Revitalization of Integrated Thematic Material to Improve the Learning Process

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Abstract

The aim of this research is to improve students' abilities in the learning process, especially in integrated thematic learning material in class IV. This research method is Research and Development (R&D). This development research procedure uses the ADDIE model. This research instrument is a validation questionnaire for material experts, media experts, language experts and practitioner experts and interview sheets for students and class teachers. The results of this research are: (1) Revitalization of integrated thematic material to improve the learning process for class IV with theme 2 "Always Save Energy". (2) The level of validity of the integrated thematic material revitalization module for class IV Elementary School obtained from the material expert validator with a score of 3.6 is in the very valid category with a percentage of 72%, the media expert validator with a score of 4.3 is in the very valid category with a percentage of 86 %, language expert validators with a value of 4.82 are in the very valid category with a percentage of 96.3%. (3) The level of practicality of the module developed with expert practitioners carried out by 1 class IV B elementary school teacher was obtained with a score of 4.8, including the very practical category. The conclusion of this research resulted in a product in the form of teaching materials for a revitalization module of integrated thematic material for class IV elementary schools. which is suitable for use in the learning process.

Keywords: Module Development; Revitalization of Integrated Thematic Material; Integrated Thematic Learning Theme 2 Subtheme 1

INTRODUCTION

Achieving student competency in the teaching and learning process is a measure of learning success. This success can be seen from two indicators, namely student activity during teaching and learning and the learning outcomes obtained by students at the end of learning (Najib & Elhefni, 2016). Indicators of activeness include students being enthusiastic in learning, answering questions asked by the teacher, doing work in front of the class. Meanwhile, student learning outcomes can be seen from their assignments and daily test scores (Fahmi & Hidayat, 2014). The changes that will be implemented are expected to bring changes to the learning model and provide the widest possible space for expression for students. The 2013 curriculum has four assessment aspects, namely the knowledge aspect, skills aspect, attitude aspect and behavioral aspect. In the 2013 curriculum, especially in learning materials, there is material that has been streamlined and material that has been added.

The 2013 curriculum forms a series of solutions to the curriculum that was created in 2004 which is based on abilities (competencies) and then continued with the 2006 curriculum. The 2013 curriculum has been implemented since the 2013/2014 academic year. The curriculum changes aim to continue the development of educational unit level courses launched in 2006 covering attitudes, knowledge and skills in an integrated manner (Bunglai, 2015).

Thematic learning is learning where there are several subjects that are interconnected and related to a theme (Kristiantari, 2014). The thematic learning principle places more emphasis on the process of applying learning while doing something (Yohani et al., 2014). So that thematic learning can be said to be a means of developing students' abilities and skills in learning and understanding learning material according to the learning theme that is being applied to learning. The implementation of thematic learning as a learning model is expected to open up a wide space for students to experience a more meaningful, interesting and enjoyable learning experience. Because children can develop a sense of interconnectedness or mutual need between one experience and another or one knowledge and another and/or between knowledge and experience. Apart from that, this learning opens up opportunities for students to be able to develop the most appropriate strategies and methodologies. Because the curriculum plays an important role and key (Mahmud, 2013). Because it is related to determining the direction and content of the educational process, which ultimately determines the type and qualifications of graduates of an educational institution. Where the curriculum also concerns educational implementation plans both within the classroom, school, regional, regional and national scope. Everyone is interested in the curriculum, because we as parents, community members, as formal or informal leaders always hope for better growth and development of children and the younger generation.

Integrated thematic learning, apart from learning that is easy for students to understand, aims to familiarize students with high-level thinking, which requires students to learn to think (learn to think) and how to learn (how to learn) through the experiences they have (learning experience).) (Supriatin, 2013). Thematic learning can also be interpreted as a way to get students used to thinking, especially at a high level, so that when learning takes place students will not find it difficult to understand the learning material being provided by the teacher, and students can also get used to the learning process (Jannah, 2016).

The implementation of thematic learning as a learning model is expected to open up a wide space for students to experience a more meaningful, interesting and enjoyable learning experience (Verrawati & Mustadi, 2015; Rahmawati, 2015). Because children can develop a sense of interconnectedness or mutual need between one experience and another, or one knowledge and another, and/or between knowledge and experience. Apart from that, this learning opens up opportunities for students to be able to develop the most appropriate strategies and methodologies. The selection and development of the learning strategies used must consider suitability with previously selected themes or with other subjects. And, teachers are required to be more creative and innovative to create a learning atmosphere that leads students to understand the realities of life (context) that they live both regarding themselves as individuals and in relation to their family, community, environment and natural surroundings.

Based on the description above, we can conclude that learning using modules is learning that can attract students' attention in learning because the modules used are made very interesting so that students are interested in the use of modules during the learning process using modules. When using the module, students can also be enthusiastic about learning because in the theme there are many pictures that can attract the student's attention, so students have curiosity about the materials in the module and it can be said that integrated thematics can have a positive influence. positive in ongoing learning activities.

Students' success in learning cannot be separated from their cognitive abilities. This cognitive assessment requires teachers to develop cognitive assessments, which of course are less than optimal in the cognitive assessments that have been made (Rijal & Bachtiar, 2015). Cognitive ability is a student's knowledge ability such as the ability to remember or memorize, understand, apply, analyze and evaluate. So the cognitive assessment is carried out by the teacher which aims to measure the level of achievement and abilities of students according to the aspects of students' cognitive abilities.

In learning themes/topics are given to combine the content of the curriculum as a comprehensive

unit, the differences in students' understanding and linking several learning activities will share meaningful experiences with students. So themes are also a forum for students to develop abilities and skills in learning both in the process and learning outcomes and themes can also train students' high-level thinking abilities which are really needed during the learning process.

Educators carry out assessments of student learning outcomes in the form of tests, observations, assignments and other forms required by educators (Baharun, 2016). Assessment of learning outcomes can also be used for students with the aim of measuring students' ability to learn during one semester, from the results of which teachers can see whether their students' abilities are good or not in learning and know what the teacher should do to improve their students' abilities. in the learning process so that learning can be carried out in accordance with the learning objectives that have been created.

Here the researcher is interested in creating a module regarding an integrated thematic material module which aims to develop the material using methods or processes that have been created by the researcher, but for the material itself the researcher adapts the material created to material that is already in the book, only the researcher makes more effort. to improve learning methods that can attract students' attention. A module is a learning medium in the form of teaching materials that contains materials that will be taught to students, where using this module can make it easier for students to understand the learning material provided. In the opinion of Novita & Rochmawati, (2014) a module is a printed teaching material that is arranged systematically in language that is easily understood by students according to their level of knowledge and age, so that they can learn on their own (independently) with minimal help or guidance from educators. . According to Yanti et al., (2016) thematic modules are printed teaching materials in the form of a set of teaching materials consisting of a series of learning activity units arranged systematically, promising subject matter and various fields of study thematically and integrated between one subject and another. through the use of contextual themes.

"Based on this explanation, the aim of this research is to improve students' abilities in the learning process, especially in integrated thematic learning material in class IV theme 2 (always save energy) subtheme 1 (energy sources)."

RESEARCH METHODS
Research Design
The research used by researchers is included in research and development (R&D) research which will later produce a product. The Research & Development method is a research method used to produce a particular product and test the effectiveness of the product. The development model used in this development is the ADDIE Model which is a systematic learning design model. This development research uses the ADDIE development model (analysis, design, development, implementation, evaluation).

Research Target/Subject
The subjects of this trial were grade IV elementary school students. This trial was carried out in small groups and large groups, with the aim of looking at the use of small groups to see its suitability and achievability, while in large groups the aim was to see its practicality in the learning process. For small group trials, we can randomly select several grade IV students with varying abilities from high, medium to low abilities, while for large group trials we can use all grade IV elementary schools.

Research Procedure
In developing a product, each development model chosen has stages and procedures. The ADDIE development procedure consists of five stages, namely Analyze, Design, Develop, Implementation and Evaluate. In the process of developing thematic learning material modules using the ADDIE development method, there are several things that need to be considered. Such as analyzing needs, teaching materials and curriculum. Plan and develop thematic material modules based on the ADDIE stages. The ADDIE model was developed by Dick and Carry to design learning systems. Below are examples of activities at each stage of developing a learning model or method, namely:

a. Analyze

At this stage, the main activity is to analyze the need to develop new learning models/methods and analyze the feasibility and conditions for developing new learning models/methods. The development of a new learning method begins with a problem in the learning model/method that has been implemented. Problems can occur because the current learning model/method is no longer relevant to target needs, learning environment, technology, student characteristics, etc.

b. Design

In designing learning models/methods, the design stage is similar to designing teaching and learning activities. This activity is a systematic process that starts from setting learning objectives, designing scenarios or teaching and learning activities, designing learning tools, designing learning materials and tools for evaluating learning outcomes. The design of this learning model/method is still conceptual and will underlie the subsequent development process.

c. Develop

Development in the ADDIE model contains product design realization activities. In the design stage, a conceptual framework for implementing the new learning model/method has been prepared. In the development stage, the conceptual framework is realized into a product that is ready to be implemented. For example, if at the design stage the use of a new model/method that is still conceptual has been designed, then at the development stage learning tools are prepared or made using the new model/method, such as lesson plans, media and learning materials.

d. Implementation

At this stage, the designs and methods that have been developed are implemented in real situations, namely in the classroom. During implementation, the model/method design that has been developed is applied to actual conditions. The material is delivered in accordance with the new model/method developed. After implementing the method, an initial evaluation is carried out to provide feedback on the subsequent application of the model/method.

e. Evaluate

Evaluation is carried out in two forms, namely formative and summative evaluation. Formative evaluation is carried out at the end of each face-to-face meeting (weekly) while summative evaluation is carried out after the activity has ended as a whole (semester). Summative evaluation measures the final competency of the subject or learning objectives to be achieved. The evaluation results are used to provide feedback to users of the model/method. Revisions are made according to evaluation results or needs that cannot be met by the new model/method.

Instruments, and Data Collection Techniques

The data collection instrument used in this development research is a questionnaire. The instruments in this development are teacher interview sheets, media expert validation questionnaire sheets, language expert validation, material expert validation, and practitioner expert questionnaire sheets. Teacher interview sheets are used to dig up in-depth information regarding the revitalization of integrated thematic materials to improve student learning processes, product validation questionnaire sheets are used to see the validity of products in the form of thematic learning modules carried out by media experts, language experts and material experts. The expert practitioner questionnaire sheet was used to look at the practical aspects of using integrated thematic learning material modules for class IV Theme 2 Always Save Energy, Subtheme 1 Save Energy.

Data analysis technique

Analysis of quantitative data obtained from questionnaires. The questionnaires used are media validation questionnaires, language validation questionnaires, material validation questionnaires, teacher

practitioner expert questionnaires. The data obtained were analyzed using all aspects contained in the questionnaire, then the average value was determined. The following is the formula used:

$$R = \frac{\sum_1 n = 1 \ Vji}{nm}$$

Information:
R = Average of expert/practitioner assessment results
Vij = Score from experts/practitioners' assessment of the j criteria
n = Number of experts/practitioners who assessed
m = Number of criteria

The average results obtained are then categorized using predetermined criteria. The obtained average is confirmed by the established criteria. How to get these criteria using the following steps: a. Score range starts from 1-4 b. The criteria are divided into 4 levels, namely very valid, valid, less valid and invalid. c. The score range is divided into four interval classes.

Table 1. Categories for Determining Validity Levels

Range	Validity category
1.00-1.99	Invalid
2.00-2.99	Not valid
3.00-3.49	Valid
3.50-4.00	Very valid

The assessment of practicality is analyzed using the following formula:

$$Range = \frac{number \ of \ highest \ scores - lowest \ scores}{number \ of \ criteria}$$

To determine the highest and lowest scores from the expert practitioner questionnaire, the following formula is used:

Maximum score = highest score x number of questionnaire items x number of respondents
= 4 x 10 x 1 = 40 (falls into the very practical category)

Lowest score = lowest scale x number of questionnaire items x number of respondents
= 1 x 10 x 1 = 10 (falls into the very impractical category)

Range $= \frac{40-10}{4} = \frac{30}{4} = 7.5$

So that the determination of the level of practicality in the module being developed is as follows:

Table 2. Categories for Determining the Level of Practicality

Range	Validity Category
10-17.2	Not practical
17.3-24.8	Not practical
24.9-32.4	Practical
32.5-40	Very practical

The quantitative data will then be described through descriptive statistics, namely using the Mean (average), Mode and Median (middle value), percentage values. Mean is the average value of all data. A

mode is a set of data that appears frequently. Median is the middle value of data that has been arranged from smallest to largest.

The qualitative data analysis technique in this research was carried out on each data from teacher and student interviews in the form of information, suggestions and input regarding integrated thematic material that will be used in the learning process as well as suggestions and suggestions from validators which were carried out in a qualitative descriptive manner. With the following steps, data reduction means summarizing, sorting out the main things, focusing on the important things, presenting the data with narrative text and drawing conclusions in the form of new findings that have never existed before. In interview activities, researchers carried out (1) data reduction, interviews were conducted with teachers and students using prepared interview instruments, this aimed to obtain information regarding integrated thematic material; (2) Data presentation, from data that has been reduced and then presented and explained in descriptive form obtained from the results of responses and answers from various sources; (3) Drawing conclusions, based on the data that has been obtained and presented, it can be concluded what the responses of various sources are regarding integrated thematic material.

RESULTS AND DISCUSSION

This research is research (Research and Development). Development of integrated thematic material modules. The modules developed are based on the 2013 curriculum in class IV theme 2 "always save energy", sub-theme 1 "energy sources", learning 1. The model used in this development is the ADDIE model designed by Branch. The ADDIE development stage consists of five steps, namely (1) Analysis, (2) Planning, (3) Development, (4) Implementation, and (5) Evaluation. However, in this research the researcher only focused on the analysis, planning, development stages and each stage included an evaluation. The reason researchers use the ADDIE model is because this model is more structured and simple with a clear framework that is easy to understand. In line with Hasdi & Agustina (2016), one development model that pays attention to the basic stages of media development design that are simple and easy to understand is the ADDIE model.

Before the module is developed, researchers design things that must be prepared so that they can continue development activities at an early stage for the module being developed, such as the cover page, foreword, table of contents, instructions for using the module, KI, KD, indicators, stories. relating to energy source material, questions and assessment instruments, references and author biography. That way, the module will be more structured and systematic to develop. A module is said to be feasible if it meets 3 criteria, namely, valid, practical and effective. The ADDIE model is a valid, practical and effective module for use in the learning process. In this research, researchers only measured the validity and practicality of the electronic modules being developed. At the module development stage, researchers carried out module validation, namely validation of material experts, media experts and language experts. After the validator provided an assessment, the researcher analyzed the results provided, namely the first validator was a material expert with an average of (3.6) in the very valid category. Both media experts with an average of (4.3), a very valid category. The three linguists with an average of 4.82 categories are very valid. However, there are several suggestions and revisions from the validator, the researcher has made revisions according to the suggestions/comments given by the validator. So, it can be concluded that the module developed has a very valid category.

Apart from that, the researcher also tested the practicality to find out the practicality of the module developed with validators by an experienced teacher in class IV B Elementary School, namely Mrs. MU as a practitioner validator. After the validator gave an assessment, the researcher analyzed the results given by the validator, namely with an average of 4.8 very practical categories. There are no suggestions/comments from validators. So it can be concluded that the integrated thematic material revitalization module developed can be used in learning in the very practical category.

The product developed contains learning that is in accordance with the 2013 curriculum. Basic Indonesian Language Competency 3.2. Observing the connections between ideas obtained from oral, written or visual texts, 4.2 Presenting the results of observations about the connections between ideas in

writing. Meanwhile, in KD Science 3.5 Identifying various energy sources, changes in energy forms, and alternative energy sources (wind, water, sun, geothermal, fuel, organic and nuclear) in everyday life, 4.5 Presenting reports on the results of observations and searching for information about various changes in forms of energy. With direct experience, meaningful learning is created.

CONCLUSION

Based on the conclusions of this research regarding the revitalization of integrated thematic material for class IV elementary schools which has been carried out, it can be concluded that using the ADDIE model only reaches the development stage and the level of validity of the integrated thematic material revitalization module for class IV elementary schools obtained from the validator material expert with a score of 3.6 is in the valid category with a percentage of 72%, media expert validator with a score of 4.3 is in the very valid category with a percentage of 86%, language expert validator with a score of 4.82 is in the very valid category with a percentage of 96.3%, validator expert practitioner carried out by one class IV B elementary school teacher with a score of 4.8, including the very practical category with a percentage of 96%.

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