Use of Mobile-Assisted Language Learning (MALL) Apps in Teaching English to Engineering Students – A Study

[1] V. Kumar, [2]Dr. K. Maheswari

[1]Assistant Professor of English, Government College of Engineering,

Tirunelveli -07

kumar@gcetly.ac.in

[2]M.A., M.Phil., Ph.D. Assistant Professor of English,

PG & Research Department of English, M S S Wakf Board College,

Madurai-20

Abstract: Proficiency in written and spoken English is becoming increasingly crucial for engineering students to thrive in their academic and professional endeavors. Mobile-Assisted Language Learning applications have been created as a means to assist language learners in studying on an individualized basis, providing them with flexibility and ease of access. This paper examines the potential application of Mobile-Assisted Language Learning (MALL) applications in the delivery of English language instruction targeted at engineering students. This study explores different theoretical frameworks in the fields of language acquisition, educational technology, and engineering education. Its objective is to analyze the advantages, difficulties, and consequences of integrating innovative Mobile-Assisted Language Learning (MALL) applications into the English Language curriculum specifically tailored for engineering students. This research conducts a comprehensive assessment of the influence of MALL apps on the language proficiency requirements of engineering students, as well as their motivation and excitement. Lastly, this paper address pedagogical factors and suggestions for researchers and tutors that utilize MALL applications in English engineering lessons.

Keywords: Innovative Strategy, Influence of MALL, Facilitate Language Acquisition, Enhance Academic Achievements

Introduction

In the current era of globalization and professional engagement, English is no more a language that is limited to a select few. In highly competitive domains such as engineering, possessing this skill has become imperative for achieving success. With the increasing globalization and interconnectivity of engineering fields, engineers must possess not just exceptional technical expertise but also the ability to communicate proficiently across many languages and boundaries. In doing so, individuals collaborate with individuals who possess diverse linguistic backgrounds (Gaikwad, 2022). It is imperative to undertake interdisciplinary initiatives that are specifically designed to address the linguistic requirements of engineering students.

The utilization of Mobile-Assisted Language Learning (MALL) applications is a novel technique in the field. Mobile-Assisted Language Learning (MALL) applications leverage the extensive accessibility and versatile capabilities of mobile devices to facilitate language acquisition for learners at their convenience and in various locations (Shield & Kukulska-Hulme, 2008). MALL applications provide pupils with a versatile and individualized educational setting. Individuals have the opportunity to engage in interactive activities, select from a variety of multimedia resources, and promptly receive feedback. Due to the potential of MALL apps to enhance language learning performance, it is crucial to investigate the ways in which these applications can support engineering students in their English studies. The present study aims to investigate the utilization of Mobile-Assisted Language Learning (MALL) applications in the instruction of English to students pursuing engineering degrees. The research will examine the utilization patterns, ramifications for the enhancement of language

competency, student engagement, and motivation resulting from the integration of MALL applications with English instruction for engineering students. This study aims to analyze the efficacy and obstacles associated with MALL-based language learning programs. Its objective is to put forth pragmatic concepts and recommendations about the integration of technology in engineering education for language training.

Theoretical Framework

This study has employed a variety of theoretical frameworks to investigate the utilization of Mobile-Assisted Language Learning (MALL) applications in the instruction of English to engineering students. The following chapters present the key findings derived from the extensive research conducted. The present study draws inspiration from prominent language acquisition theories, such as Krashen's Input Hypothesis and Vygotsky's Socio-Cultural Theory. The objective of this study is to examine the process by which individuals acquire or enhance their language proficiency through exposure to understandable material and social interaction (Krashen, 1985; Vygotsky, 1978). Additionally, this research aims to incorporate education technology theory, namely the Technology Acceptance Model (TAM) and the SAMR model, in order to examine the role of technology in creating an environment conducive to language acquisition. This exploration is based on the works of Davis (1989) and Puentedura (2006), who have contributed to the field of Educational Transformation. The subsequent section of the study proceeds to examine various theories pertaining to engineering education, such as the CDIO framework and the ABET accreditation requirements. Next, organize the linguistic prerequisites for acquiring proficiency in Easy. It is the United States of America, from an engineering perspective, engineering education is regarded as a component within a range of human endeavors done by students. Therefore, our considerations cannot be separated from the path and goals pursued on this larger platform (Crawley et al., 2007) ; ABET, 2019).

Benefits of MALL Apps in Teaching English to Engineering Students

MALL applications provide several advantages in the context of instructing English to engineering students. One notable advantage of MALL apps is their ability to offer flexibility and accessibility, allowing students to engage in language learning at their convenience and from any location using their smartphones. The aforementioned adaptability is especially crucial for engineering students who face stringent academic timetables and limited availability for extracurricular language pursuits beyond their professional obligations. Additionally, Mobile-Assisted Language Learning (MALL) applications provide a diverse range of interactive lessons, multimedia resources, and prompt feedback. There exist three distinct additional modes that collaborate to augment students' interest and involvement in learning the second language (L2). By incorporating gamified activities and various tracking functions, MALL applications not only foster a continuous engagement in language practice among engineering students during their free time but also motivate them to proactively pursue further knowledge in each subject. MALL apps offer a wide range of interactive features. Furthermore, MALL applications cater to the diverse learning requirements and inclinations of engineering students by providing tailored learning encounters (Shield & Kukulska-Hulme, 2008). In language classes, students have the opportunity to select activities that align with their proficiency level. They can establish personalized objectives that challenge their current capabilities. Additionally, students have the ability to track their progress, allowing them to take pride in their achievements in the long term. For instance, they can proudly showcase their proficiency in conversational Japanese or Italian cuisine to tourists. In brief, Mobile-Assisted Language Learning (MALL) applications represent a novel and efficacious methodology for instructing English language skills to engineering students, tailored to their individual language needs. These applications employ a delivery mode that fosters engagement, motivation, and overall attractiveness.

Challenges and Considerations

The integration of Mobile-Assisted Language Learning (MALL) applications into the English language teaching curriculum for engineering students presents both obstacles and opportunities. Hence, the division among students may arise from concerns over accessibility and equity, as not all students possess mobile devices or a dependable Internet connection (Chen, 2008). The existence of this digital divide has the potential to exacerbate inequalities in language acquisition and academic performance among engineering students. Furthermore, it is important to consider potential concerns regarding the quality and effectiveness of MALL applications. This is because not all applications adhere to pedagogical concepts that are deemed sound or aligned with language acquisition objectives (Shield & Kukulska-Hulme, 2008). Educators must select and assess MALL applications that align with their students' requirements and educational goals. Once again, it is possible that there could be resistance from educators or students who are either learners or unfamiliar with the utilization of technology in the context of language instruction. In order to overcome this resistance, it is imperative to offer in-service training, support, and resources to educators, enabling them to effectively incorporate MALL applications into their instructional methodologies. The utilization of MALL apps by teachers or students for language skill development may give rise to legal challenges and privacy concerns. Faculty members are required to adhere to legislation regarding the storage and utilization of student data in order to protect the privacy and integrity of students.

Pedagogical Implications

Language instruction incorporates MALL apps. When teaching English, it is important to prioritize language learners. Utilizing MALL apps as a supplementary tool would facilitate integrated English language learning experiences, wherein students actively participate in collaborative learning, cooperate with their peers, and develop self-reliance. By adopting this approach, educators may effectively address the diverse requirements of engineering students while ensuring equitable treatment. The most crucial aspect to emphasize is the promotion of what researchers refer to as technological competency (Chen, 2008).

By providing digital literacy curriculum, institutions may empower our graduates to enhance their future opportunities and prepare themselves for the demands of the professional environment. It is imperative for institutions to furnish the necessary infrastructure, resources, and support services in order to establish a conducive atmosphere for the integration of MALL apps into language courses. Nevertheless, in the event that students possess a mobile device, dependable internet connectivity, and technical assistance, it guarantees equitable access to the advantages of MALL-based language learning for all learners, regardless of their presence in formal educational environments or not.

Conclusion

This theoretical research work has examined the utilization of MALL applications in the instruction of English to college students majoring in engineering. The study has identified the potential advantages, difficulties, and effects of using MALL apps in English training for engineering students, drawing on language acquisition theories, instructional technologies, and engineering education. The study has highlighted that Mobile-Assisted Language Learning (MALL) applications have the potential to offer adaptable, easily available, and tailored educational experiences. However, they also present challenges pertaining to accessibility, quality, resistance, and privacy. Furthermore, this paper has examined the effects of using a MALL-style approach to teaching English on both educators and educational institutions. MALL apps are a novel and effective method to enhance the academic achievements of students in language colleges. However, educators must address the challenges and causes that hinder the integration of MALL apps into language training in order to identify and address these concerns.

References:

[1] ABET. (2019). Criteria for Accrediting Engineering Programs: 2019 – 2020. ABET, Inc.

[2] Chen, N.-S. (2008). *Effects Of Short-Term Memory and Content Representation Type On Mobile Language Learning*. *12*, 93–113.

[3] Crawley, E. F., Malmqvist, J., Östlund, S., & Brodeur, D. R. (2007). Rethinking engineering education: The CDIO approach. In *Rethinking Engineering Education: The CDIO Approach*.

[4] Davis, F. D. (1989). Davis, F. D. (1989) '249008', Perceived Usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, *13*(3).

[5] Gaikwad, A. D. (2022). Issue 4. *International Journal of Research and Analysis in Science and Engineering*, *2*.

[6] Krashen, S. (1986). The Input Hypothesis: Issues and Implications. Longman.

[7] Puentedura, R. R. (2006). *Transformation, Technology, and Education Part 1: A Model for Technology and Transformation*.

[8] Shield, L., & Kukulska-Hulme, A. (2008). Special issue of ReCALL on Mobile Assisted Language Learning. *ReCALL*, *6*(4).

[9] Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.