DESIGNING AND IMPLEMENTING INTERACTIVE LEARNING MEDIA

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Abstract: The objective of the research is to design and implement interactive learning media using Macromedia flash for primary education. This research adapted from ADDIE's model. The First is analysis, in the first step is an analysis based on students' needs. To get the data of need analysis, the researcher did distribute the questionnaire for 3rd, 4th, 5th, and 6th grade of SD Negeri 050 Tarakan. There were six items of questions in the questionnaire. The second is the design. After the researcher got the data about students' needs, the next step is to design the product. The product used Macromedia Flash 8 application. The researcher prepared some animations and sounds in learning English for students, which consists of steps from the beginning until the finish. The third and fourth are Development and Implementing, the products already exist, but the researcher needs an expert to suggest the advisability of the product. The last is an evaluation. In this step, the researcher did revise the product before trying out.

Keywords: *interactive learning media, Macromedia flash, primary students*

INTRODUCTION

Teacher education programs in Indonesia currently prepare pre-service English teachers for teaching in junior high schools level and not in primary schools as compulsory subjects, because the Curriculum 2013 for English language education in Indonesia focuses on junior high and senior high school students. As a result, many schools may offer English without having the necessary teachers, competences, and facilities. It implicated in the teaching technique, students' achievement, and the atmosphere in the teaching and the learning process in the classroom.

Furthermore, the learning process based on the National Curriculum needs to be supported by learning aids or tools; one of them is electronic media such as computer or laptop, tape, video, interactive animation. To increase students learning interest and motivation by giving a different touch in the teaching and learning process, such as by using animation or interactive learning media to learn English in primary school. The teachers can use some media in the English teaching and learning process as a way to make an interactive learning class.

Using media that can be demonstrated directly for the issues, interactive and more attractive like multimedia, is essential in the learning process. Healey et al. (2008) stated that the teaching-learning process with multimedia is more fun and educated. She also says that using multimedia in the classroom, it can stimulate the students' brain to be more creative. In this way, the teachers of English can take full advantage of technology to teach English in non-native speaking countries.

The essential advantages of the use of multimedia technology motivating students to learn English develop students' communicative competence, improving teaching efficiency, enhancing interaction among students, creating a conducive learning environment in the classroom, and providing opportunities for English teaching inside or outside the classes. Dhewiberta (2005) explains that the definition of Macromedia is one of application and animation program, which used by animators or illustrators to produce animation, presentation. Macromedia Flash is the most flexible program in making interactive animations, games, company profiles, presentations, movies, and other animated displays.

Meanwhile, according to Adjie (2006), Macromedia Flash Professional 8 is the computer software, which is the flagship product of Adobe Systems. Mike in Saputra and Tiarina (2003) states that Macromedia flash 8 has some excellences technology, such as:

a. Vector-based graphic: graphic images compress down exceptionally well, making for streamlined animation.
b. Database driven content: flash front-ends can be hooked into a database through Generator and can serve dynamically-generated images and text.
c. Typography flash gives designers new control over the display and size of typographic elements on the web.
d. Interactivity flash allows for designers to create custom drop-down menus and other innovative interface elements that better organize information.

Macromedia Flash 8 is the most flexible program in making interactive animations, presentation, games, quiz, learning and teaching materials, and other animated display. By using Macromedia Flash 8 in language and learning process can hold students' attention by causing them to shift from one form of learning to another. It can also make students have the motivation to learn English. Indriana (2011) mentions a few things that included in the media are film, television, diagrams, print media, computers, and gadget. If the media that carry messages or information aimed at teaching mean instructional is called a medium of learning. The teacher can bring the media (technology) into the classroom through visuals, sounds, animation, and illustration. It is one of the reasons that teaching with media is brain-friendly.

According to Slameto (2004), the benefit is a sense some prefer to taste and touch of interest in matter or activity, without telling. Meanwhile, Nurkancana said that (1983) benefit is psychological symptoms associated with objects or activities that stimulate feelings of pleasure on the individual. Besides, Walgito (2004) defines a situation where a person has excellent attention to an object, which is accompanied by a desire to know and learn until further evidence about the purpose. According to Rasyid and Mansur (2009) definition of conceptual interest is composed character through experience that encourages individuals looking for an object, activity, understanding, skills for attention, or control purposes.

METHOD

The objectives of the research are to design and implement interactive learning media. The researcher tried to create interactive learning media using Macromedia Flash 8 for Primary Education, especially in English Subject. This research design was Research and Development. According to Sugiyono (2013), research and development are the research method that can be used to get and create the product and find out that effect. The output of this research was producing the product. The product was learning media using Macromedia Flash 8 for English subject.

The researcher applied the ADDIE-type model from Dick and Carey. The model was adapted and modified based on the researcher's needs. The model was chosen because of its flexibility. Another reason was that this model is very goal-oriented and works as a system. In this research, the procedures there were five phases, namely analysis, design, development, implementation, and evaluation.

The subjects in this research were content experts, media experts, and primary students. Meanwhile, the object of the research was interactive media using Macromedia Flash 8 for English Subject. The stages of development modify the research from the Borg & Gall model (1983), the first is research and information, the problems in the class are teacher's ability was

not optimal using learning media, students have low interest, students feel that English as a difficult subject. The second is planning, the researcher planned English learning media using Macromedia Flash 8, by consideration of learning objectives, making draft advisability learning media. The third is developing. The researcher conducted some materials based on the curriculum, such as numbers, alphabet, fruits, vegetables, things, animals, and colors. The researcher also did validate the design of learning media by media experts and material experts. Validation by media experts was carried out by an expert to assess the learning media developed. Validation by the material expert was carried out by expert lecturer to evaluate the content/materials. (4) Field Testing and Implementing, after learning media was ready for use, the next activity was to test the design of learning media. This test was involved in one of the primary schools in Tarakan. The instrument used a questionnaire for collecting data at this stage. Necessary data analyzed and evaluated to correct learning media at the next step.

FINDINGS AND DISCUSSION

In this research, the researcher found some findings. The findings based on ADDIE's model, there were analysis, design, development, implementation, and evaluation. It can be analyzed as follows:

Analysis

The first step is an analysis based on students' needs. To get the data of need analysis, the researcher distributed questionnaires for 3rd, 4th, 5th, and 6th grade of SD Negeri 050 Tarakan. There were six items of questions in the questionnaire. For question number 6, the students had the opportunity to choose more than one option. The result of the questionnaire analysis is showing in table 4.1 to 4.6.

Table 4.1 Learning English is Easy for Them

Options	Frequency	Percentage (%)
Very Agree	9	16
Agree	26	46
Disagree	19	33
Very Disagree	3	5
Total	57	100

Based on Table 4.1, there were 57 students asked to fill the questionnaire. The result shows that the most of students' response about this question is Agree 26 (46%), the students choosing the option disagree 19 (33%), 9 (16%) students choosing very agree. The other option very disagrees 3 (5%). Based on the result of this question, the researcher concludes the most students assumed that learning English is difficult for them. So, it is considered by the researcher to design learning media using Macromedia Flash 8 to the students easy to learn English. The second question of the questionnaire was that student always focuses on learning English.

Table 4.2 Student's Always Focus in Learning English

Options	Frequency	Percentage (%)
Very Agree	20	35
Agree	35	61
Disagree	2	4
Very Disagree	0	0
Total	57	100

Table 4.2 shows that most students or 35 (61%) can focus on learning English, and 20 (35%) always focus on learning English. Next, the students choosing disagree about this question 2 (4%). The option very disagree was not selected by the students. The result of Table 4.2, it could be revealed that the students can focus on the teacher when the teacher was explaining English materials. For this response, the students had an interest in learning English when the teacher taught them. As the researcher's consideration, the teacher taught them in the classroom using Macromedia Flash 8. The third question in the questionnaire was about the teaching Method. It is showing in Table 4.3.

Table 4.3 Teaching Method Make Students Easier and More Interesting in Learning English

Options	Frequency	Percentage (%)
Very Agree	18	32
Agree	38	67
Disagree	0	0
Very Disagree	1	1
Total	57	100

Table 4.3 shows that there were 38 (67%) students who were asked to fill out the questionnaire and choosing Agree with the option, 18 (32%) students very agree with these questions, and only 1 (1%) student choosing very disagree. The other option is not select. Based on the result above, the existing method had already appropriate to students. It was the students' interest in learning English. However, the teacher must have another way in teaching methods to students who did not feel dull. The teachers have to combine their teaching methods with media interactive. The fourth question is whether teachers always using teaching media in teaching and learning English subjects.

Table 4.4 Teachers Always Use Teaching Media

Options	Frequency	Percentage (%)
Very Agree	16	28
Agree	29	51
Disagree	11	20
Very Disagree	1	1
Total	57	100

Table 4.4 shows that most students agree with this statement. 29 (51%) agree that teachers always use teaching media, 11 (20%), and 1 (1%) student disagree and very disagree with this statement. In this question, the researcher concludes that teachers already implemented media in the teaching process. Based on the teacher's opinions, they usually use simple media such as pictures, books, and things around the school. The fifth question, about students' interest in learning English, it is shown in Table 4.5.

Table 4.5 Media Interactive for Students

Options	Frequency	Percentage (%)
Very Agree	23	40
Agree	28	49
Disagree	6	11
Very Disagree	0	0
Total	57	100

Table 4.5 shows that students like media interactive, which has contents some animations and audio support. 28 (49%) students agree with this question, and 23 (40%) students' answers very agree, 6 (11%) students contradict with the other students, they choose to disagree. It can conclude that most of the students very like media interactive, which contains animation and sound. It also supported the researcher's argument about existing media in SD Negeri 050 Tarakan, only using pictures in order the students felt bored. The last question in the questionnaire was about the topics in English, which necessary for the student of SD Negeri 050 Tarakan.
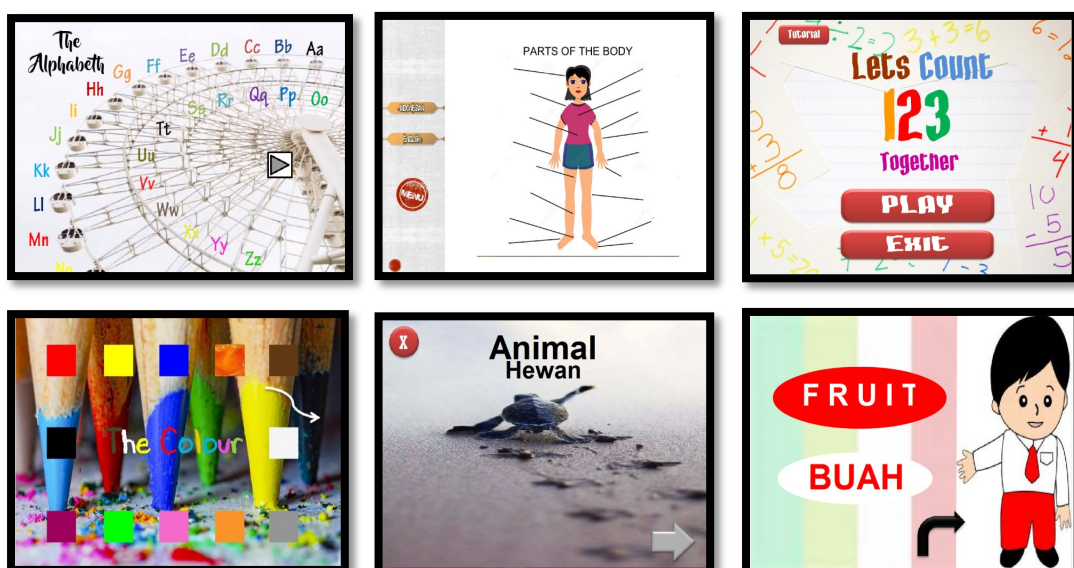
Table 4.6 Themes to learn English

Options	Frequency	Percentage (%)
Alphabet	19	33
Number	15	26
Thing	15	26
Part of Body	8	14
Vegetable	18	32
Fruit	18	32
Colour	19	33
Other: -	0	0
Total	112	196%

Concerning the topic above, the question was intended to find out the items that students want to learn English. Table 4.6 shows that the most favorite themes in learning English are Alphabet and Colour 19 (33%). The options Vegetable and Fruit 18 (32%), is more than Number and Thing 15 (26%) and Part of Body 8 (14%). Based on the result of Table 4.6, it can conclude that the students are interested in the topic Alphabet and Color, while other themes like Vegetable, Fruit, Number, Thing, and Part of Body are also considering and included in the product. So, the students are more expected and motivated to learn English.

Design

After the researcher got the data about students' needs, the next step is to design the product. The product used Macromedia Flash 8 application. The researcher prepared animations and sounds in learning English for students in the storyboard, which consists of the steps from the beginning until the finish.

Development

The products already exist, but the researcher needs an expert to suggest the advisability of the product. Validation also was intended to gain feedback from experts. There were two experts validated the product. They were experts from media and content. As the first expert for media was Decky Heriyanto Rooroh. He graduated from The Informatics Technic Department of Yogyakarta. He was chosen based on his qualifications and experience. He validated on design media of the product. The second expert was Syarifa Rafiqa. She was chosen based on her qualifications and skills as the English Lecturer and The Head of the English Education Department at Borneo Tarakan University. She validated the appropriateness of the content and language of the product. For the aspect of media (First Expert), there were 12 items of components and 19 indicators such as text, picture, screen design, color presentation, interaction, navigation, accessibility, animation, respond, documentation, and efficient. The expert gave score 5 (very good) in the documentation and practical components, score 4 (good) in text, picture, screen design, color, presentation, interaction, animation, and response. The expert also gave score 3 (Fair) in navigation and accessibility. Based on the result of validation from the first expert above, it shows that the expert was interested in some components, and fair category, the researcher, already revision the product or media so that the students can use it. However, the product or media is appropriate for students. For the aspect of material (Second Expert), there were five components and 14 indicators of validation sheet, namely indicators, material presentation, content, visualization, and language. The expert gave score 5 (very good) for indicator and some materials in the product and score 4 (good) in all items of the components. It means that the material or content in the product was appropriate to use for students of SD Negeri 050 Tarakan.

CONCLUSIONS

This research adapted from ADDIE's model. The First is analysis, in the first step is an analysis based on students' needs. To get the data of need analysis, the researcher distributed questionnaires for 3rd, 4th, 5th, and 6th grade of SD Negeri 050 Tarakan. There were six items of questions in the questionnaire. The second is the design. After the researcher got the data about students' needs, the next step is to design the product. The product used Macromedia Flash 8 application. The researcher prepared animations and sounds in learning English for students in the storyboard consists of the steps from the beginning until the finish. The third and fourth are Development and Implementing, the products already exist, but the researcher needs an expert to suggest the advisability of the product. The last is an evaluation. In this step, the researcher revised the product before trying out.

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