

# Media Development of the Map of the Board of Indonesia Map Board for Learning

Dienta Aditama Kurnia <sup>1, \*</sup>, Murtiningsih <sup>1</sup>, Putri Mahanani <sup>1</sup>

<sup>1</sup> *Elementary School Teacher Education, Faculty of Education, Universitas Negeri Malang, Malang, Indonesia*

\* *Corresponding author. Email: dienta07kurnia@gmail.com*

## ABSTRACT

This study aims to produce hanging maps of Indonesian media for grade V students of Public Elementary School (SDN) Kesatrian 2 Malang, Indonesia, which are suitable according to media experts, material experts and user experts. This research was conducted because the Indonesian media map that displays the names of ports in Indonesia does not yet exist in social studies learning in class V SDN Kesatrian 2 Malang. This type of research is Development Research, using the Borg & Gall Model. Data collection instruments used in the form of a media feasibility questionnaire and tests. Data analysis techniques used descriptive qualitative analysis to analyze the results of the media feasibility questionnaire and quantitative descriptive analysis to analyze test result data on learning by using hanging map media. The results showed an increase in student learning outcomes about the names of ports in Indonesia by using hanging maps of Indonesia. The average results of media eligibility from media experts, material experts and user experts are said to be feasible. On the average results of the feasibility of the media obtained a percentage of 89.37% by media experts, 95% by material experts, and 90% by user experts. On student learning outcomes there was also an increase of 24.92% from the percentage of 55.05 before using the hanging map media in Indonesia, to 79.97 after using the hanging media map on Indonesia.

**Keywords:** media map, hanging map of Indonesia, development, primary school

## 1. INTRODUCTION

Almost every day humans do learn activities. Learning activities carried out by humans are basically a series of systematic and dynamic processes that aim to change human behavior. According to Skinner [1] explains that learning is a process of adaptation (behavior adjustment) that takes place progressively. This learning process takes a long and gradual, just as when someone learns to say a difficult word, he needs to recite the words several times until he can finally do it.

Learning activities at this time have been very developed considering learning can not only be done individually but also learn in groups. One of the developments regarding group learning is the opening of an institution called a school. Namawi [2] states the school is a work organization as a forum for cooperation of a group of people to achieve goals. It can be understood that the school is an association which contains several individuals who will carry out a series of physical and mental activities that produce something that has been planned. The results of a learning process cannot be separated from the stated objectives of learning activities. Therefore, in order to achieve the objectives of a learning activity it is necessary to create a pleasant and conducive learning atmosphere.

Creating a conducive atmosphere is not only one of the things that affect learning outcomes, from several things

that can affect the results one of them is the teacher or teacher. The presence of teachers or teachers is considered very important in group learning activities, especially in school institutions. Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education through formal education, basic education, and secondary education. The presence of a teacher or teacher in a school institution carries a very large role, therefore teachers should have adequate abilities to carry out their tasks in school or class and be able to maximize learning activities by communicating during learning activities.

Communication in this learning activity cannot be carried out by just one person by the teacher for example but also individuals who study or students. Communication between students and teachers is an interactive-educative delivery, or simply said the process of mutual communication, or two-way communication [3], [4], [5]. The teacher will deliver the message, the student receives the message and asks the teacher again, and vice versa the teacher asks the student during the learning process.

Often in a communication process the learning of messages conveyed by the teacher does not always go well, such as the teacher asking questions and students answering. This was reinforced by research by Nisa' [6] who explained the communication process of teachers in

MIN Tempel Yogyakarta which was not going well. The situation that most often arises is when a teacher conveys a message or learning material, the student who is the recipient of the message does not pay attention to the message conveyed by the teacher. The way to overcome the problems that arise in the process of learning communication requires the availability of a media that connects between the sender of the learning message and the recipient of the learning message. Media according to the National Education Association (NAE) is anything that can be manipulated, seen, heard, read, or talked about along with the instruments used for these activities.

The use of media in learning activities cannot be done immediately. The use of media certainly considers certain aspects of learning activities. Heinich [4] proposed a model of media use known as ASSURE (analyze learner characteristics, state objectives, select, or modify media, utilize, require learner response, and evaluate). Based on this model, it can be explained that the selection of media must: (1) consider the characteristics of the target group that can be seen from age, sex, etc.; (2) there are objectives to be achieved in the use of media; (3) choose to modify and use the right media; (4) preparation of time and material to be used with the media; (5) request responses from students regarding the media used; and (6) conduct a final assessment or evaluation of the media.

Based on observations during the KPL activities on 30 July-17 September 2018 in Kesatrian 2 SDN Malang, the researchers found that the delivery of learning messages from teachers to students did not run smoothly. At that time precisely when learning Theme 1 Sub Theme 3 Learning 3 on social studies learning materials about the port, the media used was LCD. Incidentally at the time of airing the media experienced a power failure. Another obstacle that arises is the absence of a substitute media so the atlas is forced to use media. However, the use of the media is less effective because most students who carry the atlas have no port name in the atlas, they have so that students are busy and less willing to carry out learning activities at the time. Even that cannot be overcome by the instructor at that time, the learning that should aim at students is expected to be able to write 34 port names from each province, but in reality, only a few port names can only be mentioned.

The results of interviews conducted with grade 5 teachers of Kesatrian 2 Elementary School Mrs. Sutrisniwati said that there were no other alternative media in the event of a dead light for learning to discuss the names of ports in Indonesia because the atlases in the library were not listed the names of ports in Indonesia. Based on those things, it is necessary to develop a special hanging board map media or it can be called a thematic map, which is a map that displays specific information from an appearance in a certain area. The making of the hanging map is also based on the absence of a specific

port map in SDN Kesatrian 2 in class V, and the incomplete ATLAS media owned by students as a learning resource. In addition, this hanging map media can be used at any time when there is electricity that is off or there is damage to the LCD.

In previous studies of the media map already exists. Research by Destriana [7] concerning "Development of Indonesia Map Hanging Media Board for Learning the Beautiful Subtema of Cultural Diversity of My Country, Class 5, SDN Bareng 5, Malang City. The results of the study show that the developed media map is feasible and effective for learning activities according to media experts, material experts, user experts (grade IV teachers) as well as the results of field trials, this media can improve student learning outcomes from the class average of 44.4; 48.75; and 31.25 increased to 81.25; 78.75; and 76.24.

Subsequent research by Pratiwi [8] on "Media Development of Indonesian Cultural Maps on the Theme of Beautiful Togetherness in Class IV Elementary Schools". The results of the study show that the developed map media is feasible and effective for learning activities according to media experts 4.6 in the category of Very Valid, material experts an average of 4.8 in the category of Very Valid, user experts (class IV teachers). Research by Eka [9] on "PATAYA Media Development (Replication of Cultural Maps) in Thematic Learning for Class IV Elementary Schools" shows that PATAYA learning media (Replication of Cultural Maps) in thematic learning can be used as a learning medium in thematic learning in class IV SDN Pekukuhan.

Based on this research the researcher wanted to develop a special map of the names of the ports from 34 provinces in Indonesia, Theme 1 Sub Theme 3 Learning 3 The use of the hanging board map media can also be used later on other themes that have a relationship with the names port. This hanging board map media will later be made to attract students' interest, and certainly can increase the achievement of learning objectives.

## **2. METHOD**

The model used in this study is the research and development (R&D) model. According to Borg and Gall in Sugiyono [10] research and development is a process or method used to validate and develop products. According to Sugiyono [10] research and development functions to validate and develop products.

In this research development, researchers refer to the development research (R&D) model. According to Borg and Gall [10] there are ten R&D steps, namely: (1) research and information collecting; (2) planning; (3) developing preliminary form a product; (4) preliminary field testing; (5) main product revision; (6) main field testing; (7) operational product revision; (8) operational field testing; (9) final product revision; (10) final product

revision; and (10) dissemination and implementation.

Researchers adapt the steps of R&D development research according to Borg and Gall as needed. Because research is only in one class in one school, the research steps are as needed, namely: (1) research and data collection (research and information collecting); (2) planning (planning); (3) product development (developing product); (4) experts validation; (5) revision I; (6) main field testing; (7) revision II, and (8) final product. the product trial design is a test that involves experts, at this stage a product test is done by both media experts, lecturers, material experts, social studies lecturers, field experts, teachers, and users, students. Where later lecturers as media experts and teachers as field experts will provide suggestions in the form of revisions and others.

The test subject is the target that will be used to test the media to be developed. The test subjects here are grade 5 students of SDN Kesatrian 2 Malang City, with a total of 38 students where the number of male students is 21 students while the female students are 17 students. The types of data used in this research are quantitative and qualitative data. Quantitative data is data sourced from student learning outcomes conducted before the use of the Indonesian map hanging board media and after the use of the Indonesian map hanging board media. Then the qualitative data is a data obtained from the results of suggestions on the questionnaire used.

Research instruments are needed as a means of collecting data. Sanjaya [10] stated "research instruments are tools that can be used to collect research data." In accordance with this understanding, of course research instruments must be aligned with the data collection techniques used. In line with the data collection techniques carried out, the instruments in this study were questionnaires and tests.

After conducting a series of data collection activities, the data collected will be analyzed. The activity of analyzing data is the process of systematically searching and compiling data obtained from interviews, field notes and other materials, so that they can be easily understood, and their findings can be shared with others Bog and Gall [10].

The technique used in this research and development uses descriptive form of quantitative data that is converted on a Likert scale. Success criteria in this study, refer to the modification of Akbar [11] where the eligibility criteria of the media are in the range of 85.01% -100% said to be feasible.

### **3. RESULT AND DISCUSSION**

Research and Development produces a media product. Learning media according to Briggs [12] are all means or physical devices that can present messages and stimulate learners to learn. As a vehicle, of course the media can

present a process of communication between teachers and learners. In producing this media, the prototype is used before the hanging board maps of the Indonesian map become truly standard media. In the development of prototypes ranging from map boards made of layered iron with banner maps of Indonesia as a whole where each province is given a different color measuring 1.5 mx 1 m, supporting legs are made of pipes which are 1.7 mx long, 1.6 m high, coupled with 2 manuals for students and also teachers, and also 64 pairs of port names that are color-adjusted to 34 provinces on the map.

The process of making the Indonesia hanging board map media is done by cutting the iron measuring 1.5 m x 1 m which is then glued to the existing map banner. Followed by cutting the pipe with a length of 1.7 m x 1.6 m high. The process of making 64 pairs of port names is made of cardboard measuring 10 cm x 2 cm and also an ice cream stick which is glued together with a magnet on the back. For the use of media, it must be arranged first and then after the chaining process is completed students independently match the names of the ports with the province in the same color, while the teacher is asked to conduct supervision and also justification in pasting student answers [13], [14], [2].

Based on the media size of the hanging board map of Indonesia, this media can be categorized into the big media category [4], [9], [14], [15]. Big media according to Schramm [3] learning media that is used in groups / classes, and also large in size. This media was also developed in accordance with the principles of choosing instructional media, according to Arsyad [15] criteria that need to be considered in the process of selecting instructional media include: (1) clear and neat; (2) clean and attractive; (3) match the target; (4) relevant to the topic taught according to the learning objectives; (5) practical, flexible and resistant; (6) good quality; and (7) the size is in accordance with the learning environment. From the learning media selection criteria then a trial and validation of the hanging board map of Indonesia media is conducted to media experts, material experts, and user experts as well as students to find out to what extent the developed media can be said worthy [9], [16].

Based on the implementation of media tests and validations conducted by researchers, to media experts, material experts and user experts. Each score was obtained, including 89.37% by media experts, 95% by material experts, and 90% by user experts. Whereas the effectiveness of the media gained a percentage increase of 24.92% from the percentage of 55.05 just before the use of the Indonesian map hanging media map, and 79.97 after the use of the Indonesian map hanging media map. For the attractiveness level of the media get a percentage of 86.57%.

#### 4. CONCLUSION

Based on the data exposure, the researchers' findings and discussion on the research development of the hanging map of Indonesia in SD Kesatrian 2 Malang City were declared feasible. This is evidenced by the data validation results by material experts, media experts, and user experts who each showed a percentage of 89.37% for media experts, 95% for material experts, and 90% for user experts. Where the media developed can be categorized as viable media because it gets a percentage at 85.01-100%. In addition to being feasible, according to media experts, it can also improve student learning outcomes, which is indicated by an increase of 24.92% from the percentage of 55.05% before using media, and 79.97% after using media.

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