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# **Development Learning Media Based Android for English Subjects**

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**Abstract.** This study aims to develop android-based learning media on the subjects of english class IX. The research method used is research development with stages of designing, production, evaluation. The results of this study indicate that the android-based learning media developed on the subjects of english class IX is feasible for use in learning by teachers and students. Based on different stages the trial was being done to experts: media experts 78,3, the design 78, and the matter 80. So the percentage of overall value on the validation experts have eligibility criteria good. To scale one-to-one 80, small group 80,05 and field test 80,5. In addition, students also commented that the android-based learning media are good, varied, interesting and fun. From the results of the data analysis, it can be concluded that the android-based learning media on the subjects of english Class IX are good and can be used in the learning process.

Keywords: android, learning media, development, english subject

#### 1. Introduction

Learning is a communication to convey an idea or the idea of teachers to students. The dissemination of it takes a medium so that the message delivered in accordance with the purpose of learning planned. The use of the media in the process of learning have an important role. The role of media to the learning process very helpful teachers in support the success the purpose of learning. With the media learning power to raise the motivation to study students enabling student could independent study according to the ability of everywhere and whenever.

Learning is the various types of environmental component in students who can excite students to study even though is distributing messages and can stimulate the mind, a student stimulat and encourages the learning process [1]. Media as an intermediary in order to facilitate the achievement of a goal of the education. Media learning to transferring the message and can stimulate the mind, and a willingness to promote students so that learning from him.

The learning are needed an educator capable of integrating as information technology and communication in line with the developments of the times. With the advancement of technology as a smartphone could be one of the media an alternative for teachers to facilitate the delivery of the subject matter to students. Learning uses science as smartphone be called with mobile learning, education is the move and unconstrained given place and time [2]. Smartphone or that which often called android is an operating system to smartphone and tablet. The operating system can illustrated as a bridge between tool (device and its use, so users can interact with device-nya and run applications available on device [3]. Android is a new generation mobile platform that includes based linux operating system, middleware,

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and the application [4]. With some excess as is: user frendly, open source, populist, support a variety of applications [5].

But, the useful of technology progression do not yet appear in learning. Based on phenomenon were happening while learning English class exactly in learning process which done by teacher just use presentation as media such as, power point with text only without pictures and video. In addition, teachers and students do not yet useful hand phone based android to support learning process. A half of teachers and students only use android to touch social media or play game. In line to quality, Technology progression as android can be usefulness in learning process. In relation to research, Labib [6], Hapidz [7], Astuti [8].

Based on the above explanation needed learning android media based on the subjects of english class IX. Media the learning can be made by media for learners good school and outside school, and can be used by educator as a medium learning to the learning process. Besides that with this application students smartphone suggested using more that they earned did not only to communicate in but also for education.

## 2. Literatur Review

#### A. Learning Media

Learning is the media, metodik and a technique that is used as an intermediary communication between a teachers and students in order the more playing an effective communication and interaction between teachers and their students in the process of education teaching in schools [9].

## B. Media benefits

Benefits media is as follows [10]:

- Clarify our message that is not too verbalistis (know his words but did not know the terminology)
- Private space, time power the senses
- Using media accurate and varied learning can take a passive students
- Inflicts the same perception of a problem.

#### C. Android

Smartphone or often called android is an operating system for smartphone and tablet operating system can be illustrated as a bridge between appliance (device) and demand so users can interact with devicenya and running applications available on device [4]. Android is a new generation mobile platform based linux which includes an operating system, middleware, and the application [3].

## 3. Methodology

The study uses a research development that is research concern to develop and valid products are used in education [11]. Procedural model is descriptive model used for the development of learning media based android. Showing steps should be turned to create product. [12]. Steps procedural development includes design step, production, and evaluation [13]. In design step: researcher analyzes needs, arranges GBIM, and wrote report. Production step: researcher do preparing creating product, working, and finishing. Evaluation step: researcher evaluate product, revise, and do field-trial.

The subject of this study was first step is expert judgments (design, media, and material). Therefore, the trial error small group with six respondent. Next, field trial consisted of 30 students as respondent. Technique collecting data was questionnaire. Questionnaire used to gain information and data to measure reliability of product. Percentage was used analyzing data to measure reliability product from the result of evaluation step. Formula following [14]:

$$P = \frac{F}{N} \times 100\% \tag{1}$$

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Note:

P = Percentage

F = frequency of instrument

N = Number of cases

## Next, the criteria of percentage calculation for result calculation used scale 4 are [15]:

 Table 1. Percentage calculation scale 4

Internal Percentage achievement level	Conversion Scale Four		C. 4
	0-4	D-A	Categories
86-100	4	A	Very good
76-85	3	В	Good
56-75	2	С	Fair
10-55	1	D	Poor

#### RESULTS AND DISCUSSION

#### 4. Result and Discussion

In accordance with steps development that has been chosen, produced design, the production and evaluation as follows:

- The design: obtained the results of the analysis needs of matter and syllabus subjects in accordance with curriculum.
- The point of production: media developed of media audiovisual namely the merger between text, sound, pictures and animation.
- The evaluation: evaluation pramaster consisting of evaluation the people, individuals, and clusters of small. Continues to trial of the field.

The final result of the media is learning based on android used as media learning. Consisting of pages applications that connect, there is media learning android based on the subjects of english class IX this having the appearance of as follows:



Figure 1. Main Menu

The mainframe as in the picture 1, 5 menu there is to facilitate user access in running or other display. The menu include among other clues that used to display a hint. Competence to display competence used

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in the media. The material to display competence. materials to appropriate. Evaluation used to display evaluation that is to the media. A profile for profiles and the key out used to end / out of the media.



Figure 2. Display Main Material

Figure 2 is display main material consisting of 4 buttons KD, where knobs is used to connect display materials to appropriate with competence basic. On a are 4 buttons choice KD (KD1, KD2, KD3, KD4). If either a button KD in clicks or in select, so the material will displayed in accordance competence basic selected. How it looks as follows:

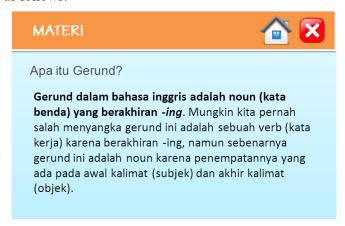


Figure 3. Display Materials to Appropriate KD

The containing the evaluation used to measure students ability through learning android based media products. Application to about the evaluation of number 1 will to finish. About the score for the evaluation will look after about final finished answered.

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Figure 4. Display Evaluation



Figure 5. Display Evaluation Result

The results were to be seen after the work has been completed / answered. The score of the about evaluation will look after the final finished answered. If we want repeat doing the evaluation, students it clicked the repeat. Application to about the evaluation of number 1 will to finish.

In accordance with the phase that has been done in the manufacture of media in the form of media learning android, be said that media learning in accordance with the english curriculum of the subjects english class IX.

Learning media android have gone through the evaluation pramaster which begins with expert. For validation or judgment was being done to the expert design is as follows:

**Table 2.** The assessment by the design

Indicator	Value
Question-1	76
Question-2	80
Question-3	78
Question-4	76
Question-5	79

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Question-6	78
Question-7	77
Question-8	77
Question-9	80
Question-10	79
The total value of the answer	780
The number of indicators questions	10
Average	78

Based on the table, the average scores the design is 78. Based on table, feasibility scale the 78 are at intervals 76-85 with category good.

**Table 3.** The assessment by the media

Indicator	Value
Question-1	80
Question-2	76
Question-3	79
Question-4	80
Question-5	79
Question-6	75
Question-7	75
Question-8	75
Question-9	80
Question-10	80
Question-11	80
Question-12	79
Question-13	80
The total value of the answer	1018
The number of indicators questions	13
Average	78,3

Based on the table, the average scores the media is 78,3. Based on table, feasibility scale the 78,3 are at intervals 76-85 with category good.

Table 4. The assessment by the material

Indicator	Value
Question-1	80
Question-2	80
Question-3	83

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Question-4	83
Question-5	78
Question-6	80
Question-7	78
Question-8	82
Question-9	78
Question-10	78
Question-11	80
The total value of the answer	880
The number of indicators questions	11
Average	80

Based on the table, the average scores the material is 80. Based on table, feasibility scale the 80 are at intervals 76-85 with category good.

**Table 5.** The assessment by the one-to-one

Indicator	Value
Question-1	241
Question-2	243
Question-3	243
Question-4	234
Question-5	245
Question-6	244
Question-7	235
Question-8	240
Question-9	235
The total value of the answer	2160
The number of indicators questions	9
Average	80

Based on the table, the average scores the one-to-one is 80. Based on table, feasibility scale the 80 are at intervals 76-85 with category good.

**Table 6.** The assessment by the small group

Indicator	Value
Question-1	240
Question-2	244
Question-3	245
Question-4	234
Question-5	245
Question-6	243
Question-7	242
Question-8	241
Question-9	238
Question-10	240
Question-11	235

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Question-12	240
Question-13	235
The total value of the answer	3122
The number of indicators questions	13
Average	80,05

Based on the table, the average scores the small group is 80,05. Based on table, feasibility scale the 80,05 are at intervals 76-85 with category good.

**Table 7.** The assessment by the field test

Indicator	Value
Question-1	245
Question-2	243
Question-3	241
Question-4	235
Question-5	242
Question-6	244
Question-7	245
Question-8	240
Question-9	238
Question-10	245
Question-11	238
Question-12	240
Question-13	245
The total value of the answer	3141
The number of indicators questions	13
Average	80,5

Based on the table, the average scores the field test is 80,5. Based on table, feasibility scale the 80,5 are at intervals 76-85 with category good.

Overall media learning based on android has several advantages namely having the appearance of this media, interesting design both in terms of color, writing, pictures and animation. The media it is easy to operate, understood and understandable to the students because have been through the test phase experts, the field and to obtain good results, buttons is in the media it can function properly as directed the use of the media. Material and about the exercise in accordance with SK/KD and accompanied by pictures and animation and so students do not feel bored in using it.

Furthermore apart from having excess, learning android based media is also lacks, could not access the application in online, users in evaluation can only choose one test type only in the form of double test choice, test, the absence of the of images used in a media are sourced from the internet and textbooks.

# 5. Conclusions

Based on research finding and discussion that the research result of developing learning media based android in English subject of class XI had reliability criteria:

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- Validity was valid through expert judgment that include design aspect, media, and material were good criterion.
- Reliability was obtained based one to one evaluation, small group evaluation and field trial were good category.
- A half of Students' comment of developing learning media based android stated that interesting, good, fun, user friendly, and varied in learning.

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