Accompaniment in making learning media to increase interest in learning at SDN Balongmojo Mojokerto

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ABSTRACT
School is a place for students to study. Often we meet in class there are students who are less enthusiastic in studying and are less responsive to what is conveyed by the teacher. Students sometimes feel bored with lecture-based learning models, so educators need to conduct self-evaluations and improve the quality of learning in class. In this case, improving the quality of learning in the classroom can be done in various ways and teachers have a very important role in increasing students' interest in learning so that students feel comfortable and the knowledge they gain will be easy for them to accept. This study aims to analyze the use of instructional media in increasing students' interest in learning. The purpose of this service activity is to provide knowledge to SDN Balongmojo Mojokerto teachers about the use of plastic and paper waste to make innovative media. The target of this service is to provide information and assistance to teachers at SDN Balongmojo Mojokerto regarding the use of plastic waste and cardboard for making innovative learning media. The method used in this service is interactive training and mentoring. As a result of this community service activity, teachers at SDN Balongmojo Mojokerto are able to design, create and practice making innovative media using plastic waste and cardboard.


1. INTRODUCTION
Learning is a process of interaction between teachers, students, and the surrounding environment. Efforts to improve the quality of learning have been launched by the government and have been carried out by related parties. However, this increase has not seen the impact until now. Improving the quality of learning and education processes will lead to improving the quality of educational outcomes/products which in the future can become outcomes for stakeholders. The results of quality education will be relevant to the demands of the business world and the industrial world while still paying attention to the needs of everyone to develop themselves to become religious beings, with personality, character, and independence as well as being able to master science and technology (Soenarko et al., 2018).
Elementary school teachers are the first basic points of basic education that will make an impression and be remembered by students. The Law on Teachers namely Number 14 of 2005 was passed by the government. The law regulates the welfare of teachers with the existence of educator certification and regulates the competencies that must be possessed by an educator/teacher. These competencies include: 1) personality competence; 2) social competence; 3) pedagogic competence; 4) professional competence. One form of teacher professional competence, among other things, teachers must be able to create creative and innovative learning breakthroughs. Professional teachers are teachers who prioritize the quality and quality of their services and products, teacher services must meet the standardization of the needs of society, the nation, and users and maximize the abilities of students based on the potential and skills possessed by everyone (Yamin & Maisah, 2010). Innovative learning can be done by using learning media. Utilization of learning media can generate new desires and interests, increase motivation and stimulation of learning activities, and even affect students psychologically (Hamalik, 2004). If the learning media used in learning is more concrete or with direct experience, the message in the learning process conveyed by the teacher to students will be conveyed properly. This is in accordance with the principle of the Cone of Experience put forward by Edgar Dale.

One way that can be done by a teacher to create creative and innovative learning is by using innovative learning media. Using learning media in teaching and learning activities will generate motivation and help facilitate students’ understanding of the material so as to create meaningful learning (Hafiz et al., 2022). A teacher must have the ability to create innovative learning media so as to increase students’ understanding and learning motivation (Pambudi et al., 2019). The learning media can be developed independently by a teacher but some teachers at SDN Balongmojo find it difficult to develop learning media. This is due to the lack of information and creative ideas of teachers in developing learning media. So far, teachers think that making learning media independently is too difficult because it takes a long time and costs a lot. The lack of assistance and information for teachers resulted in many teachers lacking creative ideas in developing simple learning media. Learning media as a tool in learning activities can be developed simply from some of the waste in the surrounding environment. Besides being useful as a learning medium, waste utilization can also reduce waste production (Kristin & Setyawan, 2021).

The production of waste, especially plastic and paper waste, is increasing day by day. Schools as a gathering place for many people can be the biggest waste producer apart from markets, households, industry and offices. Excessive waste production without proper processing will have a negative impact on the environment. The use of plastic and paper waste as learning media in schools can be done by a teacher to create innovative learning. Besides that, making learning media by utilizing plastic and paper waste can increase creativity and a sense of concern for the environment (Rohani, 2017). Based on this situation analysis, it is important that community service activities are an effort to mobilize, direct, provide science and technology for the community which can encourage teacher creativity in creating innovative learning and a sense of concern for the environment. The purpose of assisting the use of plastic and paper waste for innovative learning media for teachers at SDN Balongmojo is to provide assistance for making media and simulating innovative learning from the use of plastic and paper waste.

2. METHODS

The partner of this activity is SDN Balongmojo Mojokerto. SDN Balongmojo Mojokerto represents the population in Puri District, almost all schools in Puri District have problems in making and using mathematics and science learning media. In addition, almost all schools are less able to utilize waste, especially plastic and paper, in the learning process. Community service activities in the form of training and assistance in the utilization of plastic and paper waste for teachers' innovative learning media.
**Activity Methods**

The method used in this service uses a participant active learning approach (participants actively participate in training activities and mentoring the use of plastic and paper waste for teachers’ innovative learning media). The form is interactive training and mentoring. The stages of the method used in the training and mentoring process use: 1) lectures; 2) question & answer; 3) discussion; 4) brainstorming; 5) case study; 6) simulation; and 7) practice.

**Material Presentation and Joint Discussion**

The lecture method is used to deliver training materials, such as: learning English, innovative learning media, as well as how to use plastic and paper waste for teachers’ innovative learning media to increase student learning interest. Then proceed with the question-and-answer method which is a way of delivering material for training which is carried out with the aim of providing clarity of information/knowledge and concepts by asking questions and being answered by other parties. After explaining and debriefing, the next stage is a discussion involving training and mentoring participants in discussing and solving the problems assigned to the training and mentoring activities, so that there is an activity of exchanging ideas regarding each other's ideas and ideas to then produce a mutual agreement. The discussion was then followed by brainstorming to find out the opinion of the training participants and mentoring on a problem. If the problem can be formulated, the next step is to use a case study to discuss a specific case/problem and a solution is needed. Simulation is an activity carried out in a limited place as a follow up from the theory that has been described. Finally, the participants were facilitated to practice directly in utilizing plastic and paper waste for innovative teacher learning media with the direction of the facilitator.

**Learning Media from Remaining Materials**

Learning media in elementary schools should be developed by the teacher himself. In this activity the teacher will be trained in making media from leftover materials to be able to visualize several characters for students. Learning to use media, in this case media from leftover materials, can directly optimize the function of all the five senses of a child thereby increasing the effectiveness of children learning by hearing, seeing, feeling, and using their minds logically and realistically (Palupi et al, 2020). Information is not just dreaming in abstract areas, but as a concrete empirical process that is realistic and becomes a part of life that is not easily forgotten by children. The purpose of using direct media, in this case media from leftover materials, is to demonstrate abstract concepts in a visual form.

Remainder materials are materials that come from items that are no longer used and can be recycled back into something usable. Such as: wastepaper, newspapers, magazines, cardboard, cardboard, cloth, plastic, cans, styrofoam, foam, rope, bottle caps, straws, ice cream spoons, plastic bottles, fruit baskets and rubber. Meanwhile, natural materials are materials derived from nature that can be processed into goods that are useful for its users. Such as: rocks, wood, twigs, seeds, dry leaves, fronds, bamboo, flowers, rice stalks, and others. The goals in utilizing leftover materials and natural materials as play media are: Enriching or adding playing tools as learning resources, Motivating teachers to be more sensitive in optimizing the surrounding environment to be used as play media, cheap, easy and available. Some of the leftover materials that can be used for learning and playing media include the following: 1) cardboard, 2) plastic and cans, 3) ice cream sticks (Efransyah et al., 2022).
Utilizing leftover materials as a medium for playing is not spared from utilizing the environment as a source of learning and a place for children to play. Because the remaining material is obtained and obtained from the environment. Therefore, teacher creativity is required in utilizing the environment as a source of learning and playing for early childhood by finding learning media from leftover materials that already exist in the environment (Acesta et al., 2021). The examples of the use of the environment as a learning resource for elementary school students (Figure 1) are: 1) Game of snakes and ladders from used cardboard materials, 2) Scrabble games from used cardboard and from used wood, 3) Mosaic work from bagasse, 4) Making Puppet animals from used cardboard. So educators are expected to be able to take advantage of various types of learning resources into game tools that are educational and useful for children. Besides that, it can also help save the earth, in a simple but meaningful way. In daily learning activities adapted to existing media, not media adapted to learning activities. Often, even if there is media, they are forced to convey a lesson even though it is not appropriate (Fauzi et al., 2021).

![Learning media made: (a) Active snakes and ladders, (b) Scrabble words, (c) Animal Puppets from used cardboards](image)

**Figure 1.** Learning media made: (a) Active snakes and ladders, (b) Scrabble words, (c) Animal Puppets from used cardboards

### 3. RESULTS AND DISCUSSION

**Results**

The results achieved in this activity, in general, consists of: (1) Pre-activity; (2) Activity planning stage; (3) Training activity implementation stage; (4) Follow-up stage of training activities in the form of mentoring practice trials for making training products (learning media) innovative; (5) Simulation and practice stage; and (6) Activity evaluation stage. First, the pre-activity stage; At this stage the service team carries out licensing activities to partner schools in accordance with the MoU that was mutually agreed upon. Second, the activity planning stage; At the planning stage the service team makes plans and designs by carrying out activities: (a) Field studies and needs analysis based on field facts to determine the design of learning activities; (b) Collection of reference sources and literature studies on innovative learning media using plastic and paper waste; (c) Science and technology planning (training and mentoring materials) to be transferred to SDN Balongmojo Mojokerto teachers.

The design of the training and mentoring materials consists of learning media and innovative media, the practice of using plastic and paper waste for innovative learning media, and the practice of using plastic and paper waste for innovative learning media. Third, the implementation stage; At the implementation stage, the service team provides training and assistance in the form of activities (Figure 2): (1) Socialization and workshops on the use of plastic and paper waste for teachers’ innovative learning media; (2) Presentation of the theory of innovative learning media and elementary school learning; (3) Presentation on how to make innovative Mathematics learning media with paper and plastic waste; and (4) Presentation on how to make innovative learning media with paper and plastic waste.
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Fourth, the follow-up stage of training activities is carried out in the form of mentoring on the practice of making training products. Products resulting from training and mentoring are innovative learning media by utilizing plastic and paper waste that can assist teachers in the process of teaching and learning activities. Fifth, the practice and simulation stages, service participants carry out activities for making innovative learning media by utilizing plastic and paper waste. After that, carry out a simulation of using innovative learning media by utilizing plastic and paper waste with students in front of colleagues and the service team, as shown in Figure 3. The service team is tasked with accompanying and evaluating the simulation activities carried out by the participants.

Sixth, the evaluation stage is carried out in two steps: (1) Evaluation by colleagues participating in the training. This evaluation activity was carried out by colleagues in the form of mutually appraising activities, giving advice and appreciation for the work of the training participants' products as well as simulation activities using innovative learning media by utilizing plastic and paper waste carried out from and by community service participants. The purpose of this activity is to gather input from colleagues for all activities from creating innovative media to its use in learning activities; (2) Evaluation of the results of training and mentoring by the service team.

The service team carries out evaluation activities, assesses, gives suggestions, inputs and awards related to training results, training products, simulations and elementary school teaching practice activities using innovative learning media by utilizing plastic and paper waste carried out and made by service participants. Based on the evaluation results, it was found that the facilitation activities for utilizing plastic and paper waste for innovative learning media for teachers at SDN Balongmojo Mojokerto ran well, were active, creative, effective, and fun. Teachers at SDN Balongmojo Mojokerto gain (Figure 4): (1) Knowledge about elementary school learning and innovative media; (2) How to make innovative learning media by using plastic waste and used paper; and (3) An overview of the practice of innovative learning media by using plastic waste and paper files in learning in elementary school.
Discussion

The occurrence of the learning process does not always have to be someone who teaches but can be assisted by learning media to support teaching and learning activities. Learning activities also cannot be represented by other people but must be experienced by yourself. Although a teacher can provide guidance and knowledge to the learner, the most effective learning process occurs when individuals are actively involved in the learning process and experience the material directly. In conducting a study, learning media is also needed. Learning media is a part of learning resources. This learning media can be in the form of messages, people, tools, materials, techniques, and the environment (Suryani, 2020). Software and hardware can be combined and called learning media. Learning media is anything that can be used to stimulate the feelings, attention, and abilities of learners to encourage learning activities.

In designing innovative learning, there are 3 things that must be considered. Namely innovative learning designs, the preparation of innovative learning designs, and the characteristics of innovative learning designs. According to Ragan & Smith (1999), learning design is a systematic process of translating learning and learning principles into guidelines for learning materials and activities. Dick et al. (2005) emphasized that the learning design includes all processes carried out with a systems approach. The system approach itself includes analysis, design, development, implementation, and evaluation. Learning media itself has several roles such as making abstract concepts concrete, presenting certain parts that are considered important, providing substitutes for direct experience, approaching objects that are difficult or dangerous to approach, providing experience in terms of observation, presenting color differences visually, and presenting information that is difficult to approach. In learning styles, each child has a different type. The first is the auditory type, namely learning more effectively by listening. The second is the visual type, namely learning more effectively by seeing. The third is kinesthetic, namely learning is more effective while doing something. Therefore, the use of learning media can also be adapted to each learning style. The usefulness of using instructional media is to clarify messages so they are not too verbalistic. In a traditional learning approach that relies solely on verbal delivery, there is a risk of relying too heavily on spoken words which can be confusing or unclear to students (Herlawati et al., 2022). Learning media also overcomes the limitations of space, time, and sensory power. Learning media can also overcome the passive attitude of students to be more passionate. This is because it can encourage active participation of students so that they want to be active in learning.

4. CONCLUSION AND RECOMMENDATIONS

The results achieved through the activity of making innovative learning media using plastic and paper waste are: 1) Teachers at SDN Balongmojo Mojokerto gain knowledge about making innovative
learning media from using plastic and paper waste; 2) SDN Balongmojo Mojokerto Bae teachers have increased their creativity in making innovative learning media from the use of plastic and paper waste; 3) SDN Balongmojo Mojokerto Bae teachers to be able to carry out simulations and practice making innovative learning media from the use of plastic and paper waste; and 4) 5 sets of innovative learning media were produced using plastic and paper waste. Based on the results obtained in this community service activity, some suggestions that can be submitted are: 1) Elementary school teachers should always strive to continuously develop their professional skills through various training activities; 2) Learning media that have been produced so that they are carried out continuously and developed learning media related to other materials; and 3) For those who are interested, to carry out further activities in the form of producing innovative learning media by utilizing plastic and paper waste.

Creating effective learning media requires careful planning and an understanding of learning objectives and the characteristics of students. Teachers must choose the type of media that suits the learning objectives and learning styles of students. Media can be videos, presentations, infographics, animations, audio, or a combination of several types of media. Make sure the selected media supports the delivery of material effectively. Visuals such as images, graphs, and diagrams can help explain concepts better. Multimedia such as video or audio can also enrich the learning experience. Make sure the visuals and multimedia used are relevant and support learning objectives. Create learning media that involves student participation. Include questions, assignments or exercises that encourage them to think about, respond to and apply the concepts learned.

**REFERENCES**


