Android games: education javanese vocabulary

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**Abstract:** the existence of smartphone becomes close to children in the digital age. Most learning devices switch to using android. Attracting children's interest in learning for the development of vocabulary, especially Javanese language, is carried out the development of learning media in the form of game android for prescholl named “sinau basa jawa”. This research was conducted in TK Muslimat  NU 12 Pakis. Type of research applied is Research and Development (R&D) with ADDIE development model covering 5 stages: Analysis (Analysis), Design (Design), Development (Production), Implementation (Implementation) and Evaluation (Evaluation). The results of this study were tested toward media experts, early childhood education specialists, javanese language expert, paractiser. The quality of this media product is seen from the aspect of material and media feasibility. the assessment of media feasibility aspects conducted by media experts obtained a percentage of 98.2% which is "very good" category, The result with media outcomes that are declared very feasible.

Keywords: game android, sinau basa jawa,education javanese vocabulary

1. **Introduction**

learning as an effective tool for educators to use in the classroom because it engages students in problem solving, critical thinking and review of content knowledge. Digital games are the modern version of game-based learning educators are using to engage their students in meaningful and fun activities.[6]. The problems of learning Javanese vocabulary at Muslimat NU 12 Kindergarden Pakis are (1) the lack of use of technology media in Javanese language learning, (2) students not ussualy communication using Javanese in life, (3) low motivation for learning Javanese vacabulary,. This has an impact on students' lack of understanding in the Javanese language learning process. It is hoped that the use of android games will attract students' interest to improve children's vocabulary.There are 9 features offered in this game: (1) agency or control, (2) interactivity, (3)feedback, (5) curiosity, (6) there is a challenge, (7) identity, (8) immersion, and (9)fantasy.

1. **Methode**

Type of research applied is Research and Development with ADDIE development model covering 5 stages: Analysis (Analysis), Design (Design), Development (Production), Implementation (Implementation) and Evaluation (Evaluation). [5] Flowchart of sinau basa jawa media can be seen in figure 1.

Letter ta Badan

Animal ta Badan

Number Train

Letter Game

Animal Guess

Colour of baloon

Picture game

Guess part of body

Name of kids

Play Game

Play Game

Play Game

Play Game

Play Game

Play Game

NO

Main menu

Colour

Body

Activity

numberta Badan

Ngoko – Krama - Krama Inggil

Study menu

NO

NO

YES

YESes

YES

YES

NO

NO

YES

YES

Learn javanese letter

YES

YES

YES

NO

NO

Ya

Ya

Ya

YES

YES

YES

Quit

Games menu

Figure 1. Flowchart of sinau basa jawa

This game have authorization parents may limits game play to children prior to a particular time of day such as bed-time or to a maximum playtime limit according to a secret [3] . The description game android sinau basa jawa for education javanes language a design, development, and an evaluation experiment of an educational game for learning javanes language. Use android kit kat 4.4.

Design for this game with the step Unified Modeling Language (UML) diagrams, interfaces, animation, narrative. Hardware and software requirements were also determined. After designing the game, 3D objects were created according to the interface design. After that, the animation and narrative or audio were created on these objects according to the animation and narrative or audio design. The animation given to these objects included translation, scaling, and rotation. To give an action on the objects, ActionScript 3.0 was added on them.[1]

**3. Results and discussion**

This media was tested to media experst, early childhood education spesialist, javanese language expert, prescholl teachers. The student responden test after media expert, javanese language, and early childhood education spesialist, and prescholl teacher done.

There were 30 questionnaires that were divided into five criteria as follows 1) suitability of the material , 2) depth and width of material, 3) language used, 4) media display and 5) implementation. In each criterion there were a number of different question items. On the material criterion, out of the six items of questions given,four of them have been declared very feasible and two item that has feasible criterion. The second assessment of the criteria of depth and width, out of the five items of questions, two items have feasible criteria, and has three a very feasible criterion. In the third assessment of the language criterion, there are eight items with six very feasible and two feasible criteria. The fourth assessment of the media display criteria consists of nine question items with seven question items that have feasible criteria and three questions have very feasible criteria. The last assessment was on the implementation criteria that consist of two items of questions with reasonable criteria. Based on the results of questionnaire analysis from media experts, material experts, physics teachers and students, the average score can be obtained as follows.

Average score = 93,3%+98,2%+72%+97.5%

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= 90,25

The results of the questionnaire analysis yielded a percentage of 90.25% which is categorized as

very feasible. Thus in terms of the developed display and technical learning media, it is feasible to be

applied as a medium of javanes vocabulary for early childhood on the topic of android game: education javanese language. Utilization of android media is very effective for learning [l][2]. It can also increase students' motivation to follow the learning activity [3][4]

**4. Conclusion**

The development of game android for education javanes vocabulary with android kit kat 4.4 can can be done based on the development steps of the analysis of the teaching material needs,

designing the framework of learning media program content, creating learning media program, trials on material experts, media experts, preescholl teachers, and early childhood education experst..

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