THE DEVELOPMENT OF ENGLISH LEARNING MEDIA BASED ON ANDROID APPLICATION ON MATERIAL COMPLIMENTS TOWARD STUDENTS' OF 10TH GRADE SENIOR HIGH SCHOOL

Herdina Utami¹, Prih Febtiningsih², Wandi Syahfutra³

1,2,3 Universitas Muhammadiyah Riau, Pekanbaru, Indonesia

¹herdinautami20@gmail.com ²prihfebtiningsih@umri.ac.id ³ wandisyahfutra@umri.ac.id

ABSTRACT

The purpose of this study was to develop English learning media based on an Android application for X SMA compliments material, as well as to determine the quality of media products. This study uses Research and Development (R&D) research and the model used is the ADDIE Development model which consists of 5 stages namely Analysis, Design, Development, Implementation and Evaluation. The data analysis technique used is feasibility and quality the media obtained with the instrument in the form of a questionnaire. This product has been validated by material experts, media experts. The results of the validation show that material experts obtain an average of 4.77 which is included in the "Very Good" criteria, for the validation results of media experts obtain an average of 4.56 in the "Very Good" category. The developed media was tested on 26 class X SMA Muhammadiyah 1 Pekanbaru. Based on the acquisition results these data indicate that Android-Based English Learning Media in Material Compliments is suitable for use as a learning resource for high school students. In trial with students obtaining a result of 4.61 which is included in the "Very Good" criteria. It can be concluded that this android-based application product can increase student motivation and achievement and is suitable for use in the learning process.

Keywords: learning media, android, compliments

PENGEMBANGAN MEDIA PEMBELAJARAN BAHASA INGGRIS BERBASIS APLIKASI ANDROID PADA MATERIAL COMPLIMENTS TERHADAP SISWA KELAS X SMA

ABSTRAK

Tujuan penelitian ini adalah mengembangkan media pembelajaran bahasa Inggris berbasis aplikasi Android untuk materi Pujian Kelas X SMA, serta untuk mengetahui kualitas produk media. Penelitian ini menggunakan penelitian Research and Development (R&D) dan model yang digunakan adalah model ADDIE Development yang terdiri dari 5 tahapan yaitu Analysis, Design, Development, Implementation dan Evaluation. Teknik analisis data yang digunakan adalah kelayakan dan kualitas media diperoleh dengan instrumen berupa angket. Produk ini telah divalidasi oleh ahli materi, ahli media. Hasil validasi menunjukkan bahwa ahli materi memperoleh rata-rata 4,77 yang termasuk dalam kriteria "Sangat Baik", untuk hasil validasi ahli media memperoleh rata-rata 4,56 dengan kategori "Sangat Baik". Media yang dikembangkan diujicobakan pada 26 siswa kelas X SMA Muhammadiyah 1 Pekanbaru. Berdasarkan hasil akuisisi data tersebut menunjukkan bahwa Media Pembelajaran Bahasa Inggris Berbasis Android pada Materi Pujian layak digunakan sebagai sumber belajar siswa SMA. Pada uji coba dengan siswa memperoleh hasil 4,61 yang termasuk dalam kriteria "Sangat Baik". Dapat disimpulkan bahwa produk aplikasi berbasis android ini dapat meningkatkan motivasi dan prestasi siswa serta cocok digunakan dalam proses pembelajaran.

Kata Kunci: media pembelajaran, android, compliments

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INTRODUCTION

The development of science and technology provides impact on the development of learning media. Application of learning media in education produces many new breakthroughs

in increasing efficiency and effectiveness learning process (Hakky, 2018).

Furthemore, learning media is anything that can be used to convey a message to the



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recipient in order to increase students' thoughts, feelings of attention, and interest in learning (Tafonao, 2018). The role of learning media in education is one of the important components of the learning process (Fatmawati, 2020). The use of learning media is a need that cannot be ignored (Umar, 2017). The existence of learning media is very important because it can help the learning process of students (Kuswanto & Radiansah, 2018). Learning media is essential to increasing, igniting new interests in the learning process (Zulherman, 2021)

Media not only developed as for social interaction or often called media social, also develops in education. Almost all components in education involves technology. The teaching and learning process cannot regardless of technology (Nababan, 2020). Even today's information technology must be integrated in all subjects, including English subject. Learning development through mobile devices can increase the effectiveness and efficiency of student learning. Students can study anywhere and anytime while doing social media activities or entertainment via smartphone (García, (2015)).

English subjects are compulsory subjects that must be mastered by students as a challenge in the era of globalization (Adi, 2019). English is important to learn is because English is a universal language used by most countries in the world as the main language, the main purpose of learning English is more directed at improving the ability of students to communicate, both orally and in writing (Wijaya, 2020).

In responding to the needs of the industrial revolution 4.0, there is a need for innovation in teaching, including the use of ICT as a learning media, because using IT-based learning media is easier to access and more interesting for students to learn. One form of technology-based learning media is mobile Android-based learning using smartphone devices (Nadawiyyah, 2021). Android operating system is platforms which is open to software development third party because of the process development is very free (Jiaqi, 2012) That matter Becomes basic for media selection as a topic to develop learning media to material compliments Android application based.

The selection of this android-based smartphone media is based on the large number of users smartphone users in the world, as of now active android users around the world reached 2.5 billion per month (Pratomo, 2019). And also, the use of an Android application students in understanding the material Compliments using learning Application. Besides (Muhammad FahmiTri Kurniawan, 2019) claims Android application-based interactive learning media is a form of variation or development of books, modules, handouts and others which are usually used by teachers in delivering learning material. This is because it is felt that books, modules, handouts or the like have not been able to make students become comfortable and can learn the material anywhere.

Based on previous relevant research that android-based learning media can increase learning motivation and make learning more interesting and fun and can have an impact on improving learning outcomes (Yektyastuti, 2016). The learning media developed can increase learning motivation and cognitive learning outcomes because the media developed is in accordance with the level of thinking of students (Ria, 2017).

In the results of interviews conducted with English subject teachers for 10th grade Senior High School, learning the subject matter of Compliments still uses the lecture method. At the time of learning students feel bored so that the teaching and learning process does not run optimally. Students tend to be interested in using their respective gadgets, demanding teachers to provide innovative and appropriate learning media their favorite technology. Supported by the rapid development of mobile technology. Smartphone are one of the most widely used and popular mobile technologies among students, so the opportunity to use smartphone as a media of learning in education is getting bigger.

Based on the problems, the researcher wants to develop an Android-based application that is suitable for use to support English learning. This application is ultimately expected to be a learning media that can improve students' skills in learning English. In addition, with this application students are directed to make more



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use of the gadgets they have not only for communication but also for the realm of education. The limitation of the problem in this study focuses on the material that is taken and applied in the android application, namely only the material Compliments in accordance with the applicable curriculum.

The purpose of this research is to design and compile interactive learning media as a substitute for teaching materials based on android application to determine the improvement of student learning outcomes. Knowing the equality of the product to be developed so that result can be obtained from the feasibility of the media to be used for students.

LITERATURE REVIEW

1. Android

Android is a software that is used on mobile devices (running devices) which includes an operating system, middleware and core applications (Purwantoro, 2013). According to (Aritonang, 2014) Android is an operating system for smartphones and tablets. The operating system can be illustrated as a bridge between the intermediary (device) and its use, so that users can interact with their devices and run applications available on the device. Following that (Huda, 2013) claims that Android is a Linux-based operating system specifically for mobile devices such as smartphones or tablets.

2. Andromo

Andromo is a tool for creating android applications, andromo is a web-based app builder that is relatively easy to use, we can create android applications in brief without the need to have coding skills. Andromo offers built-in features and templates, which you can easily add into applications such as an audio player, integration support for facebook, Twitter, Flickr, and Youtube, as well as support for adding content fom websites, radio and podcast players, PDF support, RSS and so on. Not to forget the feature to add important things such as contacts and photos.

However, in Andromo you can only create one application for free, if you want to make other applications, then you have to buy a

premium package. The advantage of this website is that you can publish your applications on the Play Store, Amazon Store, App Store, and other application stores. You can also monetize it if you use the premium plan.

REASERCH METHOD

The research employs is the type of research and development (R&D), which is a research method used to produce certain products, and test the effectiveness of these products. (Sugiyono, 2010). This research design uses the ADDIE model. The ADDIE model has 5 stages, namely: (1) Analyze, (2)Design, (3) Development, (4) Implementation, (5) Evaluation. This research is a development research conducted at SMA Muhammadiyah 1 Pekanbaru. The subjects of this study were 10th grade students with a total of 26 students.

Research Procedures

a. Analysis

The first stage is an analysis to determine the initial needs in developing this learning media. Among them are the analysis of the characteristics of students and media analysis. This analysis stage is the stage of finding information in the field, which can be used as t to develope reason for the need to develop a media.

b. Design

The second stage is the stage of making the media design that will be developed. In this second stage, the researcher makes a Flowchart and storyboard.

c. Development

This stage is the process of making learning media. At this stage, the researcher continued to make media based on the storyboard and flowchart that had been made.

d. Implementation

In this implementation phase, the product will be tested on 26 students from SMA Muhammadiyah 1 Pekanbaru. As well as being distributed questionnaires to measure and find out the opinions or responses of students regarding

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Android-based learning for english lessons on compliments material.

e. Evaluation

Evaluation is a process to see if the learning system that is being built according to success, according to initial expectations or not. Evaluation is carried out in the form of formative evaluation. This learning media is used for formative evaluation at each stage points A to D, and carried out by several experts, or the revision stage.

Collecting Data

In collecting data, product trials will be developed according to instructional media instructions. There are two stages, namely:

a. Alpha testing

Alpha testing to learning media using Andromo was carried out by material experts and media experts. This testing requires advice from material experts and media experts who will be used to revise the product developed before being tested.

b. Beta testing

After the product is revised, the next step will be tested on students. Beta testing was carried out at Muhammadiyah 1 Pekanbaru high school. The trial was carried out in grade 10th with a total of 26 students.

Data analysis

The research method used is the survey method. This survey method uses data collection techniques using questionnaires, tests, and documentation. The questionnaire method is used to determine a product by testing the validation of the product being developed. To maintain the quality of the instrument, it is necessary to obtain an opinion from an expert or in other words validation is needed (Hikmah, 2017). The instrument used is a validation questionnaire of material experts, media experts, and student responses. To evaluate the learning media required media expert, material expert and 26 students.

Table 1. Rules for Granting the Score of Instruments for Media Expert and Material Expert

Description	Category
Very Good	5
Good	4
Pretty Good	3
Not Good	2
Very Poor	1

Table 2. Rules for Grading Respondent's Instruments Score Remarks

Description	Category
Strongly Agree	5
Agree	4
Quite Agree	3
Disagree	2
Strongly Disagree	1

RESULTS AND DISCUSSION

This research and development produces an android-based application product that focuses

on Compliments material in the 10th grade English subject. This application is made with a simple design so that students can focus on the



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content of the material presented in the application. The selection of colors and fonts used in the application is intended to improve the readability of the content in terms of color contrast and the legibility of the type of writing.

Figure 1. is the display of an Android-based mobile learning application product at the beginning of the application, the application menu, and the Compliments material.



Figure 1. Application View

1. Material Expert Validation

Validation is carried out by giving the product development results to the validator to assess each aspect and provide an assessment of the questionnaire that has been provided. In the validation process, researchers obtained quantitative and qualitative data that are very supportive for the development and improvement of the developed android-based application products. Material expert validation is carried out to determine the quality of Android-based application products in terms of the material

aspect. Aspects assessed include aspects of material relevance as many as 5 items, aspects of material organization as many as 6 items, aspects of evaluation/practice questions as many as 7 items, language aspects as many as 2 items, aspects of effect for learning strategies as many as 3 items and visual display aspect as many as 2 items. Validation is carried out by providing an android-based application product that is developed to be assessed by a material expert with a 5-scale questionnaire. The results of the material expert assessment can be seen in table 3.

Tabel 3. Result of Expert Validation of Material in Every Aspect

No.	Assesment	Mean	Category
1	Aspects of Material Relevance	5	Very Good
2	Aspects of Organizing Materials	4.6	Good
3	Aspects of Evaluation / Practice Questions	4.57	Very Good
4	Language Aspect	4.5	Good
5	Aspects of Effects for Learning Strategies	5	Very Good
6	Visual Display Aspect	5	Very Good

Based on the results of the average material expert validation, which is 4.77, it shows that the material in the Android-based application media is included in the "Very Good" criteria.

2. Media Expert Validation

Validation was carried out to determine the quality of teaching materials in terms of the media aspect. Four aspects were assessed, namely the language aspect with 3 items of assessment, the effect aspect for learning strategies with 5



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items, the software engineering aspect with 4 items and the visual display aspect with 7 items. Assessment with a 5 scale questionnaire. The

results of the media expert assessment can be seen in table 4.

Table 4. Result of Expert Validation of Media in Every Aspect

No.	Assesment	Mean	Category
1	Language Aspect	4.66	Very Good
2	Aspects of Effects for Learning Strategies	4.8	Good
3	Software Engineering Aspect	4.5	Good
4	Language Aspect	4.5	Good

Based on the results of the validation as a whole above the shows the criteria of "Very Good" with an average of 4.56.

3. Trial with the students

The purpose of beta testing is to collect information that can be used to improve the product in the next revision. The number of

students in the beta test amounted to 26 students. Beta test is done by showing the development product to students.

The data obtained from the results of students' assumptions about the developed android-based application products were then converted into a scale of 5.

Table 5. Student Respondent Validation Results

	No.	Assesment	Mean	Category
	1	Media Format	4.59	Very Good
	2	Media quality	4.72	Very Good
	3	Clarity media	4.54	Very Good
	4	Visual	4.59	Very Good

Based on the results of the average students response, it shows as much as 4.61 so that the learning media obtained in the category. This proves that this Android-based application media is feasible to use in the learning process.

Discussion

The product resulting from this research is an application named "Learn English: Compliments". .apk (dot apk) extension. This application was developed as a learning media for students of X SMA. The start page is the initial view enter the application. This learning media contains Instruction, basic competencies, material, dialog, evaluation, video and profile that can be accessed with an Android-based smartphone. Homepage in the form of a splash that shows the background that uses the image accompanied by application title The main icon becomes the first page times seen by each user at the time the program is run. On the instruction icon is how to use aplication. On the basic competencies icon is

the learning objective. On the material icon contains 4 material icons consisting of giving compliments, expression of exclamation, cultural awarness, grammar in action. On the dialog icon contain of picture about giving compliments and how to response it. On the evaluation icon there are 2 task. On the video icon the user can play a video about compliments. On the profile icon there are biodata of material experts, media experts and developer. Media is operated in online mode.

Based on the results of the study, students stated that the application based learning media Android is a new innovation that is used in the learning process in class and easy to use application. This application can be used by students to add insight or study on the go. So with mobile-based learning applications learning can increase productivity to the maximum and with the least effort. Mobile learning (Portelli, (2016)). Mobile learning has characteristics that are



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practical and can be carried anywhere (Kennewell, (2007)). One of the considerations in developing smartphones into media mobile learning is the basis of the system used.

The results of research on development of learning media on android applications are has been carried out successfully carried out and has a value in the very good category by the material expert and media expert. This is because the application that was created already run properly well and no crashes/errors when the application is used. which states that media is good are media that are clear and uncluttered in appearance and of good quality in every case aspects. The mobile or smartphone application has touch screen capabilities for interact for accelerometer-based smartphone users (Chao, J.T., Parker, K.R & Fontana, A., (2011)).

CONCLUSIONS AND RECOMMENDATION

In conclusion, after completing testing and surveying. Application can be used in learning English, especially in compliments material interesting and innovative way. Students find the first time the experience is pushing and the application is well done regardless of phone brand and operating system version.

Based on the results of the study it can be concluded that media development learning on Compliments material in the form of an android application has the following advantages tested on material expert, media expert and students. These advantages are from material experts it has the value of 4.77, from the media expert it has a value of 4.56,. everything is in very good category. The same goes for the test results students, the average score for applications that have been made has a value of 4.61 by category very good. On the results of the analysis and discussion, it can be concluded that the English learning media based on android application on material compliments can increase motivation and learning achievement and is suitable for use in the learning process.

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