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Mobile-Assisted English Reading Comprehension of Narrative Texts in Under-Resourced Schools

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Abstract

Limited resources in remote-area schools impede the development of English reading skills, particularly narrative text comprehension. Mobile technology, with its flexible access, offers a potential solution. This study aims to explore students' experiences and teachers' perceptions regarding the use of mobile devices for reading English narrative texts in under-resourced schools. Employing an interpretive phenomenological approach, the research investigates the subjective experiences of students and the views of teachers. The findings reveal that students value the accessibility and flexibility of mobile devices, despite facing constraints such as limited internet connectivity and distractions from other applications. Conversely, teachers acknowledge the potential of mobile devices to enrich learning but also identify technical and pedagogical challenges that hinder effective implementation. This study contributes to the Mobile-Assisted Language Learning (MALL) literature by offering a novel perspective on technology utilization in under-equipped schools, while also providing guidance for more inclusive and adaptive educational policies. Furthermore, these findings establish a foundation for further research to explore specific applications and solutions for optimizing language learning technology in resource-limited settings.

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Introduction

English as a Foreign Language (EFL) education is crucial for equipping students with global competencies, where reading comprehension forms the essential foundation for knowledge acquisition and development of other language skills. At the junior high school level, narrative texts are frequently core instructional materials due to their ability to

engage student interest and convey cultural and linguistic values [1]. However, achieving reading competency in EFL is often hindered by significant contextual challenges, particularly in under-resourced environments. Schools in such contexts typically face limited access to authentic, quality materials, inadequate library facilities, and suboptimal teacher-to-textbook ratios [2].

More specific evidence reveals the depth of this crisis. In the Indonesian context, for instance, national assessments consistently show that a significant portion of students fail to meet minimum reading competency standards, with particularly acute challenges in remote and underfunded areas [3]. This low proficiency is exacerbated by a chronic lack of infrastructure; many schools lack functional libraries or have a very limited collection of books, forcing teachers to rely on outdated or irrelevant worksheets [3]. Furthermore, students' low reading interest is compounded by a lack of access to engaging, age-appropriate reading materials, which demotivates them from practicing EFL reading [4]. This situation is worsened by students' generally low English proficiency; Indonesia, for example, ranks 51st out of 88 countries in the English Proficiency Index, falling into the 'low proficiency' category, which directly hinders their ability to engage with even basic narrative texts [5]. The convergence of low skill and poor infrastructure creates a vicious cycle that standard pedagogical approaches struggle to break.

Digital technology, specifically mobile devices like smartphones and tablets, has emerged as a promising alternative in response to these structural issues. These devices offer a potential solution by providing flexible and relatively affordable access to diverse digital learning materials, applications, and educational platforms [6][7]. The field of Mobile-Assisted Language Learning (MALL) has thus expanded, investigating mobile integration in language learning. General literature indicates MALL can enhance motivation, learner autonomy, and access to authentic language input [8]. Nevertheless, implementing MALL in resource-constrained educational settings is fraught with challenges. Practical obstacles such as device access disparities, uneven and limited internet connectivity, varied device quality, and insufficient teacher training in pedagogical technology integration are common [9][10]. These hurdles demonstrate that technology's mere presence is inadequate; a deeper understanding of how it is subjectively experienced and implemented in real conditions is necessary. The digital divide is not just about hardware but also about the skills to critically evaluate and use digital information, a facet of information literacy that is often overlooked but crucial for effective MALL implementation [11].

More specifically, research on using MALL for receptive skills like reading comprehension, particularly at basic and secondary levels in under-resourced areas, remains underdeveloped. Most prior studies have focused on quantitatively measured impacts or on skills like speaking and vocabulary [12]. Concurrently, in-depth exploration

of the primary users', students and teachers, subjective experiences in using mobile devices for English narrative text reading is still limited.

Previous research has successfully mapped technical and pedagogical factors in MALL implementation. For example, studies on game-based learning have shown that digital media can increase student motivation in English language learning, highlighting the potential of interactive content [5]. Similarly, research on augmented reality (AR) in literacy has demonstrated that interactive digital tools can significantly improve early childhood engagement with reading materials [4]. Other studies have focused on the systemic challenges, such as the lack of teacher training and infrastructure, that hinder the success of school literacy programs [3]. Furthermore, collaborative academic efforts have underscored the need for applied linguistics to address contemporary challenges like digital literacy and hate speech, demonstrating the broad relevance of language technology in education [13].

However, the dominant approaches have often not fully immersed in the phenomenological dimensions of this process. The personal experiences, perceptions, and meanings constructed by students and teachers during mobile technology interaction for reading comprehension is a less highlighted area, despite being crucial for understanding the innovation's adoption and sustainability. While the studies above confirm the *potential* of technology [5][4] and map systemic *barriers* [3][13], they do not explore *how* individual students and teachers in a low-resource school navigate, interpret, and make sense of using mobile devices for reading narrative texts on a daily basis. This study addresses this specific gap by focusing on the lived experience, not just measurable outcomes or external obstacles.

To address this gap, this study employs an interpretative phenomenological approach to deeply explore participants' lived experiences. The research objectives are: (1) to explore students' experiences using mobile devices for reading English narrative texts; (2) to understand teachers' perceptions of MALL's impact, challenges, and benefits; (3) to identify convergences and divergences between student experiences and teacher perceptions in under-resourced junior high schools. This study's novelty lies in its phenomenological focus on the specific context of mobile-assisted narrative text reading in resource-limited environments, a perspective that is still scarce. Its contribution aims to provide a comprehensive, nuanced understanding of mobile technology's role, aiding the development of contextual MALL pedagogy and informing more inclusive, adaptive educational policy.

Literature Review

Mobile-Assisted Language Learning (MALL)

MALL has emerged as a significant area in educational technology, offering flexible access to resources and promoting learner autonomy [8]. Its potential in overcoming spatial and temporal constraints is particularly noted in diverse learning contexts [6]. Research indicates that mobile devices can serve as portable hubs for authentic language exposure, supporting various linguistics skills [7]. However, successful implementation is not guaranteed, as outcomes heavily depend on pedagogical integration and contextual factors [9]. While the general benefits of MALL are established, its specific efficacy for detailed skill development warrants closer inspection.

English Reading Comprehension

Focusing on reading comprehension, a core receptive skill in EFL, digital tools offer distinct advantages. Multimedia features, interactive glossaries, and adjustable text presentations can aid decoding and meaning construction [12][14]. Studies suggest that well-designed mobile activities can enhance learner engagement and motivation during reading tasks [8][15]. The portability of devices also encourages extensive reading habits outside formal classrooms [16]. Nevertheless, the cognitive processes of reading comprehension on digital platforms, especially for younger learners, are complex and influenced by interface design and task structure [17]. The transfer of general MALL benefits to measurable gains in deep textual understanding remains a nuanced subject requiring further context-specific evidence [18].

Narrative Texts

Narrative texts are a staple in junior high school EFL curricula due to their engaging storylines and cultural content, which can motivate learners [19]. When delivered via mobile platforms, these texts can be enriched with audio support, annotations, and visual aids, potentially fostering a more immersive reading experience [20][21]. This aligns with the goal of making comprehension activities more accessible and engaging [22]. Yet, a clear gap exists in the literature: few studies have qualitatively investigated the lived experience of students using mobile devices specifically for narrative text comprehension in under-resourced settings [23]. Most existing research prioritizes quantitative outcomes or other skills, leaving the subjective, phenomenological dimension of this specific practice largely unexplored [24]. This study aims to address this gap by exploring the firsthand perspectives of both students and teachers.

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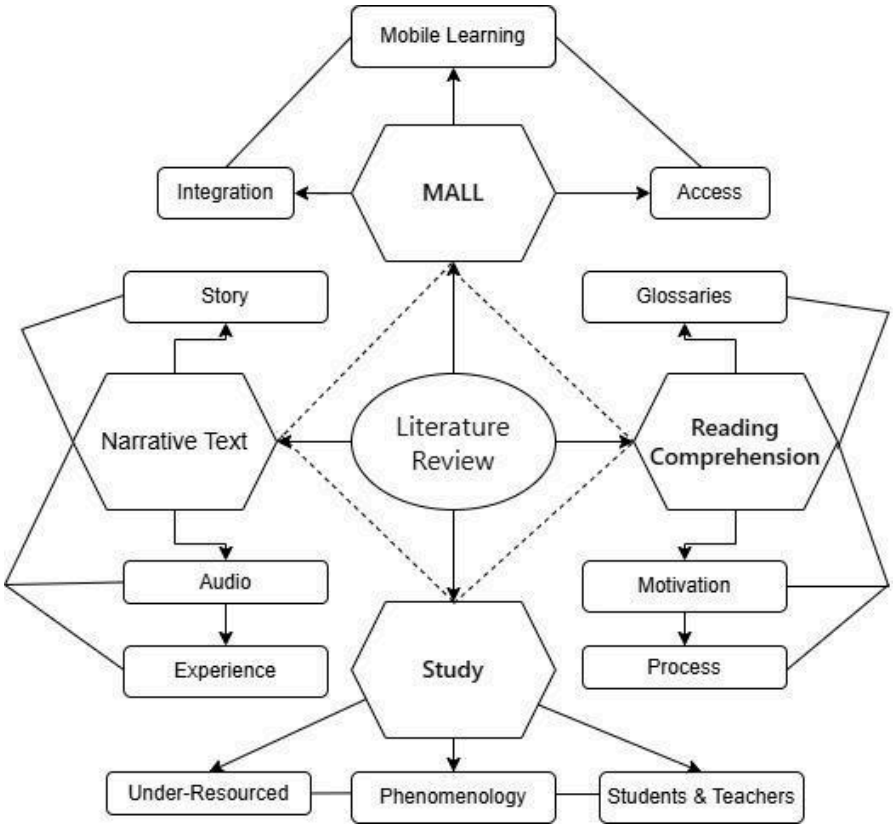

Fig. 1. Network Structure of Interconnected Core Elements

The structure of this literature review mind map is built from four interconnected core elements. At its center is Literature Review, which branches into four main sections. The first branch, MALL, encapsulates the essence of mobile-assisted language learning through the keywords: Mobile-Learning, Access, and Integration. The second branch, Reading, focuses on the aspect of reading comprehension with digital components like Glossaries, its impact on Motivation, and the complexity of its cognitive Process. The third branch, Narratives, highlights narrative text material through the concepts of Story, enhanced Audio features, and the key research gap: Experience. The fourth branch, Study, defines the position of this research with its Phenomenology approach, involving Students as participants, within the specific Under-Resourced context. This diagram visually illustrates the progression from a general concept (MALL) to a specific focus (the experience of narrative reading), culminating in the identification of a research gap and the study's methodology.

The literature review establishes that while Mobile-Assisted Language Learning (MALL) provides accessible tools for reading comprehension and narrative texts are well-suited for digital learning, a critical gap remains. Previous studies have largely

overlooked the subjective, lived experiences of the primary users, particularly students in under-resourced schools. Consequently, this synthesis prioritizes a deeper investigation into the personal meanings and perceptions constructed by both learners and teachers over mere effectiveness metrics. This identified gap directly justifies the phenomenological approach of this study, which is designed to bridge it by systematically capturing and understanding these essential firsthand experiences within the learning process.

Methodology

This study employs a qualitative approach, utilizing an Interpretative Phenomenological Analysis design [25] to investigate student experiences and teacher perceptions regarding the use of mobile devices for facilitating English narrative text reading comprehension. The research is situated within two resource-limited junior high schools in the Aru Islands, Maluku, Indonesia.

Data were derived from in-depth interviews with 10 students and semi-structured interviews with 4 teachers, supplemented by researcher reflective notes. Participants were selected through purposive sampling based on their direct and relevant involvement with the phenomenon. Student interviews centered on personal experiences, whereas teacher interviews were designed to elicit perceptions of both challenges and benefits associated with mobile-assisted learning [26]. Reflective notes served as part of a bracketing process to enhance methodological rigor and mitigate potential researcher bias [27].

Data analysis followed established Interpretative Phenomenological Analysis (IPA) thematic analysis procedures [28]. This iterative process involved verbatim transcription, repeated reading for immersion, initial noting, development of emergent themes, and the search for connections across themes. To ensure systematic data management and visualization, the analysis was supported by ATLAS.ti software and Draw.io for thematic mind mapping [29]. This methodological process aimed to uncover the subjective meanings that participants ascribe to their interactions with technology within a context of constrained resources.

Results and Discussion

The data collected through interviews with students and teachers revealed key themes. From the students' perspective, the themes that emerged are shown in Fig. 2 below.

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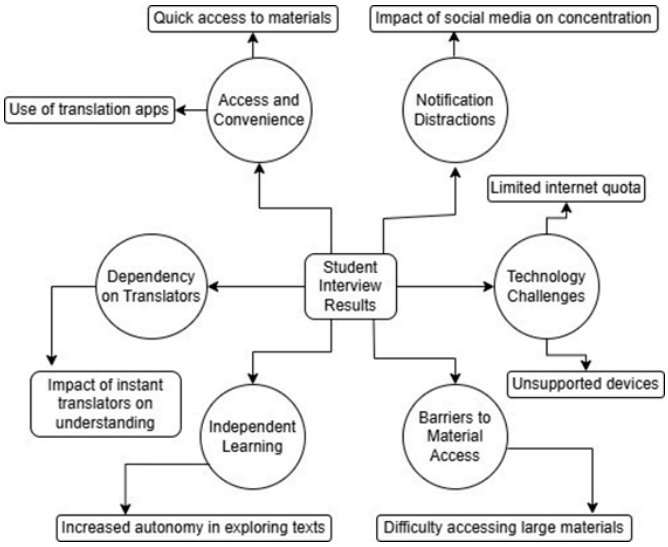

Fig. 2. Emerging Themes of Student's Interview

First, mobile devices provide significant access and convenience, such as rapid access to narrative text materials and translation applications for understanding difficult vocabulary. However, these benefits are often accompanied by distractions from social media notifications, which reduce concentration. Second, learners face technological constraints, particularly limited internet data plans and devices that cannot smoothly support learning applications, thereby hindering access to materials requiring large data volumes. Third, there is a shift toward a self-directed learning approach, in which students experience greater autonomy in exploring texts. Nevertheless, this independence carries the risk of overreliance on instant translation tools, which may undermine deeper comprehension.

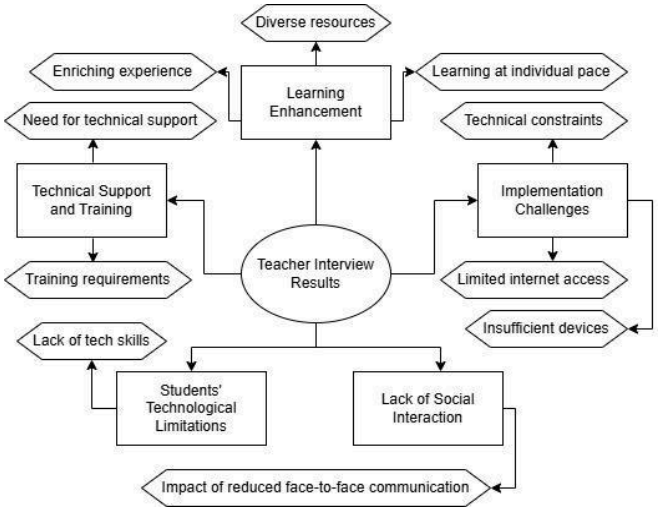

Fig. 3. Emerging Themes of Teacher's Interview

Meanwhile, teacher analysis revealed two key themes. On one hand, teachers acknowledged significant potential for learning enhancement, particularly in narrative text comprehension where mobile devices could enrich the learning experience, provide diverse resources, and facilitate self-paced learning. On the other hand, they strongly emphasized implementation challenges within resource-limited contexts, such as technical constraints including inadequate internet access and insufficient devices. Teachers also expressed concerns regarding diminished social interaction and students' lack of skills in using technology effectively for learning, thereby underscoring the necessity for adequate technical support and training.

Overall, a disparity in perceptions between students and teachers was identified. Students tended to focus on practical benefits such as ease of access and learner autonomy, whereas teachers paid greater attention to technical challenges and broader pedagogical impacts. This discrepancy highlights the complexity of aligning learning experiences with educational objectives.

These findings of phenomenological study provide in-depth insights into the complex realities of implementing MALL to enhance narrative text reading comprehension in under-resourced junior high schools. The analysis uncovers a fundamental dialectic, a persistent tension between the significant potential of the technology and the substantial barriers that hinder its effective application. This duality defines the MALL experience within constrained educational contexts.

On the one hand, mobile devices provide substantial material and pedagogical affordances [30]. They primarily facilitate greater access to learning materials and promote learner autonomy, a key advantage highlighted in mobile learning literature [31]. In practice, students actively leverage these affordances to support their comprehension, notably by using digital dictionaries and translation tools to overcome lexical challenges, thereby engaging in self-directed learning activities [32]. This aspect underscores the transformative possibility of mobile technology in democratizing access to language learning resources where traditional materials are scarce.

On the other hand, the realization of this potential is critically limited by a multifaceted array of challenges. These impediments are both technical and socio-cognitive in nature. The technical barriers are particularly pronounced. Issues such as unreliable and limited internet connectivity, the high cost of mobile data, and the inadequacy of available devices, problems well-documented in recent studies [33][34], severely restrict consistent access and functionality. Local data from this study corroborates these findings, with participants explicitly citing infrastructure deficits as a primary obstacle [35][36].

Beyond infrastructure, the socio-cognitive challenge of digital distraction presents a major hurdle. Consistent reports from participants indicate that notifications from social media and other non-educational applications frequently disrupt focus and fragment

learning sessions. This confirms existing concerns about the detrimental impact of distractions within MALL environments [37][38] and aligns with broader research on attention and technology use [39]. This evidence collectively demonstrates that technological affordances are not inherent properties but are relational; their educational value is contingent upon the user's ability and context to manage and mitigate competing demands within the digital environment.

Maximizing the efficacy of Mobile-Assisted Language Learning (MALL) in under-resourced settings requires a systemic, holistic intervention strategy rather than isolated solutions. Infrastructure enhancement is non-negotiable, but studies show that simply providing devices without pedagogical support fails to sustain literacy gains. For instance, Fitriani (2024) found that while a morning literacy program increased students' reading interest in a low-facility school, the improvement diminished without continuous teacher guidance and varied reading materials [3]. This aligns with Zahra (2024) who noted that Indonesia's low English proficiency (ranked 51st out of 88 countries) is partly due to monotonous learning methods and lack of interactive media, not merely hardware shortages [5]. Therefore, infrastructure investments must prioritize offline-compatible resources, such as downloadable modules and augmented reality-based storybooks proven effective by Nuraini et al. (2024) in fostering early childhood reading engagement [4].

Second, sustained, contextualized teacher professional development is imperative. Training must extend beyond basic technical skills to include pedagogical strategies for integrating mobile tools, designing distraction-resilient activities, and guiding students' self-regulation. The collaborative seminar model reported by Munibi & Boeriswati (2025) demonstrated that academic forums involving teachers, practitioners, and policymakers significantly enhanced digital and pedagogical literacy among language educators [13]. Without such training, mobile devices risk becoming sources of distraction rather than learning enhancement, as AI translation tools alone cannot capture cultural nuances or promote critical literacy without human mediation [11].

Third, policy-level support must advocate for lightweight, offline-capable learning applications and cross-institutional collaboration. Nuraini et al. (2024) emphasize that sustainable literacy ecosystems require partnerships between universities, local governments, and schools, not short-term projects [4]. Moreover, Zahra (2024) highlights that game-based educational media, when aligned with curriculum objectives, can boost motivation and social interaction among students, but their effectiveness depends on teacher facilitation and equitable access to technology [5].

Collectively, this study enriches MALL literature by delineating the intricate interaction between theoretical affordances, sociocultural mediation, and tangible

constraints of marginal educational contexts. Unlike prior quantitative studies focusing on vocabulary gains [12], this research moves beyond simplistic technology promotion to present a nuanced analysis of necessary success conditions. It supports the argument that information literacy in the digital age requires human agency to evaluate and validate information, not just automated tools [11].

Thus, the path forward demands co-investment in digital infrastructure, human capacity (teacher training), and supportive policy frameworks. Only such a holistic approach can ensure that the promise of mobile-assisted learning is equitably fulfilled for all students, regardless of their school's resource level. Future research should longitudinally test integrated intervention models across diverse cultural and multilingual contexts.

Conclusion

This study reveals that utilizing mobile devices for English language learning, specifically in narrative reading comprehension instruction within under-resourced schools, exerts a significant influence. Students perceive enhanced accessibility and flexibility, yet encounter constraints including limited internet connectivity, inadequate devices, and distractions from other applications. Educators acknowledge the positive potential of the technology but face challenges such as insufficient supporting facilities and training. Furthermore, over-reliance on technology without guidance can diminish comprehension of complex material.

Theoretically, this study enriches literature on technological affordances and sociocultural theory. Practically, the findings underscore the necessity of teacher training and enhanced technological infrastructure in under-resourced schools. Future studies are recommended to broaden the sample to include diverse school contexts and employ more comprehensive methodological approaches, such as integrating quantitative methods.

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