PROJECT
(Professional Journal of English Education)
Volume 8, No. 4, July 2025
p–ISSN 2614-6320
e–ISSN 2614-6258

Developing Android-Based Mobile Application for Learning Procedure Text

Kimiyaul Laili Sa'adah[1], Ahmad Thoyyib Shofi[2]

Universitas Qomaruddin, Indonesia
[1] lailijay08@gmail.com, [2] zhofi.thoyyib@gmail.com

Abstract

The advancement of technology has transformed education, providing opportunities for innovative learning methods. This study aims to develop an Android-based mobile application to support the learning of procedure texts for Grade X students at MA Assa'adah, aligned with the Merdeka Curriculum. Current teaching practices still rely on conventional methods, such as textbooks and manual translation using Google Translate. These approaches often limit vocabulary development and hinder students from achieving the expected competency standards (KKM). To address these challenges, the proposed application integrates procedure text materials with multimedia features, including images and audio, to enhance interactivity, engagement, and motivation in learning. The research employs the Research and Development (R&D) approach, following the PLOMP model. Data were gathered through questionnaires administered to students and interviews with the teacher. The findings indicate that the developed mobile application serves as an innovative and accessible tool, improving students' comprehension of procedure texts and supporting English language learning. Teacher observations confirmed increased student motivation and participation during lessons.

Keywords: Learning Media; Procedure Text; Android Application

INTRODUCTION

The integration of technology in education has transformed teaching and learning practices by offering innovative solutions to enhance student engagement, comprehension, and learning outcomes (Mulyadi & Aimah, 2021). Among these innovations, mobile learning applications, particularly those developed for the Android platform, provide accessible, interactive, and flexible learning opportunities. These tools allow students to learn anytime and anywhere, and in language education, they have been shown to improve motivation and support the development of key skills such as reading comprehension and vocabulary acquisition (Dia, 2024). Previous studies have demonstrated the effectiveness of mobile learning applications in increasing student engagement and improving learning outcomes in language education (Listya & Widodo, 2023). Android-based platforms are particularly advantageous due to their widespread use and accessibility among students (Nurfadhilah, 2018). Research also highlights the positive impact of multimedia elements such as audio, images, and interactive exercises on students' understanding of reading materials and vocabulary (Jannah & Thoyyib Shofi, 2022). In the context of teaching procedure texts, interactive and contextual learning materials are essential for helping students understand text structures and language features (Aminah, 2018). Despite technological advances, there remains a lack of mobile learning applications specifically designed to teach procedure texts in alignment with the Merdeka Curriculum. This curriculum emphasizes student-centered learning, real-life contexts, and communication skills, which can be effectively supported through digital learning tools (Alimin, 2021). This research aims to address the gap by developing an Android-based mobile application to support the teaching and learning of procedure texts for tenth-grade students at MA Assa'adah, a school

that implements the Merdeka Curriculum. Preliminary observations at the school revealed several challenges, including the reliance on traditional methods such as textbooks and manual translations, which limit students' vocabulary development and comprehension. Many students struggle to meet the minimum competency standards (KKM) outlined in the curriculum, partly due to the absence of digital learning media tailored to procedure texts. Although students at MA Assa'adah have access to mobile devices and are generally familiar with technology, the integration of mobile learning tools in English lessons remains minimal. This situation presents an opportunity to introduce an innovative learning application that aligns with the principles of the Merdeka Curriculum, promoting student-centered, contextualized, and communicative learning experiences (Lowerison et al., 2006). The Android-based application developed in this study integrates multimedia features such as images, audio, and interactive quizzes to enhance student engagement and understanding of procedure texts. Its offline functionality also addresses the issue of limited internet access, making it practical for classroom use. The application aims to support students in mastering procedure texts and achieving the required competency standards. This study employs the Research and Development (R&D) approach using the PLOMP model, which consists of five phases: preliminary investigation, design, realization/construction, testing, evaluation and revision, and implementation (Plomp & Nieveen, 2010). The process began with a needs analysis involving interviews and questionnaires with teachers and students to identify learning challenges. In the design and realization phases, the application was developed using tools such as Canva, PowerPoint, iSpring Free 11, and Web2Apk Builder v54. Validation was carried out by subject matter and IT experts, whose feedback informed revisions. Finally, the application was implemented in classroom learning activities. The results from the implementation indicated improved student motivation and engagement. Teachers observed increased participation and better comprehension when the application was integrated into lessons. This supports the potential of mobile learning technology to enhance language learning, particularly in teaching procedure texts.

METHOD

This study employed the Research and Development (R&D) methodology, following the PLOMP model, to develop an Android-based mobile application aimed at supporting the teaching and learning of procedure texts for tenth-grade students at MA Assa'adah. Based on PLOMP theory, this model consists of five stages: preliminary investigation, design, realization/construction, testing, evaluation and revision, and implementation (Plomp & Nieveen, 2010). In the preliminary investigation phase, learning challenges were identified through observations, teacher interviews, and student questionnaires. The design phase focused on planning the application's structure, content, and user interface based on the Merdeka Curriculum. The realization or construction phase involved developing the application using various tools such as Canva, PowerPoint, iSpring Free 11, and Web2Apk Builder v54. Once the prototype was completed, the testing, evaluation, and revision phase was conducted, where the application was validated by IT and subject matter experts before its implementation in the classroom. This study involved 23 tenth-grade students and one English teacher from MA Assa'adah, a school that implements the Merdeka Curriculum. Data were collected through questionnaires and interviews, with the student questionnaire assessing their experience with digital learning tools, engagement levels, and learning preferences. Meanwhile, the teacher interview provided insights into current teaching strategies, challenges in teaching procedure texts, and expectations for digital learning media.

The developed application was designed to include multimedia features such as images, audio, interactive quizzes, and vocabulary pronunciation support to enhance student engagement and comprehension. After the development phase, the application underwent validation by both a subject matter expert and an IT expert, whose feedback guided necessary revisions before classroom testing. During the implementation phase, students used the application as part of their English lessons, while the teacher integrated it into learning activities and observed student responses. At the end of the study, feedback was collected from both students and the teacher through a post-implementation questionnaire to evaluate usability, engagement, and the application's impact on learning outcomes.

RESULTS AND DISCUSSION

Results

Need Analysis

The needs analysis aimed to identify the learning media requirements of tenth-grade students and their English teacher at MA Assa'adah, focusing on the teaching of procedure texts. Data were collected through an interview with the English teacher and student questionnaires to ensure the developed media aligned with the curriculum and addressed practical needs. The English teacher at MA Assa'adah, stated that procedure text lessons still relied on traditional methods such as textbooks and manual translation using printed dictionaries or Google Translate. This approach limited vocabulary development and made it difficult for students to understand sequential instructions. She also noted that no digital learning tools were used, particularly for procedure texts, and emphasized the need for multimedia-based instructional media to enhance engagement, vocabulary acquisition, and pronunciation skills. The questionnaires distributed to 23 tenth-grade students explored their experience with digital learning tools and expectations for technology-based media. The results indicated a strong preference for multimedia-enhanced learning, confirming the need for an Android-based application to support procedure text comprehension. The results of the student questionnaire are presented in the following table:

Table 1. Students' Need Analysis Questionnare

No	Questions	Number of Answer	
		Yes	No
1.	Do you like English lessons?	16	7
2.	Do you like studying texts?	13	10
3.	Did you find it easy when studying the text?	12	11
4.	Do you understand the subject matter of the text chapter using the teaching method that has been used by your teacher?	16	7
6.	Do you feel interested when you study with learning media?	18	5
7.	With guidance from the teacher, do you feel motivated to ask questions about things you don't understand?	19	4
8.	Do you like learning with pictures?	18	5
9.	Do you like the teaching methods used by the teacher?	21	2
10.	Would you be interested if there is learning media in the form of an application for learning English?	20	3
11.	Have you ever used an application to learn English?	12	11
12.	Do you agree that there is an English application for learning procedure text?	20	3

13.	Do you agree that in the application there is a quiz about procedural texts to measure your understanding after studying procedural texts with the application?	18	5
14.	Do you agree if the procedure text application has images and audio?	22	1
15.	Do you agree if the material contained in the application is equipped with English vocabulary?	17	6
16.	Do you agree if the vocabulary is equipped with pronunciation in English?	19	4
17.	Do you agree if this application is provided on Android?	21	2
18.	Do you agree if the text in the material is equipped with English audio?	18	5
19.	Do you agree if the application is equipped with grammar material related to procedural texts?	14	9
20.	Do you agree that the application is designed to be simple, but still contains audio, images and vocabulary and pronunciation?	20	3

The questionnaire analysis revealed that most students showed a strong interest in learning English through mobile applications, particularly on Android devices. They favored multimedia features like images, audio, and interactive quizzes to enhance comprehension and vocabulary development. Many also highlighted the need for pronunciation support, emphasizing the importance of audio elements. However, they noted the absence of digital learning tools specifically designed for English procedure texts. Both teacher and student input confirmed the need for an engaging, user-friendly mobile application equipped with multimedia features to support procedure text learning. These findings served as the foundation for developing an Android-based learning tool for MA Assa'adah.

Design and Development

The design and development of the Android-based mobile application for learning procedure texts were informed by the needs analysis conducted at MA Assa'adah. The process followed the PLOMP development model, with a focus on the design and realization/construction phases. These stages aimed to produce a learning tool aligned with the Merdeka Curriculum and address specific challenges faced by tenth-grade students in understanding procedure texts.

In the design phase, the researcher planned the structure and features of the application based on findings from the preliminary investigation. The primary objective was to create an interactive, user-friendly application that supports students in comprehending procedure texts. The content was organized into sections covering the definition, generic structure, and language features of procedure texts, including imperative sentences, action verbs, and chronological connectors. Relevant examples related to students' daily activities were also provided to make learning more contextual and meaningful.

The design included a vocabulary list of key terms frequently used in procedure texts, each accompanied by audio pronunciation to improve listening and speaking skills. Interactive quizzes were added to help students assess their understanding after engaging with the material. The application was designed with a simple and intuitive interface, ensuring easy navigation for tenth-grade students. Visual elements, such as images and animations, were incorporated to maintain interest and encourage active engagement.

In the development phase, the content was created using PowerPoint and Canva to design slides, illustrations, and animations. The instructional materials were aligned with the Merdeka Curriculum competencies. Audio recordings for vocabulary pronunciation were produced and embedded using iSpring Free 11. After completing the multimedia integration, the materials

were exported to HTML5 and converted into an Android application package (APK) using Web2Apk Builder v54. The application was designed for offline use to accommodate students with limited internet access.

The final application consisted of several menus to enhance navigation and usability. The Home menu provided general information and links to other sections. The Learning Materials menu contained explanations and examples of procedure texts. The Vocabulary menu offered key terms with audio pronunciation. The Quiz menu featured interactive multiple-choice questions for self-assessment, while the About menu explained the purpose of the application, instructions for use, and developer details.

This Android-based mobile application was developed as an accessible and engaging learning tool, enabling students to access learning materials anytime and anywhere via their Android devices. Its offline functionality made it suitable for use in classrooms and areas with limited internet connectivity. The application display is showed on the pictures below.

Figure 1. Menu Application Display

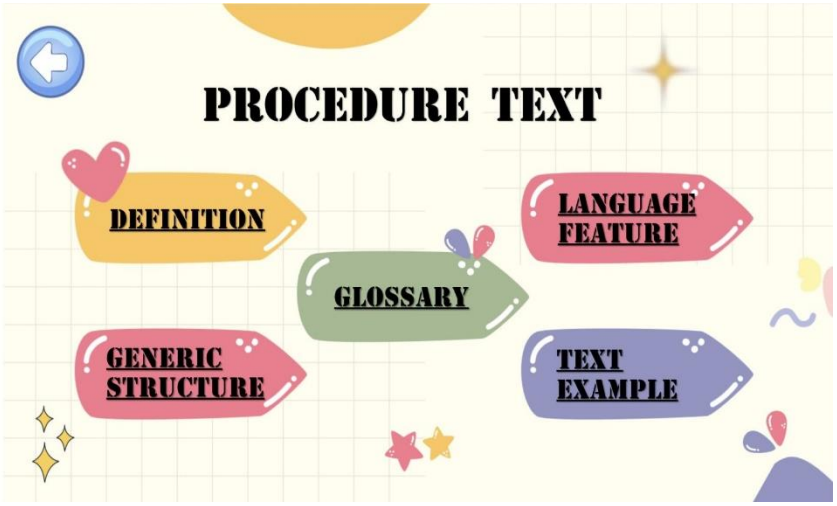

Figure 2. The Learning Menu Application Display

The design and development process concluded with the production of a fully functional

Android application, aimed at supporting the teaching and learning of procedure texts for tenth-grade students. The application was prepared for validation and testing in the subsequent phases to ensure its effectiveness and usability in the learning environment.

Validation Results

The validation of the Android-based mobile application was conducted to ensure its appropriateness for classroom use and its compliance with both pedagogical and technical standards. Two experts were involved in this process, consisting of a subject matter expert and an IT expert, who evaluated both the content and the technical quality of the application.

The subject matter expert assessed the accuracy of the learning materials, the clarity of the language, and the alignment with the Merdeka Curriculum. Based on the evaluation, the expert concluded that the application was suitable to support English learning at MA Assa'adah Bungah. Several suggestions for improvement were provided and subsequently implemented to enhance the quality and usability of the application. The detailed results of the material expert's assessment are presented in the following table:

Table 2. Material Expert Validation Result

No.	Aspect	Indicator	Evaluation		
			Less	Enough	Good
1	Relevance of the material to ATP	The material developed is ATP compliant			✓
		The material developed is in accordance with the independent curriculum			✓
		The material developed is in accordance with the indicators achieved			✓
2	Material quality	The images presented are appropriate to the material		✓	
		The systematic presentation of the material is coherent		✓	
		The quality of the application is in accordance with student learning			✓
		The material developed can increase students' interest and motivation in learning			✓
3	Language	The language or vocabulary used is easy for students to understand		✓	
		The language or vocabulary used is appropriate to the student's level		✓	
4	Audio	The quality of pronunciation of English vocabulary sounds clear and easy to understand			✓
		Audio sounds clear			✓
5		The text type is easy to read			✓

	Typography	The text size is appropriate (not too big or small)	✓
6	**Application functions and benefits**	Able to clarify and make it easier to convey material	✓
		The application is able to provide students with an understanding of the material	✓
		Can raise students' interest and motivation to learn	✓

Suitable for use as a reference for developing learning applications at MA Assa'adah Bungah without revision.	
Suitable for use as a reference for developing learning applications at MA Assa'adah Bungah with revisions according to suggestions.	✓
Not suitable to be used as a reference for developing learning applications at MA Assa'adah Bungah.	

Based on the table above, the validator provided two key recommendations for improvement. First, grammatical errors found in the procedure text materials were corrected using a grammar checker to ensure clarity and accuracy. Second, although the validator suggested reorganizing the learning materials from simple to complex, the existing structure was retained, as it was already aligned with the official textbook and the curriculum used at MA Assa'adah Bungah. Additionally, the IT expert reviewed the technical aspects of the application, including the user interface, navigation, and multimedia integration. The expert confirmed that the application was appropriate for use as a learning tool at MA Assa'adah Bungah, with necessary revisions made according to the feedback provided. The detailed results of the IT expert's assessment are shown in the following table:

Table 3. IT Expert Validation Result

No.	**Aspect**	**Indicator**	**Evaluation**		
			Less	**Enough**	**Good**
1	**Design or template application**	Opening display		✓	
		Display for material content			✓
		Picture quality which included			✓
2	**Technical quality**	Ease of operation of the application			✓
		Suitability of control tools (control buttons)		✓	
3	**Media visual design**	The design used attracts student motivation		✓	
		Selection of attractive colors, backgrounds and pictures			✓
4	**Audio**	The pronunciation quality of English vocabulary is good and understandable			✓
		Audio sounds clear			✓

5	**Typografy**	The text type is easy to read	✓
		The text size is appropriate (not too big or small)	✓
6	**Functions and benefits of application**	Able to clarify and make to convey material be easier	✓
		Able to raise students' interest and motivation to learn	✓

Suitable for use as a reference for developing learning applications at MA Assa'adah Bungah without revision.	
Suitable for use as a reference for developing learning applications at MA Assa'adah Bungah with revisions according to suggestions.	✓
Not suitable to be used as a reference for developing learning applications at MA Assa'adah Bungah.	

Based on the feedback provided, several technical improvements were implemented. The button layout was adjusted to improve navigation and create a more intuitive user experience. Navigation triggers were also added to ensure smoother and more responsive transitions between menus. Additionally, background music was added to the home page, with an option for users to adjust the volume or mute it as needed. These enhancements aimed to make the learning experience more engaging without distracting users.

After completing all revisions recommended by both validators, the application was finalized and deemed ready for classroom use. The validation process confirmed that the Android-based mobile application met the required standards and was suitable for supporting tenth-grade students at MA Assa'adah Bungah in learning procedure texts.

Implementation Result

The implementation phase was conducted after the Android-based mobile application for learning procedure texts had passed the validation and revision stages. This phase aimed to evaluate the practicality and effectiveness of the application in a real classroom setting, although it was carried out on a limited scale due to research constraints.

The implementation took place at MA Assa'adah Bungah, involving 23 tenth-grade students and their English teacher. In this phase, the teacher introduced the application as a learning tool to help students better understand procedure texts. Students were guided on how to navigate the application, explore the learning materials, study vocabulary lists with audio pronunciation, and complete interactive quizzes. During the lesson, the teacher observed student participation and engagement. To support further practice beyond the classroom, the application was made available for download via Blogspot (https://slicapp.blogspot.com/2024/11/procedure-textapk.html), allowing students to install the APK on their Android devices.

After the learning session, feedback was collected from both students and the teacher through questionnaires. The feedback focused on the application's practicality, ease of use, interactivity, and overall effectiveness in supporting the learning of procedure texts. The student feedback results are presented in the following table:

Table 4. Students' Feedback Result

No	Aspect	Indicator	Evaluation		
			Less	Enough	Good

1	**Students' opinions regarding the application of media during the learning process**	The application display helps in the learning process		**5**	**18**
		The application motivates students in the learning process		**4**	**19**
		Students make progress by using the application	**2**	**6**	**15**
2	**Students' opinions regarding the application**	Attractive media design		**3**	**20**
		Content and images are clear and appropriate to the material		**2**	**21**
		Audio sounds clear		**5**	**18**
		Applications are generally appropriate to student learning		**4**	**19**
3	**Student opinions regarding the material in the application**	The explanation of the material presented is easy to understand		**5**	**18**
		The material presented is appropriate to the student's level		**2**	**21**

Based on the table above, the majority of students indicated that the application was easy to use and contributed positively to their understanding of procedure texts. They appreciated the multimedia features, particularly the audio pronunciation and the engaging quiz activities, which helped reinforce their learning. Beside that, the teacher also gave feedback that is summarized in the following table:

Table 5. Teacher Feedback Result

No	**Aspect**	**Indicator**	**Evaluation**		
			Less	**Enough**	**Good**
1	**Teachers' opinions regarding the application of media during the learning process**	The application display helps in the learning process			✓
		The application motivates students in the learning process			✓
		Students make progress by using the application			✓
		Students are enthusiastic in the learning process		✓	
2	**Teachers' opinions regarding the application**	Attractive media design			✓
		Content and images are clear and appropriate to the material			✓
		Audio sounds clear			✓
		Applications are generally appropriate to student learning			✓

3	**Teacher's opinion regarding the material in the application**	The explanation of the material presented is easy to understand	✓
		The material presented is appropriate to the student's level	✓

Based on the teacher's observations, the application significantly increased student motivation and participation during English lessons. The multimedia elements made the materials easier to understand, while the interactive quizzes encouraged active involvement. Overall, the implementation phase demonstrated that the Android-based mobile application was practical, user-friendly, and effective in supporting tenth-grade students at MA Assa'adah Bungah in learning procedure texts. The combination of text, visuals, audio, and interactive features created a more engaging learning experience and enhanced students' comprehension of the material.

Discussion

The findings of this study indicate that the Android-based mobile application developed for learning procedure texts effectively addressed the challenges previously faced by tenth-grade students at MA Assa'adah Bungah. At the outset, many students struggled to understand procedure texts due to limited vocabulary and their dependence on conventional learning methods such as textbooks and manual translations using Google Translate. By incorporating multimedia features including images, audio support, and interactive quizzes, the application provided a more engaging and interactive learning experience. As a result, students demonstrated improved comprehension and increased motivation.

The increase in student engagement observed during the implementation phase highlights the important role of multimedia elements in enhancing the learning process. The audio pronunciation feature helped students develop their speaking skills, while the visual aids clarified each step in the procedural texts. These findings are consistent with the study conducted by (Rahmanita et al., 2021), which demonstrated that integrating multimedia in mobile learning applications can significantly improve learner motivation and comprehension. In addition, the flexibility offered by the application allowed students to study independently and at their own pace. This finding supports the research by (Agustini et al., 2018), which emphasized the advantages of mobile learning in promoting personalized education.

Validation from both IT and material experts confirmed that the application met the required technical and pedagogical standards. The IT expert highlighted the intuitive navigation and attractive design, while the material expert verified the accuracy and relevance of the content in accordance with the Merdeka Curriculum framework. These validations strengthen the credibility of the application as an effective learning medium in classroom settings.

Furthermore, the observed improvement in student motivation and comprehension aligns with the principles of the Merdeka Curriculum, which emphasize student autonomy and contextual learning. By providing access to procedure text materials through multimedia resources, the application fosters digital literacy and independent learning. In addition, student-centered learning approaches that incorporate technology have been shown to enhance critical thinking and problem-solving skills, which are essential competencies in modern education (Brown, 2006). The positive feedback received from students and teachers during the implementation phase highlights the practical benefits of integrating mobile applications into English language learning. Students reported that the application was engaging and supportive of their learning process, while teachers observed increased student participation and improved comprehension during lessons.

In conclusion, the findings of this study demonstrate that the Android-based mobile application significantly enhances the teaching and learning of procedure texts. It addresses the challenges associated with traditional learning methods, increases student motivation and engagement, and supports the achievement of curriculum objectives related to the development of students' language competencies.

CONCLUSION

This research confirms that the development of an Android-based mobile application for learning procedure texts effectively addresses the challenges identified during the preliminary investigation and further elaborated in the results and discussion. The study found that students at MA Assa'adah Bungah faced considerable difficulties in understanding procedure texts, primarily due to their reliance on traditional learning methods, limited vocabulary, and the absence of engaging digital learning media. These factors hindered their ability to achieve the competency standards (KKM) set by the Merdeka Curriculum. The application, which integrates multimedia features such as images, audio, interactive quizzes, and vocabulary pronunciation tools, successfully increased students' motivation, engagement, and comprehension. Validation from both material and IT experts confirmed that the content was accurate, aligned with curriculum standards, and that the application was user-friendly for both students and teachers. The implementation phase showed a positive impact, with increased student enthusiasm and participation in the learning process, as observed by the English teacher. Students reported that the application was helpful, easy to use, and made learning more enjoyable. As a result, students demonstrated improved understanding and retention of procedure text materials. In conclusion, this study demonstrates that integrating Android-based mobile applications into English language learning can effectively overcome common challenges in teaching procedure texts. It enhances learning outcomes and supports students in meeting the expected competency standards outlined in the Merdeka Curriculum.

ACKNOWLEDGMENTS

The researcher would like to express sincere gratitude to the Government of Indonesia through the KIP Kuliah Scholarship Program for the full financial support throughout four years of study. Appreciation is also extended to Prof. Dr. H. Aswadi, M.Ag., Rector of Qomaruddin University, and Dr. Muhammad Jamaluddin, M.Pd., Dean of the Faculty of Teacher Training and Education, for their support and guidance, as well as to Mrs. Lailatul Masruroh, M.Pd., Head of the English Education Program, for her continuous support and helpful advice. The researcher also wishes to thank all lecturers at the Faculty of Teacher Training and Education for their valuable teachings, and the researcher's beloved parents for their endless love, prayers, and support. Special thanks to Mr. Yopi, the research supervisor, for his guidance, and to Mrs. Munafiyah for her assistance during the development of the mobile learning application at MA Assa'adah. Finally, the researcher extends heartfelt thanks to all who have contributed in any way to the completion of this research.

REFERENCES

Agustini, S., Wardhani, N. P., Kurniawan, M., & Amalina, E. N. (2018). Mobile Application for English Reading Comprehension. *IPTEK Journal of Proceedings Series*, *0*(6). https://doi.org/10.12962/j23546026.y2018i6.4627

Alimin. (2021). *Developing a Mobile Apps as Media for Learning Vocabulary*. http://creativecommons.org/licenses/by

Aminah, S. (2018). The Use of Video in Teaching Writing Procedure Text. *NOBEL: Journal of Literature and Language Teaching*, *9*(2), 148–157. https://doi.org/10.15642/nobel.2018.9.2.148-157

Brown, H. D. (2006). Learner characteristics. In *The Ultimate FE Lecturer's Handbook*. https://doi.org/10.1017/cbo9781139062398.015

Dia, A. A. (2024). Teaching and Learning English in the Digital Era: Opportunities and Challenges. *Proceedings of The International Conference on Research in Teaching and Education*, *1*(1), 13–25. https://doi.org/10.33422/rteconf.v1i1.183

Jannah, W., & Thoyyib Shofi, A. (2022). *Developing Mobile Learning Application as Instructional Media for Reading Comprehension*. *7*(2). https://journal.iaingorontalo.ac.id/index.php/al

Listya, A., & Widodo, D. (2023). *Peran Media Pembelajaran Dalam Meningkatkan Motivasi Belajar Siswa*.

Lowerison, G., Sclater, J., Schmid, R. F., & Abrami, P. C. (2006). Are We Using Technology for Learning? *Journal of Educational Technology Systems*, *34*(4), 401–425. https://doi.org/10.2190/er58-3h7p-y8fk-u8f7

Mulyadi, D., & Aimah, S. (2021). Android-Based Mobile Learning Media in Teaching Reading of Report Texts. *Getsempena English Education Journal (GEEJ)*, *8*(1).

Nurfadhilah, R. (2018). *The Effect of Project-Based Learning on Students' Writing Ability of Narrative Text (A Quasi-experimental Study at Tenth Grade Students of SMAN 1 Kota Tangerang Selatan in the Academic*.

Plomp, T., & Nieveen, N. (2010). *An introduction to educational design research*.

Rahmanita, R. A., Ratminingsih, N. M., & Juniarta, P. A. K. (2021). Developing an Android-Based English Reading Material for the Eighth Grade Students in Mtsn Karangasem. *The Art of Teaching English as a Foreign Language*, *2*(1), 102–112. https://doi.org/10.36663/tatefl.v2i1.179