

INVESTIGATING THE IMPACT OF MOBILE-ASSISTED LANGUAGE LEARNING (MALL) ON ENGLISH LANGUAGE PROFICIENCY AND STUDENT ENGAGEMENT IN HIGHER EDUCATION

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Abstract

The importance of the research topic of Mobile-Assisted Language Learning (MALL) is that smartphones and other mobile devices enable students to train English outside of the confines of time and space in the classroom. Recent research indicates that MALL is linked to vocabulary, listening, speaking, learner autonomy, and flexible access to learning resources improvements, but also questions the issue of readiness, pedagogy, and institutional support. The paper follows a qualitative research methodology, which is document analysis approach to explore the impact of MALL on English language proficiency and the student involvement in higher education. It is based on the latest systematic reviews, meta-analyses, bibliometric studies, and empirical studies within the university settings. The results indicate that MALL may have a beneficial impact on English proficiency, through enhancement of repeated exposure, vocabulary retention, listening and speaking practice, and self-directed learning. It is also shown that MALL has the potential to enhance student engagement through the enhancement of motivation, convenience, interaction, and autonomy. But the influence of the MALL is not a priori. It relies on task design, teacher instructions, self-regulation of learners, and their readiness to use digital devices. The paper concludes that MALL is best applied in situations where it is incorporated into an explicit pedagogical structure as opposed to being an incidental technological supplement.

Introduction

Mobile technology has transformed the education sector mostly in higher education where students already have their smartphones as part of their daily academic and social lives. This has seen language education grow in the area of Mobile-Assisted Language Learning also referred to as MALL. MALL is the utilization of mobile devices and apps to facilitate language learning in a flexible, portable, and interactive manner (Liu et al., 2016). According to recent reviews of higher education, MALL is used more and more to enhance learning and teaching of English language, especially in English as a Foreign Language settings due to its ability to provide access to learning resources at any time and location (Alvarez Martínez et al., 2025; Fang, 2025).

MALL is particularly relevant in the context of the higher education since students at the university level frequently require the possibilities to learn outside of the classroom. Repeated practice in vocabulary, listening, speaking, and grammar can be offered to learners using mobile apps, digital flashcards, video-based activities, AI chatbots, and messaging tools. Recent studies further reveal that mobile learning is not just a delivery mode but a more general learning environment capable of influencing motivation, engagement of behavior and self directed study behavior (Viberg et al., 2023). Investigations of mobile English learning by university students outside the classroom have discovered that students interact with MALL due to various cognitive and emotional intentions, and their level of proficiency may influence the frequency and duration of use (Huang et al., 2024).

This article explores how MALL can influence two outcomes related to higher education: English language proficiency and student engagement. The two variables are interconnected

since language development involves active involvement and interaction with words, whereas engagement determines the consistent interaction of the learner to the English language. The article claims that MALL can significantly contribute to proficiency and engagement, yet it will require the right pedagogy, training of learners, and institutional environment (Lai et al., 2022; Li et al., 2024).

Methodology

The research design selected in this study is a qualitative research design with the help of document analysis. Instead of using primary data in form of interviews or surveys, it comprehends published research on MALL in tertiary education. The qualitative method is suitable as the issue does not merely entail quantifiable learning outcomes, but also perceptions, behaviors, experiences, and engagement patterns. The study is thus based on thematic literature interpretation and not the statistical re-analysis (Álvarez Martínez et al., 2025).

The literature sources are systematic reviews, meta-analyses, bibliometric, and empirical studies of university learners. These sources were chosen as they are a general overview of the field and also include specific examples of how MALL has been applied in actual educational contexts. The review is structured by the recurring themes: vocabulary acquisition, listening and speaking acquisition, self-directed learning, motivation, engagement with behavior, teacher support, pedagogical design (Lai et al., 2022; Viberg et al., 2023).

One of the weaknesses of this method is that the paper is based on secondary evidence but not observation in the classroom. Nevertheless, the approach is appropriate in a research paper since it would permit a generalized and comparative comprehension of the impact of MALL on the learning of the English language at higher education institutions. It also helps to generalize the recent evidence of various settings and discover the circumstances in which MALL seems to be the most promising (Fang, 2025).

Literature Review

As it is demonstrated in the literature, MALL has emerged as a significant area of research since it used to be a niche area of technology-enhanced language learning. A bibliometric review of MALL research trends resulted in a significant increase in the field, which is associated with a broader use of smartphones and a growing interest in the digital space where the learner is the central part of the process (Viberg et al., 2023). Previous review literature also termed MALL as a new area that was influenced by portability, immediacy, and the capacity to relate language learning to everyday life (Liu et al., 2016). Combined, these works indicate that MALL is no longer considered as a trifled extension of computer-assisted language learning, but rather a separate and powerful field in language education.

One of the latest systematic reviews has been dedicated to higher education in particular, where MALL is quite promising to enhance the learning and teaching of English. According to that review, the recurrent benefits included vocabulary development, listening and speaking development, learner autonomy, and digital literacy, and the obstacles were considered to include technical limitations, lack of teacher training, student readiness, and institutional support (Álvarez Martínez et al., 2025). A different more recent review on acceptance, readiness, affordances, and challenges also made the same conclusion, that the educational value of MALL is not only based on the access to devices, but also on the preparedness of teachers and pupils to utilize the mobile technologies in a meaningful way (Fang, 2025).

Another dimension is research on self-directed learning. A methodical scoping review on higher education learners found that mobile technologies could be used to aid self-directed language learning through making learning resources attainable, aiding cognitive and metacognitive strategies, and improving motivation and autonomy (Lai et al., 2022). This is particularly applicable in universities, where students are supposed to study on their own, and

take care of their studying schedule. MALL is well suited to this environment since it enables language practice to persist over time and space, even when not in formal lessons.

It is also indicated in the literature that the MALL results are dependent on the language competence. One of the most common success areas that are reported is vocabulary learning. Review and meta-analytic findings show that mobile-assisted vocabulary training can have a beneficial impact on word retention and word recall, particularly when a repetition, spaced revision, multimedia-aided, and brief yet frequent practice are used (Lin and Lin, 2019; Okumuş Dağdeler, 2023). Recent literature on mobile-assisted vocabulary learning proves that it is one of the most robust subtopics of MALL studies (Okumuş Dağdeler, 2023; Nawaz et al., 2025).

Other areas of interest have also been identified in listening and speaking. The scoping review of the EFL learners listening and speaking performance in colleges revealed an increasing amount of evidence that MALL can be used to support the development of oral and aural skills, but the quality of the results is dependent on the learning design and the type of task (Wang and Soo, 2024). Simultaneously, the social aspect of language acquisition has been highlighted in the collaborative MALL studies with the demonstration that mobile devices can be used to facilitate interaction, collaboration, and collective meaning-making, instead of the individual drill-based training (Jiang et al., 2024).

Effects of MALL on ELP.

Among the most evident results of the literature is the idea that MALL can have a positive impact on the development of the English language proficiency by increasing the chances of frequent practice. Mobile learning is superior to classroom-only learning since students can revise and practice language in brief periods during the day. This exposure is particularly beneficial in terms of acquiring vocabulary, listening comprehension, and practicing pronunciation (Lin and Lin, 2019; Mohammadi et al., 2024). One of the university-level articles about academic vocabulary development revealed that digital flashcards in a mobile-assisted format enhanced both the receptive and productive vocabulary knowledge, and in particular, the receptive vocabulary (Mohammadi et al., 2024).

It is important as vocabulary knowledge is helpful in most other areas of English proficiency, such as reading, writing, speaking, and listening. Multimedia input, spaced repetition, instant feedback, and flexible access can be used to facilitate vocabulary learning on mobile devices. The previous meta-analytic results revealed a large and positive overall effect of mobile-assisted L2 vocabulary learning interventions as well, which supports the thesis that vocabulary is among the most effective fields of MALL performance (Lin and Lin, 2019).

Listening development also seems to be facilitated by MALL. A mobile English-learning application was used as an instructional tool in an action research study that was implemented in a university listening and speaking course. The research study exhibited substantial improvements in listening and more positive attitudes of learners towards MALL following instructional refinement and increased teacher monitoring (Xu, 2020). This implies that mobile tools can enhance receptive abilities when incorporated into a facilitated course design and not left to be used fully independently.

It is more complicated with speaking development. Other researchers propose that MALL may enhance oral performance, particularly when mobile applications involve interactive speaking activities, project-based learning, or AI-assisted dialogue (Ouahidi, 2024; Zhou et al., 2025). Simultaneously, other studies show that speaking gains could be less potent compared to listening or vocabulary gains when mobile learning does not allow sufficient interaction, feedback, or task-complexity (Xu, 2020; Du and Daniel, 2024). This implies that the productive skills usually need blended or teacher-guided MALL settings instead of isolated use of apps.

In a wider sense, there is a literature that MALL enhances proficiency best when it is linked to pedagogical structure. One of the recent studies in pedagogical frameworks suggests that the advantages of MALL lie in consistent design guidelines, and not the availability of mobile devices (Li et al., 2024). The use of apps does not automatically help students to improve their English. It is more likely to achieve gains when the course objectives are aligned with the app, task, feedback, and course objectives (Li et al., 2024; Fang, 2025).

Effects of MALL on Student Engagement.

Another key area where MALL has proven to be promising is student engagement. Students are accustomed to using mobile devices, which can provide a sense of accessibility and flexibility in learning activities compared to traditional classroom-based approaches. Studies on mobile-assisted classroom-out-of-classroom English learning revealed that behavioral engagement of students varied according to their level of proficiency and students with lower proficiency demonstrated more frequent and lengthy mobile learning. The qualitative aspect also revealed that the motivation of students to engage was not only determined by the availability of technology but also by the emotional and cognitive motivation (Huang et al., 2024).

This is significant as language learning is a multidimensional activity. It comprises of behavior, motivation, perseverance, attention and interaction. These dimensions can be facilitated by MALL through enabling learners to study according to their speed, re-read challenging materials, discuss with fellow students, and get replies in real-time with digital systems (Lai et al., 2022; Jiang et al., 2024). The self-directed learning review also revealed that mobile technologies have the potential to enhance motivation, engagement, and autonomy in language learning in higher education (Lai et al., 2022).

Research into MALL collaboration also proposes that interaction with social interaction in mobile learning is effective in increasing engagement as compared to individual repetition. The systematic review of collaborative mobile-aided language learning revealed that the current studies have paid more attention to collaboration in teams, peer collaboration, and mobile-assisted communication (Jiang et al., 2024). Such attributes are significant in higher education as learners tend to be more involved when they perceive language to be a tool of interaction and not just evaluation.

The engagement could also be facilitated by gamified and app-based platforms. A study of Duolingo in higher education also found that non-English-major-students who were using the application became more motivated, indicating that language practice can become more appealing due to the design of apps, time flexibility, and gamified progress (Suherman et al., 2024). On the same note, studies of mobile-assisted formative assessment have indicated that MALL tools are capable of enhancing attitudes and engagement in the case of using them to facilitate ongoing assessment and feedback (Metruk, 2022; Shadiev and Liu, 2022).

Engagement is not assured though. Activities that are not related to course objectives may also distract students, they may use applications randomly, or only superficially. That is why, in literature, it is always demonstrated that teachers play the primary role in MALL settings. The guidance, monitoring, sequencing of tasks, feedback, all influence whether students will enjoy meaningful interactions or only work with technology on a superficial level (Alshammari, 2023; Li et al., 2024).

Difficulties and drawbacks of MALL.

Despite the generally positive literature, some significant challenges are also noted. Digital readiness is one of the problems that have been identified to reoccur. The students can have smart phones but they might not have the digital literacy, studying patterns or Internet accessibility to learn language academically. The reviews highlight that acceptance and access

is not sufficient; meaningful MALL use needs readiness, training, and conducive conditions (Fang, 2025; Álvarez Martínez et al., 2025).

The threat of considering technology as a pedagogy substitute is another issue. The literature cautions numerous times that MALL works best when integrated into a well-planned teaching structure. The lack of the pedagogical planning may make mobile learning disjointed, too repetitive, or not tied to the course outcomes. That is why the most recent framework-based work has emphasized the necessity of consistent principles of task design, interaction, and assessment (Li et al., 2024).

There are also skill-specific limitations. Vocabulary and listening tend to exhibit more evident improvement than spontaneous speech or longer writing. More complex types of feedback, conversation, and performance support are often needed to support productive language skills (Xu, 2020; Du and Daniel, 2024). The data indicate that even in the areas where AI chatbots and speaking apps demonstrated potential, these technologies are more effective as a part of blended or guided learning rather than as a standalone solution (Zhou et al., 2025).

Lastly, there exist contextual constraints. Most of the new studies are focused on EFL university environments, particularly in Asia, indicating that the findings might not be equally applicable to other higher education environments. Nevertheless, the similarity of recent reviews and meta-analyses points to the fact that the general trend the evidence takes is evident: MALL may be valuable, but its effectiveness is largely determined by design, context, and the quality of implementation (Álvarez Martínez et al., 2025; Viberg et al., 2023).

Discussion

The evidence presented in this paper demonstrates that MALL is significantly positively related to the English language proficiency and student engagement in higher education. Its most significant contributions on the proficiency side are seen in vocabulary acquisition, listening, repeated exposure, and flexibility in studying (Lin and Lin, 2019; Mohammadi et al., 2024). Convenience, autonomy, social interaction, and the possibility to continue learning outside the classroom are the values of engagement side (Huang et al., 2024; Jiang et al., 2024).

Simultaneously, the literature does not underpin a naive perspective that mobile technology will necessarily enhance learning. Rather, the best and most stable conclusion is that MALL is effective when it is incorporated into a systematic pedagogy. The best implementations are mobile flexibility with the presence of clear purposes, teacher instructions, proper feedback, and self-regulated learning support (Lai et al., 2022; Li et al., 2024). In that regard, MALL must be viewed not as a substitute of teaching, but as an effective supplement to good teaching.

Conclusion

The current paper explored the effects of Mobile-Assisted Language Learning on English language proficiency and student engagement in higher education by conducting a qualitative study of recent studies. It suggests that MALL has the ability to enhance the learning of English through vocabulary retention, listening and speaking, repeated exposures, and self-directed learning (Mohammadi et al., 2024; Xu, 2020). It is also able to improve student engagement by making it more motivational, convenient, interactive, and autonomous (Huang et al., 2024; Suherman et al., 2024).

Nonetheless, the paper also reveals that MALL has an effect that varies according to its implementation. Successful MALL is pedagogically designed, self-regulated by the learner, and supported by the institution and teacher engagement (Álvarez Martínez et al., 2025; Li et al., 2024). Under such circumstances, mobile technologies can render English learning more flexible, engaging and effective in higher education. In their absence, MALL can be shallow or lopsided in its results. The safest conclusion to make, then, is that MALL is a useful educational tool, however, it is only when it is incorporated in a larger teaching and learning framework.

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