# Development of Matryoshka Animal Media of Thematic Learning for Sixth Grade of Elementary School

Jurnalita Rose Anggraeni[1*], Arina Restian[1], Belinda Dewi Regina[1]
[1]PGSD, FKIP, University of Muhammadiyah Malang, Malang, Indonesia
*jurnalita98@gmail.com

## Abstract

The research of matryoshka animal media development is established based on the problem that exists which is the students' characteristic of inability to focus on and the teacher who got difficulty in giving understanding upon the teaching material toward the students. Therefore, the researchers create a concrete tool for the learning targets. The aims of this research are: (1) to know and describe the development of the matryoshka animal media in thematic learning in grade IV theme 6 sub-theme 2 in SDN Ketawanggede Malang; (2) to know and describe the application of matryoshka animal media in thematic learning in grade VI theme 6 sub-theme 2 in SDN Ketawanggede Malang. This research used ADDIE developmental model. This developmental ADDIE model has 5 stages which are analysis, design, development, implementation, and evaluation. The data analysis technique used in this research is quantitative and qualitative to know the applicable product that has been developed. This research was done in grade IV of SDN Ketawanggede. The result from this developmental research of matryoshka animal media on thematic learning in grade IV theme 6 sub-theme 2 based on the scoring percentage which is (1) the percentage of material validation is 85% within a valid category, and master of media is 88% within a valid category, and right to be used. While the percentage of teachers' responses is 100% and students' response from 25 students shows 96% and pass the criterion. Based on the percentage matryoshka animal media is passed and right to be implemented.

**Keywords:** *development; matryoshka animal media; thematic learning*

## 1. INTRODUCTION

The development of science and technology has brought very significant changes to human life, both in the economic, social, cultural and educational fields. Therefore, an educator must have a way of teaching with a creative learning model that is based on the curriculum. In essence, learning is a process in which students interact with learning resources, with students, and with educators, so that learning activities will become more meaningful for students by doing them in a comfortable and safe environment for students (Majid ,2017: 15).

Thematic learning is an integrated learning that combines several subjects in one unit by being packaged into a theme that emphasizes the mindset of

students by linking several subjects which will provide meaningful experiences to students, and thematic learning that focuses on centering and involving students actively. active in learning activities and the success of implementing the curriculum, namely with learning media that is able to support students in studying and studying educational goals independently, both in student learning activities. In general, it is natural that the role of a teacher who uses instructional media is very different from the role of an "ordinary" teacher (Anderson in Sukiman 2012:28).

Learning media in the form of teaching aids as intermediaries or introductory sources of messages that are able to stimulate knowledge and assist in delivering material to students (Arsyad, 2011: 3; Nurzayyana et al., 2021). Because the media is one that is important and needs to be studied and mastered by teachers or prospective teachers, so that they can convey subject matter to students well. According to Azhar Arsyad in Yaumi's quote, there are reasons for the importance of using media in learning, namely: (1) improving the quality of learning, (2) demands for a new paradigm, (3) meeting market needs, and (4) a global education vision (Yaumi 2018: 13-14)

By using media the teacher will find the nature of the media, namely channeling messages that can stimulate the mind so that the learning process occurs (Usman, 2006:11). And the advantage of the learning media is that it helps teachers and teachers in conveying learning messages and is faster and easier to catch by students. In this regard, the role of the media is very important in learning where the current development of the media is no longer seen as just a tool in learning but is an important part of the education and learning system. Therefore, teachers in teaching and learning activities also need teaching aids in the form of learning media (Azman et al., 2014)

The benefits of the media themselves are very beneficial for educators and students that children will be easier to accept material with concrete objects (real) than abstract ones (Daryanto, 2016:13). From the results of observations and interviews conducted on October 18, 2019 that the media Learning has a very big role in the learning process because this school has implemented the 2013 curriculum and the limited facilities and infrastructure or learning media. So for teachers and students learning media has a very important role in the process of learning activities.

Previously, in the learning process, teachers used LCD projectors, pictures and student books, while LCD projectors, which were the main media in learning, often encountered problems so that teachers would find it difficult to convey material without media. Meanwhile, students have an interest in concrete media during the learning process, because students will have a more active role and have direct interaction with learning media. And with learning media

it can increase the interests and desires of new students, stimulate and arouse student motivation and lead to psychological influences ont students (Hamdani, 2011:243).

However, not all objects in the student's environment can be used as learning media. Meanwhile, in theme 6, sub-theme 2 in class IV requires media that can make students active and creative. So regarding this problem, the researcher decided to develop a thematic learning media that has the concept of matryoshka packaged in a cupboard. The media is Matryoshka Animal media used in theme 6 sub-theme 2 in class IV.

This study aims to: 1) Identify and describe the development of Matryoshka Animal Media in the thematic learning of class IV theme 6 sub-theme 2 at SDN Ketawanggede Malang. 2) Knowing and describing the feasibility of Matryoshka Animal media in class IV thematic learning with theme 6 sub-theme 2 at SDN Ketawanggede Malang.

Matryoshka Animal media has content in the form of thematic lessons consisting of Indonesian language and science subjects. The concept of the Matryoshka Animal media itself is taken from a typical Russian doll, namely a matryoshka doll which is modified in the form of an animal so that it becomes a media that is an imitation of the original animal. The outer appearance of the matryoshka animal media itself is packaged in a small cupboard measuring 40 cm x 30 cm x 110 cm with 1 drawer and 3 lockers.

This research has theoretical and practical benefits. Theoretically, this research is a research that contributes an idea to produce a product on theme 6 sub-theme 2 class IV. while practically it can facilitate student learning and make teachers have skills and creativity in the learning process.

## 2. METHODS

The type of research used is Research and Development (R&D). Endang Mulyatiningsih (2013: 161) mentions that research and development aims to produce new products through the development process. Research and Development (R&D) is a method that examines the feasibility of a product using the ADDIE research model research procedure (Analyze, Design, Development, Implementation, Evaluation) (Figure 1).
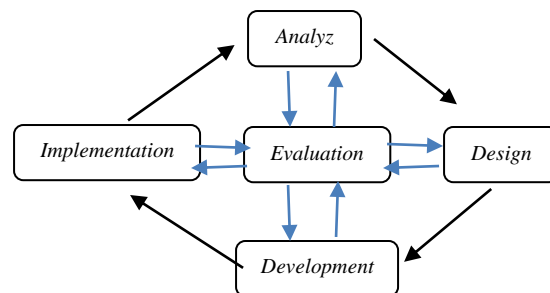


Figure 1. ADDIE Model Stages (Sugiyono, 2019)

The analysis stage is carried out by analyzing the real conditions that exist in the field so that they can find suitable products to be developed, at this stage conducting interviews and initial observations which are used to conduct needs analysis with fourth grade teacher

resource persons. The design stage is making designs for media which will later be developed by designing media designs and designing instruments. The development stage was carried out by developing Matryoshka Animal media in thematic learning of theme 6 sub-theme 2 learning 1 class IV. At the implementation stage, the researcher applies the product that has been developed and has gone through a validation test to media expert lecturers and material expert lecturers. The application of the media was then applied at SDN Ketawanggede Malang to determine the effectiveness of the media. The evaluation stage is carried out by assessing each activity that has been carried out by researchers as well as student and teacher response questionnaire sheets to determine the quality and feasibility of the developed learning product or media, so that the data that has been obtained in the evaluation is used as a reference for researchers in perfecting and completing product.

The research was conducted at SDN Ketawanggede Malang Jalan Kerto Leksono No. 93, Lowokwaru District, Malang City, which has been carried out in class IV, totaling 25 students.

The research technique was carried out in the form of observation, interviews, questionnaires and documentation obtained from class teachers and also students at SDN Ketawanggede Malang. And then processed by using data analysis techniques in the form of qualitative and quantitative.

## 3. RESULTS

According to the Law of the Republic of Indonesia Number 18 of 2002, research is an activity carried out in accordance with scientific methods and rules in a systematic manner to obtain data, information, and information related to understanding and proof of the truth or untruth of an assumption and/or hypothesis. in the field of science and technology by drawing scientific conclusions for the purposes of technological and scientific progress.

The Matryoshka Animal Media is implemented in the classroom by stimulating students about poetry, then the teacher distributes poetry sheets in the lockers and guides students to read the poetry text with good pronunciation and intonation with each group having a listening task. then the teacher again stimulates students about metamorphosis and conveys material about metamorphosis by presenting the Matroshka Animal media by demonstrating the stages of metamorphosis with Matryoshka Animal dolls (Table 1).

Table 1. *Matryoshka Animal Media*

| FIGURE | DESCRIPTION |
|---|---|
|  | Cupboard as a place for storing Matryoshka Animal media which is arranged in each part of the cupboard and locker as a place to store poetry collections and |

| | |
|---|---|
| | instruction books for using Matryoshka Animal media. Next to the wardrobe is a flexible table with wooden supports. |
| | A frog-shaped matryoshka medium that exhibits complete metamorphosis |
| | A butterfly-shaped matryoshka that exhibits complete metamorphosis |
| | Grasshopper-shaped matryoshka media showing incomplete metamorphosis |
| | A collection of poems that will be given to students at random, then students understand the content and meaning of the poem |
| | Media user manual for users who will use media |

The results of research and development of Matryoshka Animal media are as follows:

## a. Material Validation

The validation of the material expert lecturers aims to determine the level of feasibility of the indicators or aspects of the validity of the material that has been developed by the researchers (Figure 2).
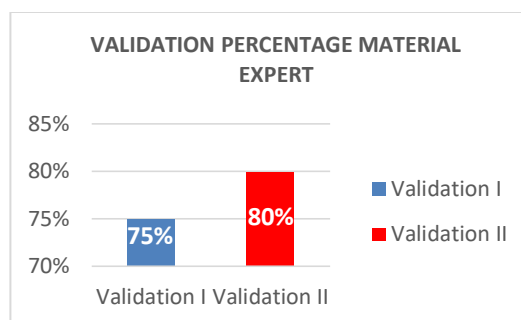


Figure 2. Results of Material Expert Validation

Based on the data above, the results of the material validation test get a total score of 27 out of a maximum score of 36 with a percentage of 75% with good or valid criteria. From the results of the material expert validation test, the material expert lecturer suggested that the material for the Matryoshka Animal media may be used and carried out with revisions, namely writing foreign languages and terms, images, avoiding language abbreviations, including sources, punctuation marks, and avoiding copy paste

Then revisions are made to the material expert which aims to determine the level of feasibility of the indicators or aspects of validity (valid and invalid) in the material that has been developed after making improvements according to what has been suggested by the material expert validator lecturer with comments and suggestions to make improvements in writing foreign languages and terms, pictures, avoid language abbreviations, include sources, punctuation marks, and avoid copy paste.

The results of the initial validation and revision have increased from 75% to 88%. The Likert scale validity number reaches 73%-88% which is declared valid (Tegeh et al., 2014:83).

### b. Media Validation

This validation by media expert lecturers aims to determine the feasibility of the indicators or aspects of validity (valid or invalid) on the Matryoshka Animal media developed in the form of media designs or designs.
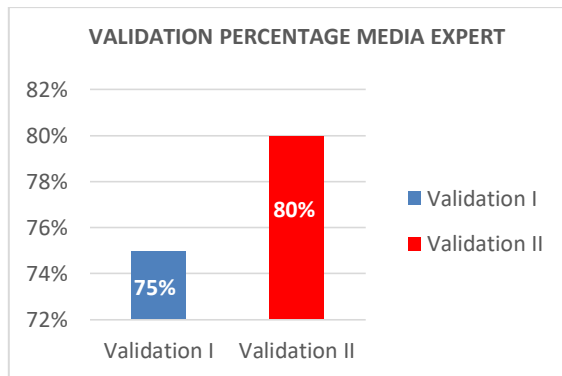


Figure 3. Product validity from media experts

Through the initial results after conducting a media validation test that has been carried out by researchers, namely getting a total score of 44 out of a maximum score of 60 and with a percentage of 73% with less valid criteria. From the results of the validation test, media experts gave suggestions that Matryoshka Animal media should not be used and carried out and media expert lecturers asked researchers to revise. The revisions that were given were revisions for flexible table supports, clarified media labels/naming, improved Matryoshka Animal manuals.

The results of the media validation test after the revision got a total score of 51 out of a maximum score of 60 and with a percentage of 85% with good or valid criteria. So based on the results of the criteria, the media can already be used in learning and can be applied in elementary schools.

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### c. Appropriateness

By implementing the research, the researchers tested the Matryoshka Animal media to answer the problem formulation based on the Student and Teacher Response Questionnaire. Following are the results of student and teacher responses after conducting a trial:

### Teacher's Response

Below are the results of the assessment of the response questionnaire given by the fourth grade teacher which aims to find out the teacher's response as well as assessments and suggestions on the application of Matryoshka Animal media used in thematic learning Theme 6 (My Dreams) Sub-theme 2 (My Images Are Awesome) Learning 1 class IV

The results of the teacher's response to determine interest in the Matryoshka Animal media that has been developed which scores 32 scores out of a maximum number of 32 scores and gets

a percentage of 100%. If viewed based on the eligibility criteria, it is included in the very good category. The advice given by the teacher is to maximize its implementation so that all students participate in the use of media so that each student gets direct experience and explores Matryoshka Animal media equally.

### Student response

Below are the results of the assessment of the responses of students regarding the student's response to the Matryoshka Animal media that has been developed and used in thematic learning Theme 6 (My Dreams) Sub Theme 2 (My Images Are Awesome) Learning 1 class IV

Based on the results of student responses from the graphic image above, to find out the student's response to the Matryoshka Animal media that has been developed which has a score of 2,360 from a maximum number of 2,500 scores and gets a percentage of 94%.

## 4. DISCUSSION
### a. Development of Matryoshka Animal Media

Based on the data that has been obtained by researchers regarding the Matyoshka Animal media in Class IV Thematic Learning Theme 6 (My Dreams) Sub-theme 2 (My Images Are Awesome) using the ADDIE model through 5 stages, namely analyze, design, develop, implement, and evaluate (Branch, 2009:2). This model is used because it is easy to learn and also

an effective and dynamic model to support the research conducted (Warista, 2011: 7).

Through the initial stage, namely the analysis carried out by observation and interviews to determine the initial needs that exist in SDN Ketawangggede Malang in class IV. Learning media has a very important role in learning activities, because the existence of learning media will make it easier for teachers to convey abstract material and knowledge will become abstract if the delivery is only in verbal language which will make it difficult for students to catch their understanding, Haryono (2015: 1) 48-49). So based on the analysis that has been carried out in the study of Theme 6 (My Dreams) Sub-theme 2 (My Images Are Awesome) the teacher has not fully used concrete objects as a medium to support students in learning activities and support to understand the material. And learning media must be able to provide a pleasant experience and can meet the needs to be able to increase student learning motivation. (Ratnaningsih & Nastiti, 2018).

The design stage carried out is to design the media to be developed, namely Matryoshka Animal media. In addition to media design, at this stage also perform the manufacture of instruments that will later be used by researchers to determine validation tests and questionnaires to determine the feasibility of the developed media.

The development stage continues from the design stage which is then tested for feasibility validation to the

validator lecturers, material experts and media experts. The results of the material expert validation test before and after the repairs were carried out were obtaining a total score of 27 out of a maximum score of 36 and with a percentage of 75% that was included in the good or valid criteria. Then it was continued with the revisions made by the researchers to test the validity of getting a total score of 32 out of a maximum score of 36 and with a percentage of 88% that is included in the good or valid criteria. For the initial media validation test, it got a total score of 44 out of a maximum score of 60 and with a percentage of 73%, which was included in the good or valid criteria. Then it was continued with revisions made by researchers to test the validity of getting a total score of 51 out of a maximum score of 60 and with a percentage of 85%, which is included in the good or valid criteria.

After carrying out the validation stage with the results that have been obtained for the media to be implemented, the media is feasible to be tested. The implementation of the media is carried out to determine the feasibility of the media that has been developed which will later be taken from the user response questionnaire, namely teachers and students. The results of the teacher's response to determine interest in the Matryoshka Animal media that has been developed which scores 32 scores out of a maximum number of 32 scores and gets a percentage of 100%. If viewed based on the eligibility criteria, it is included in the very good category. And based on the results of student responses from the table above, to find out the student's response to the Matryoshka Animal media it has been developed which gets a score of 2,360 from a maximum number of 2,500 scores and gets a percentage of 94%.

At the evaluation stage, it is carried out through analysis to media implementation. Evaluation of the analysis is carried out based on suggestions by the supervisor. At the design stage, evaluation is carried out based on themes, sub-themes, basic competencies, indicators, materials that will later be used for media and determine the product to be developed. Evaluation at the development stage is carried out by material expert validators and learning media experts which aims to determine the validity of the media that has been developed. Evaluation at the implementation stage was carried out by involving 25 students and teachers to determine the feasibility of the media using the Matryoshka Animal media response questionnaire in learning activities.

### b. Appropriateness of Matryoshka Animal

Eligibility data can be obtained from the validity aspect of conducting validation tests and responses obtained from teacher and student response sheets and student learning outcomes. Below is a description of the feasibility aspect:

## Validity

The data that has been obtained by the researcher aims to determine the validity aspects obtained when conducting the validation test of materials and media to the validator lecturers, material experts and learning media experts. The results of the material expert validation test before and after the repairs were carried out were obtaining a total score of 27 out of a maximum score of 36 and with a percentage of 75% that was included in the good or valid criteria. Then it was continued with the revisions made by the researchers to test the validity of getting a total score of 32 out of a maximum score of 36 and with a percentage of 88% that is included in the good or valid criteria. For the initial media validation test, it got a total score of 44 out of a maximum score of 60 and with a percentage of 73%, which was included in the good or valid criteria. Then it was continued with revisions made by researchers to test the validity of getting a total score of 51 out of a maximum score of 60 and with a percentage of 85%, which is included in the good or valid criteria. Aspects of the validation assessment that have been assessed are then accumulated using the validity formula and if the results are 73%-100% then the material and media are categorized as good and deserve to be tested on students.

## Appropriateness

The results of the feasibility can be obtained through data from teacher and student responses. It is proven that one of the benefits of learning media is to present messages and information to improve learning processes and outcomes to provide the same experience to students and to motivate students in learning (Haryono, 2015: 51). Based on the results of user responses, namely from teachers and students after using Matryoshka media in Theme 6 Aspirations Sub-theme 2 The Great Aspirations of Learning 1 in class IV that media development is very helpful in the learning process. The results of the teacher's response to determine interest in the Matryoshka Animal media that has been developed which scores 32 scores out of a maximum number of 32 scores and gets a percentage of 100%. If viewed based on the eligibility criteria, it is included in the very good category.

The results of the student response questionnaire totaling 26 people but 1 who did not enter so that it became 25 people, by knowing the students' responses to the Matryoshka Animal media that had been developed which got a score of 2,360 out of a maximum number of 2,500 scores and got a percentage of 94% If viewed based on the criteria eligibility is included in the very feasible category. The results of the teacher's own response questionnaire stated that it was very feasible to be used in the learning process.

Comparison with previous research entitled "Improving Understanding in Thematic Learning of My Goals Theme Using Hand Puppet Media for Class IV Students of MI Darussalam Sidodadi

Taman Sidoarjo" by Yuni with the results that hand puppet media can increase students' understanding of teacher activities by doing two times stages in thematic learning Then in the research entitled "Development of Matryoshka Box Learning Media as Media Stories in Science Learning Food Chain Materials in Class IV" by Elya with the results of developing matryoshka box learning media can add student experience and provide student motivation in the learning process. And Audrey entitled "Changing Perceptions of Unpopular Animals Through Facts, Poetry, Crafts, and Puppet Plays" the result of this research is to be able to introduce and provide direct experiences well through poetry, crafts and puppets. Compared with the Matryoshka Animal media with the results of research by developing the Matryoshka Animal media and an assessment of the feasibility of the Matryoshka Animal media this media can provide direct experience to students with the advantages of attractive designs and can also interact directly with students playing an active role and is a medium for thematic learning.

So it can be concluded that the development of Matryoshka Animal media in Class IV Thematic Learning Theme 6 (My Dreams) Sub-Theme 2 (My Images Are Awesome) Learning 1 is feasible to use. And the response of students when learning activities are carried out students are very interested in the Matryoshka Animal media and learning activities become more effective and students are actively involved in the learning activities carried out.

## 5. CONCLUSION AND RECOMMENDATION

The conclusion from the development of Matryoshka Animal media passed the validation stage of experts by getting a percentage of 88% material experts and 85% media experts with valid categories for use and the feasibility of matryoshka animal media by processing data from teacher questionnaires and students getting a percentage of 100% from teacher questionnaires and 94 % of student questionnaires with categories suitable for use in the learning process.

Suggestions given to teachers are expected that Matryoshka Animal media can be used when delivering material and become one of the references for teachers to facilitate the delivery of material on Sub-theme 2 and interesting learning and for other researchers. It is hoped that further researchers can develop by providing more innovative thematic learning media.

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