

The Development of Ritatoon Media in Learning With Sub-Theme “Me and My Ambitions” Grade IV of Elementary School

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Abstract: This research aims to produce a viable Ritatoon media for validity test media experts, subject experts and field trials. The research uses a model of research and development including the steps of product development and validation. The results of Ritatoon media product with sub-theme “Me and My Ambitions” for grade IV are in the form of Ritatoon boxes, sheets of drawing, learning materials, lesson plans, and guidances. Ritatoon 1 contains learning materials about transportation, arts and culture, health, sports, security, sanitation, journalism and producer. Ritatoon 2 involves the understanding, procedures and used materials to create collage. Ritatoon 3 includes the nature and the characteristics of the line and also the concept of parallel and intersecting line. The results of product learning 1, 2, and 3 show the eligibility percentage of 94,6%, subject experts of 91,4% and field trials of 88,3%.

Keywords: ritatoon media, sub-theme “me and my ambitions”, elementary school

I. INTRODUCTION

Basic Education Unit is applied to the Curriculum 2013 in the school year of 2013/2014. Curriculum 2013 at Basic Education Unit implements an integrated thematic learning and scientific approach for the process. Curriculum 2013 aims to facilitate learners to understand the concept of the material incorporated in the theme, provide meaningful learning experiences, and add the spirit of learning because the material being studied is the real material (contextual) and meaningful to learners. Successful implementation of Curriculum 2013 in learning activities at elementary school correspond with the government and society, one of which is determined by the availability of adequate instructional media and support. Mulyasa (2006) said that the quality of educational outcomes are largely determined by the quality of teaching and learning activities. In connection with it, improving the quality of teaching and learning in elementary school is an absolute requirement for the teacher and the school in accordance with the existing conditions. Gerlach & Ely (Arsyad, 2011) added that instructional media have to be able to distribute messages, stimulate the mind, feelings, concerns and the willingness of students so as to encourage the learning.

Based on the analysis of instructional media needs with sub-theme “Me and My Ambitions”, it shows that the attainment of combined materials can be used as a source of information about themselves, but it also requires the use of visual media in the form of images/photos. The existence of visual media has learning message that is directly related to the picture of the diversity of the child’s ambitions and how to achieve those ambitions. In accordance with the research results, Sumanto (2010) showed that students are enthusiastic in following the demonstration in the classroom by using the media of the picture display in the creative learning drawing illustration for the fourth grade of elementary school. This condition is required

by elementary school students in Indonesia to be enthusiastic about taking lessons. Therefore, it needs to be developed in the form of Ritatoon instructional media which is expected to be able to display an image of interest and realities of students’ messages about “Me and My Ambitions”.

The results of interviews with fourth grade teachers at Elementary School Purwantoro 8 Malang on November 15, 2014 stated that in learning process sub-theme “Me and My Ambitions” is not maximized in the last term. These are proven by using the media in several times only in one week. Moreover, not all classrooms in Elementary School Purwantoro 8 Malang including grade IV support the latest learning media means (e.g LCD projector), so the teachers use only the learning resources such as teacher manual and student books of Curriculum 2013. This Ritatoon media development idea is based on interviews and observations of fourth grade students who are more interested in learning to use visual media in the form of images and photos. Therefore, the development aims to produce Ritatoon products.

The purpose of this research and development, namely: (1) to produce Ritatoon media with theme “My Ambitions” sub-theme “Me and My Ambitions” in the fourth grade of elementary school which eligible according to the subject experts (lecturers and teachers of the fourth grade); (2) to produce Ritatoon media which eligible according to the media experts; and (3) to produce Ritatoon media which eligible according to the field trials (students grade IV of Elementary School Purwantoro 8). The assumptions is that learning media in the form of interesting photos will motivate students to learn. This Ritatoon product is a validated and suitable product for an alternative media learning in Curriculum 2013. The limitations of Ritatoon media development are limited to students grade IV of elementary school in the second semester, theme “My Ambitions” sub-theme “Me and My Ambitions”

learning materials 1 to 3, and Elementary School Purwantoro 8 Malang.

Ritatoon is a three-dimensional media with two sections of media devices. Sumanto (2010) says that Ritatoon consists of two parts media devices, namely: (1) basic boxes with three trenches hole where to place framed series drawings; and (2) sheet images/photos are placed or inserted in Ritatoon basic box sections. Ritatoon basic box consists of wooden boards by rows of holes to put picture frame series arranged in parallel and in sequence. This basic box consists of five or more photos/images series depending on the material to achieve the learning objectives. Ritatoon has the advantages of: (1) a simple way of making; (2) easy-to-access materials; (3) easy way to save; (4) unique and sequential placement; and (5) cultivate students' curiosity about the drawings hereinafter (Sumanto, 2010). Ritatoon can be made by available materials in the environment. Additionally, the use of Ritatoon media in teaching and learning activities does not require specific skills. Beside that, Ritatoon media has several disadvantages: (1) it tends to be used in the classical style; and (2) it has a large size and weight.

Integrated thematic learning is an applied learning in primary school today. Based on Kemendikbud 2013 (2013), the notion of integrated thematic learning is an integrated learning which uses themes. The sub-themes are taken in the use of Ritatoon media "Me and My Ambitions" with learning subjects 1 to 3. Some of the materials are taken by researchers in these sub-themes. First integrated learning subjects include Indonesian and Science, while second integrated learning subjects include Science and Arts and Culture. Second integrated learning subjects are combined with third integrated learning subjects include Indonesian and Arts and Culture. Third integrated learning subjects are combined with four integrated learning subjects include Indonesian and Mathematics. So, it can be concluded that these Ritatoon media products are expected to the fourth grade students in second semester in learning subjects 1, 2, and 3 by considering the basic competency, indicators and objectives according to the lesson plans.

II. METHODS

Ritatoon media development with theme "My Ambitions" sub-theme "Me and My Ambitions" in thematic learning grade IV of Elementary School 8 Purwantoro Malang refers to a model of development *Research and Development* (R & D) from Borg and Gall. Borg and Gall (in Sukmadinata, 2013: 168) said that research and development have ten steps in the implementation of the strategy. However, this research only applied six steps with limited consideration to the goal of producing the viable products. The steps undertaken in this research and development include: (1) the initial observation and needs analysis; (2) the early product development; (3) the initial product validation; (4) the product revisions; (5) the product trials limited scale; and (6) the final product revisions.

The product trials are intended to collect data as the basis to establish the feasibility level which consists

of the level of attractiveness and ease of operation of the resulting product. So, this stage includes test design, test subjects, data type, data collection instruments and data analysis techniques. Test subjects in this research consist of two teams, namely expert teams and users. Expert teams consist of two media experts (professors) and two subject experts (professors and teachers of grade IV), while expert users are composed of 47 students of grade IV Elementary School Purwantoro 8 Malang. The role of these experts is to validate the product as well as provide input or suggestions for the perfection of developed products, while the role of the user is to validate the product as well as provide the final assesment for developed products.

Next, the data types in this research are in the form of qualitative and quantitative data. The qualitative data were obtained based on the input, comments, criticisms, and suggestions for subjects test improvement, especially media and subject experts (professors and teachers of fourth grade). This qualitative data are notes, comments, suggestions, or written criticisms in the questionnaire at the time of product validation. Besides that, the quantitative data were obtained based on the questionnaire in the form of objective score product ratings with rating scale format. These data were also collected by questionnaire from the result assesments of the media experts, science teacher experts, fourth grade teachers, and students of grade IV. Then, these quantitative data from this closed questionnaire is analyzed by using percentage technique analysis to determine the level of product validity about the interactive evaluation.

For the data collection instruments, the questionnaire was given to expert teams and users. In other words, these can be classified into open and close questionnaire. Open questionnaire is dedicated to media and subject experts to provide feedback, suggestions, and criticisms of the initial product design, while close questionnaire is dedicated to students grade IV of Elementary School Purwantoro 8 Malang to assess with a rating scale format. The rating scale guidelines are "1" for less good / less reasonable / less appropriate / less precise / less interesting, "2" for quite good / quite reasonable / quite appropriate / quite interesting, "3" for good / reasonable / appropriate / interesting, and "4" for very good / very reasonable / very appropriate/ very precise / very interesting.

Data analysis techniques in this research are qualitative and quantitative descriptive techniques. Qualitative assessment of the products are given by the media and subject experts. At this stage, the validator gives the score, feedback and suggestions for improvements and provide conclusions about the validity of the products with some qualifications of very feasible, quite feasible, less feasible, not feasible, and very unfeasible. From this stage, scoring result, feedback, comments, criticisms, and suggestions for improvements then analyzed descriptively and used as consideration in the product revision.

Data analysis techniques for quantitative data is the percentage of data analysis techniques. To determine the feasibility of product on the data analysis

is then interpreted by the assessment qualifications or specific eligibility criteria. A product is said to be very feasible if it reaches the minimum criteria of 81.00%, so the product can be used without going through stages of revision (Akbar, 2013).

III. RESULTS AND DISCUSSION

A. Product Results of Ritatoon Media

The development of instructional media produce Ritatoon media with sub-theme “Me and My Ambitions”. Ritatoon media is used for students of fourth grade in the second semester. This media is also used for three times with the duration of 6x35 minutes by considering the basic competencies on analysis of the curriculum. Ritatoon media consists of Ritatoon boxes, plywood boards, sheets of material, guidelines, basic competencies, indicators and learning objectives, utilization procedures and ways of media maintenance.

Ritatoon box is in the form of a wooden board sized 65 cm x 55 cm x 20 cm with strips to put 10 sheets of plywood frames in parallel. Sheets of plywood are 10 to attach the learning material sized 60 cm x 50 cm x 0.5 cm. Ritatoon sheets of material are made of banner with size of 50 cm x 50 cm. So, the total of Ritatoon media is 30 sheets of banner consists of 4 packs of 3 learning subjects, including 9 sheets of material in the package 1 for learning subjects 1, 9 sheets of material in the package 2 for learning subjects 1, 6 pieces of material on the package 3 for learning subjects 2 and 6 pieces of material in the package 4 for learning subjects 3.

First Ritatoon package of learning subjects one consist of one sheet of cover pages and 8 pages of subjects. In this package, there are several categories according to their field of works, such as various fields of transportation, art and culture, health, sports, security, sanitation, journalism and producer. Here are some examples of instructional subjects of the first Ritatoon package (Figure 1).



Figure 1
Ritatoon Package 1 Learning Subjects 1

Second Ritatoon package of learning subjects one consists of one cover sheet and 9 pages of subjects (Figure 2). In this package, there are several categories of natural and non-living natural resources. The natural

resources include: (1) household appliances (wood, rubber, rattan and bamboo); (2) clothing materials (cotton, wool, cotton, silk, crocodile leather and cowhide); (3) food (bread, jelly, cooking oil, cheese, meat, and eggs); and (4) health and beauty products (aloe vera, seaweed, fruits, honey, birds nest and goat’s milk). The abiotic of natural resources include: (1) household appliances (cutlery, gas, pots, kerosene, gasoline and cables); and (2) construction materials (gravel, clay, limestone, coral, iron, cement, sand, bricks and tile).



Figure 2
Ritatoon Package 2 Learning Subjects 1

Third Ritatoon package of learning subjects two consists of one sheet of cover pages and 5 pages of subjects. The subjects on this package include the understanding, procedures and used materials of collage and also collage crafts example. Some examples of the third package are as follows (Figure 3).



Figure 3
Ritatoon Package 3 Learning Subjects 2

Fourth package of learning subjects three consist of one cover sheet and 6 pages of subjects. The subjects cover the nature and characteristics of line, the concept of parallel lines, and the concept of inserting

line in everyday life. Here are some examples of Ritatoon media product development (Figure 4).



Figure 4
Ritatoon Package 4 Learning Subjects 3

B. Results Validation and Field Trials

Based on the field trials of Ritatoon media with theme “My Ambitions” and sub-theme “Me and My Ambitions” grade IV of Elementary School Purwantoro 8 Malang, the data in this discussion cover: (1) the data review from two media experts validation; (2) the data review from two subject experts validation; and (3) the data from field trials against 47 fourth grade students of Elementary School Purwantoro 8 Malang. In other words, the data in this discussion consist of quantitative and qualitative data from the distribution of questionnaires.

Based on products validation by media experts, most of the items of validation which includes five aspects of evaluation are: (1) the suitability of the curriculum; (2) a systematic presentation of the subject; (3) the efficiency function of Ritatoon media; (4) the clarity of Ritatoon media; and (5) the display of Ritatoon media to get a score of 3 and 4 from the validators. There are also some advices and suggestions, such as: (1) each part of various kinds of work should be presented in chronological order; (2) some of the photos is less clear to be understood, so that it needs to be fixed; (3) the font size should be enlarged to be visible to all students; and (4) the pictures would be better if the is any information.

Second validation is conducted by two subject experts including lecturers and fourth grade teachers. Data from product validation by media experts which includes five aspects of evaluation are: (1) the suitability of the curriculum; (2) a systematic presentation of the subject; (3) the efficiency function of Ritatoon media; (4) the clarity of Ritatoon media; and (5) the display of Ritatoon media to get a score of 3 and 4 from the validator. Besides that, there are some advices from the product validation by media experts, like: (1) the development of indicators has not reached the target cognitive, affective and psychomotor; and (2) the description of the assessment should be measurable.

At the time of product trials, the students were given the instruction about Ritatoon media usage and contents of learning subjects. Furthermore, the students were given the opportunity to describe and explain the contents of the message on each piece of image in Ritatoon box interchangeably. The learning atmosphere conditions of product trial is shown in the figure below (Figure 5).



Figure 5
The Students Observed the Teacher through the use of Ritatoon Media

The teacher also provided the opportunities for students to explain the material in front of the class. The students looked excited to explain and describe the material in accordance with his own knowledge. Other students were also actively participating in the learning, the students listened and paid attention to the explanation enthusiastically and raised his hand to answer the questions. The learning situation is shown in the picture below (Figure 6).



Figure 6
The Student Explained the Content of the Message in Ritatoon Media

From the limited trial of Ritatoon media implementation, it shows good outcomes learning in accordance with the implementation of the scientific approach. This is in accordance with Zaini (2007) that the active learning students are invited to participate in all of the learning process, not only mentally but also physically, so the learning outcomes can be maximized.

For about 25 students fourth grade of Elementary School Purwantoro 8 Malang stated that Ritatoon media is an interesting media for use in

learning. Nine students stated that Ritatoon media is less attractive and also claimed that the picture is less big and less obvious, while thirteen students did not give any comments. Based on the evaluation data at the end of the study, the data showed that **KKM** of Elementary School Purwantoro 8 Malang is 75. Seven students have score below the KKM while 39 other students have complete score. So, the average value is 82.41. These data indicate that Ritaton product can be easily used by the students.

C. Results Analysis of Ritatoon Media Product Development

This data validation analysis is the result of data processing from two validator media experts. This products validation cover the learning subjects 1, 2 and 3 at sub-theme “Me and My Ambitions”. Each lesson includes five aspects of evaluation: (1) the suitability of the curriculum; (2) a systematic presentation of the subject; (3) the efficiency function of Ritaton media; (4) the clarity of Ritatoon media; and (5) the display of Ritatoon media. For the first study, an average percentage is 94.6% of all aspects. For the second study, an average percentage is 94.7% of all aspects, while an average percentage for the third study is 94.7% of all aspects. So, the average from all over the results validation is 94, 6%. It can be concluded that Ritatoon media is “very decent” criteria. This product validation stage can be proceed further into product trials.

Next, this data validation analysis is also the result of data processing from two validators of subject experts. An average percentage for the first study is 91.4% of all aspects while an average percentage for the second study is 91.3% of all aspects. The last, an average percentage for the third study is 93.7% of all aspects. So, the average percentage is 91.4%. It can be concluded that Ritatoon media is in “very decent” criteria. Thus, it can be proceed to the next stage of field trials. The advice from the validator still be taken into consideration in revising the product. In line with the advice, Anggraini (1014) states that to achieve the learning goals, the media should provide benefits, in this case the benefits of improving the learning outcomes to be more meaningful.

Field trial data analysis is 89.4% in the first study, 88.8% in the second study, and 86.9% in the third study. The average percentage of field trial is 88.3% with “very decent” feasibility level. The data can be interpreted that the product have reached the criteria. On the results of research related to the use of visual media expressed by Rumidjan, et al. (2013), the use of hand puppets media on the listening skills of fairytales in Javanese language for third grade elementary students, the average initial capability is 64.37 and the average end capability is 91.04. So, it can be said there is the influence of hand puppets to the ability of learning outcomes in elementary students.

Based on the results of the data validation analysis product, the media has reached the criteria for a good development of instructional media. This is because of valid and reliable Ritatoon media. This is in line with Sudjana and Rival’s statement (2009) which

states that the minimum requirement of instructional media is said to be good if it has accuracy and permanence qualifies. Based on previous research, Ritatoon media is in accordance with the results of Sadiman’s research (2010: 17-18) which says that the use of instructional media can make students more active, cheerful dan easy to understand.

IV. CONCLUSIONS

This assessment of products is based on the data analysis of product validation results. This product assessment is also a study of the data and data analysis. Ritatoon media development with theme “My Ambitions” and sub-theme “Me and My Ambitions” apply the subjects in Curriculum 2013 in accordance with the curriculum’s core competencies, indicators, learning objectives and learning ability of students. An average percentage of data analysis from the subject experts is 94.6% in learning subjects 1 to 3. The results of the analysis associated with the percentage included in the feasibility of the products. Besides that, an average percentage of data analysis from the subject experts is 92.1%. The result of field trials is 89.4% in the first study, 88.8% in the second study, and 86.9 in the third study. So, an average percentage of the overall field trials is 84.82%.

Based on the validity of the achieved level product indicates that the product has reached the eligibility criteria of “very decent”. Thus, we concluded that the product is fit for use as a complementary medium for learning. However, even though the products have been feasible without the revision, the product remains through stages of revision based on the advices and suggestions.

Suggestions for product benefits to be more optimal such as: (1) although it has developed in the use of media as a companion study, it still needs other relevant media to support the achievement of learning goals in sub-theme “Me and My Ambitions”; and (2) ritatoon products should use standard-sized boxes, plywood and images in order to reach the vision of all students in the classroom.

Suggestions for product aimed at: (1) teachers and other educational institutions that are willing to take advantage of one of Ritatoon products as companion media in learning; and (2) development of Ritatoon media through seminars and further publication. Therefore, suggestion for further development is that Ritatoon products should be developed in learning subjects 4 to 6 sub-theme “Me and My Ambitions” grade IV second semester as well as developed additional products that can be used to learn this sub-theme.

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