, Pronunciation Training.

INTRODUCTION

Mobile-Assisted Language Learning (MALL) has taken a pivotal role in learning language. The usage of mobile-assisted language learning has become one of a kind in the past years in the Indian language learning scenario. Compared to other languages in the world, the English language is considered an international language when it is used to such a wider extent. One needs to prove one's English language proficiency either to get an admission into various universities through international tests or for better communication in enhancing one's career ladder.

This paper has objectives related to SDG

One of the best ways that technology is introduced in language learning is MALL. This has not just started for English language learning, but various other world languages can be learned through MALL. The advent of the technology in connection with the World Wide Web and various online and offline apps revolutionized MALL by providing unprecedented access to authentic language resources and real-time communication opportunities.

MALL was hitherto just a language-instructing tool and was usually one-way. Learning a language was primarily text-based and focused on drills and practice exercises, providing repetitive grammar and vocabulary exercises. But later the software was enhanced to such an extent that it started enhancing communicative competence rather than mere repetition of language forms. MALL is

considered in replacing the role of facilitator. With the advancement of technology, MALL is not just enhancing language skills among learners but is also providing personalized learning with instructions and feedback to language learners. The usage of technology in MALL mediates in enhancing language learners oral proficiency and has developed and evaluated new MALL tools and materials that could be implemented for improving language learners speaking skills. MALL is not just a one-way approach, but it has gained prominence to the extent that learning through it has gained its own space in educating both the learners and the teachers. These apps can be used by the learners in the absence of the facilitator for more hours, even if the class timings are over. They are mostly loved by the learners as they are very handy, colorful in presentation, innovative, and interesting methods for them to learn, and their inhibition would also become less. Listening is very important in learning to speak. It not only enhances the learner's comprehension skills, it helps the learner to speak more accurately, to develop their vocabulary, and to refine their understanding of grammar.

The benefits of using mobile applications in education include enhanced interaction, entertainment, 24/7 availability, leisure hours utilization, systematic learning activation, portability, instant updates, tracking learners progress, etc., which results in contributing towards new learning methods, enhanced communication, ebooks, online study, etc.

Successful MALL implementation led to increased learning for both teachers and students (Burston, 2014). Needless to say, technology, which is defined as anything that makes lives easier, has unquestionably a great impact on people's daily lives (Stockwell, 2013). This software is so well designed to teach vocabulary, pronunciation, grammar, fluency, and also comprehension skills. The paper aims to investigate the effectiveness of MALL tools in enhancing learners' speaking skills by focusing on fluency, pronunciation, vocabulary enhancement, and learner involvement (Stockwell, 2010; Thornton & Houser, 2005).

1. Literature Survey

Mobile-assisted language learning is a general approach and is considered one of the 21st-century skills (Kukulska-Hulme, 2012). Mobile learning was initially defined as a subset of e-learning (Ahmad et al., 2020). Initial projects on mobile learning took place with that of the pilot studies and the kind of trials adapting existing e-learning instruction to mobile devices (Kukulska-Hulme & Shield, 2008; Kukulska-Hulme & Traxler, 2005).

Kukulska-Hulme and Traxler (2005) presented a compilation of research papers, case studies, and projects that explore the role of mobile technology in education. It acts as a comprehensive guide to those who avail themselves of mobile technologies to improve educational results (Meskill, 2002). The proliferation of MALL devices such as smartphones and tablets has facilitated the development and implementation of applications for educational purposes.

MALL lies in the principles of constructivism and sociological learning, emphasizing active learner engagement, cooperation, and personal instructions. Vygotsky's (1978) sociocultural theory also aligns with the MALL, as learners interact with peers and digital tools to co-construct knowledge. Learners find learning languages with MALL devices quite motivating due to their portability and ubiquity (Kukulska-Hulme, 2009). Mall has revolutionized language education by offering flexibility, privatization, and real-time response. While challenges exist, its ability to increase speaking skills through interactive and AI-operated devices makes it an important component of modern language learning. Facilitators have documented the effect of MALL on speaking skills (Ary et al., 1972). The MALL program is designed to improve speaking skills and is still very limited, and this requires further research on the application of mobile technology for the development of oral skills (Ahn & Lee, 2016). Many technological advancements in MALL have facilitated speech recognition technology, where it allows learners to practice pronunciation and receive immediate feedback. Artificial intelligence and machine learning enable personalized learning experiences by adapting to the learner's progress and preferences,

besides working on voice recognition, immediate error correction, and constructive feedback.

With the rapid digitalization of education, Mobile-Assisted Language Learning (MALL) has emerged as a powerful tool to increase English language proficiency. Unlike traditional language learning methods, MALL integrates mobile technology to provide flexible, accessible, and interactive learning experiences. MALL's role in improving speaking skills, pronunciation, diction, and overall language flow has attracted much research. This literature review examines the effectiveness of MALL, its educational benefits, challenges, and future research directions. Further research is required to address its limitations and to maximize its effectiveness in educational settings.

2. Mobile-Assisted Language Education

Recognizing this need and the increasing availability of mobile technology has contributed to a growth in Mobile-Assisted Language Learning, in which learners can study a second language (L2) autonomously at any time or place (De Vere, 2012). Most language learning applications are offered free of charge, but additional features or services are available for purchase at a cost that enhances the capabilities of the free version of the software. Other applications offer a free trial of one lesson or a seven-day trial, and then the user has to pay to start the process of learning.

3. Various Mobile Apps

3.1 Duolingo

Figure 1 shows the Duolingo educational app interface. According to Forbes, Duolingo is the "Best Free Language Lessons App." It is an application designed to make language learning enjoyable and simple, and it is proven for it. This is proven by the chart where Duolingo's downloads have reached 800 million total downloads in 2023. Moreover, the number of daily active users is constantly increasing. Table 1 shows the year-wise downloads of Duolingo.

According to sources like the company data, CNBC, and TechCrunch, Duolingo is one of the most widely used and downloaded apps, which is recognized as the best

Figure 1. Duolingo Educational App Interface

Year	Downloads
2013	10
2014	25
2015	120
2016	150
2017	200
2018	300
2019	385
2020	500
2021	575
2022	690
2023	810

Table 1. Duolingo Year-Wise Downloads
(Sources: Company data, CNBC, TechCrunch)

language learning app globally, with access to more than 40 languages, making it a flexible and accessible platform for learners. Duolingo is available on mobile and web platforms. It offers a free version that provides substantial learning opportunities, besides a paid version, Duolingo Plus, that provides an ad-free experience with additional benefits. The app makes the individual learn language bilingually by presenting lessons in both the target language and the learner's native language, thereby enhancing one's comprehension and language acquisition.

As a Mobile-Assisted Language Learning (MALL) application, Duolingo has a gamified approach to increase language acquisition (Wagner et al., 2016). The app uses the best elements, such as streaks, XP points, levels, and leaderboards, which keep users motivated and encouraged with continuous practice. Its

microlearning approach presents lessons in a bite-sized format, where the learners can study anytime and anywhere conveniently in small chunks. Furthermore, Duolingo adapts to user progress by identifying weak areas and adjusting the level of difficulty that is needed. The speech recognition technology further enhances language learning by providing instant pronunciation feedback, allowing users to practice with native speaker accents (Martin & Jurafsky, 2009). This, in turn, indirectly develops their listening skills and grammar.

3.2 Babbel: Language Learning

Babbel is a highly effective language-learning app designed to help users develop practical communication skills through structured, linguistically designed texts. The application offers courses in English and 13 different languages. Unlike gamified platforms, Babbel emphasizes the interaction of the real world, which is ideal for learners who want to improve their speaking, hearing, reading, and writing abilities. The app offers small, interactive lessons that focus on grammar, vocabulary, accent, and cultural nuances, which ensures a comprehensive learning experience. Figure 2 shows the Babbel language learning application interface.

With speech recognition technology, users receive instant feedback on pronunciation, which in turn benefits the learners in developing a natural accent. Babbel also personalizes the lesson on the basis of the learner's progress. It identifies the strengths and the weak areas in language and uses spaced repetition to enhance retention. Its user-friendly approach, combined with practical dialogue-based exercises, makes learners engage in the activities effectively, which in turn develops confidence in their target language.

3.3 English Grammar App

The Study on the Go" is a mobile-assisted learning tool designed to provide users a convenient and flexible way to master English grammar anytime and anywhere. This app uses interactive exercises, real-time response/feedback, and attractive gamification elements to help learners to build a solid understanding of grammatical concepts. With its user-friendly interface, individual teaching paths, and bite-sized texts, the app adapts to individual progress, ensuring that even complex grammar rules are presented in an accessible manner. The English Grammar App not only supports continuous learning but also fits the individual who has a busy lifestyle, making it an essential resource for those who wish to improve their language skills, unlike a traditional classroom setting. Figure 3 shows a partial view of the English grammar study app interface.

This application is the ideal tool for enhancing one's English grammar skills. The facilitator explains the rules, and exercises are selected from the app. Scores are displayed instantly, allowing for immediate evaluation. The exercises are selecting the grammatically correct option for a sentence to identify, filling in the gaps, and matching sentences.

3.4 English and Picture Vocabulary App

English Picture Vocabulary (EPV) is an outstanding app for learning vocabulary through various topics and with its

Figure 2. Babbel Language Learning Application Interface

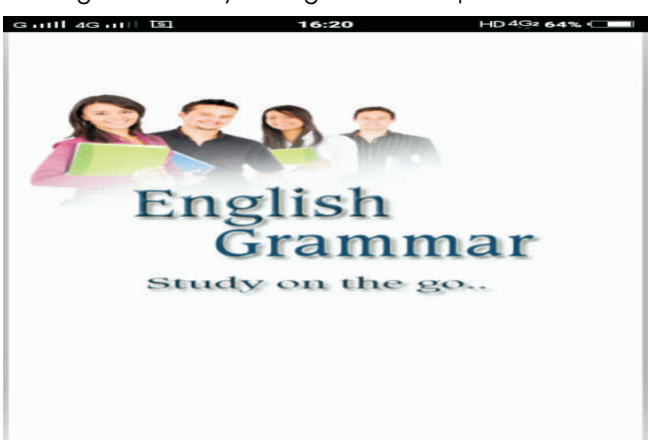

Figure 3. English Grammar Study App Interface

related images through a flashcard. The app allows users to browse easily and focuses on specific areas of interest. Users can click on a word to see its meaning along with a picture, which develops vocabulary. Organized in thematic categories such as animals, food, clothes, and everyday objects. Since visuals are memorable and easy to retain, learners are highly motivated and can acquire vocabulary quickly within a short time. Interactive quizzes and matching games are included to strengthen learning and improve retention, which is effective. Figure 4 shows the vocabulary app categories, including topics such as clothing, relationships, and food.

Despite its simple, retro interface, reminiscent of early mobile learning tools, the spontaneous design of the app ensures accessibility to the learners of all ages and technical skill levels, eventually providing a memorable and practical approach to enhancing English vocabulary. The facilitator can also provide follow-up activities to monitor the progress.

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Figure 4. EPV English Vocabulary App Categories

3.5 English Listening Practice App

The English Listening Practice App is another mobile-assisted learning tool designed to enhance learners' listening comprehension skills in English. This app provides a diverse range of authentic audio content, which includes conversations, lectures, and podcasts, which are tailored for various proficiency levels. It has interactive exercises such as gap-filling, multiple-choice questions, and transcription tasks, which result in reinforcing comprehension and retention. Figure 5 shows the app interface with categorized difficulty levels, including easy, medium, and difficult, and menu options, including rate, contact, like, share, and exit.

This app features various levels, ranging from easy to difficult. Listening activities not only enhance language skills but also expand vocabulary. It offers different lessons based on everyday situations, helping users understand how to apply what they learn in their daily lives.

The adaptive interface allows users to select content based on their current level, where it gives real-time

Figure 5. App Interface with Difficulty Levels and Menu Options

feedback, which is very important for improvement. Also, it focuses on listening skills, which one can learn anywhere and at any time, which boosts their overall English proficiency.

3.6 Phonemic Sounds App

The Phonemic Sounds App is a mobile-assisted language learning tool designed to help learners to master their English pronunciation. With interactive lessons, the app emphasizes the production, identification, and discrimination of phonemic sounds. The app offers three distinct practice modes, such as listening, writing, and reading. Users can either work with a random selection of words from the word list or focus on a specific sound or combination of sounds for targeted practice. Figure 6 shows the interface of the SOUNDS pronunciation app by Macmillan.

The chart displays all the sounds of English, divided into three sections: vowels, diphthongs (double vowels), and consonants. One can tap on a symbol to hear the sound or tap and hold to hear the sound along with an example word. The app allows one to listen to either British or American English pronunciations. Users receive immediate, personalized feedback to refine their pronunciation and strengthen their auditory discrimination skills.

With its adaptive learning interface, the app allows learners to progress at their own pace, making it an effective resource for improving spoken language skills, resulting in overall communication in English.

Figure 6. SOUNDS Pronunciation App Interface by Macmillan

3.7 English Short Stories

The English Short Stories App is a mobile-assisted language learning tool that offers a curated collection of engaging short stories in English, designed for learners at various proficiency levels. This app aims at improving the comprehension of the learners reading skills. The topics that it has are extensive and can be chosen based on the interest of the learners. Apart from that, it has topics like moral, motivational, famous people, favorite persons, etc. Here the stories are accompanied by interactive features such as vocabulary highlights, comprehension questions, and audio narration by native speakers, which work better to enhance reading fluency and comprehension. Furthermore, adjustable reading speeds and built-in dictionaries allow learners to design their experience, making the process of learning both personalized and effective. With its integrated feedback system, the app not only tracks progress but also helps identify areas for improvement, making it a valuable resource for anyone looking to improve their English reading skills and cultural understanding. Figure 7 shows the interface of the English stories offline app.

In addition to the top-rated language apps, several other mobile-assisted language applications are popular among learners, each offering distinct features and teaching methodologies (Godwin-Jones, 2011).

Figure 7. English Stories Offline App interface

4. Advantages and Key Benefits of Mobile-Assisted Language Learning

Mobile-Assisted Language Learning provides the convenience of learning anytime and anywhere at one's own pace, along with the flexibility to choose any language and course that suits your needs. These are cost-effective, including in-person lessons with instructors for individualized teaching. Many apps emphasize speaking skills from the start, helping learners begin using the language immediately. The benefits of online language learning include immediate feedback, instantly evaluating tests and essays, pointing out errors, and suggesting corrections for faster improvement. It increases motivation by allowing learners to set their own goals, study at their convenience, and use personalized curricula. Natural Language Processing (NLP) enhances pronunciation, grammar, and vocabulary.

5. Recommendations

There is a need for more research on how MALL affects learners at different proficiency levels. While some studies focus on beginners, fewer studies address intermediate and advanced learners, who may have different needs and respond differently to MALL interventions, and the majority of MALL research has been conducted in Western contexts. More studies are needed to explore how MALL tools are perceived and used in non-Western cultures and how cultural and contextual factors influence the effectiveness of MALL in enhancing speaking skills.

By addressing these gaps, future research can provide deeper insights into the optimal use of MALL for enhancing speaking skills and offer practical recommendations for educators and learners.

Conclusion

In conclusion, various apps used for training significantly impact learners' pronunciation accuracy, confidence, and fluency. Speech recognition technology plays a pivotal role by offering real-time feedback, accurate error detection, and interactive practice opportunities. Immediate feedback enhances the effectiveness of pronunciation training by enabling error correction, reinforcing correct pronunciation, and maintaining learner motivation.

The usage of technology in MALL mediates in enhancing language learners' oral proficiency and develops and evaluates new MALL tools and materials that could be implemented for improving language learners' speaking skills. Despite the extensive research on Mobile Assisted Language Learning (MALL) and its impact on speaking skills, several areas still require further investigation to provide a more comprehensive understanding.

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