MACROMEDIA FLASH 8 LEARNING MEDIA TO INCREASE LEARNING INTEREST IN THEME 2 STUDENTS ALWAYS SAVE ENERGY CLASS IV SD NEGERI 016555 ASAHAN

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Abstract

This study aims to: (1) develop media using Macromedia Flash 8 applications in elementary thematic learning, (2) determine the feasibility of developing Canva applications in elementary thematic learning. This research is a type of Research and Development (R&D) research with the ADDIE model which includes five steps, including: analysis, Design, Development, Implementation, Evaluation . The subjects in this study were media expert validators, material experts, education practitioners, namely fourth grade teachers and fourth grade elementary school students. The research instruments used in data collection were questionnaires, observations, and documentation. The results of this study indicate that the Macromedia Flash 8 Application learning media in the Thematic Learning of the Always Save Energy Theme for Grade IV Elementary School is "Very Eligible" with details of the percentage of eligibility given by media experts in Sub Theme 1 of 86.6% with the category of "Very Eligible", Sub Theme media 2 of 83.3% in the "Very Eligible" category, Sub Theme media 3 by 86.6% in the "Very Eligible" category. Material experts on media Sub Theme 1 are 94% in the "Very Eligible" category, Sub Theme 2 is 94% in the "Very Eligible" category, Sub Theme 3 is 92% in the "Very Eligible" category. For education practitioners in media Sub Theme 1, 94% in the "Very Eligible" category, 94% in Sub Theme 2 in the "Very Eligible" category, 94% in Sub Theme 3 in the "Very Eligible" category, Individual trials of 95.2% with the "Very Eligible" category and small group trials of 93.7% with the "Very Eligible" category. Therefore, it can be concluded that the Macromedia Flash 8 Application learning media in the thematic learning of the Always Save Energy for grade IV SD Negeri 016555 Asahan is "very feasible" to be used by students during the learning process.

Keywords – Learning Media; Macromedia Flash 8; Thematic.

1. Introduction

The development of the world of education is very significant in line with the development of science and technology. The world of education is always expected to follow in the footsteps of global technological developments, this is a demand, because education is the main capital in building the younger generation, educating the nation's life, and preparing to become a reliable and competitive workforce. The world is developing, technology is developing and the world of education is growing. The world of education often depends on technology, because it can help in improving learning and facilities and infrastructure that are increasingly needed in the world of education to uphold the quality of education (Rahmi et al., 2019) .

Meaningful and effective learning will take place if it gives satisfactory results for all parties such as teachers and also the students themselves. Teachers will be satisfied if students get optimal learning outcomes, and can develop the potential of students (Hidayah, 2018) .Interest can be obtained through learning, because by learning students who initially do not like a particular lesson, with increasing knowledge about the subject, interest grows so that students will be more active in learning the lesson. Interest is a constant desire to pay attention or do something, interest can create enthusiasm in carrying out activities so that the goals of these activities can be achieved, and the existing spirit is the main capital for each individual, especially students in carrying out teaching and learning activities (Dyah Anungrat Herzamzam, 2018) . (Kustandi, Sutjipto, 2019) Learning Media is a tool that can help the teaching and learning process and serves to clarify the meaning of the message conveyed, so that it can achieve learning objectives better and more perfectly.

Ariani and Dany (2018) say that "multimedia is the result of a combination of various media in the form of text, images, graphics, sound, animation, and video that are used to convey messages to the public". Macromedia Flash 8 is a multimedia that can create videos, animations, images, and sounds in an easy and effective way. By using multimedia, abstract things can be concreted so that they

can be displayed in front of students and attract interest in learning through various forms of animation that are presented (Fakhri, 2018).

The use of media is able to make the teaching and learning process more practical and efficient. (Helsa et al, 2019) stated that multimedia can make it easier for students to understand learning and apply the knowledge gained from the learning process into thematic problems. Thus I choose multimedia-based learning media, namely Macromedia Flash 8 to increase student interest in learning, besides that in today's technology has been widely used in education, so that by using this multimedia-based learning media, students and educators are not left behind with technological developments. which will be applied during the learning process (Natasya & Izzati, 2020) .

According to (Sukmawari et al, 2022: 202) learning is needed in order to prepare student face era revolution industry 4.0 which demand Skills century 21, that is think creative, think critical, communicating and collaborate. (Rangkuti & Sukmawati, 2022). A good learning process begins with wise planning. In study students not only interact with the teacher but , students as well interact with learning resources used to achieve good learning outcomes desired.

According to (Sukmawari and Hidayat, 2020) Curriculum Development 2013 is step advanced going to Development Curriculum Based on Competencies pioneered in 2004 and KTSP 2006 which emphasizes on achievement competence attitude, knowledge, and Skills by integrated. According to (Hidayat and Khayroiyah: 2018) to reduce the emergence of obstacle study, so teacher need prepare device learning which appropriate.

Innovations learning which demand power educator nor participant educate for think creative as well as capable adapt with the times to produce active, creative, innovative students and of course have noble character (Sukmawarti et al., 2021). According to (Hidayat, et al: 2021) in this modern era, technology is developing in various fields, such as education, including at the basic education level.

Formulation of the problem

1) To develop learning media Macromedia Flash 8 can increase the learning interest of elementary school students .
2) To determine the feasibility of learning media Macromedia Flash 8 themes are always energy efficient to increase the learning interest of elementary school students .

Research purposes

1) To develop learning media Macromedia Flash 8 can increase the learning interest of elementary school students.
2) To determine the feasibility of Macromedia Flash 8 Learning Media on the Theme of Always Saving Energy to increase the Learning Interest of Elementary School Students.

2. Method

Study It uses Research & Development (R&D) development. According to Sugiyono (2017) research and development (R&D) methods are research methods used to produce certain products, and test the effectiveness of these products. In this study, an audio-visual learning media was developed which was designed through the Macromedia Flas 8 application on the theme 2 Always Save Energy.

Place, Time and Research Subject

The research was conducted at SD Negeri 016555 Asahan, which is located in Bandar Pulau sub-district, Asahan district. This research was conducted in the academic year 2022/2023. Determination of research schedule in September 2022 . The subject in this research is learning media Macromedia Flash 8 .

Data Collection Instruments and Techniques

The instrument is a measuring tool used in research to obtain valid data. The data from this study were obtained through questionnaires or questionnaires, observation and documentation. The instrument used in this research is to measure the feasibility of the product developed by the researcher.

Data analysis technique

From the data that has been obtained from the feasibility aspect of the resulting product. The data analysis technique used in this research is media feasibility analysis. Data analysis uses quantitative data to test the feasibility of the product being developed which is taken from the results of teacher and student response questionnaires using a Likert scale. (Riduwan dalam Zuhriyah, 2019:485)

3. Result and Discussion

Research and development of learning media Macromedia Flash 8 application in thematic learning always saves energy for fourth grade elementary school. Researchers used the ADDIE model . To design a learning system, which consists of 5 stages, namely;

Analysis Phase (Analysis)

At this stage, what is done is 1) needs analysis : At this stage the needs analysis aims to find out how to use learning media at SD Negeri 016555 Asahan , 2) Analysis of Learning Devices : At this stage the researcher analyzes the learning tools used in class IV , namely the syllabus, lesson plans, absent books, assessment books, and teaching materials , 3) Curriculum and Material Analysis : The curriculum applied at SD Negeri 016555 Asahan is the 2013 curriculum. The material to be used in this study is Theme 2 Always saving energy, Sub theme 1 Energy sources, Sub theme 2 Energy benefits, Sub theme 3 Alternative Energy , 4) Student Analysis : Student analysis is carried out to determine the characteristics of students so that researchers can design media according to student development .

Design Stage (Design)

At this stage, what is done is : 1) Media selection : With the learning media selected for concept analysis, user characteristics and deployment plans with varying instructions from different media , 2) Format selection : In selecting the format, it must be in the appropriate format. with the theme learning material Always save energy, the sub-theme of energy sources, the benefits of energy and alternative energy and in the selection of the form of presentation must be in accordance with the learning media that

will be used , 3) Initial design : At this initial design stage is to design a learning media from the Macromedia Flash application 8 that have been made by the researcher and then given input by the supervisor , 4) Compile the content of the material : Determine the title of the material on the media, prepare source books and other reference books, identify basic competencies, identify indicators of competency achievement in accordance with the learning material, and meran design the material in the Macromedia Flash 8 application that is in accordance with the thematic learning material on the Always Saving Energy theme.

Development Phase (Development)

At this development stage, product creation and validation of learning media activities are carried out for Macromedia Flash 8 Application . The stages of developing learning media for the Macromedia Flash 8 Application are 1) Making Learning Media Using the Canva Application : In the learning media using the Macromedia Flash 8 application , which is based on the analysis that has been done previously with the concepts contained in the design stage that has been designed , 2) Validation : Validation is the research stage of learning media before being tested on students. If in the test there are deficiencies, the media must be revised, then retested by experts until there are no more revisions.

Media Expert Validation

The results of the validation of Sub-theme 1 learning media Macromedia Flash 8 Application are categorized as "Very Eligible" with a total score of 52 out of a maximum score of 60, so the percentage of eligibility is 86.6% with the final conclusion from the media expert validator that the learning media is feasible without revision so that researchers can proceed to the next stage. The results of the validation of Sub Theme 2 learning media Macromedia Flash 8 Application are categorized as "Very Eligible" with a total score of 50 from a maximum score of 60, so the percentage of eligibility is 83.3% with the final conclusion from the media expert validator that the learning media is feasible without revision so that researchers can proceed to the next stage. The results of the validation of Sub-theme 3 learning media Macromedia Flash 8 Application are categorized as "Very Eligible" with a total score of 52 out of a maximum score of 60, so the percentage of eligibility is 86.6% with the final conclusion from the media expert validator that the learning media is feasible without revision so that researchers can

proceed to the next stage. The final result of the media validation score showed an increase after the revision .

Educational Practitioner Validation

The learning design validation (RPP) was carried out by Mr. Sujarwo, S.Pd., M.Pd as a learning design validation carried out on October 4, 2022. There are 6 aspects, namely the identity of the lesson plans, aspects of the formulation of learning objectives and indicators, material aspects, aspects of selection learning approach, aspects of planning learning activities, aspects of learning resources, and aspects of language with a Likert scale of 1-5.

From the results of the validation of education practitioners in sub-theme 1 by FKIP lecturers, they obtained a total score of 47 out of a maximum score of 50 with a percentage of 94% and was included in the "Very Eligible" category. From the results of the validation of education practitioners in sub-theme 2 by FKIP lecturers, they obtained a total score of 47 out of a maximum score of 50 with a percentage of 94% and was included in the "Very Eligible" category. From the results of the validation of education practitioners in sub-theme 3 by FKIP lecturers, they obtained a total score of 47 out of a maximum score of 50 with a percentage of 94% and included in the "Very Eligible" category. So it can be concluded that the learning media of the Macromedia Flash 8 Application in the Thematic Learning Theme Always Save Energy in Grade IV Elementary School is determined to be feasible and ready to be used for Grade IV Elementary School.

Material Expert Validation

Material validation was carried out by Mrs. Nurasiyah S.Pd who is an elementary school teacher 016555 Asahan. Validation by material experts aims to obtain information, criticism, and suggestions so that the learning media of the Macromedia Flash 8 application on the theme of always saving energy for class IV SD is developed into a materially quality product.

Sub Theme 1 From the results of the validation carried out by material expert validators on learning media, the Macromedia Flash 8 application in always saving energy for the fourth grade elementary school above got a score of 47 out of a maximum score of 50 with a percentage of 94% which was categorized as "Very Eligible" .

Sub Theme 2 From the results of the validation carried out by material expert validators on learning media the Macromedia Flash 8 Application in Always Saving Energy

for class IV SD above got a score of 45 out of a maximum score of 50 with a percentage of 90% which was categorized as "Very Eligible" .

Sub Theme 3 From the results of validation carried out by material expert validators on learning media Applications Macromedia Flash 8 The theme of always saving energy for class IV SD above gets a score of 46 out of a maximum score of 50 with a percentage of 92 % which is categorized as "Very Eligible" .

Table 1. Eligibility Reviewer Validation Criteria

Category	Achievement Score	Criteria
A	81-100%	Very worth it
B	61-80%	Worthy
C	41-60%	Decent enough
D	21-40%	Not worth it
E	<20%	Very not worth it

Implementation Phase (Implementation)

This implementation phase aims to determine the feasibility of implementing Macromedia Flash 8 Application media on the Thematic Learning of Always Saving Energy in Class IV Elementary School which will be tested on students. By doing at the implementation stage, the researcher implements it in stages to see whether the media developed is valid or not and therefore the researcher conducts individual trials and only small group trials.

Table 2. Recaptulation of Student Interest Response Results (Individual Test)

No Questionnaire Item	Student 1	Student 2	Student 3	Student 4	Student 5
1	5	4	5	5	4
2	5	5	5	5	5
3	5	5	5	4	5
4	5	5	5	4	5
5	5	5	5	5	5
6	5	4	5	4	5
7	5	5	4	5	4
8	5	5	5	5	5
9	4	5	4	4	4
10	5	5	5	5	5
Amount	**49**	**48**	**48**	**46**	**47**
Total Score	**49+48+48+46+47= 238**				

Eligibility Percentage	$\frac{238}{250}\mathbf{X\ 100\ \%} = \mathbf{95,2\ \%}$
Category	**Very Worthy**

Based on the results of the calculations in the table above, it can be concluded that the learning media of the Macromedia Flash 8 Application in the Thematic Learning of Always Saving Energy in Class IV Elementary School individual trials obtained a total score of 238 from a maximum score of 250 with a feasibility percentage of 95.2%, so it belongs to the "Very Eligible" category.

Table 3. Respondents' Results of Students' Interest in Learning Using Macromedia Flash 8

No Questionnaire Item	**Student**														
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
1	5	5	4	4	4	4	5	5	5	5	5	4	4	5	5
2	4	4	5	5	5	4	5	5	5	5	5	5	4	5	4
3	5	5	5	4	4	5	5	5	5	5	5	4	4	5	5
4	5	5	4	5	5	4	5	5	5	5	5	5	4	5	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	4	4	4	4	4	4	5	5	5	5	5	4	4	5	5
7	5	5	5	4	4	4	4	4	4	4	4	4	4	4	5
8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
9	4	4	5	5	5	5	4	4	4	4	4	5	4	4	5
10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Amount	**47**	**47**	**47**	**46**	**46**	**45**	**48**	**48**	**48**	**48**	**48**	**46**	**43**	**48**	**48**
Total Score	**47+47+47+46+46+45+48+48+48+48+48+46+43+48+48= 703**														
Eligibility Percentage	$\frac{703}{750}\mathbf{X\ 100\ \%} = \mathbf{93,7\ \%}$														
Category	**Very Worthy**														

Based on the table above, from the student respondents to the learning media the Macromedia Flash 8 application obtained a 90% eligibility percentage of the 10 items of the questionnaire instrument distributed to 15 students. Of the 15 students, there were all students who chose a score of 5 on item 5 which contains the display of learning media that can attract the attention of students, Then item number 8 which contains the language used is in accordance with the

Big Indonesian Dictionary (KBBI) and no. item 10 contains the completeness of the information submitted is in accordance with the material. The results of the percentage of eligibility that have been obtained prove that there is a positive response from all respondents or students using the learning media of the Macromedia Flash 8 application that was developed, so that it can be categorized as "Very Eligible".

Results of the Evaluation Phase (Evaluation)

The last stage in the ADDIE development model is the evaluation stage. At this evaluation stage, it is carried out to see the feasibility, practicality, and effectiveness of each product assessment process that has been carried out at the time of validation.

Table 4. Recaptulation of Media Validation for Each Stage

Validator	Validation Results		
	Amount	**Percentage**	**Category**
Media Expert			
Sub Theme 1	52	86.6%	Very Worthy
Sub Theme 2	50	83.3%	Very Worthy
Sub Theme 3	52	86.6%	Very Worthy
Material Expert			
Sub Theme 1	47	94%	Very Worthy
Sub Theme 2	45	90%	Very Worthy
Sub Theme 3	46	92%	Very Worthy
Education Practitioner			
Sub Theme 1	49	98%	Very Worthy
Sub Theme 2	47	94%	Very Worthy
Sub Theme 3	48	96%	Very Worthy
Individual Trial	238	95.2%	Very Worthy
Small Group Trial	703	93.7%	Very Worthy
Practicality Test	41	82%	Very Worthy
Effectiveness Test	1.170		Very Worthy
Category	**Very Worthy**		

Discussion

In this study using the type of research Research and Development (RnD). In the development model that researchers used, namely using the ADDIE Analysis, Design, Delevoment model (Development), Implementation, Evaluation.

In accordance with previous research conducted by Gita Permata Puspita Hapsari, Zulherman (2021) and Tiara Melinda, Erwin Rahayu Saputra (2021) stated that using the ADDIE model can develop Macromedia Flash 8 application learning media that is suitable for use in learning in elementary schools.

The feasibility of learning media Macromedia Flash 8 application was obtained from the results of feasibility test data by media experts, material experts, education practitioners, practicality tests, effectiveness tests and students (individual trials and small group trials). Based on the results of the data above, the average percentage of the feasibility of learning media for Macromedia Flash 8 Applications is 86.6 % with the "Very Eligible" category . This is in accordance with previous research conducted by Gita Permata Puspita Hapsari and Zulherman (2021) which stated that the interpretation of the percentage of feasibility or validity of the media at the level of achievement of 81% to 100%, learning media can be categorized as "Very Eligible". So it can be concluded that the learning media of the Macromedia Flash 8 Application in the Thematic Learning Theme Always Save Energy for Class IV Elementary School , is "Very Appropriate" to be used as a learning medium in the learning process in Class IV SD Negeri 016555 Asahan.

4. Conclusion

Based on the results of research and development carried out by researchers, it can be concluded that researchers and development use stages with the ADDIE model, thus researchers only use 5 stages with the steps of analysis (Analysis), Design (Design), Development (Development), Implementation (Implementation), Evaluation (Evaluation) which has resulted in

a product in the form of Macromedia Flash 8 Application Learning Media on the Thematic Learning Theme Always Save Energy for Class IV Elementary School.

Based on the score results from the feasibility of learning media Macromedia Flash 8 Application which has been validated by media experts in sub-theme 1 with a score of 86.6%, sub-theme 2 with a score of 83.3%, sub-theme 3 with a score of 86.6%, and experts the material in sub -theme 1 gets a score of 94 %, sub- theme 2 gets a score of 90 %, sub -theme 3 gets a score of 92%, and the responses of education practitioners in sub-theme 1 get a score of 94%, sub-theme 2 gets a score of 94%, sub-theme 3 get a score of 94%, on the learning media Macromedia Flash 8 application , then the development of learning media for the Macromedia Flash 8 application in the Thematic Learning The theme of Always Saving Energy for Class IV Elementary School developed by the researcher is included in the category of Very Appropriate to use as a learning medium for grade IV elementary school students .

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