



## Interactive Media Development Based Macromedia Flash 8 on Themeliving Matter of Primary Class IV

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### Abstract

This study aims to determine the validity and practicality of Flash-based interactive media *Macromedia 8* on the theme of care for life makhluk Elementary School fourth grade. This research using research methodologies *Research and Development* (R & D). Steps to develop interactive media-based *Macromedia Flash 8* using ADDIE model development procedure (*Analysis, Design, Development, Implementation, and Evaluation*). The validity of the media obtained from the results of expert validation consisted of three experts and three experts media material. The results obtained from the first media expert 97.5%, 97.5% II media experts and media experts III 100%. Results obtained from the subject matter experts I 98.33% 98.33% Second material experts and subject matter experts 96.66%. The average results obtained from the three media specialists and subject matter experts 98.33% 97.77% criteria "Very Decent Used". Practicality media obtained through the questionnaire responses of students and teachers Bendokatonkidul grade IV SDN, SDN 01 and SDN Tayu Purwokerto Wetan 01 on interactive media-based *Macromedia Flash 8*. The results of the questionnaire responses fourth grade students of SDN Bendokatonkidul 98.59%, Purwokerto SDN 01 and SDN 100% 01 98.78% Tayu Wetan. The results of the questionnaire responses of teachers Kela IV SDN Bendokatonkidul 100%, Purwokerto SDN 01 and SDN 95% 01 92.5% Tayu Wetan. Average of questionnaire responses by 99.12% students and teachers' questionnaire responses by 95.83% with the criteria "Very Decent Used". The conclusion that interactive media-based *Macromedia Flash 8* is valid and practical use on the theme of caring for sentient beings Elementary School fourth grade.

### How to Cite

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## INTRODUCTION

Education is the process of establishing the fundamental abilities intellectually and emotionally toward nature and fellow human beings (in Sudharto Dewey, et al., 2009: 5). One of the factors that affect the attainment of the objectives of education is meaningful learning activities. The teacher is a person who plays a role in learning activities and create a learning environment for the benefit of student learning (Djamarah and Zain, 2010: 114). Teachers are required to design learning activities in order to form a meaningful learning activities.

Excitement and enthusiasm is only the beginning of the learning activities. This was due to the shortage of teachers in presenting a media in conveying the subject matter. Lack of instructional media use by teachers due to the collection of media in schools is very limited. Another factor that causes a lack of instructional media use by teachers for curriculum implementation in 2013 at the fourth grade SDN Bendokatonkidul, SDN 01 and SDN Tayu Purwokerto Wetan 01, which requires teachers to use the media, but can be used for multiple subjects. Lack of instructional media use by teachers less optimal impact on students' comprehension of the subject matter.

According to the facts above problems, the authors need to create a thematic learning media innovation to the fourth grade that can help students in understanding the learning material. Media is interactive learning so that students can interact, using direct and assist students in understanding the subject matter. Interactive media one using *Macromedia Flash 8*.

Based on the description above problems, the writer needs to do research and development, entitled "Development of Interactive Media Based *Macromedia Flash 8* on theMatters Beings Scene Class IV Primary school".

## STUDY THEORY

### Development

According Sugiyono(2015: 407) "method of research and development or in English in *Research and Development* is a research method that is used to produce a particular product, and test the

effectiveness of these products". To be able to produce certain products that are used research needs analysis and to test the effectiveness of the product.

Definition of development according to Soegeng (2016: 212-213), "The definition of research and development in this regard is the development of research in the field of education, more precisely in the learning process. Research & development(*DevelopmentResearch = DR*) was conducted to develop a product that will be used in the learning process. The products developed or to be generated may include teacher training materials, materials or textbooks, modules, learning model, learning media, learning evaluation tool, or a learning management system".

The above definition can be concluded that the research and development or *Research and Development* (R & D) is a type of research that is used to create new products and develop a product that already exists with certain procedures benefit the wider community.

### Media Learning

According Djamarah & Zain (2010: 120) "The word" media "comes from the Latin word for a form of words from the word" medium ", which literally means" an intermediary or an introduction ", thus the media is a vehicle for channeling information learned or dealer message".

Pengertian learning media according to Sanaky (2013: 3) "Learning media is a tool that functions and can be used to convey the message of learning".

Based on the opinion of the above, it can be concluded that the learning media is a tool that is used to convey information of a teacher or subject matter to students, so that students more easily understand the information or subject matter to students.

The benefits of learning media for students that the students can easily absorb the subject matter presented teachers, increase student motivation, improve attention and enthusiasm of students in learning activities and students will be more pleased that the students are not easy pembeajaran activity bored and tired.

### Macromedia Flash 8

*Macromedia Flash 8* is a program devoted to the designers and programmers who intend to design an animation for web page creation, presentasi for business purposes as well as learning to the creation of *games* interactiveas well as other goals that are more specific (Yudhiantoro, 2006: 1).

Interactive media-based *Macromedia Flash 8* is a vehicle or a tool used to distribute information or learning message that refers to digital products and services that responds to measures for students by presenting content such as text, moving images, video, audio, and *game*, giving rise to the interaction between learning and student media. media *macromedia flash 8* if designed for interactive learning media will benefit, which allows students to absorb the subject matter, increasing the enthusiasm and motivation of students in learning activities, provide concrete learning experiences and foster curiosity of students.

### Thematic Learning

Thematic learning is learning to use the theme to link several subjects so as to provide a meaningful experience to students (Daryanto, 2014: 3).

According Daryanto (2014: 5) thematic learning characteristics are as follows:

1. The student-based proxies. This is consistent with the modern learning approach puts more students as a subject of study, while more teachers act as facilitators that provide convenience to the students to do activities learn.
2. Provide direct experience. of thematic learning can provide hands-on experience to students, who are faced with something real (concrete) as the basis for understanding things that are more abstract.
3. Separation of subjects is not so clear. in thematic learning of separation between subject matters are not so clear. Learning focus is directed to the discussion of the themes most closely related to student life.
4. Presenting the concept of various subjects. thematic learning presenting concepts of various subjects in a learning process, so

that students are able to understand the concept of the concept as a whole.

5. Characteristically freksibel. thematic Learning is flexible (freksibel) where teachers can associate teaching materials from a subject with other subjects, even relate it to real life students.
6. Learning outcomes in accordance with the interests and needs of students. Using the principle of learning while playing fun.

### METHODS

#### Research Procedure

This study uses the research methodology *Research and Development* (R & D). Steps to develop interactive media Flash-based *Macromedia 8* using ADDIE model development procedure. Here are the steps ADDIE model development procedure:

#### 1. Analysis

analysis of the need to assess the problem and provide appropriate solutions to overcome the problems.

#### 2. Design

Determining the specific competencies, methods, teaching materials, and learning strategies on the theme of care for living things.

#### 3. Development

Perform development by validating based interactive media product *Macromedia Flash8*. Validator consists of three experts and three experts media material.

#### 4. Implementation

Implementing a program of learning by using interactive media bebasis *Macromedia Flash 8*.

#### 5. Evaluation

Evaluation is done by giving the questionnaire responses of students and teachers on interactive media-based *Macromedia Flash 8*.

#### Research Subjects

The subjects were class teachers and all students in grade IV SDN Bendokatonkidul with the number of 19 students, fourth grade students of

SDN Purwokerto 01 with the number of 14 students, and SDN Tayu Wetan 01 with the number of 33 students.

**Data collection**

Data in this study includes qualitative data (through interviews and documentation), and qualitative data obtained through questionnaires or questionnaires.

**Data Analysis**

1. Questionnaire validity

Assessment validity based interactive media *Macromedia Flash 8* is obtained from the assessment questionnaire media expert validation and subject matter experts with analysis of sheets scale questionnaire *Likert* shaped *Checklist* (✓) with the following steps: (a) The author calculates suspension each answer; (b) Calculate the number of scores obtained from the study; (c) Summing the ideal score obtained for all items;

(d) Dividing the total score with the ideal score; (e) then multiplied by 100%.

$$\text{Percentage} = \frac{\text{Number of total score}}{\text{Ideal score}} \times 100\%$$

percentage obtained will then be converted into a sentence which is qualitative as follows:

**Table 1. Range Percentand Qualitative Criteria**

Range (%)	Qualitative criteria
0-40	usedIt is not worth
41-60	improperly used
61-80	worthy is used
81-100	Very decent used

2. Practicality questionnaire

assessment results (response) to the teacher-based interactive media *macromedia flash 8* is used to analyze the data from the questionnaire sheet teacher responses to the scale *Likert* form *checklist* (✓) is done with the same calculation by way of judgment on the validity of the questionnaire.

Results of the assessment of students' response-based interactive media *Macromedia Flash 8* with scale *Guttman* in the form of "Yes-No" is converted into numbers.

**Table 2. Scoring Questionnaire Responses Students**

Responses Students	Score
Yes	1
No	0

Quantitative data collected then analyzed by *Likert* scale.

$$\text{Percentage} = \frac{\text{Number of total score}}{\text{ideal score}} \times 100\%$$

Persentase indicates the level of ideals based interactive media *Macromedia Flash 8* based on votes of teacher responses and fourth grade students.

**RESULTS AND DISCUSSION**

Validity based interactive media *Macromedia Flash 8* can be seen from the results of expert validation percentage of media and materials to interactive media-based *Macromedia Flash 8*. Assessment carried out by the three validators, where each validator acting as media experts and subject matter experts. The results of the validation of media experts and subject matter experts presented in Table 3 below:

**Table 3.** Results of Validation Expert Media Expert Matter

No.	Expert Media	Percentage	Expert Content	Percentage
1.	media expert I	97.5%	first matter expert	98.33%
2.	Expert mediaII	97.5%	expert materialIII	98.33%
3.	media expertIII	100%	materialExpert III	96.66
	average%	98.33%	average	97.77%

based on the above table, the average ratings interkatif media-based *macromedia flash 8* by all the media experts in the amount of 98.33%, thus validity interkatif media-based *Macromedia Flash 8* is based on expert media included in the criteria "Very Decent Used".

The average assessment interkatif media-based *Macromedia Flash 8* by all the experts of material that is equal to 97.77%, so the validity of interkatif media-based *Macromedia Flash 8* by subject matter experts in the criteria "Very Decent Used".

The average yield obtained from the assessment amounted to 98.33% of media experts with the criteria "Very Decent Used", and the average yield obtained from the expert assessment of material by 97.77%. Based on these results, it is known that theFlash-basedinteractive media *Macromedia 8* on the theme of care for living things, valid used in the fourth grade primary school.

Practicality based interactive media *Macromedia Flash 8* is obtained from the questionnaire responses the percentage of students and teachers. Questionnaire responses of students to the interactive media-based *Macromedia Flash 8* is given to all fourth grade students at three elementary schools in the District of Tayu, namely SDN Bendokatonkidul, SDN 01 and SDN Tayu Purwokerto Wetan teacher responses to the questionnaire 01. The interactive media-based *Macromedia Flash 8* is given to teachers Bendokatonkidul fourth grade SDN, SDN 01 and SDN Tayu Purwokerto Wetan 01. Results of questionnaire responses of students and teachers on interactive media-based *Macromedia flash 8* presented in tables 4 and 5 below:

**Table 4.** Percentage of studentsquestionnaire againstresponse-basedinteractive media *Macromedia flash 8*

No	School Name	Percentag e
1.	Bendokatonkidul SDN	98.59%
2.	SDN Purwokerto01	100%
3.	SDN Tayu Wetan 01	98.78%
	Average	99.12%

Based on the above table, the average results of student responses to themedia-based interactive *macromedia flash 8* amounted to 99.12%, so that it can be seen practicality interkatif media-based *macromedia flash 8* is based on questionnaire responses of students included in the criteria "Very Decent Used".

**Table 5.** Percentage of Questionnaire ResponsesTeacher-Based Against Interactive Media *Macromedia Flash 8*

No	School Name	Percentag e
1.	Bendokatonkidul SDN	100%
2.	SDN Purwokerto01	95%
3.	Tayu Wetan SDN 01	92.5%
	Average	95.83%

Based on the above table, the average results of teacher responses to themedia Flash-basedinteractive *Macromedia 8* amounted to 95.83%, so that it can be seen practicality interkatif media-based *macromedia flash 8* is based on questionnaire responses of teachers included in the criteria "Very Decent Used".

## CONCLUSION

Based on the steps that have been made, it can be concluded that: 1. Media interactiveFlash-based *Macromedia 8* on the theme of caring for sentient beings valid used in fourth grade elementary school with an average gain of validity of media experts and experts of 98.33% amounting to 97.77% of material with the criteria "Very Decent Used". 2. The interactive media-based *Macromedia Flash 8* on the theme of care for living things practical use Elementary School fourth grade student responses to elicit a response by 99.12% and amounted to 95.83% of teacher responses to the criteria "Very Decent Used".

Preferably, the more active teachers to use instructional media so that the material presented to the student teachers more easily understood students. In addition susasana media can make learning more fun, not boring, and increase student interest.

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