Journal Impact Factor (JIF)™ 2023: 0.2 | 5 Year JIF: 0.2 | Quartile: Q2 | Source: JCR™ 2024 (Clarivate Analytics)





ISSN 0975-2935 | Indexed in the Web of Science Core Collection™ Emerging Sources Citation Index (ESCI)

https://doi.org/10.21659/rupkatha.v16n4.02 | Volume 16, Number 4, 2024 | Dynamic Impact Dimensions

#### Research article

# The Use of Mobile Assisted Language Learning (MALL) for the Language Enrichment of Learners at the Graduation Level

Edunuru Krishna Chaitanya 🗅 🖂

Department of English, Central University of Kashmir, Tulmulla, Srinagar, Jammu & Kashmir, India.

#### **Abstract**

Mobile-assisted language learning (MALL) has emerged as a prominent technological approach in the teaching and learning of English in today's advanced educational landscape. This article explores how MALL facilitates learners in mastering the English language at their own pace, in their preferred settings, and during convenient times at the UG level. This study specifically investigates the implementation of MALL tools, including Gamification, podcasts, and the Duolingo app, as intervention strategies to enhance English language proficiency among undergraduate learners through self-paced and collaborative learning experiences. Insights gathered from the research highlight the positive influence of MALL on learners' listening and speaking abilities and the overall experience in language acquisition. Employing a collaborative action research methodology, the study combines qualitative and quantitative data analysis to assess the impact of smartphone usage on content creation and learner confidence. The findings underscore the benefits and limitations of incorporating MALL in classroom settings, offering valuable implications for language educators.

Keywords: MALL Tools, Gamification, Podcast, Mobile Apps & English Language Proficiency

Conflicts of Interest: The authors declared no conflicts of interest.

**Funding:** No funding was received for this research.

Article History: Received: 20 October 2024. Revised: 08 December 2024. Accepted: 09 December 2024. First published: 20

December 2024.

**Copyright:** © 2024 by the *author/s*.

License: License Aesthetix Media Services, India. Distributed under the terms and conditions of the Creative Commons

Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Published by: Aesthetix Media Services, India ↗

Citation: Chaitanya, E. K. (2024). The Use of Mobile Assisted Language Learning (MALL) for the Language Enrichment of

Learners at the Graduation Level. Rupkatha Journal 16:3. https://doi.org/10.21659/rupkatha.v16n4.02



















#### 1. Introduction

The world has witnessed unparalleled growth and development in employing various technological advancements in almost all walks of life. One field that has experienced and adopted the latest trends in using technology is the education domain, precisely the English language teaching/learning field. With the world shrinking into a global village, a lot of thrust is placed on every prospective student to learn and master the English language to fulfill various academic, professional, and personal aspirations.

In the fast-paced world, students generally lead busy lives, focusing more on their core subjects and learning courses on cutting-edge technologies. Consequently, they sometimes express concern that classroom teaching alone cannot develop their English language proficiency. Moreover, they feel that they find it difficult to invest time in joining an institution/training center after college hours as it needs travel and monetary commitments on their part. Keeping this in view, the present research has proposed and employed certain selected tools of Mobile Assisted Language Learning (MALL) as one of the technically advanced means for students to reinforce and supplement their classroom learning.

Employing MALL tools for improving English language proficiency among students has been a widely known phenomenon across the globe because it is more flexible, cost-effective, and less time-consuming than the traditional method of learning. Additionally, it provides a valuable opportunity for students to learn at their convenience and comfort without getting stressed. Sharing a similar perspective, a study mentioned that "the use of technological tools has much learning potential and opportunities to study at an appropriate time, pace, and place" (Chaitanya & Meenakshi, 2021, p. 31). Although specific tools of MALL have been used to learn and develop competency in the English language, there remain many MALL tools, such as gamification and certain mobile applications, along with the use of podcasts less explored for developing English language proficiency among the undergraduate students pursuing professional courses in Hyderabad, Telangana State. Studying these tools, viz. gamification, mobile applications, and podcasts, requires special attention and emphasis because of their potentiality and usefulness in engaging students and advancing their proficiency.

Further, the researcher has chosen to study these tools as they have features such as authentic materials, user-friendliness, and cost-effectiveness; they have been proven to be one of the most promising sources of developing students' proficiency at their pace, convenient place, and time of their choice. Also, the motivating factor for researching them is that these tools enable students to grasp new concepts and knowledge acquired during classroom discussions or sessions instantaneously (Chaitanya & Aparna, 2022, p. 26); moreover, it is a great rewarding experience for them.

# 2. Background Information and Significance

MALL is the subarea of mobile learning, an emerging field that uses mobile technology to learn the English language. Mobiles for learning a foreign language were used in the 1980s when Twarog and Pereszlenyi used telephones to provide distant language learners with feedback and assistance (Dorota, 2010, p. 43; Chaitanya & Murali, 2023, p.6).

While mentioning about the environment of MALL or m-learning, some studies (Kumar, 2023 & Crescente, 2011, p. 14) reported that:

- i. Mobile/smartphone devices to facilitate learning
- ii. Learners access educational content online
- iii. Anywhere/anytime mobile learning
- iv. Instant Learning and Feedback

These two studies stress the possibilities of learning through mobiles and advocate how MALL emerges as an alternative tool to learn and master English language proficiency. Further, they add that the language learning materials drawn through m-learning encompass multimedia, viz. images, sounds, audio, video, and other interesting features that are engaging and motivating for the language learners. In the same vein, some studies mentioned in their works that MALL promotes "authentic learning atmosphere" and "collaborative language learning" (Shadiev, Liu, & Hwang, 2019, p. 712 & Kukulska-Hulme & Viberg, 2017, p. 207). Contrary to this, a study argues that Mobile learning, despite its highly sophisticated and convenient mode of learning, distracts students' learning ability, limits personalization and social interaction, and prevents them from accessing good technology (Sullivan, 2022). Nevertheless, denying the role of MALL in creating multiple opportunities for learners to engage in a real-time situation through authentic materials is not feasible. Asserting a similar perspective, Huizenga et al., (2009) mentioned that the tools of MALL/m-learning are meant for Generation Z (students of the present time), who are largely interested and involved in technological tools and gadgets, and they prefer to be educated/taught the latest trends rather than old and traditional paradigms. (p. 333).

In addition, many studies were conducted on using MALL (Mobile Assisted Language Learning) in different contexts. The findings of most studies report the positive effects of using MALL in language teaching and learning.

Over the past decade, Mobile-assisted Language Learning (MALL) has developed as a field within its right, with several studies examining the use of mobile devices in different contexts. In an overview of mobile-assisted language learning, MALL is defined as 'formal or informal learning mediated via handheld devices which are potentially available for use anytime, anywhere.' These devices include smartphones and tablets with internet connections and other devices like electronic dictionaries and game players that do not have internet access. (Rajendran & Yunus, 2021, p. 588).

A study focused on vocabulary learning and presented a vocabulary learning system based on Item Response Theory and the learning memory cycle. This was translated into recommending a set of vocabulary lists according to individual ability. The results indicated an increase in vocabulary acquisition and increased learning performance. The success was due to the effective and flexible learning mode. (Lashari et al., 2023, p. 144)

Another study with Japanese learners required them to use the video recording function of their mobile phones to produce short English monologues. He found that the learners could make increasingly longer videos over time. In their study, (Hashim. H et al., 2014, p.4 & Gromik, 2012, p.12) concluded that mobile devices are motivational tools for various learning activities and are

very popular among students. Contrary to this, there was an argument that employing mobile learning tools will negatively affect individuals' attitudes and lead to many distractions. Further, he contended that mobile devices should strictly be used only for non-academic purposes. In light of positive feedback reported by many researchers about MALL tools in effective learning, it will not have a great impact even if used for academic purposes as long as the purpose is clear. (Ally, 2013, p.5)

Studies have shown that MALL allows learners access to the desired learning materials (Keezhatta & Omar, 2021, p. 439 & Nuraeni et al., 2020, p. 2). It also facilitates individualized learning, allowing students to choose their learning and pace. This enhances their critical thinking abilities. Mobile devices with Wi-Fi connections help learners to access supplementary learning materials. Teachers use mobile devices to communicate and send learning materials to their learners at any time convenient. Further, it enhances self-learning, encouraging students to continue learning independently in the future too (Solihin, 2021, p. 96). Another study listed five unique educational attributes of mobile devices: portability, social interactivity, context sensitivity, connectivity, and individuality (Kloper et al., 2002, p. 2). A few studies found that continual connectivity to information leads to flexible access and engagement in learning and encourages knowledge-sharing (Alexander, 2004, p. 30; Kukulska-Hulme & Traxler, 2008, p. 272 & Murali & Chaitanya, 2023, p. 9).

#### 3. The Purpose and Design of the Study

The purpose of the study is to bridge the gap in the literature by developing and evaluating the effectiveness of MALL tools to enhance English language proficiency among undergraduate students pursuing professional courses. By examining the impact of this innovative approach on students' performance, this research will provide valuable insights into the potential of technology-enhanced language learning. Further, it provides necessary exposure, improving participants' proficiency and confidence in the target language.

This research contributes to the current literature by exploring the effectiveness of using MALL tools in improving the English language proficiency of learners, particularly undergraduate students pursuing professional courses in Hyderabad. This study may provide useful insights for several stakeholders, such as educators, policymakers, and researchers interested in promoting more research into the potential of technology-enhanced learning.

The study aims to investigate the effectiveness of MALL tools in developing proficiency in the English language for undergraduate students pursuing professional courses. The following are the research objectives, hypotheses, and questions:

## 3.1 Research Objectives

The article aims

i. To investigate whether MALL tools such as gamification, mobile apps, and podcasts improve students' ability in the English language.

- ii. To determine whether MALL tools will enhance learners' proficiency in listening and speaking skills in the English language.
- iii. To recognize whether significant differences exist between students' abilities before and after using MALL tools regarding their English language proficiency.
- iv. To know whether learners continue using MALL tools for language enrichment and recommend them to their peers and friends.

### 3.2 Research Hypotheses

The following hypotheses are put forward:

- i. MALL tools such as gamification, mobile apps, and podcasts improve students' English language skills.
- ii. MALL tools will enhance learners' proficiency in listening and speaking skills in the English language.
- iii. There will be notable differences between students' English language proficiency abilities before and after using MALL tools.

#### 3.3 Research Questions

The following research questions are raised:

- i. To what extent does the use of gamification, mobile apps, and podcasts improve students' proficiency in listening and speaking skills in the English language?
- ii. Are there significant differences between students' abilities before and after using MALL tools regarding their English language proficiency?
- iii. Do learners continue using MALL tools for advancing their language development and recommending these sources to others?

The inferences drawn from the study can be generalized as the sample group has common characteristics. Moreover, a similar study in such settings and sample groups can be replicated for similar findings and to explore novel teaching methods to improve students' proficiency further.

# 4. Methodology

The research method used is qualitative largely and quantitative (used only to analyze post-test questionnaires and results) using the Classroom Action Research (CAR) type. CAR is a teacher-initiated, teacher-conducted, self-reflective, and self-directed classroom inquiry. It aims to understand deeper insights into classroom teaching and learning. Supporting a similar perspective, a study stated, "Action research equips teachers to analyze students' behaviors, identify potential problems, modify their teaching practices, methods, and materials, and evaluate

results (Chaitanya, 2021, p. 623). Here, the study examines how MALL tools develop learners' language proficiency.

This study was conducted at an institute of technology, Hyderabad, for a total period of 6 weeks (from November 2023 to December 2023). It is an engineering college offering the core engineering streams to students in UG and PG. Furthermore, the sample comprises 30 UG students selected through purposive sampling. This method is appropriate because the sample group has the following common characteristics.

- i. The sample group has completed 10+2 education in regional medium background
- ii. They have limited proficiency in the English language
- iii. They fall in CEFR A1 to A2
- iv. They have expressed willingness to improve their English language
- v. Their age group is between 18 and 20

The implementation method was divided into two meticulous phases.

The first phase of preparation was conducted in three sequences of steps:

- i. Initial observation and interviews were conducted to identify the student's language proficiency and the research problem.
- ii. A review of literature was done to analyze earlier databases related to the use of MALL tools to develop English language proficiency;
- iii. The coordination of supervising lecturers was sought to get guidance and feedback on preparing necessary tasks for the learning activities.

In the next phase, execution cum evaluation was carried out in four steps to make it bias-free and systematic.

- Through MALL tools (listening and speaking tasks), the proficiency levels (CEFR A1-C2) were assessed.
- Students' progress was summarized based on results.
- Students' proficiency was also evaluated based on personal observation, pretest, and posttest questionnaire and analysis.
- Observations were made to note the learning process, including students' abilities. Subsequently, pretest and posttest progress was compared, and students' language proficiency was measured accordingly before and after intervention.

The inferences drawn from the study may be generalized as the sample group has common characteristics. Moreover, a similar study in similar settings with such a sample group can be replicated for similar findings to explore further novel teaching methods to improve the student's proficiency.

#### 4.1 The Coordination of Supervising Lecturers/Colleagues

During the research process, the cooperation of supervising teachers was sought to get guidance and feedback to prepare necessary tasks for the learning activities. The coordination of colleagues was extremely helpful in implementing the intervention of MALL tools and anticipating certain problems and possible solutions for better implementation.

In the next stage, the intervention was implemented following execution cum evaluation was carried out in four ways:

#### 4.2 Introduction of MALL Tools

The MALL tools (podcast and gamification) were introduced to the sample group to assess their proficiency levels (CEFR Levels A1, A2, B1, B2, C1 & C2) based on listening and speaking tasks. During the process, they were given a brief orientation to the MALL resources such as Voice of America (VoA), Learn English, and Duolingo. After discussing these tools, the research participants were advised to take the English (level) test related to listening and speaking skills. Speaking skills/oral proficiency was assessed by recording their brief presentations on general issues related to society. After analyzing the pre-test (level test) results, it was found that 17 students attained a band between A2 – B1 levels, and the remaining 13 got a band score slightly above B1. The analysis of scores was based on the scores compiled from the web resources.

# 4.3 Second Stage - Intervention Strategy

After analyzing the proficiency levels of the participants, an intervention strategy was implemented to improve their English proficiency levels, employing the MALL tools mentioned here.

# 4.4 Assessing and Summarizing Students' Progress

Some of the significant MALL resources and specific language tasks about listening comprehension and speaking skills in those resources were suggested to students. Based on the instructions, students created accounts in the following web resources they accessed on their mobiles to complete the tasks assigned at their convenient pace, time, and place.

- 1. <a href="https://www.learnenglish.britishcouncil.com/">https://www.learnenglish.britishcouncil.com/</a>
- 2. https://voanews.com/
- 3. <a href="https://englishtest.duolingo.com/">https://englishtest.duolingo.com/</a>

In consultation with other colleagues, it was decided to assign the following specific sources/tasks/exercises/quizzes/courses to fine-tune their listening and speaking proficiencies depicted in Table 1.

Table 1: Six-week plan for the study

Source	Weeks 1-6
1. Learn English	Beginner to Intermediate level course: "An Easy English Series - London to Edinburg"-10 Episodes <a href="https://www.learnenglish.bbc.co.uk">www.learnenglish.bbc.co.uk</a> (BBC Learning English - The London to Edinburgh Challenge)  2 episodes each week followed by discussion and reinforcement
2. VOA News App	1. English in a minute. English In A Minute - Episodes - VOA - Voice of America English News (voanews.com)  1 task every day followed by discussion and reinforcement  2. Level 1 English lessons (40 short episodes) Let's Learn English - Level 1 - Lesson 1 (voanews.com)  1 or 2 lessons every day followed by discussion and reinforcement with hand-
	outs
3. Duolingo App	Self-practice on listening and speaking tasks – Discussion and reinforcement. <u>Duolingo - The world's best way to learn a language</u>

The study was conducted for six weeks, with clearly defined listening and speaking tasks, activities, and timeframes, as mentioned in the table above. During this, the researcher and his colleagues conducted a brief orientation to the students, explaining the significance of the research and the importance of mobile-assisted language learning tools for their language development. The choice of the course content in each MALL tool is based on the collaborative discussions between the researcher and his colleagues.

The purpose of choosing 'An Easy English Series – London to Edinburgh' is to provide ample practice in listening and speaking activities concerning everyday English (Viz., Self-introductions, Socializing, College/academic life, Travel, Places, Shopping, Food and drink, Work, Family, Directions, Competition and Congratulating and Leave-taking) to the students. Further, according to their opinions, the students require these resources the most during the informal discussions in the initial stages of the research. Further, the selection of English in a minute and Level 1 English lessons is to help students with podcasts and game-based, interactive, and multi-media quizzes and handouts. These lessons focus on what exactly students have required and expressed, i.e., developing their English language competency for practical purposes. These podcasts help them describe places, hobbies, people, general scenarios, future goals, school life, weather descriptions, etc. The Duolingo app was suggested to them for logging in and practicing activities related to listening and speaking to strengthen their purpose. All the activities that students went through for 6 weeks were monitored and recorded by the researcher with the help of his colleagues.

A follow-up classroom discussion after each session was conducted regarding the activities that students practiced the previous day at their homes. The discussion includes playing the podcast, if necessary; distributing handouts suggested; practice sessions through role-plays and group tasks wherever essential, questions about their understanding; and clarification of doubts. Practice

sessions were held 3 hours a week during routine lectures in the college, and students were advised to spend 1 to 2 hours beyond college hours practicing the suggested sources. Their practice sessions at home were monitored with follow-up questions on the assigned topics. These discussions were highly interactive and fruitful. Further, there was steady but continual progress in students' language development, inquisitiveness to ask and clarify, self-confidence, and active engagement in classroom discussions. In addition to recording the inputs meticulously from personal observation and regular oral feedback from students, the researcher administered a structured (post-test) questionnaire (Appendix 1) to seek their opinions about the usefulness of MALL tools in their language development.

After monitoring and recording their daily and weekly progress regarding the number of activities assigned and completed and the gradual progress students made, it was decided to assess and analyze the impact of MALL tools after six weeks (from November 2023 to December 2023). The study began in the first week of November, i.e., 6th Nov 2024, and was carried out till 18th December 2024. After completion of the study, feedback on respondents' improvement was obtained using the post-experiment questionnaire, which was crucial in obtaining the data for further process and analysis of the study.

### 5. Results of the Post-test Questionnaire Analysis

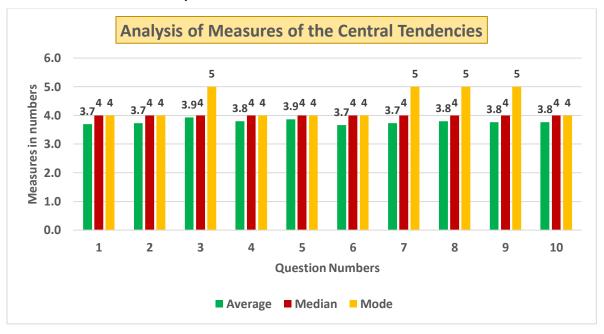
The data gathered from the post-test questionnaire (Appendix 1), classroom observation, and post-test results show that many students liked MALL tools because they allowed them to practice language learning activities on their mobile phones at their place, pace, and time of convenience. Further, it provides instant feedback for all the activities and quizzes they have taken on their mobile/laptops. The participants' responses further show that they are happy with the additional resources provided to them to practice and develop their language skills. They mentioned that they found it encouraging and recommended that a lot of their peer group and friends utilize the resources for their language enhancement. The following are the measures of the average, median, and mode of the 10 questions in the post-test questionnaire, given in tabular representation.

Measures	Q. 1	Q. 2	Q. 3	Q. 4	Q. 5	Q. 6	Q. 7	Q. 8	Q. 9	Q. 10
Average	3.7	3.7	3.9	3.8	3.9	3.7	3.7	3.8	3.8	3.8
Median	4	4	4	4	4	4	4	4	4	4
Mode	4	4	5	4	4	4	5	5	5	4

Table 2: Measures Average, Median, and Mode

The tabular representation of the figures shows that the average values of the ten questions fall between 3.7 and 3.9, the median is 4 across all the columns, and the mode value remains the highest i.e. 5 for 4 questions, viz., questions 3, 7, 8, and 9. Further, the mode remains at 4 for the

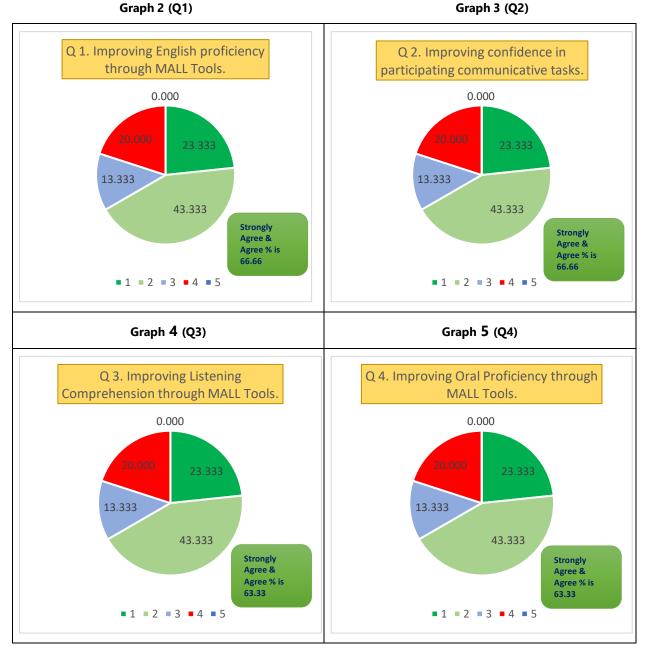
remaining questions, viz., questions 1,2, 4, 5, 6, and 10. The tabular representation of the figures shows that most participants are satisfied with using MALL tools to learn English. Their opinions further strengthen the idea that participants have improved their proficiency before and after participating in the research. The following bar graph is the analysis of measures of the central tendencies, which are similar to table 2.



**Graph 1: Measures of Central Tendencies of Data** 

Table (2) presents the central data tendencies of the individual questions and analyses the participant responses' average, median, and mode. The graph presents significant differences in the mode values of questions 3, 7, 8, and 9 compared to the mode values of the remaining questions. Further, no notable differences are found among the average and median values of the ten questions projected here. The following is a detailed analysis of the post-test/experiment questionnaire from the students' perspective. The data is represented as pie graphs for some of the significant questions.

Based on the values presented in the following pie diagrams, it can be stated many students expressed a sense of satisfaction and positive feedback about using MALL tools during their free time to improve their English language proficiency. Responding to the first question, 66.66% of the students expressed that MALL tools contributed positively to attaining requisite proficiency and confidence in using the English language. When enquired, they mentioned that the content and activity types of the language learning tasks and the positive effect of gamification with colors, background music, and instant feedback motivate them to practice the given sources longer than generally expected. Some have mentioned that learning a language is much fun. In contrast, others expressed that they particularly like micro lessons, which are part of some of the tools that not only help those with little attention span but also contribute to developing proficiency in the language. Expressing a different viewpoint, the remaining 20% of them expressed neutral and negative feedback, mentioning these sources did not help them and said a face-to-face session would have been better. The rest of the respondents remained neutral in their opinion.



Regarding their participation in communicative tasks (2nd Question), 66.66% mentioned significant improvement in their enthusiasm and confidence in partaking in various department-level and college and inter-college level communicative events such as poster presentations and extempore sessions besides debates and general topics. In addition, they mentioned that role-plays, group and pair activities, and brief oral and poster presentation sessions during practice sessions in the classroom positively affected them and instilled the required motivation and courage to attempt and learn things on their part. In contrast, 13.33% of the respondents mentioned no significant difference in their enthusiasm and confidence levels to participate in the communicative tasks. They need more time to adjust to the MALL tools.

Answering the third question, 63.33% of the students reported that it improved their ability to listen and comprehend information related to various day-to-day topics. In addition, they mentioned they could follow various kinds of paces in speech used by the speakers. While listening to podcasts, they expressed that they could understand syntax (structure), semantics (meaning), and supra-segmental features such as word stress, rhythm, intonation, and pronunciation of words. Some have mentioned explicitly that listening also reinforces their ability to speak and express in various day-to-day situations. One-minute English lessons on Voice of America (VoA) and Easy English series London to Edinburg on learn English on BBC, along with Listening tasks on the Duolingo app, largely helped them to combine listening and speaking skills and improve their proficiency gradually. Contrary to this, 10% of them expressed that they would need more time with MALL tools to develop their listening proficiency, and some mentioned they could not relate to the content and culture of the tasks. The remaining members did not express either positive or negative viewpoints.

While sharing their views on the fourth question in the questionnaire, 63.33% of the respondents mentioned that MALL tools helped improve their oral proficiency skills. They mentioned their earlier situation, where they would remain mostly silent because of language barriers. In contrast, they can attempt to open up a conversation, share their views on general aspects, and participate in classroom discussions. Further, they mentioned that their practice beyond college hours, teachers' support, and daily follow-up activities in the classroom, coupled with their passion and drive for learning a language, pushed them positively to gain fruitful experience. From the respondents' opinions, it was evident that the activities/tasks chosen and assigned to them were extremely helpful for their social interaction for various practical purposes. Sharing a negative perspective, 06.66% of them expressed that they would need more time with MALL tools to develop their oral proficiency, and some mentioned they felt they were overburdened with college work and research assignments.

In addition to this, many of them (66.66%), when responding to the fifth question, mentioned that their ability to learn the English language independently had been improved largely. Justifying their stand, they mentioned that while practicing the suggested sources, they explored other language-learning websites and apps, doubling their self-confidence and language-learning abilities. Apart from learning, they have mentioned that they have suggested many other students who require proficiency in English to practice the sources. Further, with the active engagement of user-friendly MALL tools and instantaneous and auto-generated feedback, they have to know techniques to develop the areas of weakness. Sharing a negative perspective, 10.00% of them expressed they would require more time to adopt the online tools and understand the nature of activities to develop proficiency in the English language, whereas the remaining preferred to remain neutral in expressing their opinion.

Answering the sixth question, 66.66% of the respondents mentioned that they improved their listening skills along with the sub-skills of listening, such as listening for gist, extensive listening for skimming and scanning purposes, and attempting words and sounds in a gap-filling/cloze test while listening to podcasts, and listening activities. The listening strategies teachers mentioned during and after the sessions were extremely helpful, as some students opined.

Respondents stated that the listening tasks (podcasts) and activities on listening comprehension prescribed in the web resources are interesting and engaging. Practicing exercises based on their learning abilities/level regularly helped them gradually move to the next level of complexity systematically. Further, it helped them overcome earlier problems regarding listening to podcasts, news, and programs in English. The whole process increased their self-confidence, as they mentioned. Contrary to this, the rest of the 26.66% of students reported that the content of the activities was difficult for them to comprehend, and they could not attempt and progress as expected by the teachers. The remaining members chose to be neutral in their feedback.

While responding seventh question, they explained reasons for their self-improvement and self-paced learning. Many of them (63.33%) mentioned that they liked the MALL sources, as most activities and tasks were highly interactive, encouraging, and interesting. Because of the exciting features, they mentioned that the whole process led to self-exploration, self-improvement, and self-development, which facilitated them with additional practice besides the support from the classroom lectures for enhancing their language competency. The remaining members (28%) expressed mixed opinions by being neutral or mentioning that they could not relate the content to their academic and personal backgrounds. Contrary to this, 26.66% of them expressed that they did not find any notable self-development with the MALL tools suggested for the study, which implies they need either more time or a different set of tools for better comprehension. The remaining members were neutral in their opinion.

Answering the eighth question, they explained the reasons for their self-paced learning. The majority (60%) further stated that the listening and speaking content/materials used in the online resources were authentic, which led to acquiring language in natural settings. They particularly mentioned choosing the pace of their learning and comfort, repeating and playing back and forth until they understood the multimedia files and podcasts that were advised. Thus, their motivational levels keep increasing to spend more time and make consistent progress, which was evident in their post-test results in the classroom discussions. It also motivated the participants to learn and use English in several real-life contexts. There was considerable improvement in the student's oral proficiency as they could present various topics with ease and confidence. Moreover, their supra-segmental features and body language were improved largely. It was found during their oral presentation/poster presentation, picture description, and discussion tasks, which were held in the classroom. Contrary to this, 13.03% of them expressed a negative perspective about the contribution of MALL tools in self-paced learning, which implies that they require more practice with extended periods of periods and with no deadlines to accomplish tasks. The rest of them remained neutral about the outcome.

In responding to the last two questions of the questionnaire, most of the students (84%) for the ninth question expressed that the use of MALL resources improved their English language proficiency largely, and they said they would continue using these sources in the future, as learning is a continuous process. Their views imply that they have realized the essence of MALL tools in practicing language independently, apart from the inputs they receive from the classroom. Further, it is reflected in their self-exploration of other competent sources for language practice, which they have discussed with teachers during their classroom discussions. A few respondents expressed doubt about continuing to use the sources for their language development, which

implies they need another set of MALL tools with more time and guidance to change their perspective.

While answering the last question, (60%) of them mentioned that, apart from benefitting individually, they would recommend and share these resources with their peer group or any students with limited or no proficiency in the English language for their development. Some of them (13%) were skeptical and expressed that they would recommend when they personally benefited from attaining requisite proficiency in the English language, whereas the remaining respondents remained neutral.

When the pre-test results were reviewed, of the total 30 population, only 17 students secured a band between A2 – B1 levels, and 13 members achieved a band score slightly above B1. Compared to pre-test results, students have made considerable progress in their post-test, which is evident in the post-test questionnaire mentioned above. During the final analysis, it was found that students whose (13 members) proficiency levels were found between A2-B1 levels in the pre-test moved to B2 and slightly above B2 levels in the post-test analysis. In addition, the students (17 members) who got a B2 level in the pre-test attained C1 levels. The award of grades was measured and analyzed meticulously by the researcher and the supervising colleagues following the CEFR evaluation criteria. The statistical analysis of the post-test questionnaire is mentioned in Appendix 2. Students made gradual but consistent and visible progress in advancing their language proficiency levels using MALL tools during their free time. It also implies that the role of the learner is maximized, unlike in the traditional classroom, where the teacher's role is dominant. Consequently, learners can learn, speak, and express their views online and during offline classroom discussions. Moreover, there is no pressure on the learners to complete the activities within a rigid deadline frame; students utilize their time properly and focus on improving their competence.

This study investigated the intervention of MALL tools to develop English language proficiency in the research participants. The student's ability to use, adapt, and extract maximum learning outputs from the tools suggested significantly improved participants' understanding, confidence, and proficiency in the English language through the applied methods. The success is evident based on the pretest and posttest results using two skills: listening and speaking.

#### 6. Limitations and Challenges of MALL Tools

Despite the many advantages of MALL tools in developing proficiency in the English language, certain limitations and challenges exist for users. One of the most common challenges is psychological issues, and it is a common tendency among students to take time off after a hectic day at college. Many students do not generally find logging on to the device for the solo purpose of learning beyond college hours exciting. Further, using smartphones for learning activities also leads to several distractions, as many social media notifications appear on the device. As a result, they get tempted to surf social media to follow, post, like, share, and add their comments on the content they read, watch, and listen to. This process gradually leads to the problem of excessive screen time for the students, which in turn leads to other associated problems with straining eyes and necks along with headaches, backache, etc. Excess screen time is synonymous with a lack of

social interaction. Hence, using the smartphone without proper timelines leads to a waste of precious time. Another challenge that many users of MALL tools face is technical difficulties, internet problems, and compatibility of their devices. Participants expressed some of these problems during the classroom discussions, and the necessary remedies/motivation were given to them to overcome them (Chen & Chung, 2008, p. 640; Ally, 2009, p. 35; Okumus, 2023, p. 14; Trentin & Repetto, 2013, p. 121 & Twarog, 1988, p. 472).

Another limitation of the present study was integrating only two language skills (listening and speaking), employing a limited timeframe, and lacking reinforcement. In this context, longitudinal studies would provide more comprehensive outcomes.

#### 7. Conclusion

This study investigated the impact of integrating MALL tools in developing students' English language proficiency in listening and speaking. The findings indicate that integrating MALL tools led to significant improvements in integrating listening and speaking skills, with the most notable improvement in their language proficiency. The results suggest that MALL tools can effectively enhance students' language learning outcomes in this context. Moreover, the study demonstrated that the improvements in students' skills were not limited to specific aspects of learning, as students experienced significant gains in all three areas after the intervention of MALL Tools.

For future research purposes, researchers can conduct longitudinal studies on teachers' and students' attitudes toward using MALL tools, their perceptions, and the challenges faced. Therefore, to maximize the benefits of MALL tools for diverse learners, educators must receive adequate training and support in implementing this technology effectively.

#### References

- Alexander, B. (2004). Going nomadic: Mobile learning in higher education. EDUCAUSE Review, 39(5), 28–35.
- Ally, M. (Ed.). (2009). *Mobile learning: Transforming the delivery of education and training*. Athabasca University Press.
- Ally, M. (2013). Mobile learning: from research to practice to Impact Education. Learning and Teaching in Higher Education: Gulf Perspectives, 10(2). http://lthe.zu.ac.ae
- Chaitanya, Krishna, E., (2021). Teacher Action Research (TAR): An Effective Tool for English Language

  Teachers' Continual Professional Development (CPD). *Towards Excellence*, 622–633. https://doi.org/10.37867/te130250
- Chaitanya, Krishna, E., & Aparna Reddy, V. (2022). Effective Strategies for Active Participation of the

  Students in the ESL Context. In *Literary Voice* (Special). https://www.literaryvoice.in/LV%20Special%20Edition%20Jan.%202022.pdf
- Chaitanya, Krishna, E., & Meenakshi Barad Sirigiri. (2021). Enhancing the Communicative Competence

- of Professional Students Using Flipped Classroom Strategy. *Journal of English Language Teaching*, *63* (4), 30–39. Retrieved from https://journals.eltai.in/index.php/jelt/article/view/JELT630406
- Chaitanya, Krishna, E., Murali, V., & Reddy, R. S. (2023). Employing selected technology tools for effective English language teaching online. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0165702
- Chen, C.M. & Chung, C.J. (2008). Personalized mobile English vocabulary learning system based on item response theory and learning memory cycle. *Computers & Education, 51*(2), 624-645. Elsevier Ltd. Retrieved July 5, 2024 from https://www.learntechlib.org/p/67314/
- Crescente, M. L., & Lee, D. (2011). Critical issues of m-learning: design models, adoption processes, and future trends. *Journal of the Chinese Institute of Industrial Engineers*, 28(2), 111–123. https://doi.org/10.1080/10170669.2010.548856
- Dickey, R.J. (2001). Make it a conference call: An English conversation course by telephone in South Korea. In L.E. Henrichsen (Ed.), Distance-learning programs (pp. 51-60).

  Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.
- Dorota, C.-A. (2010). Mobile Assisted Language Learning. *nOwOczeSne technOlOgie W Nauczaniu Języków OBcych, 1*(2).
- Gromik, N. (2009). Producing cell phone video diaries. In M. Thomas (Ed.), Handbook of research on Web 2.0 and language learning. Hershey (PA): Information Science Reference.
- Hashim, K. F., Tan, F. B., & Rashid, A. (2014). Adult learners' intention to adopt mobile learning: A motivational perspective. British Journal of Educational Technology, 46(2), 381–390. https://doi.org/10.1111/bjet.12148
- Huizenga, J., Admiraal, W., Akkerman, S., & Dam, G. T. (2009). Mobile game-based learning in secondary education: engagement, motivation and learning in a mobile city game.

  \*\*Journal of Computer Assisted Learning, 25(4), 332–344. https://doi.org/10.1111/j.1365-2729.2009.00316.x\*
- Keezhatta, M. S., & Omar, A. (2019). Enhancing reading skills for Saudi secondary school students through mobile assisted language learning (MALL): An experimental study. *International Journal of English Linguistics*, *9*(1), 437-447.
- Klopfer, E., Squire, K. & Jenkins, H. (2002) 'Environmental detectives: PDAs as a window into a virtual simulated world', in *Proceedings of IEEE international workshop on wireless and mobile technologies in education*. IEEE Computer Society, Vaxjo, Sweden, pp. 95–98.

- Kukulska-Hulme, A. & Shield, L. (2008). An overview of mobile-assisted language learning:

  From content delivery to supported collaboration and interaction. In ReCALL, 20(3), pp. 271–289.
- Kukulska-Hulme, A. (2009). Will mobile learning change language learning? In ReCALL, 21(2), pp. 157–165.
- Kukulska-Hulme, A., & Viberg, O. (2017). Mobile collaborative language learning: State of the art. *British Journal of Educational Technology*, *49*(2), 207–218. https://doi.org/10.1111/bjet.12580
- Kumar, K. (2023, August 16). *Mobile Learning: Empowering Education In The Digital Age*. eLearning Industry. https://elearningindustry.com/mobile-learning-empowering-education-in-the-digital-age
- Lashari, A. A., Abbasi, F. N., Kurd, S. A., Mirjat, M. A., Mehmood, T., & Ahmad, S. (2023). The impact of mobile assisted language learning (MALL) on ESL students' learning. *Onomázein*, (60 (2023): June), 137-148.
- Murali, V., Chaitanya, Krishna, E., & Reddy, R. S. (2023). English for all but effectiveness is for the few in the context of engineering colleges in Telangana state: Its challenges. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0165699
- Murali, V., & Chaitanya, Krishna, E. (2023). Professional communication skills in English for non-native English speaking engineering students in the context of Telangana state: Its challenges. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0165701
- Nuraeni, C., Carolina, I., Supriyatna, A., Widiati, W., & Bahri, S. (2020, November). Mobile-Assisted

  Language Learning (MALL): Students' perception and problems towards mobile learning in English language. In *Journal of Physics: Conference Series* (Vol. 1641, No. 1, p. 012027). IOP Publishing.
- Okumuş Dağdeler, K. (2023). A systematic review of Mobile-Assisted Vocabulary Learning research. *Smart Learning Environments*, *10*(1). https://doi.org/10.1186/s40561-023-00235-z
- Rajendran, T., & Yunus, M. M. (2021). A systematic literature review on the use of mobile-assisted language Learning (MALL) for enhancing speaking skills among ESL and EFL learners. *International Journal of Academic Research in Progressive Education and Development, 10*(1), 586-609.
- Solihin, S. (2021). Using mobile assisted language learning (MALL) to teach English in Indonesian context: Opportunities and challenges. *Voices of English Language Education Society, 5*(2), 95-106.
- Shadiev, R., Liu, T., & Hwang, W. (2019). Review of research on mobile-assisted language learning in familiar, authentic environments. *British Journal of Educational Technology*, *51*(3), 709–720. https://doi.org/10.1111/bjet.12839
- Shortt, M., Tilak, S., Kuznetcova, I., Martens, B., & Akinkuolie, B. (2021). Gamification in mobile-assisted language learning: a systematic review of Duolingo literature from public

release of 2012 to early 2020. *Computer Assisted Language Learning*, *36*(3), 517–554. https://doi.org/10.1080/09588221.2021.1933540

Sullivan, S. (2024, February 27). *Top Advantages and Disadvantages of Mobile Learning*.

Thinkific. https://www.thinkific.com/blog/mobile-learning-advantages-disadvantages/

Trentin, G., & Repetto, M. (2013). *Using Network and Mobile Technology to Bridge Formal and Informal Learning*. Elsevier.

 $http://books.google.ie/books?id=cAFEAgAAQBAJ\&printsec=frontcover\&dq=Using+Network+and+Mobile+Technology+to+Bridge+Formal+and+Informal+Learning\&hl=\&cd=1\&source=gbs\_apid=learning&hl=lear$ 

Twarog, L. I., & Pereszlenyi-pinter, M. (1988). Telephone-Assisted Language Study at Ohio State

University: a report. Modern Language Journal, 72(4), 426–434. https://doi.org/10.1111/j.1540-4781.1988.tb04204.x

Vyad. (2024, February 26). Technology in English Learning: How it can help you?

AllAssignmentHelp.com.

https://www.allassignmenthelp.com/blog/technology-in-english-learning/#:~:text=Tools%2C%20resources%2C%20and%20technology%20in,they%20will%20learn%20the%20language.

Dr. Krishna Chaitanya Edunuru is an Associate Professor at the Central University of Kashmir, Tullamulla, Ganderbal, India. He has presented more than 40 papers at National and International conferences. He has published over 30 articles in high-ranked journals, including UGC, WoS, Scopus, and Peer-reviewed publications. He is a recognized PhD supervisor and reviewer for reputed national and international journals and scholarly or refereed articles. He has received notable awards and best presentations for his contributions in both academic and research. In addition to this, he has delivered several invited talks, workshops, training, and orientation programs for teachers and students in India and the Gulf region. He has been on the BoS panel for many institutions.

# **Appendix-1 (Post-test Questionnaire)**

	Questions	Agree	Strongly Agree	Neutral	Disagree	Strongly Disagree
1	I improve my English language proficiency through MALL Tools.					
2	My listening comprehension skills have improved to a great extent.					
3	My oral proficiency skills have improved to a great extent.					
4	My confidence in speaking/participating in communicative tasks has improved.					
5	My ability to learn the English language independently has improved.					
6	I feel my skills for listening for specific and general purposes have improved.					
7	I feel use of MALL tools led to my Self-improvement in learning English language.					
8	I feel use of MALL tools contributed to my Self-paced learning in attaining proficiency in the English language.					
9	I will continue using MALL tools for my language improvement in the future too.					
10	I recommend my peer group to use MALL tools for their language enrichment.					

Appendix - 2
Statistical Analysis of the Post-test Questionnaire

Details	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
Average	3.700	3.733	3.933	3.800	3.867	3.667	3.733	3.800	3.767	3.767
Female Average	3.769	3.923	3.923	3.923	3.769	3.692	3.923	3.692	3.769	3.923
Male Average	3.647	3.588	3.941	3.706	3.941	3.647	3.588	3.882	3.765	3.647
Difference= F -	0.122	0.335	- 0.018	0.217	- 0.172	0.045	0.335	- 0.190	0.005	0.276
% Difference wrt Male	3.350	9.332	- 0.459	5.861	- 4.363	1.241	9.332	- 4.895	0.120	7.568
Number of 5s	7	6	12	7	9	8	11	10	9	9
4	13	14	7	12	11	12	8	8	9	9
3	4	6	8	9	7	2	3	8	8	8
2	6	4	3	2	3	8	8	4	4	4
1	0	0	0	0	0	0	0	0	0	0
Percentage of getting 5	23.33	20.00	40.00 0	23.33	30.00 0	26.66 7	36.66 7	33.33 3	30.00 0	30.000
4	43.33	46.66 7	23.33	40.00 0	36.66 7	40.00 0	26.66 7	26.66 7	30.00 0	30.000
3	13.33 3	20.00	26.66 7	30.00 0	23.33	6.667	10.00 0	26.66 7	26.66 7	26.667
2	20.00	13.33 3	10.00	6.667	10.00 0	26.66 7	26.66 7	13.33 3	13.33 3	13.333
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Positive (4, 5)	66.66 7	66.66 7	63.33	63.33	66.66 7	66.66 7	63.33	60.00	60.00	60.000
Negative (1, 2)	20.00	13.33 3	10.00	6.667	10.00	26.66 7	26.66 7	13.33 3	13.33 3	13.333

Standard Deviation	1.055	0.944	1.048	0.887	0.973	1.155	1.230	1.064	1.040	1.040
Median	4	4	4	4	4	4	4	4	4	4
Mode	4	4	5	4	4	4	5	5	5	4

# Scale:

- 5 Strongly Agree
- 4- Agree
- 3 Neutral
- 4 Disagree
- 5 Strongly Disagree