Mastering English on the Go

Mastering English on the Go:

The Ultimate Guide to Mobile Apps for Language Instruction

By

Shirin Shafiei Ebrahimi

Cambridge Scholars Publishing

Mastering English on the Go: The Ultimate Guide to Mobile Apps for Language Instruction

By Shirin Shafiei Ebrahimi

This book first published 2026

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-0364-6266-6
ISBN (Ebook): 978-1-0364-6267-3

To the Great Soul of my Beloved Father in Heaven

In your pocket lies the key to the world of languages.

TABLE OF CONTENTS

PREFACE

The language education landscape is transforming in an era where mobile technology permeates every aspect of daily life. As English has become a global lingua franca, the demand for effective language-learning tools has intensified. Among the most significant advancements are mobile applications that harness the power of technology to facilitate and enhance the learning of English language skills—specifically listening, speaking, reading, and writing. This handbook serves as a comprehensive guide to understanding and utilizing these mobile applications to improve English language proficiency across various skill areas.

The ability to communicate effectively in English encompasses a range of skills that are integral to academic success and professional development. Listening skills allow learners to comprehend spoken language, engage in conversations, and understand nuanced dialogues. Speaking skills empower learners to express themselves clearly and confidently, facilitating interaction in both personal and professional contexts. Reading skills enable comprehension of written texts, fostering critical thinking and knowledge acquisition, while writing skills provide the means for clear expression and communication in various formats.

Integrating mobile applications into English language learning reflects a broader shift towards learner-centered, technology-driven educational practices. These applications offer interactive, flexible, and engaging platforms that cater to diverse learning styles and preferences. They incorporate various technological features such as real-time feedback, adaptive learning algorithms, and extensive digital libraries, which enhance learners' experiences and outcomes. However, despite their popularity and potential, there exists a need for thorough research that assesses the effectiveness of these applications in improving specific language skills.

This handbook addresses that need by systematically examining the most effective mobile applications for enhancing English listening, speaking, reading, and writing skills. Each chapter provides an in-depth exploration of a specific skill area, beginning with an analysis of existing research and theoretical frameworks, followed by empirical evaluations of selected applications. Additionally, this handbook seeks to answer critical research questions regarding the features and impacts of these applications

on learners' proficiency, as well as the perceptions of educators and students.

The significance of this work lies not only in its contribution to academic research but also in its practical implications for educators, students, and researchers. By providing insights into the efficacy of mobile applications in language learning, this handbook aims to guide pedagogical practices, inform curriculum design, and inspire further research in the realm of educational technology.

Through the pages of this handbook, educators and learners alike will gain a deeper understanding of how to leverage mobile applications to enhance English language skills effectively, paving the way for more successful and engaged language learners in our increasingly interconnected world.

In closing, I would like to dedicate this book to the memory of my late father, whose unwavering support, love, and guidance have been the cornerstone of my journey. He supported me through every victory and failure, giving me advice and words of wisdom that motivated me to keep going for my goals. His enthusiasm for knowledge and faith in my abilities have greatly influenced who I am now. This book is a testament to his enduring influence, and I carry his spirit with me in every word written and every goal achieved. Thank you, Father, for being my greatest mentor and inspiration.

FOREWORD

Language education has undergone a dramatic transformation in recent years, driven by the rapid rise of mobile technologies. These tools are reshaping how people learn, communicate, and access information. English, now firmly established as the global language of academia, commerce, and international collaboration, has seen an unprecedented demand for flexible, accessible learning solutions. In this context, mobile applications have evolved from convenient supplements to powerful platforms that support and enhance every dimension of language proficiency. Mastering English on the Go: The Ultimate Guide to Mobile Apps for Language Instruction offers a timely and practical response to this shift.

What sets this handbook apart is its thoughtful balance of research-based insights and real-world applications. In a marketplace crowded with thousands of language-learning apps, educators and learners often struggle to identify tools that truly foster skill development. This guide addresses that challenge directly. Through a systematic review of mobile applications for listening, speaking, reading, and writing, it combines critical analysis with actionable recommendations. Grounded in current research yet attuned to the realities of today's classrooms, it provides a clear framework for understanding how and why certain apps promote measurable growth in English proficiency.

Each chapter bridges theory and practice, translating complex findings into accessible evaluations that educators, students, and researchers can apply immediately. Dr. Shirin Shafiei Ebrahimi demonstrates how features such as adaptive learning algorithms, interactive feedback, and multimodal content can transform traditional instruction into a personalized, engaging, and effective learning experience. In an era of constant connectivity, this handbook affirms that mobile learning, when thoughtfully integrated, can lead to deep, sustained mastery rather than superficial engagement.

Beyond its academic contribution, this resource offers practical value for institutions seeking to align curricula with the needs of a mobile-first generation. It equips educators to make informed decisions, empowers learners to take ownership of their progress, and encourages researchers to explore the evolving intersections of language pedagogy and technology. Most importantly, it underscores that success in English language learning

today depends not only on access to digital tools but on understanding their capabilities and limitations.

Mastering English on the Go is more than a guide; it is a catalyst for reimagining how English can be taught and learned in our interconnected world. I commend Dr. Shirin Shafiei Ebrahimi for advancing both scholarship and practice in this vital field. Readers will find not only guidance but inspiration to leverage mobile technologies in ways that make language learning more meaningful, equitable, and effective. I invite you to explore this work and consider the opportunities it presents for shaping the future of mobile-assisted language learning.

Kouider Mokhtari
Anderson-Vukelja-Wright Endowed Professor
The University of Texas at Tyler, United States

WHO SHOULD USE THE BOOK

This handbook is an essential resource for various audiences, particularly those involved in teaching, learning, or designing English language programs using technology. It offers practical and research-based insights into how mobile AI applications can be effectively integrated into language instruction. Below is a guide to who can benefit from this book and how they should use it:

1. English Language Teachers and Instructors

- **Who**: Teachers at all levels (K-12, higher education, private language schools) who seek to incorporate mobile technology into their lessons.
- **How**: Teachers can use each chapter to identify the most effective mobile AI applications for enhancing specific language skills, such as listening, speaking, reading, and writing. By following the recommendations, educators can incorporate these apps into their classroom activities or assign them as supplemental learning tools to motivate students outside of class hours. The discussions on pedagogical effectiveness can guide teachers in adapting their teaching strategies to different learning preferences and needs.

2. English Language Learners

- **Who**: Self-directed learners, students in formal programs, or individuals seeking to improve their English proficiency.
- **How**: Learners can use this handbook as a guide to selecting mobile applications that suit their learning goals. Each chapter provides an in-depth analysis of specific applications tailored to enhancing listening, speaking, reading, and writing skills. By understanding the features and functions of the recommended apps, learners can personalize their study plans and track their progress independently. The flexibility and interactivity offered by these applications will help them practice language skills in a structured yet engaging manner.

3. Curriculum Designers and Educational Technologists

- **Who**: Professionals involved in designing language learning programs and integrating technology into curricula.
- **How**: Curriculum designers can use the research findings presented in each chapter to inform their decisions about which mobile applications to recommend or integrate into learning modules. The book provides valuable insights into how various mobile tools align with specific language skills, enabling designers to create comprehensive and technology-enhanced learning experiences. Furthermore, the recommendations at the end of the book serve as a guideline for integrating mobile apps into broader educational frameworks.

4. Researchers in Language Education and Educational Technology

- **Who**: Academic researchers focusing on the role of technology in language acquisition and education.
- **How**: Researchers can draw from the systematic literature reviews, methodologies, and empirical findings provided in each chapter. The book highlights gaps in current research and suggests areas for future exploration, making it a useful resource for scholars interested in studying the long-term effects of mobile AI applications on language proficiency. The mixed-methods approach outlined in the chapters can serve as a template for conducting similar studies or expanding on the research questions posed in this handbook.

5. Administrators and Policy Makers in Education

- **Who**: School administrators, policymakers, and decision-makers in educational institutions.
- **How**: This book can help administrators and policymakers make informed decisions about adopting mobile technologies in language learning programs. The evidence-based recommendations provided throughout the handbook can support policy development for integrating mobile apps into official curricula, ensuring that technology enhances the educational experience without replacing traditional methods. By understanding the pedagogical value of these applications, decision-makers can allocate resources efficiently and foster a culture of innovative learning.

How to Use the Book

- **Focus on Specific Skills**: Readers should approach the book based on the skill they want to improve or teach. Each chapter is dedicated to one language skill (listening, speaking, reading, writing), making it easy to focus on the most relevant mobile applications.

- **Apply Recommendations**: At the end of each chapter, and in the recommendation section, the handbook offers practical suggestions for educators, learners, and institutions. Implementing these strategies will maximize the benefits of mobile learning tools.
- **Stay Updated**: The educational technology field evolves rapidly, so users of this book should remain adaptable. The recommendations for further research and ongoing evaluation of mobile AI applications ensure that educators and learners stay ahead of technological trends.

CHAPTER ONE

APPLICATIONS FOR ENGLISH LANGUAGE SKILLS INSTRUCTION

1. Introduction

Integrating mobile and digital applications into English language instruction has profoundly transformed traditional language learning environments. By leveraging technology, these tools have created dynamic and interactive opportunities for learners to develop essential language skills—reading, writing, listening, and speaking—beyond the spatial and temporal constraints of the classroom. This chapter delves deeply into the landscape of applications available for English language instruction, thoroughly examining their potential to foster language acquisition, enhance skill development, and adapt to the diverse needs of learners across varied educational and cultural contexts.

Driven by technological advancements, particularly in mobile accessibility, artificial intelligence, and gamification, language learning applications have evolved into sophisticated platforms that transcend the limitations of conventional instruction. These tools now offer personalized and adaptive learning experiences that cater to a broad spectrum of proficiency levels, learning preferences, and styles. Research demonstrates their efficacy in promoting learner autonomy, engaging students through gamified and interactive content, and enabling on-demand access to high-quality practice materials (Chan, 2024). Such capabilities empower learners to take control of their own educational journeys, bridging the gap between formal instruction and self-directed learning (Mohd, et al., 2019).

Notable features of these applications include real-time feedback mechanisms, which provide immediate corrections and guidance, and spaced repetition techniques, which enhance long-term vocabulary retention. Additionally, adaptive learning algorithms dynamically adjust instructional content in response to a learner's progress and challenges, ensuring a tailored and responsive educational experience (Li and Wang, 2024). These

affordances underscore the capacity of digital tools to support sustained engagement and optimize learning outcomes.

Despite the transformative potential of these technologies, significant challenges remain. For instance, ensuring the authenticity of language used within applications is critical to fostering genuine communicative competence. The balance between entertainment-oriented gamified elements and rigorous language instruction must also be carefully managed to ensure that pedagogical integrity is maintained. Moreover, while these tools are designed to enhance engagement, they must also align with broader curricular goals and learning objectives to achieve meaningful educational outcomes.

This chapter critically examines these applications and their pedagogical affordances, assessing their strengths, limitations, and implications for English language instruction. By providing an evidence-based analysis, it aims to equip educators, curriculum designers, and researchers with insights into how mobile and digital tools can be leveraged to enrich English language teaching and learning in diverse educational settings. In doing so, it highlights both the opportunities and challenges associated with integrating technology into language instruction, offering practical recommendations for optimizing its use in fostering effective and inclusive learning environments.

2.1 Overview of Mobile Applications for Language Learning

The rapid advancement of mobile technology has catalyzed the development of numerous applications tailored to support English language instruction, significantly reshaping traditional paradigms of language teaching and learning. Mobile applications, collectively referred to as mobile-assisted language learning (MALL) tools, have become integral to the educational landscape. Research underscores their transformative potential, enabling learners to engage in language practice both within and beyond formal classroom environments. Existing studies on these tools highlight their diverse capabilities in addressing the core language skills—reading, writing, listening, and speaking—through innovative technological affordances that cater to specific pedagogical needs (Gou, 2023).

2.1.1 Reading and Vocabulary Development

Mobile applications designed for reading and vocabulary acquisition leverage a variety of interactive features to enhance learners' exposure to target language items. Spaced repetition systems, gamified tasks, and

interactive e-books are particularly effective in improving vocabulary retention and reading comprehension. For instance, studies reveal that gamified platforms like Duolingo and Memrise sustain learner motivation through engaging activities while fostering incremental mastery of vocabulary and grammar concepts (Tommerdahl, et al., 2024; Yuen and Schlote, 2024). Additionally, these applications' portability allows learners to engage in language practice during brief, idle moments throughout the day, a phenomenon often described as "microlearning" (Kohnke, 2023). Such accessibility democratizes language learning, empowering students to integrate English practice seamlessly into their daily routines.

2.1.2 Writing Skills and Automated Feedback

Although research on mobile applications for writing is relatively nascent, emerging studies point to the promising role of automated writing tools such as Grammarly and Ginger. These applications offer real-time grammar, punctuation, and stylistic suggestions, enabling learners to refine the mechanical accuracy and coherence of their written work (Wu, et al., 2024). However, their limitations are noteworthy. Automated systems often lack the sophistication required to evaluate creativity, rhetorical structure, and argumentation, which are essential for developing advanced writing skills. Moreover, while these tools provide immediate and convenient feedback, their inability to replicate the nuanced insights of human instructors constrains their applicability for higher-level learners requiring detailed guidance in crafting complex texts.

2.1.3 Listening and Speaking Proficiency

Applications targeting listening and speaking skills harness the power of voice recognition, AI-driven chatbots, and audiovisual resources to simulate interactive, real-world communication scenarios. Platforms such as HelloTalk and Tandem, which connect users with native speakers, are particularly effective in fostering communicative competence and providing opportunities for authentic practice. These informal interactions reduce language anxiety and promote learner confidence in spoken communication (Kessler, et al., 2025). Furthermore, AI-powered tools that simulate conversational exchanges allow learners to practice speaking in varied contexts, including professional and social settings. However, the effectiveness of these simulations often hinges on the accuracy and contextual appropriateness of AI-generated feedback, which remains a subject of ongoing research and refinement (Tai and Chen, 2024).

2.1.4 Challenges and Limitations

Despite their pedagogical promise, mobile applications for language learning face notable challenges that necessitate critical evaluation. A recurring concern in the literature is the limited instructional depth of many applications, which often prioritize memorization and basic skills over the cultivation of higher-order language competencies such as critical thinking and complex communication (Metruk, 2024). Furthermore, the absence of adaptive, nuanced feedback for intricate tasks, particularly in writing and speaking, can hinder the development of advanced proficiency. Ethical considerations, including user privacy, data security, and equitable access, also emerge as pressing issues, highlighting the importance of accountability in the design and implementation of MALL tools.

2.1.5 Toward Effective Integration

While mobile applications offer unprecedented opportunities for autonomous and accessible language learning, their full potential can only be realized through thoughtful integration into comprehensive instructional frameworks. Scholars advocate for a balanced approach that combines the strengths of MALL tools with teacher guidance and curriculum design to ensure alignment with broader educational objectives (Wang, et al., 2024). Additionally, addressing the existing limitations of these tools requires continued innovation and research. Emerging technologies such as adaptive artificial intelligence, immersive virtual reality environments, and real-time, context-aware feedback systems hold promise for overcoming current challenges and further enhancing the efficacy of mobile applications in English language instruction.

2.1.6 Conclusion

The literature on mobile applications for English language learning presents a nuanced perspective, illustrating a landscape of vast potential interwoven with complex challenges. Mobile applications have redefined the boundaries of language instruction, offering learners unparalleled flexibility and opportunities for engagement. However, their pedagogical success depends on critical considerations of instructional depth, feedback mechanisms, and ethical implementation. As technology continues to evolve, ongoing research and interdisciplinary collaboration will be vital to ensure that these tools not only complement but also elevate the quality of English language education.

2.2 Theoretical Frameworks for Language Acquisition and Mobile Application Technology

Theoretical frameworks for language acquisition provide valuable insights for understanding and enhancing the use of mobile applications in language learning. This chapter explores how established language learning theories—such as behaviorism, constructivism, sociocultural theory, interactionism, and emerging approaches like connectivism—inform the development and pedagogical design of MALL. By grounding mobile language applications in these frameworks, educators and app developers can align technology-based learning with foundational cognitive, social, and interactive processes essential to language acquisition. This theoretical examination offers a structured lens through which the design and application of mobile technology can more effectively support language learners.

Behaviorism, one of the earliest frameworks applied to language acquisition, emphasizes repetition, reinforcement, and stimulus-response conditioning as critical for skill development. Rooted in the work of Skinner, behaviorism suggests that language learning involves forming habits through repeated exposure and feedback. This theory has directly influenced the design of mobile applications that utilize spaced repetition and gamified rewards to reinforce vocabulary acquisition and grammar rules. Applications such as Duolingo and Memrise are emblematic of behaviorist principles, focusing on repetitive tasks, immediate feedback, and incremental rewards to encourage habit formation and retention (Nguyen, 2024). However, while behaviorism's focus on drill-based practice supports basic language building blocks, its limitations lie in addressing communicative competence and language use in complex, real-world contexts (Gao, et al., 2024). This limitation highlights the need for mobile applications to go beyond behaviorist approaches to support more comprehensive language skills.

Constructivism, advanced by Piaget, emphasizes active learner engagement and the construction of knowledge through experience. Constructivist approaches in language learning prioritize contextually meaningful interactions and problem-solving tasks that allow learners to relate language to real-life situations. In mobile language applications, constructivist principles have influenced the creation of interactive and scenario-based learning environments where learners are encouraged to apply new language skills in context. Applications like Babbel and Busuu integrate constructivist design by providing simulated real-world conversations and situational language use, allowing learners to actively

construct and apply knowledge within a structured but flexible framework (Xiao, et al., 2024). The focus on context and engagement makes constructivist-inspired apps particularly effective for developing communicative skills, although they may require supplementary tools for comprehensive skill development across language domains (Pan, et al., 2024).

Sociocultural theory, as formulated by Vygotsky, underscores the importance of social interaction and cultural context in language development. According to this framework, language learning occurs as learners interact with others and engage in culturally relevant tasks, with more knowledgeable individuals guiding the learning process. Sociocultural theory has significantly impacted MALL by encouraging the development of social and collaborative learning platforms that facilitate language exchange and peer support. Applications like HelloTalk and Tandem embody sociocultural principles by allowing learners to connect with native speakers or fellow language learners, enabling authentic interaction that supports both linguistic and cultural learning (Kessler, et al., 2025). These interactions align with Vygotsky's Zone of Proximal Development (ZPD), where learners advance through the support of more capable peers or native speakers, ultimately fostering communicative competence and cultural awareness (Shadiev, et al., 2024). The success of sociocultural-based applications highlights the importance of interactive and social components in mobile language learning, though practical challenges, such as ensuring the quality and appropriateness of peer feedback, remain.

Interactionism, particularly Long's Interaction Hypothesis, emphasizes the role of conversational exchanges in language learning, where learners negotiate meaning through interactive feedback. Interactionist theory suggests that language acquisition is enhanced when learners engage in communication that requires clarification and adjustment, thereby strengthening comprehension and productive use of language. In mobile applications, this theory supports the integration of real-time chat, voice interactions, and interactive feedback mechanisms, often facilitated by AI-driven technologies. For example, applications like Mondly and Elsa Speak incorporate chatbot-based interactions and speech recognition to enable learners to practice speaking and listening in simulated conversations. Although AI-based interactions provide valuable practice opportunities, they often lack the natural variability and authenticity of human interaction, which may limit their effectiveness for higher-level communicative skills (Xiu-Yi, 2024).

Connectivism, an emerging theory proposed by Siemens, emphasizes learning as a networked process, where knowledge is distributed across a variety of digital platforms, resources, and communities. Connectivist

principles are particularly relevant in mobile learning environments, where learners often engage with content across multiple platforms and draw on social networks and online communities to build language skills (Ali, et al., 2020). This framework aligns well with mobile learning's focus on autonomy, accessibility, and interconnectivity, enabling learners to access information, share resources, and seek peer support on demand. Language applications such as LingQ and language exchange platforms integrate connectivist elements by offering access to vast online content libraries and enabling learners to interact within global language communities, facilitating self-directed and interconnected learning experiences (Bruzos, 2023). However, connectivist approaches rely on the learner's ability to effectively navigate and curate learning resources, which can pose challenges for less experienced or highly structured learners (Conceição and Biniecki, 2024).

In addition to these primary frameworks, hybrid approaches in mobile language applications combine elements from multiple theories to create well-rounded learning experiences. For example, some applications integrate behaviorist repetition with constructivist scenario-based learning or sociocultural language exchange features, aiming to leverage the strengths of each theoretical approach. These hybrid models reflect an evolving understanding of how mobile technology can support multifaceted language learning needs, fostering both foundational language skills and higher-order communicative abilities.

In summary, theoretical frameworks for language acquisition offer a nuanced understanding of the principles that inform mobile application design for language learning. Behaviorism provides a foundation for repetition and memorization, constructivism promotes contextual learning, sociocultural theory emphasizes interactive and culturally relevant experiences, and interactionism supports authentic communicative practice. Connectivism, meanwhile, underscores the power of networked, autonomous learning in the digital age. Together, these theories illustrate how mobile applications can be designed to support various language learning objectives, emphasizing the need for theoretically grounded, pedagogically diverse approaches in MALL. As mobile technology advances, further research is needed to explore how adaptive AI, multimodal resources, and networked learning environments can deepen the alignment between theoretical frameworks and mobile application functionality, ultimately enhancing the effectiveness of technology in language instruction.

2.3 Studies on the Effectiveness of Mobile Apps for Language Instruction

The growing prevalence of mobile-assisted language learning (MALL) has stimulated significant academic interest, resulting in an expanding body of research that evaluates the effectiveness of mobile applications in supporting various aspects of language acquisition. These studies collectively underscore the potential of MALL to enhance essential language competencies, including vocabulary acquisition, listening comprehension, speaking fluency, and grammatical proficiency. The pedagogical affordances of mobile applications—spanning features like gamification, multimedia integration, and real-time interaction—have been instrumental in advancing language learning outcomes, making them a cornerstone of modern instructional strategies.

2.3.1 Vocabulary Acquisition

Vocabulary acquisition has been a central focus of research on MALL, with studies emphasizing the efficacy of mobile applications in fostering long-term retention. Shi, et al. (2024) demonstrated that learners utilizing vocabulary apps outperformed peers relying on traditional study methods, achieving higher retention rates due to features such as spaced repetition systems and gamification. These features leverage cognitive principles to reinforce memory, providing consistent, engaging practice opportunities that enhance the depth and durability of vocabulary knowledge. Gamified approaches in applications like Memrise not only sustain learner motivation but also enable incremental learning, where vocabulary is introduced progressively and reviewed at optimal intervals for retention.

2.3.2 Listening and Speaking Skills

Listening and speaking, essential for communicative competence, have also benefited significantly from mobile applications designed to simulate authentic language use. Platforms like HelloTalk and Tandem facilitate direct interactions between learners and native speakers, fostering real-world communication skills in low-stakes, supportive environments. Chen (2024) found that regular engagement with these applications not only improved learners' fluency but also reduced anxiety in speaking situations, highlighting the socio-emotional benefits of mobile-mediated language exchanges. The opportunity to converse with native speakers helps learners acquire natural pronunciation, intonation, and idiomatic expressions,

thereby enhancing their communicative competence and confidence in real-world interactions.

2.3.3 Reading Comprehension

Mobile applications for reading comprehension employ multimedia resources and interactive features to engage learners and enhance their understanding of written texts. For instance, digital reading platforms that integrate glossaries, comprehension questions, and interactive annotations have proven particularly effective. Huang, et al. (2024) found that learners who used these tools demonstrated higher levels of reading comprehension compared to those engaging with traditional print materials. The integration of multimedia elements, such as audio narration and visual aids, enriches the reading experience, making texts more accessible and fostering deeper cognitive engagement with the content.

2.3.4 The Role of Integration with Traditional Instruction

While mobile applications offer substantial benefits, their effectiveness is amplified when integrated thoughtfully into broader instructional frameworks. Tommerdahl, et al. (2024) highlighted that learners who combined mobile tools with formal classroom activities achieved significantly better language proficiency outcomes. This finding underscores the importance of guided learning and the role of instructors in scaffolding language development. Mobile applications can complement traditional instruction by providing learners with additional opportunities for practice and exploration, but they cannot fully replace the nuanced feedback, structured guidance, and collaborative learning experiences facilitated by educators in classroom settings.

2.3.5 Challenges and Limitations

Despite the positive outcomes associated with MALL, researchers caution against over-reliance on mobile applications. Gamified elements, while effective in enhancing motivation, may inadvertently prioritize extrinsic rewards over intrinsic learning goals (Mohd, et al., 2018). Órdenes and Ulloa (2024) observed that learners who became overly reliant on reward systems demonstrated reduced engagement with deeper, self-directed learning processes. Additionally, many applications focus on discrete skills, such as vocabulary or grammar, at the expense of fostering higher-order

language competencies, including critical thinking, argumentation, and cultural nuance.

2.3.6 Toward Comprehensive Language Development

To maximize the effectiveness of mobile applications, they must be incorporated into educational strategies that prioritize holistic language development. This includes designing learning pathways that balance the immediate, engaging nature of mobile apps with the rigor and depth of formal instruction. Moreover, ongoing research is needed to address existing limitations and explore how emerging technologies, such as adaptive AI and immersive learning environments, can further enhance the pedagogical value of MALL.

2.3.7 Conclusion

The effectiveness of mobile applications for language instruction is well-supported by empirical research, particularly in their capacity to promote vocabulary acquisition, listening comprehension, speaking fluency, and reading comprehension. However, their pedagogical potential is best realized when they are thoughtfully integrated into comprehensive instructional frameworks that combine the affordances of mobile tools with the strengths of traditional classroom instruction. By addressing the challenges of over-reliance on gamification and discrete skill focus, educators and researchers can unlock the full potential of mobile-assisted language learning to support learners in achieving robust, enduring language proficiency.

2.4 Gaps in the Existing Research for English Language Skills Instruction

Despite the significant advancements in research on mobile applications for language instruction, several critical gaps persist that warrant deeper investigation. Addressing these gaps is essential for refining mobile-assisted language learning (MALL) approaches and ensuring their effectiveness in diverse educational contexts.

2.4.1 Learner Demographics and Personalization

One prominent gap in the current literature is the limited exploration of how learner demographics—such as age, proficiency level, and cultural

background—affect the interaction with mobile learning tools. Research has predominantly concentrated on younger learners, often in formal educational settings, with far less emphasis on adult learners or those in informal learning environments. This imbalance risks overlooking the unique challenges and preferences of adult learners, such as the need for flexible, self-directed learning pathways or content tailored to professional contexts. Furthermore, cultural background plays a critical role in shaping learning preferences and engagement with technology (Ebrahimi, 2018). The paucity of cross-cultural comparative studies limits our understanding of how learners from diverse cultural contexts adopt and benefit from mobile language applications. Expanding research to include a wider range of learner demographics could provide valuable insights into how to design and adapt mobile resources to meet the needs of diverse populations.

2.4.2 Long-Term Impact of Mobile Applications

Another critical area of inquiry lies in the exploration of the long-term effects of mobile application use on language acquisition. The majority of existing studies focus on short-term learning outcomes, such as vocabulary retention, test scores, or immediate improvements in specific language skills. However, these metrics provide an incomplete picture of the sustained impact of mobile applications. For instance, questions remain about how initial gains achieved through mobile learning translate into long-term language proficiency, practical communication skills, or the ability to apply language knowledge in real-world contexts. Longitudinal studies that track learners over extended periods could offer a more comprehensive understanding of the enduring effects of mobile learning tools and help identify factors that contribute to sustained language development.

2.4.3 Integration with Traditional Instruction

While research acknowledges the potential of MALL as a supplementary tool, there is a lack of empirical evidence on how to effectively integrate mobile applications into traditional classroom instruction. Studies, such as Ebrahimi (2020), have highlighted the benefits of using mobile tools alongside face-to-face instruction, but practical strategies for achieving this integration remain underexplored. For example, how can mobile applications be aligned with curriculum objectives to ensure coherence and continuity in language instruction? What roles do instructors play in guiding learners to maximize the benefits of mobile tools? Investigating these questions could provide educators with actionable frameworks for combining mobile

technology with traditional pedagogical methods, ultimately leading to more meaningful and effective learning experiences.

2.4.4 Psychological Dimensions of Mobile Learning

The psychological aspects of mobile learning, including motivation, learner autonomy, and engagement, are another underexplored area in the existing literature. While studies often emphasize the technical features of mobile applications—such as gamification, multimedia integration, and interactive elements—they rarely examine how these features influence learners' psychological states. Understanding the motivational dynamics of mobile app usage is particularly important, as sustained engagement is critical for language acquisition. For instance, how do gamified rewards affect intrinsic versus extrinsic motivation? To what extent do mobile applications foster a sense of autonomy and self-efficacy among learners? Investigating these psychological dimensions could inform the design of more user-centered applications that not only enhance learning outcomes but also promote long-term engagement and intrinsic motivation.

2.4.5 Barriers to Mobile Language Learning

Finally, there is a noticeable scarcity of research addressing the challenges and barriers learners face when using mobile applications for language instruction. Technological accessibility, usability, and learner support are critical factors that influence the effectiveness of MALL, particularly for marginalized or under-resourced populations. For example, limited access to reliable internet connections, language barriers in-app interfaces, and a lack of technical support can hinder learners' ability to fully utilize mobile applications. Additionally, cognitive overload resulting from poorly designed interfaces or excessive reliance on gamified elements can negatively impact learning experiences. Addressing these challenges through empirical research could lead to the development of more inclusive and effective mobile learning solutions that cater to a broader audience, ultimately enhancing the overall quality of English language instruction.

2.4.6 Conclusion

The gaps in the current research on mobile applications for English language instruction underscore the need for more nuanced, inclusive, and longitudinal studies. By exploring the interaction of learner demographics with mobile tools, the long-term impact of these applications, effective

strategies for integration with traditional instruction, psychological factors influencing learner engagement, and barriers to accessibility, future research can provide a more comprehensive understanding of mobile-assisted language learning. Addressing these gaps will not only contribute to the theoretical advancement of MALL but also support the development of practical, evidence-based interventions that meet the diverse needs of language learners in a rapidly evolving technological landscape.

References

Ali, S. I., S. S. Ebrahimi, M. Z. I. Khan, and M. A. Habeeb. "A Novel Approach to Identify Student's Attentiveness Based on Drowsiness Detection during Online/Live Classes." International Journal of Applied Sciences and Engineering Research 5, no. 2 (2020).

Bruzos, A. "'Language Hackers': YouTube Polyglots as Representative Figures of Language Learning in Late Capitalism." International Journal of Bilingual Education and Bilingualism 26, no. 10 (2023): 1210–27. https://doi.org/10.1080/13670050.2021.1955498.

Chan, V. "Using a Virtual Reality Mobile Application for Interpreting Learning: Listening to the Students' Voice." Interactive Learning Environments 32, no. 6 (2024): 2438–51. https://doi.org/10.1080/10494820.2022.2147958.

Chen, Y. C. "Effects of Technology-Enhanced Language Learning on Reducing EFL Learners' Public Speaking Anxiety." Computer Assisted Language Learning 37, no. 4 (2024): 789–813. https://doi.org/10.1080/09588221.2022.2055083.

Conceição, S. C., and S. Y. Biniecki. "Technology and Adult Learning." New Directions for Adult and Continuing Education (2024). https://doi.org/10.1002/ace.20545.

Ebrahimi, S. S. "Environmental Sciences Students' Achievements via Conventional and Technology-Based Instructions." Journal of Environmental Treatment Techniques 8, no. 1 (2020): 437–41.

Ebrahimi, S. S. and Jiar, Y. K. The use of technology at Malaysian public high schools. Merit Research Journal of Education and Review, 6, no. 3, (2018): 54-60.

Gao, C., X. Lan, N. Li, Y. Yuan, J. Ding, Z. Zhou, ... and Y. Li. "Large Language Models Empowered Agent-Based Modeling and Simulation: A Survey and Perspectives." Humanities and Social Sciences Communications 11, no. 1 (2024): 1–24. https://doi.org/10.1057/s41599-024-03611-3.

Gou, P. "Teaching English Using Mobile Applications to Improve Academic Performance and Language Proficiency of College Students." Education and Information Technologies 28, no. 12 (2023): 16935–49. https://doi.org/10.1007/s10639-023-11864-9.

Huang, C., T. Wang, and Y. Li. "Mobile-Assisted English Learning Beyond the Classroom: Understanding the Effects of Language Proficiency on Chinese Undergraduate Students' Behavioral Engagement." Education and Information Technologies 29, no. 1 (2024): 737–62. https://doi.org/10.1007/s10639-023-12301-7.

Kessler, M., F. Marino, and S. Farrell. "Computer-Assisted Language Learning and Teaching: Emerging Trends, Challenges, and Solutions in ELT." In Adaptable English Language Teaching, 228–44. 2025.

Kohnke, L. Using Technology to Design ESL/EFL Microlearning Activities. Singapore: Springer, 2023. https://doi.org/10.1007/978-981-99-2774-6.

Li, M., and T. Wang. "Optimizing Learning Return on Investment: Identifying Learning Strategies Based on User Behavior Characteristic in Language Learning Applications." Education and Information Technologies 29, no. 6 (2024): 6651–81. https://doi.org/10.1007/s10639-023-12078-9.

Metruk, R. "Mobile-Assisted Language Learning and Pronunciation Instruction: A Systematic Literature Review." Education and Information Technologies (2024): 1–28. https://doi.org/10.1007/s10639-024-12453-0.

Mohd, N, K. Ali, S. Ebrahimi, and A. A. Fauzi. "Understanding the level of self-directed learning and decision-making style of construction-related workers." (2019): 44-53. https://doi.org/10.3991/ijim.v13i07.10749

Mohd, N. I., K. N. Ali, A. F. A. A. Fauzi, and S. S. Ebrahimi. "Serious Game Attributes for the Construction of a Hazard Identification Framework." iJIM 12, no. 7 (2018): 61. https://doi.org/10.3991/ijim.v12i7.9647.

Nguyen, H. A. T., A. Chik, S. Woodcock, and J. Ehrich. "Language Learning Beyond the Classrooms: Experiences of Vietnamese English Major and Non-English Major Students." System 121 (2024). https://doi.org/10.1016/j.system. 2024.103232.

Órdenes, M., and D. Ulloa. "The Design of a Professional Career Ladder for Teachers: Do Extrinsic Incentives Trigger Intrinsic Motivation for Improving Teaching—The Case of Chile." Nordic Journal of Studies in Educational Policy 10, no. 3 (2024): 248–65. https://doi.org/10.1080/20020317.2024.2400776.

Pan, S., B. Hafez, A. Iskandar, and Z. Ming. "Integrating Constructivist Principles in an Adaptive Hybrid Learning System for Developing