

Exploring the Potential of Mobile Assisted Language Learning in Rural Area of Indonesian

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Abstract: This study aims to explore the potential of Mobile Assisted Language Learning (MALL) in Indonesian rural areas. Rural communities often face challenges to access a good education. Therefore, an innovative approach is needed that can overcome these obstacles. MALL is emerging as a potential solution that harnesses the power of mobile technology to enhance the language learning experience, providing flexibility and learning opportunities according to the needs of learners. This research uses a systematic approach in the literature review to explore the benefits of MALL in improving language learning outcomes in Indonesian rural communities. By exploring the potential of MALL in language learning in rural Indonesian communities, this research is expected to contribute to improving the practice of language education in rural areas, as well as providing equal educational opportunities for students throughout Indonesia.

Keywords: Mobile-Assisted Language Learning, Mobile Learning, Language Learning

1. Introduction

Research on Mobile Assisted Language Learning (MALL) has gained considerable concerns in language learning developments (Hou & Aryadoust, 2021; Kamasak et al., 2020; Shadiev et al., 2020). Previous research on MALL has provided many valuable findings about its potentials such as improving language learning experience, more personalized approaches, flexibility, and collaborative opportunities (Kukulska-Hulme & Shield, 2008). Other MALL research directions also tend to analyze the extent to which the effectiveness of the use of mobile devices in improving the quality of language learning with various research contexts, strategic approaches, and various targeted language aspects (Hwang & fu, 2018; Sung et al., 2015).

Research on MALL in the Indonesian context provides a different perspective in terms of the potential for developing language learning and the barriers to implementation (ibrahim, 2021). The complexity of Indonesian local cultures and language diversity has become such a unique challenge in the implementation of MALL. Moreover, it also concerns about the language need and cultural context for Indonesian students to improve their language learning experiences (Estuarso, 2017). In this case, the use of mobile devices can be the main alternative in providing solutions to issues of inequality in education because mobile devices can be optimized for language learning anytime and anywhere while also minimizing barriers from geographical factors (Fotouhi-Ghazvini et al., 2009). In addition, the very rapid increase in the penetration rate of mobile technology in Indonesia is also an important reason for the need to develop the potential of MALLs in improving the quality of education in Indonesia (Pratama, 2018).

The effectiveness of MALL can also be promoted to improve the quality of education in rural areas in Indonesia. Most research on MALL has focused on regional contexts with advanced technological developments or urban areas. Other researchers had developed MALL research to a more general context regardless of the conditions of the area that is the

research target. Therefore, research on MALL in rural areas needed to be highlighted, especially to improve the quality of education in rural areas (Fotouhi-Ghazvini et al., 2009).

This paper is expected to provide an understanding of the urgency of implementing MALL in rural areas of Indonesia and to what extent MALLs can be developed further. Moreover, this discussion will also identify how MALL implementation practices can be carried out more effectively for recommendations for education policy makers, stakeholders and teachers to develop MALL in rural Indonesian contexts.

2. Method

This study uses a literature-based approach to explore teaching and learning in rural areas of Indonesia. The research design involves a systematic review and analysis of relevant literature from various sources, including academic journals, books, reports, and other scholarly publications. Several leading academic databases, such as ERIC, JSTOR, and Google Scholar, were selected to obtain relevant literature. The identified search terms are used to perform a systematic search in selected databases and sources. The screening process involves reviewing the titles and abstracts of the sources found to assess their relevance to the research topic. Retained sources were carefully read and analyzed to extract key information and findings. Thematic analysis was used to identify recurring themes, patterns, and challenges related to teaching and learning in rural contexts of Indonesia.

3. Illustration the Educational Condition in Rural Area of Indonesia

As the biggest archipelagic country consisting of 17,499 islands, Indonesia has continuously experienced problems in the equitable distribution of resources, especially in education, due to various geographical problems and social-cultural differences in society (Luschei & Zubaidah, 2012). This problem becomes very complicated when it occurs in the context of education in rural areas. Rural areas in Indonesia refer to areas that are far from urban centers and are often difficult to reach due to difficult geographical conditions, such as mountains, wilderness, or small islands. Rural areas usually have lower populations and lack basic infrastructure such as roads, electricity, clean water, and adequate educational facilities (Madhakomala et al., 2022).

The geographical differences between urban, rural and rural areas have significant implications for educational conditions. Urban areas generally have better access to educational facilities, such as schools with complete facilities, stable internet access, and good transportation accessibility. On the other hand, rural and rural areas often face challenges in terms of school accessibility, limited facilities, and the availability of educational resources. This inequity is also closely related to the funds allocations from local government (Sukasni & Efendy, 2017). Long distances and limited means of transportation can be obstacles for students to reach school safely and on time. In addition, supporting infrastructure such as limited or non-existent electricity, networks, availability of clean water, and poor sanitation can also affect learning conditions in rural areas (Nuraeni et al., 2020). Geographical factors also have an impact on the availability of educational resources. Rural areas tend to have limitations in terms of textbooks, laboratory equipment, computers and other technological devices. These limitations can affect student learning experiences and the teacher's ability to present material well.

Other common issues faced by rural education are the availability of the skilled teachers, the low motivation of students to learn, and the low support from the communities for education (Fadilah et al., 2023). This issue is further worsen with lack learning materials or resources, teaching aids or media, teaching methods, slow internet connectivity, learners' motivation, evaluation technique and parental support (Mudra, 2018). Moreover, Indonesian education management can also be concern particularly in rural areas for the ineffective teaching methods, insufficient facilities, and infrastructure (Solihin & Sara, 2021).

Some efforts to improve the education quality in rural area of Indonesia have not shown the good progress. Even after having a mass recruitment of teachers from the Indonesian government, the inadequacy and the low welfare of teachers remains the issue for rural education (Febriana et al., 2018). Teachers often have to teach multiple subjects which they

might not be qualified for (Anwar et al., 2020). These complex issues of inequality in access to and quality of education in Indonesia can also be considered as the effect of various factors at individual, household, school, community, and government levels (Muttaqin, 2018). Therefore, it is necessary to focus on development of teachers' professionalism in remote areas, including facilitating further studies, sharing abilities among teachers, and improving school facilities (Kurniati et al., 2020). Moreover, the professional teacher training should be considered based on geographical location, culture, and the limitations of human resources and infrastructure (Fauziyah & Uchtiawati, 2017).

4. The Significance of MALL for Rural Area of Indonesia

The urgency of MALL in rural areas is very important and has a significant impact in improving the quality of education. MALLs provide greater accessibility and affordability to educational resources. In rural areas that often have limited access to educational facilities and learning resources, MALLs allow students and teachers to flexibly access learning materials, applications and online learning resources through mobile devices that are more affordable and easy to use (Rajendran & Yunus, 2021).

The other significance is that MALL allows students to learn languages anytime and anywhere. This is especially important for rural areas where schools may be far away, or travel times are long. By using the MALL application, students can learn languages at home or in their surroundings, according to their needs and time availability (Kukulska-Hulme & Shield, 2008). Some studies even found out that the students' acceptance and perception toward the use of mobile assisted learning were high (Lizamuddin et al., 2019; Yudhiantara & Nasir, 2017).

MALL can also improve the quality of learning in rural areas through the various features and applications available (Rajendran & Yunus, 2021). For example, interactive and multimedia language learning applications can help increase student motivation and understanding. In addition, MALLs can also provide access to a more varied learning material, such as videos, audio, and e-books, which help enrich students' learning experiences. The use of MALL also allows students in rural areas to develop digital skills which are essential in today's information technology era. Using mobile devices, students can learn about using technology, navigating the internet, and using relevant applications. This helps prepare them for the needs of the digital world and enhances their opportunities in the future.

Related to the learning content and student's needs, MALL development can produce language learning content that is tailored to the needs of students in rural areas. Such content may include learning modules, exercises and interactive games specifically designed to reinforce language skills. These contents can be adapted to students' language level, relevant topics, and local cultural context (Estuarso, 2017).

MALLs can also connect students in rural areas with the wider language community via social media or sharing platforms. Students can interact with native speakers of the target language or with fellow students from other areas who are learning the same language. This can help increase student motivation and engagement in language learning (Kukulska-Hulme & Shield, 2008). In this case, parental and community involvement in education in rural areas can also be included. With the MALL platform that allows communication between teachers, students, and parents, better interactions can be established in monitoring student learning progress. Parents can also be actively involved in supporting their child's learning process through monitoring, guidance, and collaboration with teachers.

Rural areas often face limited educational resources such as textbooks, laboratory equipment, and limited learning materials (Febriana et al., 2018). MALLs can help overcome this limitation by providing access to a more diverse and up-to-date digital content and online learning resources. Thus, students in rural areas can access more complete and up-to-date learning materials even though local resources are limited.

MALL applications can provide monitoring and feedback features that can help students and teachers monitor language learning progress (Ishaq et al., 2021). Students can track their progress, identify areas for improvement, and receive immediate feedback via the app. This can help students in rural areas manage their learning independently and increase learning effectiveness.

5. Identifying the Challenges of MALL Implementation in Rural Area

Implementation of Mobile-Assisted Language Learning (MALL) in rural areas may face several obstacles. One of the main barriers is the availability of adequate technological infrastructure in rural areas. Unstable or even widely available internet connectivity can hinder access and use of the MALL. Limited networks and lack of infrastructure such as signal towers and limited access to electricity can be serious obstacles.

Other obstacles are about the accessibility and the availability of mobile devices. Although mobile technology is becoming more common, there are still limitations in mobile device accessibility in rural areas. Many students and families in the area may not have access to the necessary mobile devices, such as smartphones or tablets, to access and use the MALL. In addition, the cost of the device and the need for internet access can also be obstacles (Nuraeni et al., 2020).

The Major concern of MALL implementation in Rural area is also about the limited technological knowledge and skills both from teacher and students. In rural areas, teachers and education staff may have limited knowledge and skills in using mobile technologies for education. Adequate training and coaching are needed so that they can integrate MALL in learning effectively. Lack of knowledge about proper application and learning methods can be a barrier in tapping into MALL's full potential (Tømte, 2015). Moreover, not all learning content available in digital formats or MALL applications is relevant to the context and needs of students in rural areas. Content related to the culture, environment, and everyday life of students may be less available. The lack of content adapted to local contexts can reduce the effectiveness of MALLs in enhancing student learning in rural areas.

Other issues of MALL application is related to sociocultural issues and the readiness to the use of mobile devices in learning (Eltayeb et al., 2014). The use of MALL requires changes in learning behavior and culture among students, teachers, and people in rural areas. Not all students or teachers may be accustomed or ready to adopt mobile technology in the learning process. Awareness, understanding and support from all stakeholders is important to overcome resistance to change and promote acceptance of the use of MALL.

6. Implication and Recommendation for Better MALL Application

There are several recommendations that can be applied in the context of using Mobile Assisted Language Learning (MALL) in Indonesian rural areas. In the provision of access to technology, the government and relevant stakeholders need to work together to ensure the availability of adequate infrastructure and access to technology in rural communities (Fauziyah & Uchtiawati, 2017). This includes providing a reliable internet network, affordable mobile devices, and access to relevant MALL applications or platforms. In this case, recommendations can be in the form of government programs that encourage access to technology in rural areas and collaboration with institutions or organizations to provide technological assistance to rural communities.

Another important implication is the need to increase the Teacher Training (Kurniati et al., 2020). Teachers in rural areas need to be provided with adequate training regarding the use of MALL in the language learning process. This training may include knowledge of relevant MALL applications or platforms, teaching strategies for effective use of technology, and an understanding of how to overcome constraints that may arise in the use of MALL in rural settings.

More efforts are also needed to develop educational content that is appropriate to the rural context and takes advantage of the potential of mobile technology. The current interest on developing educational contents was focusing on learners and their involvement in knowledge sharing in a contextualized mode (Foomani & Hedayati, 2016). These contents can include interactive learning modules, supporting materials in the form of video or audio, and digital resources that are relevant to the life and culture of rural communities. Recommendations can be in the form of collaboration between content developers, educational institutions, and rural communities in designing and developing appropriate educational content.

Other important matter is about collaboration with local communities: It is important to involve local communities in the development and implementation of MALLs in rural areas.

Through collaboration with the community, such as community leaders, parents, and village leaders, a better understanding of local needs and context can be found. This collaboration can also strengthen social support and acceptance of the use of MALL in language learning. Teacher can also be a bridge for this collaboration for students to integrate their language learning with their own local culture (Estuarso, 2017).

Monitoring and evaluation can be a crucial process in MALL implementation. A continuous monitoring and evaluation system are needed to measure the effectiveness of using MALL in rural communities. This evaluation should cover aspects such as improving language learning outcomes, student motivation, active participation, and user satisfaction. Evaluation results can be used to adjust and improvements needed in the implementation of MALL. Further research on technological innovation will always be needed in order to develop better education quality including MALL. It is very necessary to continue research on the latest technological innovations that can support MALLs in rural areas.

7. Conclusion

Rural areas in Indonesia face challenges in improving the quality of education, including limited access to educational resources, limited infrastructure, and a lack of qualified teachers. In this regard, MALL has great potential in improving education in rural areas by providing better accessibility, quality, and engagement in learning. MALL can also overcome the limited accessibility of learning resources, while also offer more engagements, freedom, and flexibility in language learning for rural areas. By optimizing various supports and collaborative efforts, it is hoped that MALL can become an effective tool in improving the quality of education in rural areas in Indonesia and promoting equity of educational opportunities throughout the country.

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