AN INVESTIGATION INTO MOBILE-ASSISTED LANGUAGE LEARNING: FROM THEORY TO APPLICATION

Duysenbaeva Shaxnoza Kadirbaevna
Faculty of English philology,
Uzbekistan State world languages university,
Tashkent, Uzbekistan
duysenbayevashahnoza@gmail.com

Abstract: Mobile devices have quickly taken over language learners' lives, providing them with previously unheard-of access to reading resources and chances for individualized instruction. While the potential of mobile-assisted language learning (MALL) is widely accepted, the specific nuances of how mobile devices uniquely influence reading skill development require closer scrutiny. This article defines the peculiarities of using technology to enhance learners reading skills, focusing on the interplay between device affordances (e.g., portability, interactivity, multimodal capabilities), cognitive processes (e.g., attention, working memory, motivation), and pedagogical methods. We will look through and analyze existing research drawing upon frameworks from cognitive load theory, constructivism, and multiliteracies to explore the specific merits and complexities of mobile reading. Ultimately, this article endeavors to provide a nuanced comprehension of how to effectively leverage mobile technologies to cultivate engaged and proficient readers.

Keywords: MALL, mobile learning, CALL, digital technology, innovative pedagogical approaches, engage learners, traditional instruction, SDT

Introduction

Mobile-assisted language learning (MALL) is preferred by all the members of society regardless of their age due to its accessibility and benefits offered by utilizing. The use of digital technology over the past 40 years has the most significant potential to transform education. An education technology industry has emerged and focused, in turn, on the development and distribution of education content, learning management systems, language applications, augmented and virtual reality, personalized tutoring, and testing. Most recently, breakthroughs in artificial intelligence (AI) methods have increased the power of education technology tools, leading to speculation that technology could even supplant human interaction in education. Technology has been used to support teaching and learning in multiple ways. Digital technology offers two broad types of opportunities. First, it can improve instruction by addressing quality gaps, increasing opportunities to practice, increasing available time, and personalizing instruction. Second, it can engage learners by varying how content is represented, stimulating interaction, and prompting

collaboration. Systematic reviews over the past two decades on technology's impact on learning find small to medium-sized positive effects compared to traditional instruction. However, evaluations do not always isolate technology's impact in an intervention, making it difficult to attribute positive effects to technology alone rather than to other factors, such as added instruction time, resources, or teacher support (UNESCO, 2023). The concept, like the technology, has developed over recent years, from the use of handheld devices in classrooms, through the use of technology to support learning in context and on the move, towards a broader investigation of learning in a mobile society (Vavoula, 2009). One definition that captures the dual perspectives of learner mobility and learning with portable technology is the following:" Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies" (Claire O'Malley, 2005). An increasing number of games and game-like components are increasingly influencing the modern world. In the present era, the field of education has been compelled to adjust to a novel educational environment characterized by the presence of digital natives; given this context, it becomes imperative for the teaching-learning process to embrace innovative pedagogical approaches, such as gamification. The use of game mechanics and game thinking to engage users and find solutions to problems is known as gamification. The primary objective of this approach is to enable user experiences that exhibit attributes of playfulness and gamification, motivate desired user behaviors, ultimately augment overall user satisfaction, and increase student involvement in educational environments. Education is made more accessible, stimulates students' cognitive interests, and boosts learning motivation through computer networks, web-based applications, and interactive services. Motivation is a cognitive process that initiates and sustains actions toward achieving specific goals. Utilizing self-determination theory (SDT) as a macro-level framework is an established approach to understanding the significance of motivation within education (Matsumoto, 2012) .

Literary review and methodology

Mobile-Assisted Language Learning (MALL) has been one of the approaches that use mobile technologies to enhance and support language learning. As a successor of Computer-Assisted Language Learning (CALL), MALL is regarded as language learning in both real-world and virtual environments, and it is assisted by highly portable (handheld and wearable) devices as well as communication and social network technologies (Chang, 2007). Mobile phones, smartphones, smartwatches, social networks, tablet computers, electronic dictionaries, digital music players, personal digital assistants (PDAs), digital voice recorders, and e-readers have been the most utilized devices in mobile learning. Today, smartphones—thanks to their advanced features—have replaced almost all mentioned devices, and MALL is now

closely associated with smartphone applications (Burston, 2012). This study aims to review the MALL-related studies conducted in the field of second or foreign language teaching and learning between the years 2016 and 2020 in terms of research trends/topics, research methodology, and research findings. For this purpose, the main intention was primarily to search the journals that specifically focus on the integration of technology into foreign/second language education. Secondly, in order to narrow down the selection of articles, the journals that are placed in the Social Sciences Citation Index (SSCI) were embraced since they "adopt stringent criteria in reviewing articles" and "have higher impacts in the field" (Duman, 2012). Since the focus of this review is on second/foreign language learning and teaching practices, conceptual analysis of research reviews, meta-analysis studies, theoretical formation, or discussion/opinion papers were also eliminated from the first list. Subsequent to filtering based on the above-mentioned criteria, a total of 25 articles were selected and reviewed (Noyan, 2020).

Results

Upon reviewing twenty-five articles meeting the criteria that were specified at the beginning, it was decided to classify these studies into four categories in terms of their topics to answer the first research question. Accordingly, the first category encapsulates studies focusing on the integration of mobile tools into second/foreign language learning. The second one refers to the research concerning the efficacy of mobile-mediated applications in L2 learning. The third one presents the number of studies in relation to four language skills and vocabulary, grammar, and pronunciation. The last category, on the other hand, comprises the studies in which views, perceptions, or attitudes toward mobile-assisted language learning were the focal points.

Discussion

The importance of MALL is unprecedented in the current technological era. Many students prefer it, as it is considered one of the ways of self-centered learning. The engaging features are handful and various. The concept, like the technology, has developed over recent years, from the use of handheld devices in classrooms, through the use of technology to support learning in context and on the move, towards a broader investigation of learning in a mobile society. One definition that captures the dual perspectives of learner mobility and learning with portable technology is the following: any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies. Let's break down the merits and demerits of MALL in our lives.

1)The defining feature of MALL is that it can happen anywhere, anytime. Learners can access learning materials and engage in activities regardless of their location.

2)Learning experiences may be tailored to each learner's needs, pace, and learning preferences thanks to mobile devices.

3)Apps and platforms are able to deliver tailored feedback and adjust to the development of learners.

4)Mobile devices may utilize technologies like GPS, cameras, and microphones to provide context-aware learning experiences.

5) Learners can interact with their environment in the target language, creating images, recording audio, and getting location-based information

6)Immersion learning environments are created by mobile devices, which give users access to real language resources like news articles, podcasts, movies, and social networking content.

7)Through online forums, messaging apps, and social networking sites, mobile devices help students engage and work together.

8) MALL fosters learner autonomy by providing learners with control over their learning experience.

9)Students' motivation to learn a language may be boosted by the perception that mobile devices are entertaining and interesting.

10)Provides learning experiences tailored to each learner's requirements and preferred method of learning.

11)However, mobile devices have the potential to cause distraction, which impairs concentration and lowers learning results.

12) App crashes and other technical issues, such as poor connectivity, might interfere with learning.

13) Not all internet tools and apps for language learning are of a good caliber.

14) A digital divide results from some students' lack of access to mobile devices or dependable internet connectivity.

Conclusion

With its robust and adaptable approach to language learning, MALL gives students access to individualized, interesting, and real-world learning opportunities. Nonetheless, it's critical to understand the difficulties and execute MALL successfully, taking into consideration elements like learner requirements, instructor preparation, and content quality. MALL may greatly improve language learning results and enable students to become more competent and self-assured language users with careful preparation and execution. To fully investigate MALL's potential and provide best practices for its successful incorporation into language instruction, more language is required.

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