

Innovative Approach to Javanese Language Learning: Exploring the Potential of Mobile-Assisted Language Learning

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Abstract. Currently, the development of learning that prioritizes technology, especially in online learning whose learning process is limited to delivering one-way material and assigning assignments. The learning process of writing Javanese literature has a big challenge because the delivery of material must have interaction in it so that teachers must be more creative and innovative to find the application of appropriate learning media. This study presents a systematic review of mobile assisted language learning (MALL) research in the field of Javanese literature learning at the high school level that can facilitate the development of creative reading and writing. This article also examines and reports on educational technology issues that may limit the development of reading and writing in a MALL-based Javanese language learning environment. The result of this study is a research on the use of MALL in aspects of learning to read and write creatively Javanese at the high school level. This article concludes that the use of interactive multimedia in language learning can be an effective strategy to improve student learning outcomes. The researchers also recommend further research to explore the use of interactive multimedia in different language learning contexts.

Keywords: Javanese; mobile assisted language learning; creative writing; innovative learning.

INTRODUCTION

Language is the most important communication tool in everyday life. The use of language is almost used in all activities involving individuals and community groups. Humans sometimes use different language and expressions when interacting with their groups and with older ones (Bencsik, Juhász, & Horváth-Csikós, 2016). Language skills in the curriculum in schools include four aspects, namely: listening skills, speaking skills, reading skills, and writing skills. It is explained that language studies include Indonesian, regional languages, and foreign languages with considerations: first, Indonesian is the national language. Second, the regional language is the student's mother tongue. Third, foreign languages, especially English, are international languages that are very important in a global association.

The problems that arise in learning Javanese are increasingly complex. In addition to existing Javanese language learning methods, there are also problems with student responses in learning Javanese. Some students consider Javanese as local content that is not learned optimally. Addressing the problem of lack of attention to Javanese language lessons today, the most appropriate and effective effort in preserving Javanese culture and language is through

educational channels, namely through learning Javanese language and literature within the cultural framework in each region. Sudjarwadi (Javanese language congress IV, 1991: 74) explained the function of the Javanese language more broadly. Sabdwara in Supartinah (2010: 24) the functions of Javanese include: a) Javanese language is a cultural language in addition to communicative functions also acts as a means of realizing cultural attitudes loaded with noble values, b) Javanese manners means knowing the boundaries of manners, knowing how to use good customs and having a sense of responsibility for the improvement of life together, and c) in order to achieve politeness that can be a decoration of one's personal self, the conditions that must be taken are as follows: 1) good at tending the feelings of others in the association, 2) good at respecting friends and enemies, and 3) good at maintaining speech, not rude, and not hurting others.

Javanese language learning is one of the subjects that must be taught to students at the high school level, especially in Central Java Province as it has been designated as Javanese Local Content Subjects for all levels of education in Central Java Province. Javanese language subjects must certainly teach aspects of language skills like other language subjects covering two aspects: aspects of language skills and aspects of literary abilities. This is as explained in the

curriculum that students are able to understand, process, interpret, identify, respond, evaluate, and present the content of the text in various types of texts, *pawarta*, *geguritan*, *sastra wayang* (epic Mahabharata), and Javanese script in the form of aural text (text read) visual text, and/or audiovisual text. The application of the learning model needs to be adjusted to the theory taught, the goals to be achieved, and pay attention to the environment and students (Ahyar & Edyansyah, 2021). Another important thing is that the model to be used must be fully mastered by the teacher.

Currently, the development of learning prioritizes technology, especially in online learning whose learning process is limited to delivering one-way material and assigning assignments. Theoretically, online learning can be defined as a learning process that utilizes the internet to access material, communicate and interact with content, teachers, and other students, gain knowledge and information, and gain learning experiences (Atmojo & Nugroho, 2020). The learning process of writing Javanese literature has a big challenge because the delivery of material must have interaction, so teachers must be more creative and innovative to find the application of appropriate learning media. The language learning strategy itself can be grouped into several parts as follows: the language learning strategy is grouped into 4 parts, namely (1) formal language practice that describes language related to grammar and syntax, (2) practice of functioning or using language for authentic communication purposes, (3) monitoring to test and modify or correct language output, (4) drawing conclusions intended to guess what was previously unknown in the second language.

This study presents a systematic review of mobile-assisted language learning (MALL) research in the field of learning Javanese literature that can facilitate the development of creative reading and writing, especially on students' skills in writing *cakepan tembang* and writing *geguritan*. Mobile-assisted language learning (MALL) is the use of online media and other mobile technologies in language learning, especially in situations where portability and learning offer special advantages (Hulme, 2020). Smartphone apps are one of the newer ways that can support learning that relies on modern technology. Apps have become a prominent feature in social life since the advent of Apple's iTunes App Store in 2008. Mobile-Assisted Language Learning (MALL) refers to language

learning strategies that implement and use mobile applications such as Facebook, Instagram, YouTube, and others which support learners in learning the language as needed by learners (Pratiwi et al., 2020). Mobile Assisted Learning relates to devices such as smartphones and others that can be used to access applications for language learning and has a greater influence on the teaching and learning process offline or face-to-face (Dehkordi, 2018).

Mobile-assisted learning platforms have more advantages than disadvantages, educators and teachers should explore and implement learning in language classrooms to engage and motivate students in learning new vocabulary (Ji & Aziz, 2021). Mobile learning proves its potential to meet learners' needs according to what they need and to provide a more flexible language learning model (Hulme, 2020).

This article examines and reports on educational technology issues that may limit reading and writing development in a MALL-based Javanese language learning environment. This study focused on students' Javanese language skills and how gally-based language learning can help students in terms of writing skills of *cakepan tembang*, and *geguritan* to improve learning outcomes.

METHODS

This research method is carried out with a qualitative research design whose type is a case study. Researchers collected data using literature studies. Current systematic reviews use two types of academic research databases to find related literature. ERIC, Dimensions, and Google Scholar are used as the most complete and covering journal coverage databases that can produce a variety of research documents into the initial set of documents (Alexander, 2020) to avoid the loss of related articles. Scopus and Web of Science are also searched as the most selective databases to ensure discipline-specific searches (Singh et al., 2021). To analyze the data, researchers applied three steps; data reduction, data presentation, and conclusions.

RESULTS AND DISCUSSION

A search of international journals in the last five years shows that there are 714 articles discussing mobile-assisted language learning. Some of them examine how mobile-assisted language learning works, the advantages of

mobile-assisted language learning, and how implemented in language learning at the school level.
mobile-assisted language learning can be level.

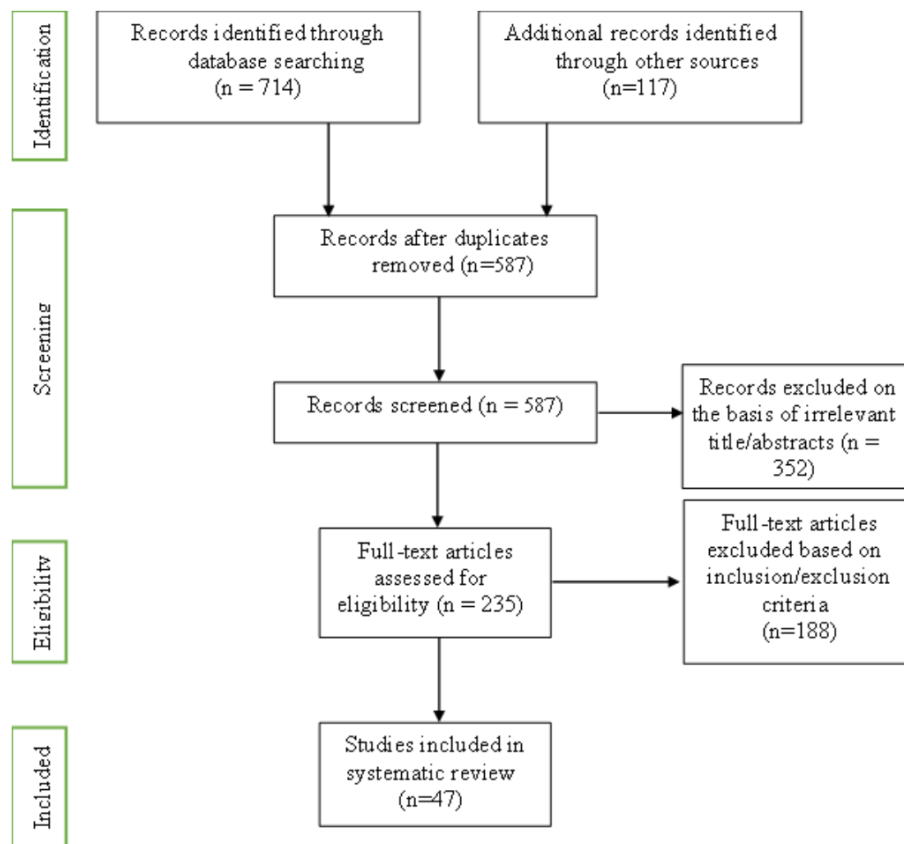


Figure 1. PRISMA Flow Diagram

There are 587 articles discussing how mobile-assisted language learning works. Some articles explain how MALL works, which can be designed according to the characteristics, needs, and habits of language learners. For example, language learning content using MALL assistance can be delivered to learners based on the location, proficiency level, and interests of each learner (Nguyen et al, 2022). Multimedia tools allow students to create their content (Liu et al, 2018). This means that students can practice their language skills by describing people, objects, and situations in contexts according to the real world, after which students can create textual content, take photos, and record audio and video files using multimedia aids for further discussion with teachers and friends (Shadiev, 2018). This means that students can practice their language skills by describing people, objects, and situations in contexts according to the real world, after which students can create textual content, take photos, and record audio and video files using multimedia aids for further discussion with

teachers and friends (Shadiev, 2018).

Furthermore, there are 47 articles about the advantages of mobile-assisted language learning. According to Fang et al (2021), the mobile-supported task-based language teaching (TBLT) implementation group reported greater awareness of fluency and accuracy-oriented strategies for speaking than the traditional TBLT group. There is no doubt that the environment aided by mobile technology is helping to change the way Chinese EFL learners adopt a series of learning strategies, which differ in the type and frequency of teacher-led and exam-oriented language classes (Gao & Hui, 2021). Shadiev et al (2022) described in their research that participants' learning outcomes improved during learning activities and most participants' perceptions of the value of practice after MALL-based learning was quite high.

Mobile-assisted language learning has certain benefits for language classes and allows language teachers to offer access to authentic content, communicative language practice, and task completion (Mobiniazad, 2018). MALL in

language learning roles is ideal and effective for students who usually use mobile phones to learn languages with learning support app features. This proves that apps have the potential to influence educational programs and require more attention and deeper research, particularly in the area of language learning, which has become the most popular curriculum area supported by apps. (Beatty, 2015). Today's most popular mobile-based language learning areas that have grown in popularity include vocabulary learning, listening, grammar, phonetics, and reading comprehension (Huang et al, 2023).

MALL in translation is increasingly prevalent among Indonesian EFL students due to the development of ICT and its practical use in teaching and learning (Fitria, 2021). In Javanese language learning, the difficulties faced by students are almost similar to the difficulties of other languages such as English, Mandarin, German, Korean, Japanese, etc. The average difficulty in learning Javanese lies in the difficulty of pronouncing new vocabulary that is not familiar. For example, the pronunciation of the words '*lara*' (pain), '*apa*' (what), and '*lunga*' (go) is read with the vowel 'o' as in '*olahraga*' (sports), '*orang tua*' (parents), and '*piano*' in Indonesian or *oval*, *board*, and *piano* in English.

Most Javanese language teachers also revealed that learning Javanese, especially in writing *cakepan tembang* and writing *geguritan*, is difficult material. As for the acquisition of the value of writing *cakepan tembang* and writing *geguritan* has not been maximized. According to preliminary data, the achievement of the value of writing and writing *geguritan* skills has not been maximized because the learning carried out has not used multimedia. The use of learning media so far has only come from learning videos through YouTube. The learning videos used have not been able to bridge the difficulties of students such as in the selection of diction. In addition, students still have difficulty in distinguishing between writing *cakepan tembang* and *geguritan*.

MALL has several advantages (Jeanjaroonsri, 2023) among them are (1) MALL allows students to access language learning resources more easily and quickly, and communicate with others at any time and from any location, (2) the nature of digital technology makes it easier for students to participate in synchronous and/or asynchronous individual and collaborative language learning activities, allowing them to improve speaking, listening skills, Reading, and writing quickly, (3) Mobile

technology offers a wide range of language learning materials and techniques that help learners become more motivated, independent, localized (location-specific), and socially engaged.

Learners often face challenges in using MALL, which includes the small screen size of the device which impacts reading difficulties, data storage, multimedia limitations, limited graphics display, and reliance on networks that may not always provide high transmission capacity and are prone to various distractions, are learners' challenges (Bui, Bui, & Dinh, 2023). The challenge of using MALL is that in online language programs, cooperative learning between professors and students and among students is beneficial to some degree. However, this is not as successful as physical touch, lecturers can provide students with large amounts of material, forcing them to think through important parts of the text themselves, and each mobile application has its own limitations. If the application is not adequately considered during use, it can reduce the effectiveness of the teaching-learning process (Jegede et al., 2023). Most students still have difficulty in distinguishing between *cakepan tembang* and writing *geguritan*. Students also do not understand the steps in writing *cakepan tembang* and writing *geguritan*. In addition, according to students in learning, both writing *cakepan tembang* and writing *geguritan*, teachers have used smartphones but are limited to browsing information related to the material. The application of learning models and the use of multimedia does not yet exist.

MALL has a concept as a mobile application, online learning resources, and interactive features that can improve the ability to speak, listen, read, write, and understand the target language. MALL has significant potential in increasing student motivation and engagement in language learning. With interactive and engaging features, students tend to be more actively involved in learning activities and feel more motivated to learn a language. MALL enables independent and flexible learning. Students can access learning resources anytime and anywhere, allowing for personalized learning tailored to individual needs. Mobile apps and online platforms also allow students to practice languages in more authentic contexts and get instant feedback.

In the context of language learning, MALL can be implemented by utilizing various applications and learning resources available

online. Educators can choose apps that fit the curriculum and learning objectives, and consider student needs and preferences. One of the first steps in MALL implementation is to ensure the accessibility of mobile technology. Educators need to ensure that students have adequate access to mobile devices and stable internet connections. If there are students who do not have personal mobile devices, alternatives such as the use of devices in the school's computer lab or borrowing devices during learning sessions can be considered.

The concept of implementing mobile-assisted language learning is included in the implementation of CBT (Computer-Based Trainings) and WBTs (Web-Based Trainings) methods (Mobinizad, 2018). Rigen Cakra is made in one of the above methods or even a combination of those methods that can benefit learners. These applications utilize the Internet as their main platform. Since the course is self-paced and language learners have no interaction with each other as well as their trainers/instructors, they can work well with the mentoring of the material by the app.

The *Rigen Cakra* application is a mobile-assisted language learning (MALL)-based learning application designed by researchers to facilitate learning to writing *cakepan tembang* and writing *geguritan*. *Rigen Cakra* with an operational system of Android, pc, and IOs serves to help students writing *cakepan tembang* and writing *geguritan*. The main menu consists of 3 menus, namely the 'pambuka', 'materi', and 'panutup' menus. The 'pambuka' menu contains the sub-menus 'petunjuk' (instruction), 'kurikulum' (curriculum), and 'diagnostik' (diagnostics). Sub-menus instructions serve to facilitate users in the operation and use of menus in multimedia.



Figure 2. Start Menu Display

The 'kurikulum' sub-menu functions to find out the relationship between the material in the curriculum, and the learning achievement

objectives used for certain levels. The 'diagnostic' sub-menu can be used as a trigger for learners before learning further material. The 'diagnostik' sub-menu serves to identify and find out the characteristics and conditions of competence that have been mastered so that it can be used as a basis for designing appropriate learning.

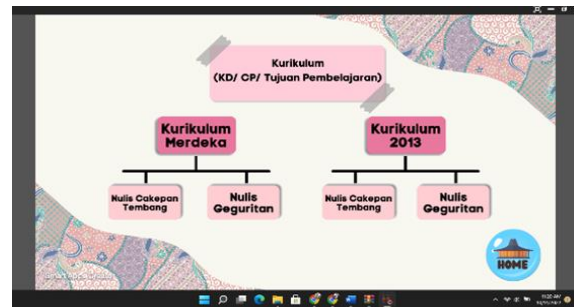


Figure 3. Curriculum Sub Menu Display

The 'materi' menu serves to bring students to an initial understanding of writing *cakepan tembang* and writing *geguritan*. The importance of an initial understanding of the concept of writing *cakepan tembang* and writing *geguritan* a form of literary work in which it contains the beauties that have been conveyed in detail in the sub-material and sub-sub-material. The 'material' menu serves to help students in achieving competencies and learning outcomes in writing *cakepan tembang* and writing *geguritan*. The 'cakepan' menu consists of 'nyuguhake', 'gladhen', 'proyek' and 'panutup' sub menus. The *Nyuguhake* Sub Menu in the form of audio and audio visual serves to provide an overview to users or students related to one example of the implementation of the results of writing *cakepan tembang* and writing *geguritan*.



Figure 4. Material Sub Menu Display

The *Rigen Cakra* application is still a prototype application based on mobile-assisted language learning (MALL) that can be developed again to be better and can be implemented in Javanese language learning, especially to develop

students' skills in creative *cakepan tembang* and writing *geguritan*. During the implementation of the *Rigen Cakra* application, educators need to monitor and evaluate the use of mobile technology by students. Educators can observe student interactions with the app, track their learning progress, and provide additional guidance or support when needed. The implementation of *Rigen Cakra* requires cooperation between educators, students, and other related parties, such as application developers or online resource providers. In this regard, good collaboration and communication are important to ensure the effective and successful use of mobile technology in language learning. The implementation of the *Rigen Cakra* application can provide various benefits, such as more flexible learning accessibility, higher student motivation, and more authentic language interaction.

CONCLUSION

Currently, the development of learning prioritizes technology, especially in online learning whose learning process is limited to delivering one-way material and assigning assignments. The learning process of writing Javanese literature has a big challenge because the delivery of material must have interaction, so teachers must be more creative and innovative to find the application of appropriate learning media. This study presents a systematic review of mobile-assisted language learning (MALL) research in the field of Javanese literature learning at the high school level that can facilitate the development of creative reading and writing.

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REFERENCES

- Ahmad, K. S., Armarego, J., & Sudweeks, F. (2017). The impact of utilizing mobile assisted language learning (MALL) on vocabulary acquisition among migrant women English learners. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, 13, 37–57.
- Baleghizadeh, S., & Oladrostam, E. (2010). The Effect of Mobile Assisted Language Learning (MALL) on Grammatical Accuracy of EFL Students. *MEXTESOL*, 34(2).
- Beatty, K. (2015). Mobile language learning: the world in our hands. *Вопросы прикладной лингвистики*, (17), 9-35.
- Bencsik, A., Horváth-Csikós, G., & Juhász, T. (2016). Y and Z Generations at Workplaces. *Journal of competitiveness*, 8(3).
- Bui, H. P., Bui, H. H. P., & Dinh, P. D. (2023). Vietnamese Students' Use of Smartphone Apps in English Learning. *LEARN Journal: Language Education and Acquisition Research Network*, 16(1), 28-46.
- Dehkordi, M. E., & Taki, S. (2018). Iranian male and female EFL learners' perceptions toward the use of mobile assisted language learning. *Journal of Applied Linguistics and Language Research*, 5(3), 56-66.
- Fang, W. C., Yeh, H. C., Luo, B. R., & Chen, N. S.

- (2021). Effects of mobile-supported task-based language teaching on EFL students' linguistic achievement and conversational interaction. *ReCALL*, 33(1), 71-87.
- Fitria, T. N. (2021). 'grammarly' as A Teachers' alternative In Evaluating Non-Efl Students Writing. *S. Leksema: Jurnal Bahasa dan Sastra*, 6(2), 141-152.
- Gharehblagh, N. M., & Nasri, N. (2020). Developing EFL Elementary Learners' Writing Skills Through Mobile-Assisted Language Learning (MALL). *Teaching English with Technology*, 20(1), 104-121.
- Hadi, M. S., & Emzir, E. (2016). Improving English Speaking Ability through Mobile Assisted Language Learning (Mall) Learning Model. *IJLECR - International Journal of Language Education and Culture Review*, 2(2), 71-74. <https://doi.org/10.21009/IJLECR.022.019>
- Huang, S., Dong, L., Wang, W., Hao, Y., Singhal, S., Ma, S., ... & Wei, F. (2023). Language is not all you need: Aligning perception with language models. *arXiv preprint arXiv:2302.14045*.
- Islam, A. B. M. S., & Hasan, M. (2020). The Effectiveness of Mobile Assisted Language Learning (MALL) on ESL Listening Skill. *NOBEL: Journal of Literature and Language Teaching*, 11(2), 188-202. <https://doi.org/10.15642/NOBEL.2020.11.2.188-202>
- Jeanjaroonsri, R. (2023). Thai EFL Learners' Use and Perceptions of Mobile Technologies for Writing. *LEARN Journal: Language Education and Acquisition Research Network*, 16(1), 169-193.
- Keezhatta, M., & Omar, A. (2019). Enhancing Reading Skills for Saudi Secondary School Students through Mobile Assisted Language Learning (MALL): An Experimental Study. *International Journal of English Linguistics*, 9(1), p437. <https://doi.org/10.5539/ijel.v9n1p437>
- Miqawati, A. H., & Wijayanti, F. (2017). Optimalisasi Penggunaan Flashcards Melalui MALL (Mobile Assisted Language Learning) pada Pengajaran Pronunciation. *Prosiding*. <https://publikasi.polije.ac.id/index.php/prosiding/article/view/781>
- Mobinizad, M. M. (2018). The use of mobile technology in learning english language. *Theory and Practice in Language Studies*, 8(11), 1456-1468. doi:<https://doi.org/10.17507/tpls.0811.10>
- Shadiev, R., Yang, M. K., Atamuratov, D., Shadiev, N., Fayziev, M., Gaevskaia, E & Oshanova, N. (2022, August). Familiarization Strategies to Facilitate Mobile-Assisted Language Learning in Unfamiliar Learning Environments: A Study of Strategies Development and Their Validation. In *Innovative Technologies and Learning: 5th International Conference, ICITL 2022, Virtual Event, August 29-31, 2022, Proceedings* (pp. 213-217). Cham: Springer International Publishing.
- Taj, I. H., Sulan, N. B., Sipra, M. A., & Ahmad, W. (2016). Impact of Mobile Assisted Language Learning (MALL) on EFL: A Meta-Analysis. *Advances in Language and Literary Studies*, 7(2), 76-83.