

Exploring The Potential Of Mobile-Assisted Language Learning (Mall) Applications In Developing English Vocabulary Skills

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Abstract

This literature review aims to investigate the potential of Mobile-Assisted Language Learning (MALL) applications in the development of English vocabulary skills. As mobile devices become increasingly integrated into our daily lives, their potential as tools for language learning has gained significant attention. This article explores the current research and examines the effectiveness of MALL applications in enhancing English vocabulary acquisition. The review highlights the advantages, challenges, and implications of using MALL applications and offers recommendations for educators, researchers, and developers to optimize the utilization of these applications for improving English vocabulary skills.

Key words: Artificial Intelligence (AI); English language; English teaching and learning

Abstrak

Tinjauan literatur ini bertujuan untuk menyelidiki potensi aplikasi Pembelajaran Bahasa Berbantuan Seluler (Mobile-Assisted Language Learning/MALL) dalam pengembangan kemampuan kosakata bahasa Inggris. Seiring dengan semakin terintegrasinya perangkat mobile ke dalam kehidupan kita sehari-hari, potensi mereka sebagai alat bantu pembelajaran bahasa telah mendapatkan perhatian yang signifikan. Artikel ini mengeksplorasi penelitian saat ini dan meneliti efektivitas aplikasi MALL dalam meningkatkan penguasaan kosakata bahasa Inggris. Ulasan ini menyoroti keuntungan, tantangan, dan implikasi dari penggunaan aplikasi MALL dan menawarkan rekomendasi bagi para pendidik, peneliti, dan pengembang untuk mengoptimalkan pemanfaatan aplikasi ini untuk meningkatkan kemampuan kosakata bahasa Inggris.

Kata kunci: Kecerdasan Buatan (AI); Bahasa Inggris; Pengajaran dan pembelajaran bahasa Inggris

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INTRODUCTION

Language learning, particularly the development of vocabulary skills, plays a fundamental role in effective communication and language proficiency (Fauziningrum et al, 2023). Proficiency in English, as a global lingua franca, is highly sought after in today's interconnected world (Sari & Ningsih, 2022). As technology continues to advance, mobile devices have become an integral part of our daily lives, offering new possibilities for language learning (Ningsih, & Sari (2021) and Sari (2023)). Mobile-Assisted Language Learning (MALL) applications, specifically designed to facilitate language learning on mobile devices, have emerged as promising tools in language education.

The ubiquity and accessibility of mobile devices, such as smartphones and tablets, have transformed the way individuals engage with information and learning experiences (Wulantari et al, 2023). MALL applications leverage the features and functionalities of these devices to provide

learners with convenient and personalized language learning opportunities. With the availability of numerous MALL applications specifically tailored to English language learning, there is a growing interest in exploring their potential in developing English vocabulary skills (Yang, 2013).

This literature review aims to examine the effectiveness of MALL applications in enhancing English vocabulary acquisition. By synthesizing existing research and analyzing empirical studies, this review seeks to shed light on the advantages, challenges, and implications of incorporating MALL applications in vocabulary instruction. It also provides recommendations for educators, researchers, and developers to optimize the utilization of MALL applications for improving English vocabulary skills.

The integration of mobile devices into language learning offers several advantages (Ghorbani & Ebadi (2020) and Cakmak (2019)). Firstly, mobile devices are portable, allowing learners to engage in language learning anytime and anywhere. Learners can access MALL applications on their own devices, enabling flexibility and self-paced learning. Secondly, MALL applications often incorporate interactive features that facilitate engagement and active participation. Learners can engage with vocabulary exercises, quizzes, and games, promoting a more immersive and enjoyable learning experience. Moreover, MALL applications often provide multimodal resources, combining text, images, audio, and video to enhance comprehension and retention of vocabulary (Ahmad, Armarego, & Sudweeks, 2013).

However, despite the potential benefits, challenges exist in the effective implementation of MALL applications for English vocabulary development. Technological constraints, such as limited internet access or compatibility issues, can hinder the seamless integration of MALL applications into language learning environments. Additionally, the preferences and learning styles of individual learners may vary, necessitating careful selection and customization of MALL applications to cater to diverse needs. Pedagogical considerations, such as the alignment of MALL applications with curriculum objectives and instructional strategies, must also be taken into account.

By exploring the potential of MALL applications in developing English vocabulary skills, this literature review aims to contribute to the existing body of knowledge on effective language learning practices. The findings of this review can inform educators, language learners, and developers about the benefits, challenges, and best practices for utilizing MALL applications in vocabulary instruction. Ultimately, this review underscores the importance of further research and collaboration among stakeholders to maximize the benefits of MALL applications in language learning and promote effective English vocabulary acquisition.

METHOD

This study employs a literature review methodology to explore the potential of Mobile-Assisted Language Learning (MALL) applications in developing English vocabulary skills. A

literature review is a systematic and comprehensive examination of published scholarly works, including academic journals, books, conference proceedings, and relevant reports. The primary focus of this review is to synthesize and analyze existing research on the topic, providing an overview of the current state of knowledge in the field.

The process of conducting this literature review involves several key steps. Firstly, a comprehensive search strategy was developed to identify relevant literature. Electronic databases, such as Google Scholar, ERIC, and academic libraries, were systematically searched using a combination of keywords and Boolean operators. The search terms included variations of "mobile-assisted language learning," "MALL applications," "English vocabulary," "vocabulary acquisition," and related terms. Additionally, reference lists of identified articles and relevant systematic reviews were examined for additional sources.

The inclusion criteria for selecting articles were as follows: (1) articles published in peer-reviewed journals or reputable conference proceedings, (2) articles written in English, (3) articles focusing on MALL applications in English vocabulary development, and (4) articles providing empirical evidence, case studies, or theoretical insights on the topic. The exclusion criteria were applied to remove irrelevant studies and non-English publications.

Following the identification of relevant articles, a systematic screening process was conducted. Titles and abstracts were screened to determine their relevance to the research topic. Full-text articles meeting the inclusion criteria were further reviewed in detail. The selected articles were critically analyzed to extract key findings, methodologies, and theoretical frameworks used in the studies. Relevant data, such as study design, participant characteristics, intervention details, and outcome measures, were extracted for further synthesis.

The extracted data were organized and synthesized thematically, focusing on the effectiveness of MALL applications in developing English vocabulary skills. Common themes, trends, and patterns were identified across the selected articles to provide a comprehensive overview of the research findings in the field. The synthesized information was then used to address the research questions and objectives of the literature review.

Throughout the review process, efforts were made to ensure the rigor and reliability of the study. By adhering to systematic search strategies, clearly defined inclusion criteria, and rigorous screening processes, potential bias and selection errors were minimized. The review process also followed established guidelines for conducting literature reviews, ensuring transparency and replicability of the methodology.

Limitations of the study include potential publication bias, as not all studies conducted on the topic may be included in the review. Additionally, the generalizability of the findings may be limited due to variations in study designs, participant characteristics, and MALL application features across different studies. However, efforts have been made to include a diverse range of studies to capture a comprehensive understanding of the topic.

Overall, this literature review provides an in-depth analysis of existing research on the potential of MALL applications in developing English vocabulary skills. The findings of this review contribute to the existing body of knowledge and offer insights for educators, researchers, and developers seeking to optimize the utilization of MALL applications in vocabulary instruction.

RESULT AND DISCUSSION

Result

Through the comprehensive literature review, the findings provide valuable insights into the potential of Mobile-Assisted Language Learning (MALL) applications in developing English vocabulary skills (Hashim et al (2017), Kim & Kwon (2012), and Zain & Bowles (2021)). The results highlight the effectiveness, advantages, and challenges associated with the integration of MALL applications for vocabulary acquisition.

1. **Effectiveness of MALL Applications in English Vocabulary Acquisition:** The reviewed studies consistently indicate the positive impact of MALL applications on English vocabulary development. Learners using MALL applications demonstrated improved vocabulary acquisition compared to traditional methods. The interactive and multimodal features of MALL applications engage learners actively, facilitating deeper understanding and retention of vocabulary. The flexibility and accessibility of mobile devices allow learners to engage in vocabulary learning at their own pace and convenience (Kim & Kwon (2012), and Zain & Bowles (2021)).
2. **Advantages of MALL Applications for English Vocabulary Development:** MALL applications offer several advantages for English vocabulary learning. Portability enables learners to access vocabulary exercises and resources anytime, anywhere. The interactive nature of MALL applications promotes engagement and motivation. The integration of multimedia elements, such as images, audio, and video, enhances comprehension and context understanding. Personalization features in MALL applications allow learners to customize their learning experience based on their individual needs and preferences. Gamification elements, such as rewards and challenges, foster a sense of achievement and enjoyment in vocabulary learning (Hashim et al (2017) and AbuSa'aleek (2014)).
3. **Challenges and Limitations of MALL Applications:** Despite the potential benefits, challenges and limitations exist in the effective implementation of MALL applications for English vocabulary development. Technological constraints, such as limited internet access and device compatibility issues, can hinder the seamless integration of MALL applications in some contexts. Learner preferences and individual differences need to be considered to ensure the selection and customization of MALL applications that cater to diverse needs. Pedagogical considerations, including aligning MALL applications with curriculum objectives and instructional strategies, require careful planning to maximize their effectiveness. Potential distractions and misuse of

MALL applications can also impact vocabulary learning outcomes (Ahmad, Armarego, & Sudweeks (2013) and Cakmak (2019)).

4. Implications for Practice and Future Research: The results of this literature review have several implications for educators, language learners, and developers. Educators can integrate MALL applications into their vocabulary instruction to enhance engagement, motivation, and learner autonomy. Language learners can leverage MALL applications to access personalized and interactive vocabulary learning experiences. Developers can consider the findings to design and improve MALL applications that effectively support English vocabulary development (Solihin, 2021). Further research is needed to address the identified gaps and challenges, such as investigating the optimal design features of MALL applications, exploring the long-term effects of MALL interventions on vocabulary retention, and assessing the impact of MALL applications on different learner populations.

Overall, the results of this literature review demonstrate the potential of MALL applications in developing English vocabulary skills. The findings highlight the importance of considering pedagogical strategies, technological considerations, and learner preferences when integrating MALL applications into vocabulary instruction. By leveraging the advantages and addressing the challenges, educators, researchers, and developers can optimize the utilization of MALL applications to enhance English vocabulary acquisition.

Discussion

The discussion section provides an in-depth analysis and interpretation of the results obtained from the literature review on the potential of Mobile-Assisted Language Learning (MALL) applications in developing English vocabulary skills. This section examines the implications, limitations, and future directions related to the findings.

1. Implications of the Findings: The findings of this literature review have important implications for language educators, learners, and developers. Firstly, educators can integrate MALL applications into their vocabulary instruction to enhance students' engagement, motivation, and autonomy. The portability and accessibility of mobile devices enable learners to practice vocabulary outside of the classroom, providing additional opportunities for reinforcement and independent learning. Educators can also leverage the interactive and multimodal features of MALL applications to create engaging vocabulary activities, such as interactive quizzes, flashcards, and word games. Personalization options within MALL applications allow educators to tailor vocabulary learning experiences to individual learners' needs and preferences.
2. Secondly, language learners can benefit from the use of MALL applications to improve their English vocabulary skills. The flexibility and convenience offered by mobile devices allow learners to engage in vocabulary learning at their own pace and in various contexts. The interactive and multimedia features of MALL applications facilitate deeper understanding and retention of

vocabulary items. Learners can take advantage of personalized learning paths, progress tracking, and feedback provided by MALL applications to monitor their own vocabulary development. Furthermore, the gamified elements incorporated into MALL applications can enhance learners' motivation and engagement in vocabulary learning.

3. Thirdly, developers can utilize the findings of this literature review to improve the design and functionality of MALL applications. The identified advantages, such as portability, interactivity, multimodality, personalization, and gamification, can serve as guiding principles for the development of effective MALL applications. Developers can focus on creating user-friendly interfaces, incorporating interactive exercises and multimedia content, and offering customization options to meet the diverse needs of learners. Additionally, developers should consider the pedagogical aspects of vocabulary instruction and align MALL applications with established language learning frameworks and curricula.
4. Limitations: While the literature review provides valuable insights, it is important to acknowledge the limitations inherent in the studies reviewed. Firstly, the generalizability of the findings may be limited due to variations in study designs, participant characteristics, and MALL application features across different studies. The reviewed studies encompassed diverse learner populations, ranging from children to adults, and employed different research methodologies, making direct comparisons challenging. Additionally, the dynamic nature of technology and the rapid development of MALL applications require ongoing research to capture the most up-to-date findings. Another limitation is the potential for publication bias, as studies with negative or inconclusive results may be less likely to be published. This bias may result in an overemphasis on the positive impact of MALL applications, potentially skewing the overall perception of their effectiveness. Future research should aim to include a more comprehensive range of studies, including both successful and unsuccessful implementations of MALL applications for English vocabulary development.
5. Future Directions: The findings of this literature review suggest several areas for future research.
 - a. Firstly, further investigations are needed to explore the optimal design features of MALL applications that effectively support English vocabulary acquisition. Research could focus on identifying the most effective interactive exercises, multimedia components, and gamification elements that enhance vocabulary learning outcomes. Additionally, more studies are warranted to examine the long-term effects of MALL interventions on vocabulary retention and transferability to real-life language use.
 - b. Secondly, future research should consider the impact of MALL applications on different learner populations. Age, language proficiency level, cultural background, and individual learning styles may influence the effectiveness of MALL applications for vocabulary development. Investigating the specific needs and preferences of diverse learner groups can

help inform the customization and adaptation of MALL applications to cater to their specific requirements.

- c. Lastly, studies exploring the pedagogical integration of MALL applications within broader language learning curricula are needed. Investigating the alignment between MALL applications and established vocabulary instruction approaches, such as explicit teaching, contextualized learning, and vocabulary strategies, can provide valuable insights for educators in optimizing the use of MALL applications in vocabulary learning.

In conclusion, the findings of this literature review underscore the potential of MALL applications in developing English vocabulary skills. The implications for educators, learners, and developers highlight the importance of incorporating MALL applications into vocabulary instruction, considering technological constraints, learner preferences, and pedagogical considerations. Future research should address the limitations identified and explore the optimal design features, examine different learner populations, and investigate pedagogical integration to further enhance the effectiveness of MALL applications in English vocabulary acquisition.

CONCLUSION

This literature review aims to investigate the potential of Mobile-Assisted Language Learning (MALL) applications in the development of English vocabulary skills. As mobile devices become increasingly integrated into our daily lives, their potential as tools for language learning has gained significant attention. This article explores the current research and examines the effectiveness of MALL applications in enhancing English vocabulary acquisition. The review highlights the advantages, challenges, and implications of using MALL applications and offers recommendations for educators, researchers, and developers to optimize the utilization of these applications for improving English vocabulary skills.

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