

ANDROID-BASED MOBILE LEARNING MEDIA: DEVELOPING SHORT FUNCTIONAL TEXT MEDIA FOR SEVENTH GRADE STUDENTS

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ABSTRACT

EFL learners had a less enthusiastic and difficult experiences when they studied short functional text. So, this current study discussed how to create a mobile phone application for online learning compatible with Android and Windows platforms named short functional text: greeting card. This study also attempted to evaluate the effectiveness of acquiring English language skills using Android-based mobile learning media. This study employed a research and development methodology, which involved nine consecutive stages: identification of potential and challenges, data collection, product design, validation of the design by experts, product testing, initial product revision, trial usage of the product, second product revision, and finalization of the product. The research instruments employed were questionnaires and tests. The data analysis was performed utilizing descriptive statistics and an independent sample T-test. The participants included eighth-grade students who were enrolled at SMP N 4 Purwodadi. Three separate findings were obtained from this inquiry. The validation of media and material specialists was a relevant evaluation of an authentic product, and the viability of using an Android-based mobile learning media product was established. Moreover, the average pre-test and post-test results exhibited a significant significance level, suggesting that the android-based mobile learning media was very effective as a learning medium throughout the learning process. Moreover, the student's perception findings were categorized as positive, with 75.5% indicating their agreement with using Android-based mobile learning media for learning. Using android-based mobile learning media can help students comprehend condensed functional content included in greeting cards, and it can alleviate monotony throughout the learning process.

Keywords: android based mobile, short functional text, developing

INTRODUCTION

The Indonesian government has come to recognize the significance of other languages, particularly English, in today's age of globalization. Teaching children English is intended to broaden their horizons so they can

better comprehend other languages and the ideas behind them. The influence of technology on community events is a fresh concept in technology-based learning (Chong & Reinders, 2020; Nurmantara et al., 2020; Papalia et al., 2018; Syathroh, 2022). In addition, the educator can create a splash by

adapting the English language lesson plan to the current climate. The novelty of mobile learning as a social movement has led to its meteoric rise in popularity. (Berge, 2013; Each & Suppasetseree, 2021; Fang et al., 2021; Pachler, 2007; Pingmuang & Koraneekij, 2022; Viberg et al., 2020). Students are no longer constrained by physical location to participate in mobile learning activities.

One part of language proficiency crucial to raising future generations that are intelligent, critical, creative, and cultured is the ability to present brief discussions via cell phones. Acquiring the ability to convey significance through concise functional texts is crucial for children to engage with their immediate surroundings. By acquiring proficiency in these skills, students will be able to articulate their thoughts and emotions with intelligence, per the specific context and circumstances outlined in an article. Adas & Bakir (2013); Harmer (2007); Wijayatiningsih et al. (2022); Wijayatiningsih & Wilujeng (2015) argue that writing is generating ideas, considering the best way to convey them, and crafting a sentence or paragraph that the reader can easily understand. Various methods exist to enhance students' enthusiasm for acquiring English language skills, including using appropriate educational resources. In order to effectively transmit knowledge to students, teachers must possess a comprehensive understanding of several components of instruction, including methodologies, tactics, learning models, objectives, and materials. This knowledge enables teachers to tailor their teaching approach to suit the unique features of each student.

Moreover, the applications and the internet can be utilized to employ technology for communication. Individuals geographically distant from their relatives frequently employ written communication through mail or electronic media (Lam & Chiu, 2018). The situation becomes intriguing when a foreign language, English, is utilized. Proficiency in both the native and a foreign language, a strong command of syntax, word choice (diction), and an extensive vocabulary are essential for effective communication.

After conducting a preliminary observation in the eighth grade at a Junior

High school in Central Java, it was discovered that certain students lacked enthusiasm for learning English and had challenges, mainly when memorizing short functional texts. It could be attributed to both the students themselves and the teacher. This problem occurred due to the use of online learning in schools during the COVID-19 pandemic, where teachers exclusively utilized the WhatsApp group application as their primary communication platform. The English learning process could have been more suboptimal, resulting in pupil boredom. Students encountered challenges composing concise functional texts due to the difficulty structuring their thoughts when they already had ideas in mind yet struggled to articulate them in writing form. In addition, pupils encountered challenges in differentiating between greeting cards and brief notes due to the nearly identical language style. Thus, when engaging in online learning, teachers should provide students with Android-based media to assist them. Students can access Android-based mobile learning media anytime and in any location.

Furthermore, android-based mobile learning media can be obtained at no cost and does not necessitate a significant amount of storage space on the cellphone. This media offers several aspects specifically designed for educational purposes, including greeting card resources and exercises that enhance students' familiarity with greeting card content. This application features multiple quizzes, one of which prompts students to create greeting cards with accurate organization and text.

Besides, with the correct approach, teaching short functional texts can be more enjoyable for the instructor in light of these circumstances. Teachers must employ creativity and ingenuity in their teaching methods to cultivate students' interest in studying the English language. An example of innovations created by instructors in learning is the creation of learning media and the use of novel ways of teaching writing. The tactics should be engaging, practical, and enjoyable to foster students' positive attitudes toward writing and vocabulary acquisition.

This study involved developing a specialized application to acquire concise, functional written content knowledge. The produced application is distinct from other

applications. The researchers' design application combines their artwork with musical instruments. The program's content is derived from various literary sources, enhancing students' learning ability in diverse environments.

Online and remote learning can both benefit from the deployment of Android-based media. The teacher will employ an intelligent application maker to facilitate students, utilizing an application as an educational tool. It will enhance students' engagement in learning, and this application offers the flexibility to be utilized at any time and in any location. The current research was focused on addressing two research questions:

1. How can using Android-based mobile devices facilitate teaching short functional text?
2. Is an Android-based mobile device effective for teaching short functional text?
3. How do students perceive studying short functional text using Android-based mobile devices?

METHOD

This current research employed mixed method research integrating quantitative and qualitative data which are elaborated, such as; research design, population and sample, instruments, and data analysis (Cresswell, 2009, 2014; Cresswell & Plano, 2018). The android media is designed by applying smart application creator 5.0.

The product was developed is an android-based learning media generated using the innovative applications' creator application. Smart Apps Creator (SAC) was a software designed to create multimedia applications for mobile, desktop, and online platforms. The outcomes of its development have the potential to be transformed into Android/iOS mobile applications, desktop applications, and HTML5 web applications that can be accessed through a browser. The device information for Smart Apps Creator (SAC) can be retrieved through the SAC Product Information page. When compiling learning media, it is necessary to complete many preparatory steps:

1. Identifying the content to be included in Smart Apps Creator.

The researchers selected the brief functional text (greeting card) material that was covered in the Junior High School students.

We are creating written material and developing practice questions using Microsoft Word. Practice questions may take the form of multiple choice, essay, matchmaking, or other types.

2. Compiling accompanying visuals for application design.

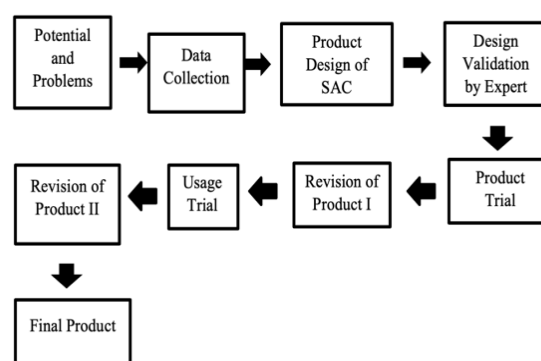
The images are utilized to enhance the visual appeal of the application's interface. Button pictures were required in the application design, such as icons for home, back, start, restart, and so on.

3. Creating application models with innovative app creators.

The application typically consisted of five primary components: opening, home, material, quiz, and developer.

Once the program has been finished, it can be saved as Android-based educational material and loaded on an Android phone.

In addition, the current study utilized the Research and Development (R&D) approach. This was a method used to develop certain products in learning English and to test their effectiveness in the learning process as a learning medium. According to Cresswell (2009); Cresswell & Plano (2018) in Research and Development research there were stages that will be carried out on the media in this study. It can be seen in Figure 1.



(Cresswell (2009)

Figure 1. Research and Development Stages

Based on Figure 1, during the potential and issues cycle, the researchers examined the issue. We assessed the efficacy of introducing junior high school pupils to mobile learning media built on the Android platform,

particularly brief functional texts. The central focus of this investigation was the English teacher's reluctance to incorporate Android-based resources into the classroom. The researchers continued to utilize traditional forms of media and relied on textbooks as a primary medium for learning. This study assessed the efficacy of mobile learning media through Smart Apps Creator for English language acquisition in response to the issues above. This media application was anticipated to be the ideal answer for instructing concise functional text.

Data was collected using a questionnaire and test. The questionnaire was categorized into student questions and expert validation questionnaires. The questionnaire was designed to ascertain pupils' perceptions, viewpoints, and reactions. Furthermore, a questionnaire was administered to obtain expert confirmation. In this study, the researchers created a questionnaire consisting of ten questions that focused on the learning process utilizing mobile learning media based on the Android platform. The questionnaire also incorporated several components of expert validation. Subsequently, the pupils and expert validators were required to complete the questionnaire by furnishing responses. The questionnaire data were analyzed using descriptive statistical analysis. Then, the data collected was analyzed using SPSS.

Moreover, the participants in this research were second year pupils enrolled at one of Junior High School in Central Java. In all, thirty-two students participated in this study which consisted of 20 females and 12 males. The researchers prepared lesson plans, other learning materials, and short functional texts. The simple random sampling technique selects samples from a population without considering the existing strata (Cresswell, 2014). The pupils then completed a survey about their viewpoints on advancing android-based mobile learning media in instructing concise functional text.

Moreover, the findings were a tabulated representation of percentages based on the specified criteria for the application. The criteria application involved determining the highest and lowest percentages.

In addition, the researchers also examined the validity and reliability. The test validity result was determined in Table 1.

Table 1. Test Validity Analysis

Question	r arithmetic	Significant	r table	Criteria
Q1	0.384	5%	0.361	Valid
Q2	0.429	5%	0.361	Valid
Q3	0.384	5%	0.361	Valid
Q4	0.375	5%	0.361	Valid
Q5	0.487	5%	0.361	Valid
Q6	0.458	5%	0.361	Valid
Q7	0.426	5%	0.361	Valid
Q8	0.375	5%	0.361	Valid
Q9	0.641	5%	0.361	Valid
Q10	0.503	5%	0.361	Valid

Based on the validity test findings, it can be inferred that ten of the preceding 20 tests were deemed invalid, resulting in 10 accurate tests for the final results. According to the results presented above, all questions were deemed acceptable. The r value for arithmetic was more significant than the r value for the table, indicating that all questions were valid and suitable for future testing. The students' reactions to mobile learning media on Android and Windows were able to fulfill the objectives within the given problem's context.

The reliability analysis was employed in the same investigation, yielding consistent results. This study evaluated the test's reliability by utilizing the Alpha formula in the SPSS 16 software, as evidenced by the alpha value (α). If the value of r_{II} is greater than the value of r_{table} , then this test is classified as trustworthy. Table 2 presents a detailed explanation of the results obtained from the reliability test conducted in this study.

Table 2. Test Reliability Analysis

Cronbach's Alpha	N Item
0.649	10

The reliability test results indicate that $r_{11} = 0.649$ and $r_{table} = 0.361$. The conclusion is that 0.649 is more significant than 0.361, indicating that the test instrument falls into the reliable group.

FINDINGS AND DISCUSSION

The first finding is the developing android based mobile media in teaching short functional text. The development based on the research and development stages.

Definition of potential and problem

To ascertain the issue at hand, I performed observations in the eighth grade of SMP N 4 Purwodadi to discern the authentic teaching and learning environment. I also conducted analysis or research to acquire data on the initial stages of development. This technique encompassed both a comprehensive analysis of existing literature and direct observation.

During the pre-observation in the eighth grade of SMP N 4 Purwodadi, the researchers noticed that the English learning process still relied on traditional teaching methods, with the teacher using textbooks as the primary learning resource. Regarding these circumstances, employing Android-based mobile learning media to instruct brief, functional English texts was deemed more suitable for the subjects under examination. Mobile phones can serve as educational tools for teachers and students, allowing learning opportunities to be accessible at any time and location.

The research applied a questionnaire to obtain information about the reactions of students and two professionals to mobile learning media based on Android. Before utilizing the product in the learning process, the researchers provided the product to the expert for validation and comments. After that, we adjusted the product based on the advice of the media and material experts.

Product Design of Android-based Mobile Learning Media

During this stage of the process, the researchers developed a mobile learning media. They decided on fundamental competencies and indicators, developed materials, and conceived a strategy for mobile learning media. Using MLM, we selected a brief functional text (greeting card) as the material. The researchers utilized a program called Smart Applications Creator to develop media or multi-level marketing. We developed a design for an application connected to the content depicted on the greeting card. The name of the media is: short functional text: greeting card. Developing

multi-level marketing items took us at least a month.



Figure 2. The Greeting Card Mobile Learning Media main Menu

Figure 2. illustrates the primary menu structure used in the greeting card application. The primary menu has several options, such as the definition, language features, generic structure, types, quiz, and developer.



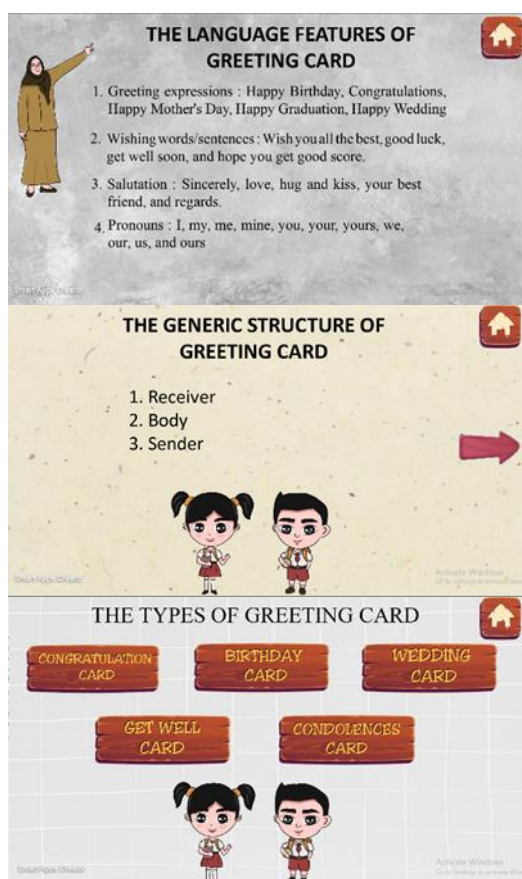


Figure 3. Greeting Card Mobile Learning Media Materials

The instructional material page included greeting card content (see Figure 3). The website provides a detailed explanation of greeting cards and examples of each style. Furthermore, a synonym phrase was included to raise pupils' awareness of synonyms frequently used in greeting cards. Even if students did not have access to the internet, they could still access the accessible materials and exercises individually and offline.

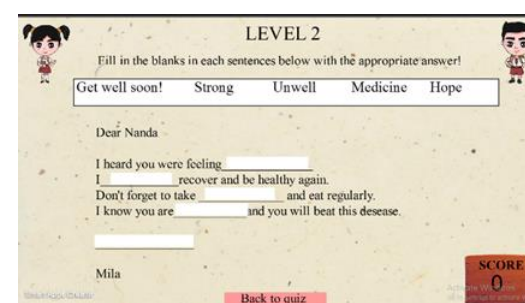
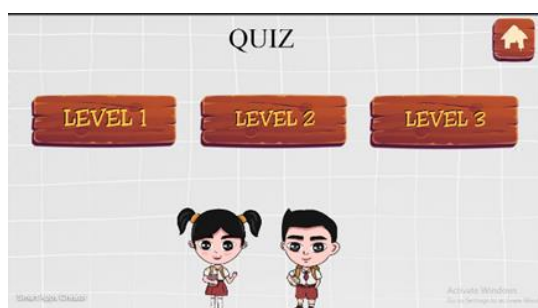


Figure 4. Greeting Card Mobile Learning Media Quiz

Figure 4 depicts an example of a design quiz for the greeting card app. In total, there were three different stages of the examination. The first level consisted of locating a suitable synonym for each of the provided words. At Level 2, some questions required students to fill in the blanks on greeting cards. An assignment given to students at the third level was to design a greeting card that included a sender, a receiver, and a body.

Design Validation by Experts

The researchers presented the multi-level marketing (MLM) product based on Android to material and media experts once it had been developed. We employed a questionnaire that was prepared to find out the findings of the expert validation before the expert validated the media and materials. It was done before the expert validated the sources. We selected an English teacher from SMP N 4 Pruwodadi

to serve as the material expert validation, and eight questions were to be answered by the material validation. A lecturer in the English education department at the Universitas Muhammadiyah Semarang received the media expert's services then. To finish the media expert validation questionnaire, nine questions needed to be answered. The material and media experts questionnaire was broken down into two categories: the criteria for teaching material experts and the layout criteria for media teaching experts. Both categories were divided into these two categories.

Revisions to the product were developed in response to comments and suggestions made by industry professionals. The researchers made expert revisions to the product before it was released for usage in the field. Following that, we compiled a questionnaire that professionals had examined in the previous step. Viewing the data from the expert validation and the interval assessment are available in Tables 3, 4, and 5 is possible.

Table 3. Short functional text materials validation result

Validasi I		
Component	$\sum ni$	Interpretation
Aspect of Eligibility of contents	100%	Very relevant
Aspects of Quality	87,5%	Very relevant
Aspects of the Quality Exercise	100%	Very relevant

Table 4. Media validation result

Validasi 2		
Component	$\sum ni$	Interpretation
Aspect of Feasibility of Graphic	91.6%	Very relevant
Language Feasibility Aspect	83,3%	Very relevant

Table 5. Assessment interval of mobile learning media

Score	Category
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>80	Very relevant
>60-80	Relevant
>40-60	Quite relevant
>20-40	Less relevant
<20	Very less relevant

Based on the findings of expert validation, all of the media and material components were rated as extremely relevant. Consequently, the product was deemed appropriate for integration into the educational curriculum. However, the validator made a few modifications.

- Modifications to provide more explicit directions for teaching students how to learn synonym phrases in the text of a greeting card.
- Using level 1 quiz tips, students are limited to selecting an answer with just one tap.
- The display color on the varieties of greeting card pages was altered to enhance the clarity of the writing.

5. Revisions of Product 1

The expert validation results indicate that certain adjustments must be made to produce mobile learning materials based on Android. The purpose of the product redesign was to enhance the medium's efficiency, attractiveness, and effectiveness. The explanations for the criticisms and suggestions provided by the validator are as follows.

Several improvements were made to this program, including clarifying the directions regarding the material to encourage students to acquire synonym phrases from the greeting card text. The original design can be seen in Figures 5 through 6.



Figure 5. The Application design before revision



Figure 6. The Application's designed outcome after revision

On the quiz page for Level 1, there were multiple choice questions with helpful hints—press the tab key once.

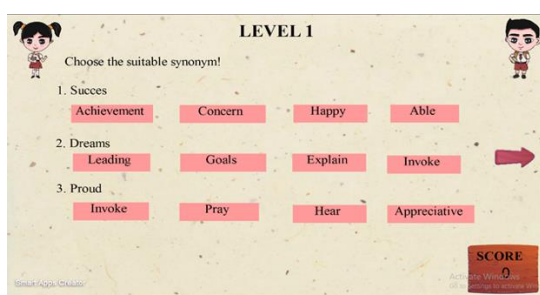


Figure 7. The Application Design before Revision

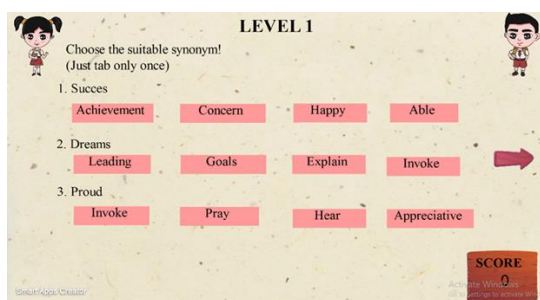


Figure 8. The Application's Designed Outcome after Revision

The lettering on the area for different sorts of greeting cards was illegible, so the researchers had to alter the color of the writing to enhance its clarity.



Figure 9. The Application Design before Revision

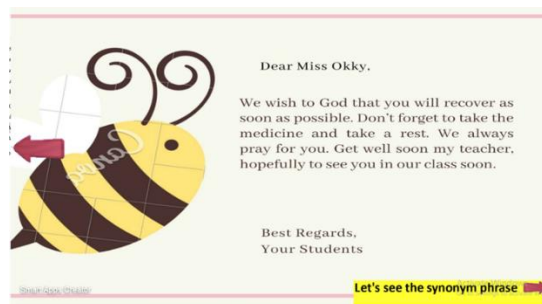


Figure 10. The Application's Designed Outcome after Revision

Product Trial

The researchers experimented to determine the product's sophistication. The media was evaluated in two distinct phases: field testing, which involved an experimental class, and small group testing. The present study employed a questionnaire to gather data.

The questionnaire consisted of ten statements pertaining to the use of Android-based mobile learning media. In this instance, we consolidated the data into a single group. In this phase, the researchers collected data by soliciting opinions and evaluations from 30 respondents through a questionnaire focused on product quality which can be seen from the results as follows.

$$\begin{aligned} \text{Percentage} &= \frac{\text{Total Score (n)}}{\text{the amount of maxscore (N)}} \times 100\% \\ &= \frac{906}{1200} \times 100\% \\ &= 75.5\% \end{aligned}$$

The trial data showed that after the experiment was completed, there was an average good accumulation of 75.5% with categories. According to the information available, thirty students agreed that mobile learning media based on Android might assist students in learning greeting card material.

Final Product

The final revision meant the final result was prepared as an instructional tool. The field testing questionnaire yielded a percentage score of 75.5%, indicating that this media falls within the "good" category and is suitable for use in the learning process. Students also noted that this medium was engaging for acquiring knowledge about greeting cards. Ultimately, this product proved well-suited

for utilization as a mobile learning medium on Android and Windows platforms.

Based on the data result, it can be concluded that the android mobile based media for short functional text is valid to implement in the teaching learning process which can encourage the students to develop their vocabulary and speaking skill.

The second finding is the effectiveness of android based mobile learning media in teaching short functional text. This result is based on the analysis of pre-test and post-test after implementation of android media.

This section used descriptive statistics and the normality T-test to describe the SPSS analysis of the students' pre- and post-test findings. This study solely involved Class 8A; the control group met in the second session, whereas the experimental group met in the first. The experimental class served as the treatment group and examined short functional texts of greeting cards using Android-based mobile learning media. Greeting card learning through the use of instructional technology based on Android-based mobile learning media was not used in the control group.

This research aimed to analyze the brief functional sentences used in greeting card advertisements. Both parts of the study process included several steps. In the first step, students took a pre-test to gauge how much they knew about the greeting card content with their English language acquisition. The second post-test consisted of seeing how much the participants had learned after reviewing the greeting card content.

Test and questionnaire results were used in this study. The data analysis aimed to determine the efficacy of greeting card learning through Android-based mobile learning media. The results were compared between the pre-and post-test times at various points in the learning process. The researchers are currently using descriptive statistics and the normalcy test to determine how effective Android-based mobile learning media are.

The normality test results showed no significant change between the pre-and post-test data (Sig. (2-tailed) value > 0.05). Based on average data, the significance level of the difference between the eighth-grade pre- and post-tests was 0.200. It means that 0.200 is more than 0.05. The experimental class's pre-

and post-test data were found to be within the usual range.

The control group, meanwhile, had a Sig. (2-tailed) value of 0.074 for both the pre-and post-tests. That $0.074 > 0.05$ was the meaning. It was possible to demonstrate that the pre-and post-test data were typical.

Table 6. Paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test Eksperimen	56.67	15	13.452	3.473
	Post Test Eksperimen	90.67	15	8.837	2.282
Pair 2	Pre Test Control	48.00	15	10.142	2.619
	Post Test Control	80.00	15	8.452	2.182

Table 6 demonstrates the validity of the pre-and post-test scores in this class. The pre-and post-test variables' values were demonstrated with fifteen participants in the control and experimental groups. The average score in the experimental group increased from 56.67 on the pretest to 90.67 on the posttest. The experimental group improved from a minimum pretest score of 40 to 70 after the intervention. The experimental group's pre- and post-test standard deviations were 13.452 and 8.837, respectively.

Conversely, the control group saw an average increase from 40 to 70 between the two assessments. Students in the control group may get as high as 100. The control group had a standard deviation of 10.142 before and 8.452 after the test.

In addition to finding statistically significant differences between the experimental and control groups, the data presented above suggests that students in the Android-based mobile learning media group performed better on average during the learning process. Following the instructor's explanations, the outcomes of the students' practice tasks provided further evidence.

Besides, the pre-test and post-test results in the experimental and control sections were compared using a T-test. A T-test with paired samples was utilized to ascertain whether the hypothesis should be accepted or rejected based on the acquired data. Tables 7 and 8 describe the data.

Table 7. The Result of Paired Sample T-test

		N	Correlation	Sig.
Pair 1	Pre Test & Post Test Eksperimen	15	.140	.618
Pair 2	Pre Test & Post Test Control	15	.333	.225

Table 8. The Result of Paired Samples Correlations

		Paired Differences				
		95% Confidence Interval of the Difference				
		Lower	Upper	T	DF	Sig. (2-tailed)
Pair 1	Pre Test–Post Test Eksperimen	-42.320	-25.680	-8.765	14	.000
Pair 2	Pre Test–Post Test Control	-37.994	-26.006	11.451	14	.000

Table 7 and 8 depict the efficiency of Android-based mobile learning media. The researchers would want to describe how the research hypotheses were developed. He stated that there was no average difference between the pre-test and post-test results, implying that Android-based mobile learning media did not influence learning. Ha indicated that there was an average difference between the pre-test and post-test or that mobile learning media impacted the learning process. To assess the effectiveness of the media, we used a significant value (sig.) of the SPSS output. If the significant value (2-tailed) < 0.05, Ho was rejected, and Ha was approved.

If the significance value (2-tailed) > 0.05, Ho was accepted, and Ha was rejected.

All in all, Ho was rejected, and Ha was accepted based on the two-tailed significance values ($0.000 > 0.05$) for the experimental and control classes, as shown in Table 8. The data from the Paired Sample T-test demonstrate that, on average, there was a difference between the findings of the pre-test and the post-test. This indicated that mobile learning media based on Android had an effect on the learning process. So, the android mobile based media is effective to implement in the teaching learning process for short functional text.

The third finding is the students' perceptions when learning short functional text using android based mobile. In this study, questionnaire findings are used to explain students' perceptions of the learning process, specifically brief functional text using Android-based mobile learning media in the experimental class. The questionnaires were distributed after students learned the greeting card material through the Android-based mobile learning medium. The researchers then assessed the data collected using a questionnaire. The questionnaire findings are shown in Table 9.

Table 9. Data Result of Questionnaire in Experimental Class

NO	Statement	mean	category
1.	The use of mobile learning media to facilitate students in learning greeting cards. The interesting android-based mobile	3.3	Good
2.	learning media design in learning greeting cards. The use of android-based mobile	3.3	Good
3.	learning media to make students more independent.	3.2	Good

4.	The students' activeness when learning using Android-based mobile learning media.	3.06	Good
5.	The use of Android-based learning media to make the students more responsible in doing assignments from the teacher.	3.2	Good
6.	The use of greeting cards' exercise to help students in practicing English.	3.6	Good
7.	Students' exciting and motivating to learn greeting card using android base-mobile media.	3.2	Good
8.	The students' participation in learning using android-based mobile learning media as a new experience	3.4	Good
9.	The use of android-based mobile learning media which is more interesting than text book.	3	Good
10.	The clear exercise and discussion of the material in the application to the students.	3.6	Good

Table 9 illustrates that one greeting card learning media found Android-based mobile learning media advantageous and satisfactory.

The first indicator, which received a score of 3.3, pertains to the application of mobile learning media in aiding students' comprehension of greeting cards. The grade was deemed satisfactory. This finding suggested that the pupils agreed with the assertion, and the content was more easily understood because every pupil had access to the aforementioned media.

The second indicator was assigned a positive evaluation score of 3.3. This finding suggests that students agreed that the aesthetics of the mobile learning media were attractive, which consequently sparked curiosity regarding using Android-based mobile learning media.

The average outcome is denoted by the third indicator, which is 3.2. This indicator stated that Android-based mobile learning media could promote the growth of increased student autonomy throughout the learning process. It was classified as being outstanding. This finding suggested that students preferred Android-based mobile learning media due to the potential for these media to promote increased student autonomy throughout the educational journey.

The following suggestion is that using Android-based mobile learning media could foster increased student engagement in the educational journey. The mean score assigned to the fourth indicator was 3.06. This result was classified as excellent quality. The Android-based mobile learning media-based learning process exhibited higher student engagement than usual. This could be attributed to the requirement for independent comprehension of the material.

The fifth indicator, with a mean score of 3.2, was within the acceptable range. When Android-based mobile learning media are utilized, a greater understanding of the material may increase student engagement.

Thus, students were enabled to take on a greater degree of responsibility in understanding the material by utilizing Android-based mobile learning media.

Furthermore, the average score obtained for the sixth indicator was 3.6. It demonstrated that the pupils agreed with the assertion that honing their skills in greeting card creation could yield advantageous outcomes. The favorable categorization indicated this outcome.

The following indication was that this application could motivate and inspire students to study greeting cards more. A mean score of 3.2 was obtained in the favorable category. It suggested that students cultivate an increased motivation toward learning due to having access to the media outside of class time.

The average score achieved on the eighth indicator was 3.4. The eighth indicator concerned the degree of novelty demonstrated by pupils in their use of Android-powered mobile learning media. Sufficiency was attributed to this category. A subset of students agreed that gaining an understanding of greeting cards via Android-based mobile learning media was an unparalleled experience for them, as they had previously exclusively utilized textbooks or video tutorials.

The ninth indicator found that mobile learning media based on Android were more engaging than traditional media (textbooks). The average score for this claim was three, which was deemed adequate. As a result, students perceived mobile learning media based on Android to be a captivating resource for greeting card study. The application consisted of various exercises, and students were provided with a score after finishing each exercise, which allowed them to evaluate their own progress in learning.

With an average score of 3.6, the final indicator was classified as "good." The concluding statement functioned as a trial run, and the application explicitly addresses the subject matter. This finding suggests that the pupils agreed on the comprehensibility of the content, evaluations, and activities featured in the application as they pertained to the study of greeting cards. Examining students' perspectives concerning incorporating Android-powered mobile learning media into the educational experience indicates that many students concurred with this methodology.

DISCUSSION

Applications Package Files (APKs) were created as a byproduct of developing mobile learning media for Android. These APKs were compatible with Windows-based and Android-based mobile devices. Furthermore,

this application's storage capacity on mobile devices or computers was restricted to 39.4 MB, facilitating its installation on such devices for the convenience of users or students. This application was more interactive and user-friendly than PowerPoint. Additional file types The Media supports include audio, video, images, and animations. Android-based mobile learning media additionally furnished students with practice opportunities and feedback. Mobile learning media have been implemented and are now more straightforward to deploy on students' computers, mobile phones, and other devices.

This study implemented the advancements in mobile learning media based on Android in the context of English language acquisition. Windows also permitted students to install applications on their devices. Android was intended to facilitate pupil learning by implementing mobile phone applications.

This media had been created and deemed appropriate for educational purposes. It aligns with the expert validation test's findings and the students' perspectives regarding mobile learning media based on Android. In addition, the success of this study could be attributed significantly to the student's engagement in the learning process through the use of mobile learning media based on Android. The students would be enthusiastic and active, as this media could also be utilized for online learning, ensuring all course materials were accessible on their cellphones.

Moreover, the results also reveal the effectiveness of android based mobile media. The normality test, descriptive statistics, and paired sample T-test were employed to assess the efficacy of mobile learning media based on Android. The paired sample T-test was utilized to compare the pre-test and post-test scores of the experimental and control groups to identify the minimum, maximum, standard deviation, and significance value (sig.) associated with the paired sample T-test results.

Based on the study's findings, the researchers obtained the results of the paired sample T-test with a significant value (2-tailed) of 0.000.05 in the experimental section and 0.000.05 in the control section. H_a was subsequently approved, whereas H_o was declined. The paired sample T-test results

indicated that mobile learning media based on Android significantly impacted students' learning and were beneficial to the learning process.

Furthermore, the computed mean scores for the pre-test in the experimental and control groups were 48.00 and 56.67, respectively. The mean scores on the post-test for the experimental and control groups were, respectively, 90.67 and 80.00. A discrepancy of 34.00 was observed between the mean scores on the pre-test and post-test in the experimental class. We discovered that the post-test score was more significant than the pre-test score prior to the distribution of Android-based mobile learning media to the students. Additionally, We calculated the disparity of 32.00 between the mean scores on the pre-test and post-test for the control group.

As previously clarified, a statistically significant disparity was observed between the groups of eighth-grade students who received instruction prior to the implementation of mobile learning media based on Android and those who received instruction subsequent to its implementation in the two research classes I evaluated. This could be illustrated by calculating the average of the pre-test and post-test scores.

Consequently, a notable disparity was observed between students who received instruction before implementing Android-based mobile learning media and those who were instructed post-implementation of such media. According to the preceding description, Android-based mobile learning media is acceptable. Based on their prior research, it was possible to deduce that their investigation centered on creating mobile learning materials for Android and that their study subjects were students. Nevertheless, the researchers endeavored to conduct research in a manner distinct from theirs. The research questionnaire was completed by students, material specialists, and media specialists. This study focused on Windows- and Android-based learning media developed with the Smart Apps Creator application to produce learning media appropriate for students' circumstances.

Nonetheless, this investigation addresses an alternative aspect of the findings presented by Cahyana et al. (2018); Muhfiyanti et al. (2021); Razaq et al. (2022). The present

investigation centered on acquiring brief functional texts by junior high school pupils, whereas (Muhfiyanti et al., 2021) concentrated on reporting text material by high school pupils. While both studies employ identical applications, the final deliverables differ in content, educational goals, and media-related topics. Further, this study's findings were consistent with those of (Cahyana et al., 2018; Marzuki et al., 2022; Muhfiyanti et al., 2021; Razaq et al., 2022)

As technology-based learning media can pique students' interest in the learning process (2016), mobile phone technology has tremendous potential to support student activities during the learning process. Additionally, a notable disparity was observed in the experimental group throughout the learning process before distributing content via mobile learning media based on Android. The pre-test and post-test results are significantly different, and so is the student's motivation to learn the material.

In addition, the findings above suggest that mobile learning media based on Android may pique students' interest in learning more than traditional media. The scores of the students also demonstrated their comprehension when the researchers administered practice questions and inquiries throughout the learning process. The research result is in line with Zatulifa & Fitriawan (2018). They claimed that mobile technology-based learning media may serve as a viable alternative to traditional learning methods due to its adaptable nature, enabling students to engage in learning at any time and from any location. The implementation of mobile learning media based on Android was facilitated by the fact that students could engage in independent study without necessitating teacher explanations. This media was a complex application with audio, video, and image components, exercises that automatically displayed score results, and many icons that students could manipulate to suit their requirements (Klimova & Polakova, 2020; Marzuki et al., 2022; Nurmantara et al., 2020). Students were consequently able to learn brief functional text greeting cards and efficiently utilize Android-based mobile learning media with the assistance of this media.

The efficacy of English learning media via Android-based mobile learning media was assessed, suggesting that it might be a viable substitute for traditional learning methods due to its adaptable nature and ability to accommodate students' studies at any time and in any location (Mulyadi et al., 2023). The utilization of mobile learning media based on Android for instructing students on the brief functions of text greeting cards had a noteworthy effect, suggesting that this media was efficacious in facilitating the learning process.

The last, based on the findings regarding the students' perspectives regarding the utilization of mobile learning media based on Android, 75.5% of the experimental and control classes scored well in the field trials, with 30 students comprising the "good" category.

Drawing from the student's viewpoint, they are required to create educational materials that could enhance their motivation and efficacy in the classroom because smartphones and Android have substantially impacted the field of education. In addition, with smartphones meeting these requirements, instructors could develop Android as an educational tool. This result was also consistent with the finding of Rohimah et al. (2021); Tania & Tolino (2020); Widyastuti & Wuryanto (2020) that smartphones can be utilized as educational media. Furthermore, this result was consistent with the findings of (Muhfiyanti et al., 2021), who also demonstrated how technological advancements in education could significantly advance educational progress through learning objectives, attributes, and abilities.

CONCLUSION

According to the findings, this study's product was an Android and Windows application called Android-based mobile learning media that instructed eighth-grade

junior high students in the functional aspects of greeting cards through brief functional texts.

The findings of this research demonstrate the efficacy and validity of utilizing mobile learning media based on Android for eighth-grade pupils at SMP N 4 Purwodadi. Additionally, the post-test scores were more significant than the pre-test scores. Hence, mobile learning media based on Android may enhance their academic pursuits. Additionally, media could be incorporated into all instructional materials, not just brief functional texts.

Furthermore, the efficacy of this media was evident in the post-test and pre-test outcomes. The post-test yielded a higher value than the pre-test. With a significance value (sig.) of $0.00 < 0.005$, mobile learning media based on Android positively impacted the learning process. Comparatively, the experimental and control groups performed differently on the pre-test and post-test. The experimental group achieved a mean post-test score of 90.67, compared to a pre-test score of 56.67. Mobile learning media based on Android could effectively promote student engagement and participation in the classroom. Sure, pupils expressed that utilizing mobile learning media based on Android was enjoyable and highly beneficial for acquiring knowledge of greeting cards.

To sum up, the outcomes of students' evaluations of mobile learning media based on Android indicate that 75.5% of the thirty students reached the "good" classification. Additionally, the students responded positively to this media; many felt inspired and were assisted in their studies by the Android-based mobile learning media. This research also gives recommendation for teachers as the new option in delivering short functional text materials to students which can encourage learners to learn English enthusiastically.

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