Developing Interactive Game-Based Learning Media Using Adobe Flash Professional CS6 to Optimize Arabic Speaking Skills

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Abstract. Speaking is one of the four Arabic skills that must be mastered by students. Interactive games are suitable learning media for use in learning speaking skills because they can stimulate students to be active in speaking and can also attract students' attention. This study aims to develop interactive game-based learning media using Adobe Flash CS6 to optimize students' Arabic speaking skills. This study uses the R&D method with the ADDIE model. Data were collected through questionnaires and interviews and then the data were analyzed quantitatively and qualitatively. The result of this research and development is in the form of interactive game media developed using Adobe Flash CS6 application. The developed media contains learning materials that are in accordance with the needs of students and contains games that are relevant to the characteristics of students. To find out the validity of the media developed, three experts tested the validity, namely media experts, material experts, and learning experts. The results of the validity test showed that the developed media was very valid with a value of 89.9%, meaning that the developed media could be used in learning Arabic speaking skills for students.

Keywords: Keyword : Game-Based Learning, Adobe Flash Professional CS6, Arabic Speaking Skills

1   Introduction

In the era of globalization or the 21st century, the progress of science and technology is so rapid and it has become a necessity of human life that is considered important, including in the world of education [1]. In the development of information and communication technology, e-Learning (Electronic Learning) emerged in the world of education [2]. According to Gilbert and e-Learning (Electronic Learning) is learning that uses electronic media such as the internet, intranet/extrabet, audio/video, CD-ROM, computer based training (CBT) and others that can be used to convey or provide learning material [3]. Because of this, it is necessary to have learning media, especially in Arabic learning material by utilizing developing technology so that it

raises student interest and motivation and can make Arabic learning material more effective and efficient.

Educational materials as a means and source of information in education have a significant impact in adding and increasing the effectiveness of education [4]. Whether the material is useful in the education process or not depends on the teacher's ability to develop it and benefit from it, so the steps for developing a good and qualified material must be mastered [5]. The world is increasingly global, characterized by various developments in the field of science and technology, and this certainly has a significant impact on human life, especially in the field of education [6].

The aim of teaching Arabic is to develop four skills, such as speaking skills, reading skills, listening skills and writing skills [7]. Speaking is an active activity that involves a person directly conveying his goals and desires through communication in the form of sound produced from the articulation of the vocal organs and nose [8]. Speaking skill is the skill that is most quickly understood by individuals so we need teachers who are creative and innovative so that students pay attention/interest and are able to actually apply speaking in Arabic [9].

Based on interviews with Arabic teachers at the Darul Ulum Tigo Jangko Islamic Boarding School, Lintau Buo, the use of learning media and the practice of using Arabic in daily life is relatively minimal. The use of media in the form of blackboards and books causes learning Arabic to be unattractive to students and they do not remember the vocabulary taught before. The researcher interviewed one of the students regarding learning Arabic and argued that he had difficulty understanding the. Material

In this case the researchers focused on the use of media which is one of the important substances of the 2013 curriculum used by the Darul Ulum Tigo Jangko Jangko Islamic Boarding School, but the use of this media is still minimal so learning Arabic does not attract the attention of students. The researcher also interviewed one of the supervisors of the girls' dormitory as well as an Arabic teacher at the Darul ulum Islamic boarding school, he said that he had taught students to use learning media in the form of Power Point, this caused the students' full attention and their enthusiasm to understand quickly the ongoing learning of Arabic. This is a sign that the use of Arabic learning media is one of the quick factors for students to understand learning Arabic.

The development of scientific and technological progress today occurs very rapidly [10]. Therefore the researcher developed Arabic learning media using Adobe flash cs6 in the form of an electronic game to arouse students' enthusiasm in speaking Arabic on a daily basis [11]. Adobe flash CS 6 is a multimedia software application used to produce animation, internet content, desktop applications and mobile applications and even videos embedded in browsers [12]. Adobe Flash can display multimedia elements such as vector or bitmap images, text, sound, video and animation. Adobe

Flash can be used to produce learning content such as interactive multimedia, educational animations, educational videos and games [13].

2   Methods

Researchers use research methods in the form of Research and Development (R & D). The Research and development method is the activity of developing a product that has been previously developed and will be tested to determine the validity and effectiveness of the product before it is used by the general public [14]. Research and development approach is a methodology used to produce a specific product and test the effectiveness of the product. The place where the research was carried out was at the Darul Ulum Tigo Jangko Jangko Islamic Boarding School.

The Research and development model that researchers use is the ADDIE model, which is structured/systematic and relatively simple to use in education research [15]. This model was created in 1990 by Dick and Carry. The ADDIE model is a combination of the principles of role-based development and infrastructure systems [16]. Divided into 5 component elements namely analysis, design, development, implementation and evaluation. The researcher completed this development only up to the development stage due to time constraints [17].

Analysis is the activity of analyzing the problems and needs of both primary and secondary schools. Researchers found several important needs that will be applied in developing electronic game learning media, namely the application of adequate media and learning materials that are designed concisely, concisely and easily understood by students in learning Arabic. Design here is the activity of designing an electronic game in the form of the content of learning materials contained in the form of flowcharts and storyboards. The development here is that researchers carry out media development using Adobe Flash, where the product results will be tested by experts/validators. There are 3 validators in this study, namely media, material and learning validators [18].

The type of data used in this study is using qualitative and quantitative data. [19] in his book statistics for research states that qualitative data is data in the form of sentences, words or pictures. Qualitative data is data that is asked in the form of categories or data that cannot be measured with certainty. The data to be obtained later is in the form of a category of quality value of learning media based on the assessment of 3 validators. Then this qualitative data can be quantified by giving scores and rankings [17]. Data in the form of a score was obtained from an assessment of the quality of the media in the form of a check list sheet which was assessed by 3 validators. [17] States that quantitative data is data in the form of numbers or qualitative data that is scored on a Likert scale in very good, good, sufficient and poor categories. So the following way:

1. Calculate the average score of each aspect assessed by equation 3.1

$$\overline{X} = \frac{\sum x}{n}$$

2. Changing the average score obtained into qualitative data with equation 3.2. Qualitative categories are determined in advance by finding the distance interval between category levels with equation 3.2 (Eko Putro Widoyoko, 2012)

$$interval\ distance\ (i) = \frac{High\ score - low\ score}{Number\ of\ class\ intervals}$$
$$= \frac{4-1}{4}$$
$$= 0,75$$

Table 1. Then the learning media assessment category is obtained in the class interval table as follows:

Average score $\overline{X}$	Category
$3,25 < \overline{X} \leq 4,00$	Very good
$2,50 < \overline{X} \leq 3,25$	Good
$1,75 < \overline{X} \leq 2,50$	Enough
$0,00 \leq \overline{X} \leq 1,75$	Less

3. Calculating the percentage of feasibility with equation 3.3

$$eligibility\ percentage = \frac{Research\ result\ score}{the\ maximum\ ideal\ score}\ x100\%$$

Table 2. percentage of feasibility

Average score $\overline{X}$	Category
80,01% - 100,00%	Very good without the slightest refinement or improvement
70,01% - 80,00%	Valid but needs a lot of repairs and revisions
50,01% - 70,00%	Less valid, so it is not possible to use
10,00% - 50,00%	Invalid and unusable

3   Results and Discussion

According to an interview in middle school, Dar Al-Ulum, Tigo Jangko Lintau Buo, the problems were the lack of use of teaching aids and the students' lack of interest in teaching the Arabic language, especially in teaching speaking skills. The school requires students to speak Arabic, but they cannot speak Arabic. [20] They said Arabic is difficult and they can't remember the vocabulary they use every day. [21] This is evidenced by learning Arabic is less than desirable for students until it is considered difficult for students to learn. This school has a learning objective where students are required to be able to use the Arabic language in their daily life, but in reality most of the students do not use the Arabic language in their daily life. Therefore, from this problem, the researcher is looking for a solution, which is through the development of teaching aids that can attract students' attention with the ability to provide a physical understanding of students' speaking skill.

The app starts with a simple introduction with a button navigation towards the instructions for using the game. The main menu page of this product has 5 navigation buttons, which are: 1. Core Competencies, 2. Learning Objectives, 3. Teaching Materials, 4. Games, 5. Developer. An introduction page and instructions for using the game are shown in the following image:
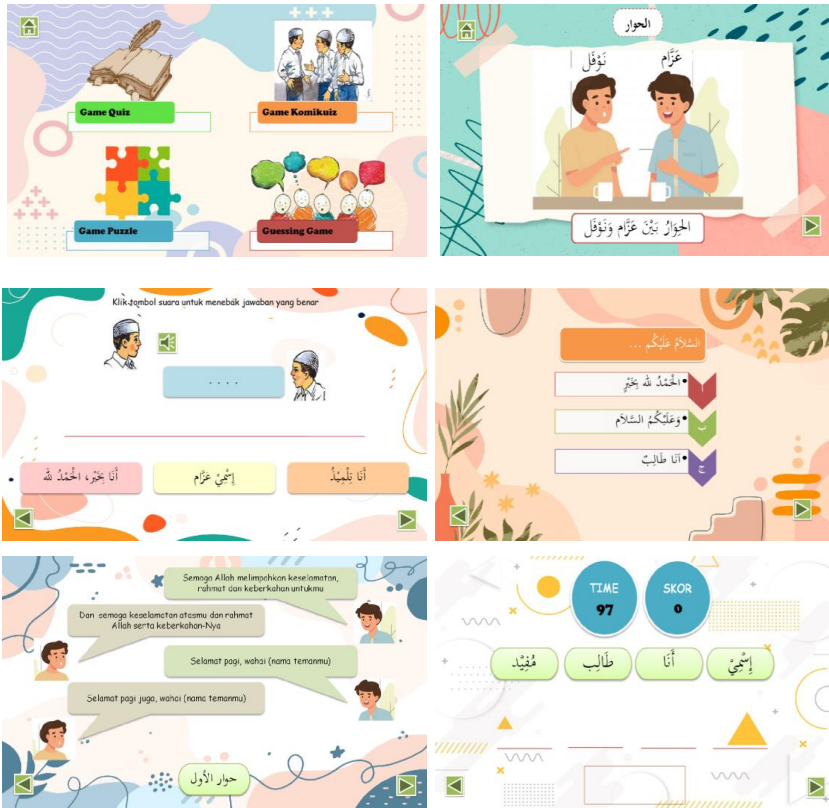
Fig. 1. Images Developed by Adobe Flash Teaching Aids

The results of research on electronic game learning media with the Adobe Flash CS6 program on learning speaking skills of MTs students at the Darul Ulum Tigo Jangko Jangko Islamic Boarding School are very valid or very good media with slight revisions in the form of strengthening speaking skills in games, changing sentence structures, adding some navigation buttons and additional evaluation of Arabic speaking skill material. The validity value of this electronic game is 3.59 on a scale of 4.00 with a feasibility presentation of 89.90%. With this the electronic game learning media is declared valid and can be used.

Previously, we knew that the lack of teaching aids caused difficulties for students to remember vocabulary and speak Arabic. This is included as a means of learning effectiveness, researchers develop it as a means of teaching in computer programs.

Computer generated e-technology games have become popular among the people. electronic games having an element of excitement such as attractiveness, because they are more manageable when using these games. Likes to spend several days concentrating, such as paying attention to a game and wanting to play a game. Using this game to train different sensory stages (visual, audio and movement) students don't get bored. During the program sessions, taking into account the continuous reinforcement, students also feel the efficiency and success that encourages them to continue, so the impact is obvious. It increases the level of perception and understanding to achieve victory and perfection.

The results of the research for the development of electronic game products, namely Informatics learning products, have been developed to increase students' interest in learning Arabic as a practice of speaking skills in Arabic in everyday life. In the development of this research, the product produced is an interactive educational tool based on electronic games with the Adobe Flash CS6 program for teaching speaking skills of Class VII MTs students at Pondok Pesantren Darul Ulum Tigo Jangko Jangko can use this product inside and outside the classroom. According to Arikounto in his book states that the results of the media > 70% are considered suitable for classification and values > 85% are very valid. [22] Therefore, the overall evaluation of educational facilities in the form of an electronic game is declared legal and valid.

4   Conclusion

Learning Teaching Aids Products Developed by Adobe Flash CS6 An application for learning speaking skill is an electronic game. The means of education is developed as an electronic game containing seventh grade material about acquaintance with many animations, pictures, sounds and backgrounds that are interesting and colorful. So the researcher hopes that the students are interested in playing this game while teaching the Arabic language, especially in speaking skill. He gets a score of 3.59 with a eligibility rate of 89.9%. This category of teaching aids is very valid for teaching speaking skill. To find out how to test the quality and feasibility of this product to three groups of experts, they are materials expert, teaching aids expert and education expert.

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