

Use Of Natural Materials As A Learning Resource For Early Children In Group B, Wakeakea Kindergarten, Gu District, Central Button District

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Abstract

This research is motivated by the monotonous learning activities of just writing and coloring, while there is an abundance of natural materials in the environment around the school but their utilization has not been carried out optimally. This research aims to find out whether researchers using natural materials as learning resources for early childhood can develop children's learning abilities at Wakeakea Kindergarten. This type of research uses participatory qualitative research which was carried out over eight meetings using natural materials as media. The subjects in this research were 12 children aged 5-6 years at Wakeakea Kindergarten. Data collection techniques were carried out using observation, interviews and documentation. The data analysis technique in this research was carried out using qualitative descriptions through data reduction activities, presenting data and drawing conclusions. The research results obtained show that natural materials in the environment around the school can be used as a learning resource for early childhood children in group B of Wakeakea Kindergarten through various kinds of children's learning activities that can stimulate aspects of children's development including fine motoric aspects, gross motoric aspects, cognitive, language aspects, social emotional aspects, religious moral aspects, and artistic aspects.

Keywords: Natural Materials, Learning Resources and Early Childhood

1. Introduction

Early childhood education is very important, because early childhood education is the basis for forming human personality. So early childhood education must be designed according to children's needs so that they can develop various aspects of development, including religious and moral aspects, cognitive aspects, language aspects, social emotional aspects, and physical motor aspects [1]. As in Law Number 20 of 2003 concerning the National Education System in Article 1 Paragraph 14 which states that "Early Childhood Education (PAUD) is a coaching effort aimed at children from birth to the age of six which is carried out through providing educational stimulation. to help physical and spiritual growth and development. The aim is for children to be ready to enter further education." In the learning process, learning is an activity that involves a person in an effort to acquire knowledge, skills and positive values by utilizing various sources for learning. Learning resources can be said to be media to support the learning process in the form of objects that provide information in several forms in the learning process, learning is an activity that involves a person in an effort to acquire knowledge, skills and positive values by utilizing various sources for learning. Learning resources can be said to be media to support the learning process in the form of objects that provide information in several forms useful for users [2].

Natural materials are an unlimited learning resource for children to explore and interact to build their knowledge and understanding. According to Yukananda in [3] natural media is everything in the environment around us that can be used to support learning.

The appropriate use of natural materials as learning media by teachers will help children develop various aspects of child development, including cognitive, social emotional, language, motoric, moral and religious values as well as life skills [4]. Vanni M. O., found that the use of natural media as a learning medium can also provide real experiences to children, learning becomes more concrete and less verbalistic, so that children absorb knowledge more easily [3].

Based on the results of pre-research observations conducted at Wakeakea Kindergarten, it was found that almost every day the children were coloring, writing, cutting, sticking to paper and playing with blocks. The dominant teacher gives assignments to children to color and write, after which the next meeting continues with the same activities with different pictures. So, kids using factory-made media, such as picture books, colored pencils, paper for sticking activities and so on. This results in a lack of interest in children in the learning process, children feel bored doing monotonous learning activities every day where there is no encouragement (press) to stimulate children's enthusiasm for learning. From the results of observations, researchers found a lack of use of natural materials as learning resources for children. Meanwhile, the natural environment around Wakeakea Kindergarten is very rich in learning resources that can be utilized, such as leaves, wood, twigs, stones, fronds, bamboo and so on.

2. Methodology

This research uses participatory qualitative research. Erickson stated that qualitative research seeks to find and describe narratively the activities carried out and the impact of the actions taken on their lives [5]. Meanwhile, participatory qualitative research is research in which the researcher participates and is active in the research activities to be carried out. The data in this research was obtained through observation, interviews and documentation. Apart from that, data is also obtained in the form of evidence, notes or historical reports that have been compiled in published or unpublished archives (documentary data) [6].

To analyze the problem data in this research, the researcher used qualitative descriptive analysis. Where the data obtained is then reduced by selecting the main things, focusing on the important things and discarding the unnecessary. Then the reduced data is presented or displayed in a form that is easy to understand. Next, draw conclusions to determine the final data so that the overall problem fits the data category.

3. Results And Discussion

Based on the results of identification carried out in the environment around the Wakeakea Kindergarten school, natural materials were found that could be used as learning resources children include leaves consisting of banana leaves, cassava leaves, lime leaves, guava leaves, papaya leaves, jackfruit leaves, gamal leaves, lantana camara leaves, komba-komba leaves, sweet potato leaves, star fruit leaves, water guava leaves, soursop leaves, cherry leaves and mango leaves, there are also dry leaves, fine rough leaves and so on. Apart from that,

natural materials were also found: twigs, crushed stone, sawdust, bamboo, cherry fruit, banana fronds, papaya fronds, taro fronds, coconut fronds and so on. The results of this identification are strengthened by the opinion of [7], who revealed that natural materials that can be used as children's learning media include rocks, wood and twigs, seeds, dry or wet leaves, fronds and bamboo.

Implementation activities for the use of natural materials are carried out using the following steps:

- a. Natural leaf materials, leaves used such as cassava leaves, papaya leaves, banana leaves, orange leaves, guava leaves and jackfruit leaves are obtained and picked directly from the natural environment around the child. The leaves used are live leaves that are still fresh and green, there are also leaves that have turned yellow. In this research, through the use of leaves children can learn various activities such as sprinkling, collage, classification, sorting and weaving. Apart from that, children's learning activities using leaves as a learning resource can be carried out through leaf sticking activities, activities to fill in picture patterns with leaves, leaf ecoprint batik activities, leaf cutting activities, children's science learning activities by mixing/melting leaves of different colors where can introduce colors to children from the results of the fusion, activities to draw leaf shapes, printing activities using leaves, activities to make patterns from leaves, leaf merging activities, painting activities using leaves and pre-literacy activities to write letters and numbers using leaves.
- b. For natural wood materials, in this research, fine wood dust was used as a learning medium for children through collage activities. The sawdust is obtained from leftover materials through the wood processing process that are simply thrown away in nature. Apart from that, children's learning activities using wood as a learning resource can be carried out through the activity of pounding cassava stalks, the activity of sticking sawdust, the activity of recognizing numbers and letters using wood as the medium and the activity of running zig zag following the direction of the wood.
- c. In this research, children use natural materials such as crushed stone and twigs, using them directly by taking and collecting rocks and wooden twigs themselves in the environment around the school. Children can learn to number many objects using broken rocks and wooden twigs. Apart from that, children's learning activities with Using broken stones and wooden twigs as learning resources can be done through learning geometric shapes using stones and twigs, activities for grouping large and small stones, counting activities using stones and twigs according to number patterns, learning activities to make simple musical instruments from used bottles containing twigs and stones as well as differentiating the sounds they produce and activities to recognize numbers 1-10 using rocks and twigs as media.
- d. Regarding natural stem materials, in this research, banana stems are used, which are easily available in the child's environment, which are then cut to the desired size and shape. By using banana stems, children can learn through printing activities. Apart from

that, children's learning activities using fronds as a learning resource can be carried out through batik activities with banana fronds, stamping activities with taro fronds, boat making activities with banana fronds or coconut fronds, meronce activities with papaya fronds, patterned stamp activities with banana fronds, sticking activities with dry fronds, making flowers from fronds, painting activities from banana fronds and tree collage activities from fronds.

For natural bamboo materials, in this research, bamboo twigs were used that had been cleaned and then cut to the desired shape and size. By using bamboo twigs, children can learn through stringing activities. Apart from that, children's learning activities using bamboo as a learning resource can be carried out through weaving activities (wall shapes or mat shapes) using bamboo, building building activities with bamboo and counting activities using bamboo.

Based on the results of identification and observations on the use of natural materials as learning resources for early childhood in group B of Wakeakea Kindergarten, Gu District, Central Buton Regency. There are 8 children's learning activities implemented, namely:

a. Printing activities using natural materials from banana leaves

This activity was carried out in the first week by utilizing natural materials from banana stems through printing activities. According to [8], banana stem media is a concrete learning tool derived from banana trees which is used as material for children's skills to create work with a specific purpose. In the process of children's play activities with printing, materials and children are trained to keep themselves and their surroundings clean by washing their hands and tidying up the equipment used after the printing activity is finished. In the artistic aspect, children can be creative in producing beautiful works according to their creativity through printing activities with banana stems.

b. Meronce activities use natural materials such as bamboo and cherries

This activity was carried out in the first week by using natural materials such as bamboo and cherry fruit through roning activities. Meronce by utilizing natural materials is a resource that children can use indefinitely to explore, interact with their friends and learn new things [9]. The children's response was very good, where the children were enthusiastic when the researchers introduced the tools and materials that would be used, namely, bamboo that had been cut to size, cherries, needles, thread and scissors. After that, the researcher gave an example of how to carry out ronce activities using bamboo and cherries to make necklaces and bracelets. Then, invite children to try to assemble it themselves according to the examples and rules that have been explained. Teachers and researchers always guide children in ronce activities. The children from group B at Wakeakea Kindergarten meronce with the technique of stringing pieces of bamboo according to size with cherries in turns using a thread. This is in accordance with the opinion of [10], that meronce is making decoration or specialty by arranging

or collecting parts from empty or deliberately pierced materials and arranging them together using a hanging tool as a string or string.

In the process of learning to string using bamboo twigs and cherries, the aspect that children develop is the fine motor aspect, where children are trained to insert thread into the eye of a needle and then carry out the stringing activity using bamboo twigs and cherries alternately in the correct order. . In the gross motor aspect, children are trained to skillfully use their right and left hands in the process of ronce activities. In the cognitive aspect, children can sort each part of the bamboo twig and cherry fruit in turn by counting them. In the language aspect, children can understand the rules in ronce activities well so that in the process children can focus and be calm in ronce with the agreed rules until the resulting work is produced. In the social-emotional aspect, children have been able to adapt to ronce activities using bamboo twigs and cherries without help from the teacher. Children also have a sense of responsibility towards himself by obeying the rules in his ronce activities and completing them well. In the moral and religious aspects, children are trained to behave politely by saying the word "please" if they want to ask for help. Apart from that, children are trained to keep their environment clean by tidying up the play equipment after the play activities are finished. In the artistic aspect, children are trained to arrange beautiful shapes so they can produce necklaces and bracelets according to their wishes.

- c. Many object counting activities use natural materials such as crushed stone and wooden twigs

This activity was carried out in the second week by using natural materials such as crushed stone and wooden twigs through the activity of counting many objects. According to [11], play media that can be created with rocks are as counting tools, sounds, and also made into stars or other shapes. Meanwhile, all parts of the plant, including wooden twigs, can be used as learning tools. In the process of children's playing activities by counting, the materials used are crushed stone and wooden twigs. Next, the researcher practiced examples of counting procedures using the correct game rules. This is done so that children can be directed in using the materials that have been prepared. According to Khadijah [12], early numeracy skills in early childhood require methods and media with concrete properties so that they do not cause problems in the concept of understanding numbers, numbers and sequence.

In the process of learning to count objects using broken stones and wooden twigs, the aspect that children develop is the fine motor aspect, where children are trained to use broken stones and wooden twigs as well as writing tools correctly. In the gross motor aspect, children are trained to skillfully use their right and left hands when counting with broken stones and wooden twigs. In the cognitive aspect, children can name and show many number symbols spoken by researchers using broken stones or wooden twigs. Apart from that, children can also use broken stones and wood to practice low-level addition and subtraction calculation skills. In the language aspect, children are trained to understand language by understanding several commands simultaneously in counting using two different media. In the social emotional aspect, children can work

together in playing counting with their peers. In the religious and moral aspects, children can know that broken stones and wooden branches are the creation of Allah SWT. In the artistic aspect, children can produce sounds with beautiful tones using stones and wooden twigs.

- d. Activities for classifying leaves (orange leaves, guava leaves and jackfruit leaves) based on color and shape and sorting the leaves from small to large

This activity was carried out in the second week by utilizing natural leaf materials, namely orange leaves, guava leaves and jackfruit leaves through classification and sorting activities. The tools and materials used are orange leaves, guava leaves and jackfruit leaves, patterned activity sheets and glue. Next, the researchers divided the children into two groups with different tasks, and gave examples of how to classify leaves based on the same color and type where in the grouping the children were asked to sort the leaves from small to large. Then, teachers and researchers distributed tools and materials to children so that children could immediately carry out classification activities and sort the leaves according to their respective tasks. This classification activity is carried out based on the color and shape of the leaves. According to [13], classification is an important ability to teach children because classification is one of the initial stages for children to learn to think logically, namely children will learn clear rules for grouping objects when classifying. object. In the activity of sorting leaves from small to large, [14] stated that sorting is the same as describing, which is a way of sorting objects based on certain characteristics.

In the learning process of classifying orange leaves, guava leaves and jackfruit leaves according to color and shape and sorting them from small to large, the aspect that children develop is the fine motor aspect, where children are trained to carry out the activity of sticking leaves in a predetermined pattern. prepared. In the gross motor aspect, children are trained to skillfully use their right and left hands to stick leaves on patterned activity sheets. In the cognitive aspect, children learn to classify leaves based on color and shape and then order them from small leaves to large leaves. In the language aspect, children are trained to understand language in the form of rules for steps in carrying out classification activities. Apart from that, children can write their own names on the leaf classification activity sheet. In the social emotional aspect, children are trained to have a sense of responsibility to obey the rules in leaf classification activities. Children are also trained to work together and respect other friends with different activity tasks. In the moral and religious aspects, children are trained to keep themselves and their environment clean by cleaning up unused materials and tools after carrying out classification activities and sorting leaves. In the art aspect, children are trained to observe the colors on leaves by grouping them into the same color.

- e. Collage activities using natural materials such as wood powder

This activity was carried out in the third week by utilizing natural materials such as sawdust through collage activities. The tools used are sawdust, glue, containers and patterned activity sheets. Next, the researcher gave an example of how to carry out

collage activities with wood dust. Then, teachers and researchers distributed tools and materials as well as patterned children's activity sheets and immediately invited the children to carry out collage activities with sawdust. The collage activity using the sticking technique by [15], is the act of collecting objects and scraps of paper, etc., which are attached to a flat surface and form one unified work. The children from group B at Wakeakea Kindergarten looked enthusiastic and interested in carrying out collage activities using the wood dust sticking technique. This is in accordance with the assessment of [16] who argue that sticking is an activity that attracts children's interest because it is related to placing and attaching objects as they like.

In the process of learning collage using wood dust, the aspect that children develop is the fine motor aspect, where children are trained to be able to attach wood powder to the image pattern accurately and correctly. In the gross motor aspect, children are trained to skillfully use their right and left hands in the collage activity process by attaching sawdust. In the language aspect, children are able to understand the rules for carrying out the sawdust collage activity that has been explained. In the cognitive aspect, children can show a creative attitude in completing collage activities in their own way. On the social aspect emotionally, children can have a sense of responsibility by obeying the rules of collage activities well. Children can also share and collaborate in using tools and materials. In the religious and moral aspects, children are trained to keep their environment clean by tidying up the remaining sawdust and unused glue after the activity is finished. In the artistic aspect, children are trained to be careful and pay attention to neatness in attaching sawdust to drawing patterns in order to produce beautiful works of art.

- f. The sprinkling activity uses natural materials such as cassava leaves and papaya leaves

This activity was carried out in the third week by utilizing natural materials such as cassava leaves and papaya leaves through sprinkling activities. The children looked very enthusiastic and eager to pay attention to the researcher when introducing the tools and materials that would be used in the sprinkling activity, namely cassava leaves, papaya leaves, dyes, toothbrushes, combs, water and containers. After that, the researcher practiced the procedures for carrying out splashing activities. Then, teachers and researchers distributed tools and materials where children were invited to try doing splashing activities themselves. According to Mayeski [17], leaf sprinkling activity is an activity that talks about natural objects collected for a project, where children can arrange these objects on paper and children demonstrate how to press the brush. all over the comb, gauze and onto the paper to get a splatter painting on the paper.

In the process of learning to splash using cassava leaves and papaya leaves, the aspect that children develop is the fine motor aspect, where children can express themselves through hand movements in splashing activities using a toothbrush and comb. In the gross motor aspect, children are trained to skillfully use their right and left hands in the process of sprinkling leaves. In the cognitive aspect, children are trained to focus and be careful in carrying out splashing activities so that the position of the leaves remains stable and does not shift so as to get the desired results. In this aspect, children

are also trained to demonstrate activities that investigate what happens when children apply color using a splash technique on paper using natural materials as a medium. In the language aspect, children are able to understand language by following the rules and directions from teachers and researchers in the process of sprinkling activities. In aspect are trained to understand explanations regarding the rules for weaving activities. In the social emotional aspect, children are trained to be responsible for themselves by being able to complete the weaving activities that have been given. In terms of religion and morals, children are trained to keep their immediate environment clean by cleaning and throwing away unused banana leaves. In the artistic aspect, apply glue in collage activities which differ from one child to another. In terms of moral and religious aspects, children are trained to keep their immediate environment clean by tidying up equipment and throwing away unused leaves after the collage lesson is finished. In the art aspect, children are trained to carry out collage activities carefully and according to the image pattern to produce beautiful works.

- g. The activity of weaving mats using natural materials is banana leaves

This activity was carried out in the fourth week by utilizing natural materials from banana leaves through mat weaving activities. After that, the researcher explained and practiced the procedures for carrying out banana leaf weaving activities. Then, the teacher and researchers distributed banana leaves to the children and asked the children to try carrying out weaving activities according to what had been explained. In the opinion of [18], weaving activities for children require precision and patience. Weaving in kindergarten is a skill for children to practice making simple basic woven motifs using colored paper, ribbons, coconut leaves, banana leaves, coconut leaves and others. Researchers and teachers provide guidance to children who experience difficulties in mat weaving activities. [19], weaving activities for kindergarten children are given with appropriate guidance and teaching, namely about how to create works from simple weaving activities.

In the process of learning to weave mats using banana leaves, the aspect that children develop is the fine motor aspect, where children are trained to weave individual strands of banana leaves according to a pattern. In the gross motor aspect, children are trained to skillfully use their right and left hands in the process of weaving banana leaves. In the cognitive aspect, in the process of weaving the mat, children are trained to count the leaves they weave in turns with the guidance of teachers and researchers. In the language aspect, children are trained to understand explanations regarding the rules for weaving activities. In the social emotional aspect, children are trained to be responsible for themselves by being able to complete the weaving activities that have been given. In terms of religion and morals, children are trained to keep their immediate environment clean by cleaning and throwing away unused banana leaves. In the artistic aspect, children are trained to be creative through mat weaving activities using banana leaves.

- h. The collage activity uses natural materials such as banana leaves

This activity was carried out in the fourth week by utilizing natural materials from banana leaves through collage activities. The children were very enthusiastic when the researcher introduced the tools and materials that would be used in the collage activity, namely banana leaves which had been shaped according to the image pattern in several separate parts and glue. Researchers also prepared patterned children's activity sheets so that children could be well directed. After that, the researcher gave an example of how to collage several parts of a banana leaf in separate patterns correctly and correctly. Next, distribute tools and materials as well as patterned children's activity sheets and then invite children to carry out collage activities. According to [20], collage for kindergarten children is a fine arts activity that combines painting techniques (hand painting) with the skills of arranging and gluing materials on the drawing paper/base used, until a unique, interesting and different arrangement is produced using paper materials, natural materials and artificial materials.

In the process of learning collage using banana leaves, the aspect that children develop is the fine motor aspect, where children are trained to carry out writing activities and paste banana leaf drawing patterns on children's activity sheets correctly and accurately. In the gross motor aspect, children are trained to skillfully use their right and left hands in the banana leaf collage activity process. Cognitive aspect, children are trained to match each part of the banana leaf pattern on the children's activity sheet that has been provided. In the language aspect, children have understood several commands simultaneously in carrying out banana leaf collage activities. Apart from that, children are also able to write their own names on their work. Social emotional aspect, namely children can appreciate differences of opinion in terms of how to apply glue in collage activities which differ from one child to another. In terms of moral and religious aspects, children are trained to keep their immediate environment clean by tidying up equipment and throwing away unused leaves after the collage lesson is finished. In the art aspect, children are trained to carry out collage activities carefully and according to the image pattern to produce beautiful works.

4. Conclusion

The use of natural materials as a learning resource for early childhood in group B of Wakeakea Kindergarten, Gu District, Central Buton Regency, is carried out through several activities, namely classification and sorting activities, sprinkling activities, weaving activities, collage activities, counting objects activities, printing activities and weaving activities. . The natural materials used are orange leaves, guava leaves, jackfruit leaves, cassava leaves, papaya leaves, banana leaves, sawdust, crushed stone, wooden twigs, banana stems, bamboo twigs and cherry fruit. These activities using natural materials as learning resources generally develop children's abilities in fine motoric aspects, gross motoric aspects, cognitive aspects, language aspects, social emotional aspects, moral and religious aspects and artistic aspects.

5. Suggestion

Based on the research results, suggestions that can be given are for teachers, it is hoped that in carrying out learning activities children can utilize natural materials in the environment around the school as learning resources for learning activities that are more interesting and not boring. For children, it is hoped that learning by using natural materials as a learning resource can provide real, contextual experiences, where learning becomes more concrete and not verbalistic.

6. References

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