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# THE UTILIZING OF RECYCLED MATERIALS MEDIA TO INCREASE THE CREATIVITY OF PPT TEACHERS IN PPT OF SURABAYA

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## *Abstract*

*Creativity through recycled materials media is one effort to improve the creativity of teachers / Mother of PPT in Surabaya and its students. In the implementation are educators / Mother of PPT make learning media which suitable with early child by using media of recycle material (used material). until so far the creativity shown by Mother of PPT in Surabaya City have not all show creativity only 20% which have seen creativity especially by utilizing recycled material (used material). Utilizing recycled materials by Mother PPT still feels far away from affordability. Intelligence and creativity are closely related, though not absolute. A creative person can be ascertained as an intelligent person, but not always an intelligent person who is creative. The birth of a creative work requires more than intelligence. But for a creative person he will enrich his problem solving with various alternative answers, in various ways and points of view, are unique and different from others or in other words "unusual : Thinking alternatively is a thinking skill that requires not only speed and accuracy in analyzing problems, but it can determine the correct and correct alternatives of answers and angles quickly. This research is a class action research (PTK), because this research is intended to improve the creativity of Mother of PAUD in PPT Kota Surabaya, where the researcher is directly involved in the process of utilizing recycled material media which is used as instructional media for early child (students). In this study, researchers examined the use of recycled material media to improve the creativity of teachers / Mother of PAUD in PPT Kota Surabaya. The process of making learning media from recycled materials is considered successful in improving the creativity of Mother / PAUD Teachers. In the first cycle of completeness increased the creativity of Mother / Teacher PAUD by 65% increase in cycle II to 82%*

**Keywords:** *media recycling materials, creativity, Early Childhood Education Teachers*

## **Introduction**

Media is everything that can be used to share messages from teachers to the children so that it can stimulate children's thoughts, feelings, attention and interests and attention (Arsyad, 2013). Azhar Arsyad (2009: 67) said that effective learning requires good planning. The media that will be used in the learning process also requires good planning. Nevertheless, the reality in the class shows that a teacher chooses one of the media in his activities in the classroom based on considerations such as (a) he feels that he is familiar with the media he uses, (b) he feels that the media he chooses can describe better than himself, (c) the media he chooses can attract students' interest and attention, and lead him to a more structured and organized presentation.

In the era of science and technology development nowadays that flows rapidly, the professionalism of educator is not enough only with the ability to teach children, but also must be able to manage information and the environment to facilitate student activities. A variety of modern education and educational facilities also support the optimization of the learning process of technological development, especially information and communication technology offers many conveniences in learning.

According to Zainal Aqib (2009: 30) Learning in kindergarten has the principle of "playing while learning, learning is like playing". By playing children find and gain experience from themselves, others and

their environment. Learning by playing gives children the opportunity to manipulate, imitate and find their personality, explore and practice so that children get a variety of concepts and understandings. Education occurs everywhere, such as at home, at school and also in the community. Each place has a great influence on education, especially in early childhood development. People who educate in formal schools that have a very important role in developing and providing knowledge are teachers (educators). The intellectual and creativity of the teacher greatly influence the education that children receive during studying.

The reason of researcher used recycled materials that is still in good condition be, as APE (Educational Game Tools) and could be used as the student's work themselves of early childhood, is applied as a strategy to increase creativity of PAUD (kindergarten) teachers in PPT (school) of Surabaya. What must be done by the PPT teacher / mother in the city of Surabaya is making learning media suitable for early childhood through recycled material. The recycled materials that can be used as APE (Educational Game Tools) and works for early childhood: plastic bottles, plastic cups, exs formula milk cardboard, corn husk and so on.

Creativity through recycled material media is one effort to increase the creativity of teachers of PPT in Surabaya along with their students. In its implementation are PPT educators make learning media by utilizing recycled material media, so far the creativity shown by PPT teachers in Surabaya, has not all teachers shown creativity. Just only 20% that has seen their creativity.

especially creativity by using recycled materials. Utilizing recycled materials by the teachers of PPT still far from affordability.

#### Research problem

From the background above, this research can be formulated a problem as follows: "Is the Utilizing of Recycled Material Media able to Increase the Creativity of ECD Teachers in Surabaya City PPT"

#### Purposes of the Study

Based on the background and the formulation of the problem above, this study aims as follows: "To find out whether the utilizing of recycled material media is able to improve the creativity of Early childhood teachers in PPT of Surabaya"

#### Benefits of research

##### 1. For Teachers

- Providing information about the benefits of recycled material media to improve the creativity of PAUD teachers.

- As media of creating learning media by utilizing recycled materials.

- As media to foster motivation in enhancing the creativity of PAUD Teachers.

##### 2. For students

To improve the creativity of PAUD Teachers in utilizing recycled material media.

##### 3. For PAUD Institutions

The results of this study can be used as a guide / in utilizing recycled material media as a learning medium of APE (Educational Game).

#### Variable Operational Definition, Assumptions, and Limitations Variable Operational Definition

Here is a variable operational definition. In this study there are two variables, namely the independent variable (the utilizing of recycled material media) and the dependent variable (the improvement of the creativity of early childhood teachers).

##### *Free Variable (Use of Recycled Material Media)*

According to Heinich, Molenda and Russel (in the Ministry of National Education, 2008) revealed that the media "is a channel communication. Derived from the Latin word for "between", the term "to anything that carries information between a source and a receiver".

##### *Bonded Variables (Increased Creativity of PAUD Teachers)*

James J. Gallagher (1985) said that "The creativity is a mental process by which individuals create new ideas or products, or existing ideas and products, in fashion that is novel to him or her"

##### *Assumption*

Assumption is a basic presumption that is believed to be true by the researcher and used as the basis for the research step.

By the title of the research "*The Utilizing of Recycled Material Media to Increase the Creativity of PPT Teachers in Surabaya*". Then terms those are assumed:

Utilizing recycled material media will increase the creativity of PPT Teachers, who are active in making learning media which is formed as APE, which suitable for Early Childhood.

- a. In the use of recycled material media will bring hope and giving joy to PPT Teachers.

#### Limitations

In carrying out this research, the researcher has the following limitations:

- a. This research is only limited to the use of recycled media to increase the creativity of PPT (kindergarten school) Teachers.
- b. This research takes data by observation.
- c. This study only applies to PPT Teachers in Surabaya.
- d. The media used is limited by the utilizing of recycled material media.

### Research methods

The steps of each cycle in this study, can be divided into four stages, namely:

#### Cycle I

1. Design / initial plan

The implementation of the cycle in this initial design / plan is in order to enhance the creativity of PPT Teachers, in utilizing the recycled material media and the learning outcomes of students in using APE from recycled materials which are adjusted to the Daily Learning Implementation Plan (RPPH).

2. Implementation

As stated (in Suharjono, 2008: 39). At the implementation stage, the process of making APE, which is carried out from the recycled material, the tools and materials to be used, the steps to make it, and how to apply it to students.

3. Observation

Data collected during the action, and then it will be analyzed. Based on the results of this observations, that this is carried out simultaneously with the implementation of learning or action. The purpose of observation is to obtain any careful descriptions of the actions and then it will be documented. The results of the observations is to see the level of success and failure achieved in the corrective action.

4. Reflection

The results of this reflection are the input of researchers in planning and implementing the next corrective action. Reflection can be carried out by researchers and colleagues, aiming to examine and analyze the implementation of actions in cycle 1 by identifying both the progress that has been achieved and the shortcomings or obstacles that are still being faced, then, after obtaining approval from both parties it is used to improve the action plan in the next cycle.

This research was conducted in the Surabaya City PPT, there were 12 PPTs spread in 7 (seven) Districts and 11 (Eleven) Villages in the Surabaya Region. Every PPT has 1-2 PPT mothers who are the subject of research.

Research locations are in the Surabaya Region; Western Surabaya, Surabaya northern part, Surabaya southern part and Surabaya center.

Data collection instruments used in this study were observation and documentation guidelines. This guide is to find out user needs. Observations were made in several Integrated Postal Posts (PPT) in Surabaya. Meanwhile, documentation was carried out to obtain supporting data, for example identity data of PPT in several sub-districts in Surabaya and photos to find out directly the making of educational game equipment (APE) from recycled materials.

The instrument used in this study is formed as PPT Teacher's Creativity Sheets.

This data analysis is a continuation of data collection activities. For that reason, a researcher needs to understand the data analysis technique so that the benefits of his research have high value.

The data obtained in this study is data of creativity improvement of Early Childhood Education PPT teachers in Surabaya PPT, in utilizing recycled material media as learning media which is suitable for early childhood. The data that has been collected then will be analyzed.

The data obtained in the analysis uses the standard of success. The teacher is said to be successful if it has reached the standard percentage of  $\geq 75\%$ .

### Research Results and Discussion

This research is a classroom action research (PTK), because this study is intended to improve the creativity of PPT teachers in Surabaya, where the researchers are directly involved in the process of teaching of

utilizing recycled material media which is used as a medium for early childhood learning. In this study, researchers examined the use of recycled material media to enhance the creativity of PPT teachers in Surabaya. From this research can be described in detail the results of the research and discussion as follows:

## **Research result**

### **1. Pre cycle**

Pre-cycle activities were carried out to find out how far the creativity of PPT Teachers in utilizing recycled material media as the APE (Educational Game Tools) which is suitable for early childhood (students). The results of the pre-cycle conducted by the researchers showed that the problems found of the PPT Teachers in Surabaya were; there were not attractive APE for their students, then the second problem was the limited infrastructure facilities from PPT Institutions in Surabaya, this condition makes the lack of creativity in the PPT Teacher at the Surabaya.

Examining these conditions, a classroom action research was conducted by the utilizing of recycled material media to increase the creativity of the PPT Teacher in the Surabaya.

### **2. Cycle I Actions**

This classroom action research was carried out to improve the creativity of PPT Teacher of Early Childhood Education in Surabaya by the utilizing of recycled material media as APE (Educational Game Tools) learning media which is suitable for early childhood. In this process, the first action was to choose and determine what type of recycled material would be used in making APE that was suitable for early childhood.

#### **a. Planning**

- 1). First Meeting Cycle I
  - a). Prepared Daily Learning Implementation Plans
  - b). Arranged the type of APE that would be made from recycled material
  - c). Developed types of recycled materials that would be managed.
- 2) *Second Meeting Cycle I*

At this stage, the researcher provided a solution to the obstacles found by researchers during the process of making recycled material media at the first meeting. From the results of the observations at the first meeting, the researchers planned the next action with the following steps:

- a). Prepared Daily Learning Implementation Plans (RPPH)
- b). Determined the type of APE that would be made from recycled materials
- c). Determined the type of recycled material that would be managed.

#### **b. Implementation**

The implementation of this cycle I action refers to the learning steps written in RPPH and will be carried out by the PPT Teacher to improve creativity in utilizing recycled materials that will be used as learning media as APE.

The implementation of both meetings were as follows:

##### *1). The first meeting*

- a). The teacher asked for today's theme
- b). The teacher gave materials in accordance with the theme that has been made in RPPH
- c). The teacher invited children to discuss and ask questions about the themes that have been given

##### *2). Second meeting*

- a). After the children knew the theme that had been explained by the teacher, the teacher would introduce learning media (APE) which had been made from recycled materials
- b). The teacher gave the opportunity for the child to use the recycled material in accordance with the theme and RPPH.

#### **c. Observation Results**

##### *The Result of Creativity of PPT Teacher Improvement*

The process of making learning media from recycled materials began with the teacher invited the children to discuss APE that was likely chosen by early childhood (students) in accordance with the theme and RPPH. These action was based on the results of this observation and assessment conducted by researchers on the creativity of PPT Teacher in the first cycle.

From the results of the analysis in the first cycle, obtained data that showed that the creativity PPT Teachers in utilizing recycled materials used as APE (Educational Game Tools) learning media which is suitable for early childhood in Surabaya City PPT reaches 65%. However, these results have not yet reached the minimum percentage standard, namely  $\geq 75\%$  of the total number of PPT Teachers in the school

#### **d. Reflection**

In cycle I, there had been an increase which was compared to the pre-cycle time. But the results in the first cycle was still not satisfied and not in accordance with the expectations of researchers. This was because percentage of completeness achieved by PPT Teacher is 65%. Than the standard percentage of  $\geq 75\%$ ,

### **3. Implementation of Cycle II Action**

The implementation of the second cycle action was intended to overcome the obstacles that arose in the first cycle and correct the problems contained in the first cycle.

The implementation of cycle II could be described as follows:

#### **a. Planning**

- 1). First Meeting of Cycle II
  - a). Prepared Daily Learning Implementation Plans
  - b). Established the type of APE that had been made from recycled materials
  - c). Established the type of recycled material that would be managed.
- 2) *Second meeting of Cycle II*

At this stage, the researcher provided any solution of the obstacles found by researchers during the process of making recycled material media at the first meeting. From the results of observations that existed at the first meeting, the researchers then planned the next action with the following steps:

- a). Prepared Daily Learning Implementation Plans (RPPH)
- b). Demonstrating APE that had been made from recycled material

#### **b. Implementation**

The implementation of this cycle II action refers to the learning steps written in RPPH and will be carried out by the PPT Teacher to improve creativity in utilizing recycled materials that will be used as learning media in the form of APE.

The implementation of both meetings is as follows:

- 1). The first meeting
  - a). The teacher asked for today's theme
  - b). The teacher gave material in accordance with the theme that had been made in RPPH
  - c). The teacher invited children to discuss and ask questions about the themes that had been given
- 2). Second meeting
  - a). After the children knew the theme that had been explained by the teacher, the teacher would introduce learning media (APE) which had been made from recycled materials
  - b). The teacher gave the opportunity for the child to use the recycled material that was in accordance with the theme and colorful which was interesting for students and in accordance with RPPH.

#### **c. Observation Results**

The Result of Creativity of PPT Teacher Improvement

From the results of the analysis in the first phase of the cycle, obtained data shown that the creativity of PPT Teacher in utilizing recycled materials used as APE (Educational Game Tools) which is suitable for early childhood in Surabaya reached 82% of the original only 65% of the results of cycle I. These results had reached the standard percentage of  $\geq 75\%$  of the number of PPT Teachers in Surabaya.

#### **d. Reflection**

Based on the results of observations on increasing the creativity of PPT Teachers in Surabaya during the implementation in cycle II shows that there was an increase. This could be seen from the results of the percentage of completeness in the second cycle reaching 82%. From the description, the PPT Teachers in Surabaya's creativity had improved in cycle II, and this result was included in the very good criteria.

This result shown that the implementation of the second cycle could be said as successful and quite representative of the planned goals. Thus this classroom action research in this study conducted until the second cycle.

This classroom action research was carried out in stages, starting from the pre cycle, then the first cycle was continued by the second cycle, where the action planning in cycle I came from problems that hinder the creativity of PPT Teachers in Surabaya so that the creativity of the PPT Teachers in Surabaya was relatively low. With the use of recycled material media in this class action research, it was expected that Mother / Early Childhood Teacher could improve their creativity in making learning media as APE (Educational Game Tools) that were suitable for early childhood (students) well.

The creativity of PPT Teachers in Surabaya had improved because there are revisions and updates, APE is made from recycled material that was very interesting, the color was very varied so that in applying it is relatively easy and safe for early childhood. Thus the use of recycled material media can enhance the creativity, multiply APE from recycled materials so that students will not be bored with the learning media provided by Teacher

The process of making learning media from recycled materials was successful in enhancing the creativity of PPT Teachers in Surabaya. In the first cycle, the creativity of The process of making learning media from recycled materials was successful in enhancing the creativity of The process of making learning media from recycled materials is felt to be successful in enhancing the creativity of PPT Teachers in Surabaya. After the first cycle, the creativity of PPT Teachers in Surabaya increasing by 65%, and increasing in the second cycle by 82%.

Thus this study proves rational cognitive theory (in Masnipal 2013: 222) views creativity as a function of cognitive abilities, especially the ability to think creatively in solving problems. (Torrace 1980, 1963; Taylor 1974; Parnes; 1967). This means that with utilizing of recycled material media has succeeded to increase the creativity of the PPT Teacher in Surabaya.

## Conclusion and Recommendation

### Conclusion

Based on the results of the study and the discussion, shows the increase of creativity of PPT Teachers in Surabaya has increased every cycle.

This can be told by researchers that through recycled material media, the creativity of PPT Teachers in Surabaya were increased This can be shown by the achievement in the first cycle of 65% and increased in the second cycle of 82%.

From the description above shows that the results of creativity improvement of PPT Teacher had reached the standard percentage of  $\geq 75\%$  of the entire Teachers in the all PPT Surabaya. So it can be concluded that through the utilizing of recycled material media can increase the creativity of the PPT Teachers in Surabaya.

### Recommendations

#### 1). For PAUD Institutions

a. For early childhood education institutions (PAUD) can use recycled material as APE to increase the creativity of the PAUD Mother / Teacher in Surabaya City PPT.

b. Mother / Early Childhood Teacher can improve their creativity in the form of APE which is very interesting and suitable for use in early childhood in their daily use of learning media by utilizing recycled material media.

#### 2. For other researchers

a. This research can be used as a reference for subsequent researchers, especially in increasing the creativity of PPT Teachers in Surabaya by utilizing learning media from recycled materials (used materials) that are interesting.

b. The focus on PPT Teachers in Surabaya is expected to be expanded with even greater subjects and different backgrounds and problems.. In the first cycle completeness increased the creativity of Mother / Teacher PAUD by 65% increasing in the second cycle to 82%.

Thus this study proves rational cognitive theory (in Masnipal 2013: 222) views creativity as a function of cognitive abilities, especially the ability to think creatively in solving problems. (Torrace 1980, 1963; Taylor 1974; Parnes; 1967). This means that with the use of recycled material media had increased the creativity of the PPT Teachers in Surabaya

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