

## **Implementation of the Natural Materials Center Learning Model in Increasing Student Creativity**

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### **ABSTRAK**

Learning centers are learning that focuses on one point or skill. All activities distributed by educators to each child have the aim of stimulating the development perspective of children aged 0-6 years. The Natural Materials Center is a place specifically designed to provide opportunities for children to interact directly with various types of natural materials. The method used in this research is Systematic Literature Review or SLR. Systematic Literature Review (SLR) is a method used to assess and interpret all existing research in a particular field or phenomenon. The stages in this research are determining the problem formulation 1) What is the concept of the Natural Materials Center Learning Model 2) Implementation The concept of natural materials learning centers in The implementation aspect found by researchers is that natural materials centers are widely implemented in Indonesia with positive results. Learning using the materials center method in several regions has been well implemented. Learning natural materials can be a rich learning source and support the development of various aspects of children's intelligence.

**Keyword :** *Natural Materials Center, Systematic Literature Review (SLR), Creativity*

## INTRODUCTION

Central learning is learning that focuses on one point or skill. All activities distributed by educators to each child have the aim of stimulating the child's developmental perspective at the age of 0-6 years (Munar, et al., 2021). The central learning model is an approach applied in an educational institution, where each child has a central point in the learning process (Munar, et al., 2021). The stages in the method are provided with media modules that are made colorful so that children are interested in carrying out learning activities. Apart from interesting media, learning is carried out in varied ways, making children not feel that they are learning (Isnaida Khofiah1, Ila Rosmilawati & Ino Sutisno Rawita., 2023).

The BCCT (Beyond Centers and Circle Time) learning model or Sentra model is more suitable to be applied in Indonesia because it can adapt to the cultural diversity and geographical differences of this country. The BCCT model does not require a lot of equipment, but is still able to optimize children's intelligence (Azizah, 2023).

The Natural Materials Center is a place specifically designed to provide opportunities for children to interact directly with various types of natural materials. (Mukhtar Latif (2013) in Ningsih, 2022). The aim of this center is to support children's sensorimotor development, self-control and knowledge through exploration activities in natural materials such as mixing colors, fishing, swinging and planting seeds. Through this experience, children can develop skills such as showing, recognizing, comparing, connecting, and contrasting, as well as increasing their motivation and confidence in learning and interacting with the natural environment (Ningsig, 2022).

The theme of learning centered on natural materials has been implemented in learning at PAUD. This research aims to describe the concept of the Natural Materials Center Learning Model in various educational units, its implementation (learning patterns), obstacles and objectives of natural materials center learning. Several research articles are used to strengthen the discussion outlined in this article. It is hoped that this article can make a contribution to the world of education, especially in the field of pedagogy for educators to develop learning models in PAUD.

Becoming a more authentic and verifiable source. This method combines a comprehensive and unbiased search, thereby providing an in-depth and objective assessment of the existing literature (Hossain, et al., 2022).

The stages in this research are determining the problem formulation 1) What is the concept of the Natural Materials Center Learning Model 2) Implementation. The next step is to determine the selected keywords and analyze the selected articles. Next is determining the literature criteria to be reviewed, which include: 1) Literature articles published in research journals indexed by Google Scholar 2) Articles published in the last 5 years (2020-2024); 3) contains elements of Natural Materials Center in the title section; and 4) Review the natural materials center learning model in general.

Data for the literature study was collected using the Google Scholar search tool, with a focus on international and national journals. The articles studied were taken from Google Scholar within the last 5 years (2020-2024), using the keyword "Natural Materials Center".

The process and strategy to prevent children from dropping out of school has been carried out systematically in Indonesia. However, when it comes to the strategy for children returning to school still have difficulties, as well as several obstacles and dilemmas to requires the right strategy. The purpose of this study is to examined the strategies of eradicating out-of-school children and the best practices of alternative schools to provide inclusive and free education Qualitative methods were chosen in the research process, primary data collection was carried out through in-depth interviews and focus group discussions (FGD) with 28 informants, includes policy makers, principals, teachers and students. The data was analyzed using thematic analysis ( Rosmilawati, 2024 ).

Transformative learning is learning that can change students' perspectives in meaning life experience. This transformative learning lead students to have critical awareness in seeing, understanding, or make sense of life experiences or realities what is seen or felt. Transformative learning or transformative learning developed during this time focusing on efforts to resolve internal conflicts within oneself individual to achieve harmony, because the self is a central and integral part of totality of personality ( Mustaqin, 2023 ).

## RESEARCH METHODS

The method used in this research is Systematic Literature Review or SLR. A Systematic Literature Review (SLR) is a method used to assess and interpret all existing research in a particular field or phenomenon. SLR strengthens the foundation of research in areas of interest by becoming a more authentic and verifiable source. This method combines a comprehensive and unbiased search, thereby providing an in-depth and objective assessment of the existing literature (Hossain, et al., 2022).

The stages in this research are determining the problem formulation 1) What is the concept of the Natural Materials Center Learning Model 2) Implementation. The next step is to determine the selected keywords and analyze the selected articles. Next is determining the literature criteria to be reviewed, which include: 1) Literature articles published in research journals indexed by Google Scholar 2) Articles published in the last 5 years (2020-2024); 3) contains elements of Natural Materials Center in the title section; and 4) Review the natural materials center learning model in general.

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## RESULTS AND DISCUSSION

### Result

The research results are presented in two tables that list the journal articles that have been reviewed. Table 1 presents information regarding the year the article was published, journal name, and type of publication. This is proven by the writings published in Google Scholar indexed journals in the last 5 years.

Of the 7 journals that contain articles with the title Natural Materials Center. After Table 1 which explains the year of publication of the journal, Table 2 presents the names of authors, research methods and findings related to natural materials centers. From Table 2, it is known that 10 authors come from Indonesia, indicating that Indonesian authors have high enthusiasm in researching natural materials center learning models.

From these findings, natural materials centers are the learning model that is mostly used in early childhood education units.

Because the learning model centered on natural materials is said to be able to make children explore their imagination more and increase creativity. For example, the integration of natural materials centers in science and mathematics learning (counting and recognizing numbers). The natural material-centred learning model found in the article tends to emphasize stimulating various aspects of children's development, including the formation of attitudes and character. The results of this research are presented in Table 2.

**Table 1 indexed journal publications**

Year	Journal Name	Number Of Articles	Type Of Publication
2021	Jurnal PG-PAUD Trunojoyo: Jurnal Pendidikan dan Pembelajaran Anak Usia Dini	1	Google Scholar
2020	Jurnal Pendidikan Dan konseling	1	Google Scholar
2022	Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini	1	Google Scholar
2023	Journal Of Social Science Research	1	Google Scholar
2021	Jurnal pendidikan islam anak usia dini	1	Google Scholar
2022	Jurnal Pendidikan Dan konseling	1	Google Scholar

## Discussion

In the articles found, 7 articles were indexed by Google Scholar with the keyword natural materials center. All of these articles were published in 2020-2024, which means the articles are still new and actual. The articles found contain the Concept of the Natural Materials Center Learning Model and its Implementation. Each journal has a different concept in the journal (Surahman, et al., 2021). In his research conducted at TKN Pembina Sawang, North Aceh, it was found that a learning method based on natural materials that is good for use in this area is making works using banana stems. The application of the learning model centered on natural materials increases children's creativity. This is proven by the results of the work carried out by children who are able to create various shapes and various kinds of images using banana leaves provided at the natural materials center. Meanwhile, in the journal (Kartika Ayu Ningsih, Iis Prasetyo & Dwi Fitria Hasanah, 2022), research conducted in the Fatma Kenanga PAUD play group, Bengkulu City, found that the method used in implementing the pillars of natural material-based character education in the play group was able to implement these pillars. with good natural material center media. Meanwhile, in the journal (Eka Sutisnawati, Edi Hendri Mulyana & Sumardi, 2020), research conducted in the A RA Baiturrahman group found that the methods used in learning about natural materials that are good for use in this area are the erupting volcano game, static electricity and water filters. The application of the learning model centered on natural materials increases children's creativity. This is proven by the results of the work carried out by children who are able to observe, ask questions and collect information.

The concept of natural materials learning centers. In the implementation aspect, what researchers found was that natural materials centers were widely implemented in Indonesia with positive results. From various regions, and from these three different concepts, learning centers on natural materials emphasize children's creativity, various methods are used, including using banana stems, play platforms, making mountains erupt, water filters and static electricity. This method is good for use in natural material learning centers because it can increase students' imagination and creativity. Research by Asyiful Munar, Hibana & Susilo Surahman (2021) on natural materials learning centers to increase children's creativity using natural materials from banana stems has been well developed. Research by Kartika Ayu Ningsih, Iis Prasetyo & Dwi Fitria Hasanah (2022) The method used in implementing the pillars of character education based on natural materials in play groups is optimal and well used. The following is a complete explanation of previous research regarding the concept of natural materials learning centers and the implementation of natural materials learning centers.

**Table 2 Authors, Methods and Findings**

Authors	Methods	Findings
Asyiful Munar, Hibana & Susilo Surahman	Kualitatif	The learning center for natural materials to increase children's creativity using natural materials from banana stems has developed very well.
Kartika Ayu Ningsih, Iis Prasetyo & Dwi Fitria Hasanah	kualitatif deskriptif	Character education pillars based on natural material centers
Eka Sutisnawati, Edi Hendri Mulyana & Sumardi	deskriptif kuantitatif.	Educator performance in managing natural materials centers in science games
Hanifah fitria azizah	Kuantitatif	The influence of the natural materials center learning model on the fine motor skills of children in the APAUD Al Muhsin Metro group.
Kiki Supriyanti, Yusria Yusria, Sandi Maspika, ridwan & Manda Yuspika Sari	kualitatif dan kuantitatif	The application of a scientific approach through learning in natural materials centers is able to increase children's creativity. This shows that there is an increase in children's creativity through the application of a scientific approach through learning in natural materials centers.
Sela Romanti & Rohita Rohita	Kualitatif	Teachers' efforts to improve children's ability to solve problems by using natural material center mediation methods

### Natural Materials Center Learning Concept

Research by Kartika Ayu Ningsih, Iis Prasetyo & Dwi Fitria Hasanah (2022) Natural materials are development activities from liquid materials, which usually utilize fluid materials, such as: water, sand, grains, flour, weighing and loading activities, filling, and review at a science event. Science games that use central learning methods can be implemented effectively. Centers, also known as areas, activity corners, study corners, or interest corners, provide children with opportunities to interact directly with a wide variety of materials. Natural resource centers support children's sensorimotor development, self-control and understanding of science. Indonesia already has many schools that apply the central learning model. Even though many have implemented it, not all schools have implemented this program well and in accordance with the four types of standards. Hanifah Fitria Azizah (2023). Sela Rohmanti & Rohika's research (2020) Every learning has different goals and benefits, as does the natural materials center learning model. According to Latif, et al, (2013: 132) in Sela Rohmanti & Rohika (2020) natural materials centers have the aim of providing opportunities to build abilities with various kinds of materials, gain sensory motor experience, and build self-control.

This natural materials center facilitates children to develop and expand their sensory motor play experience by providing lots of opportunities for children to explore natural materials in developing the fine motor maturity needed in the process of writing readiness, hand skills, and stimulating the working system of the child's brain (Karla Adhani & Sri Watini., 2022). This natural materials center really facilitates children to be able to develop sensory motor play experiences and self-control using the five senses.

The use of learning media centered on natural materials can clarify the message that you want to convey to children, can help children to increase their motivation in learning, and make learning more varied and it is hoped that children's learning will be more meaningful.

### **Implementation Of Natural Materials Center Learning**

Research by Asyiful Munar, Hibana & Susilo Surahman (2021) Implementation of a natural materials center learning model through play activities, children can recognize various shapes that they create themselves and learn to mix colors to create new colors. This learning process awakens children's creativity. At TKN Pembina Sawang, North Aceh, a learning method centered on natural materials that is good for use in this area is making works using banana stems. In play groups, educators are good at using natural material center methods by implementing the pillars of character education. The method found by Kartika Ayu Ningsih, Iis Prasetyo & Dwi Fitria Hasanah (2022) is the method used in implementing the pillars of character education based on natural materials in play groups including: lecture method, direct practice method, experimental method. The method used is adapted to the activities to be carried out.

By exploring and experimenting, children will have ideas and sensitivity to knowledge and the natural world around them, thereby growing motivation and self-confidence in learning. Play activities at the natural materials center also aim to enable children to practice gross and fine motor skills, as well as introduce children to science from an early age. The materials used are related to nature. (Sela Romanti & Rohita, 2020).

Research (Sela Romanti & Rohita, 2020) The ability to solve problems in children aged 4-5 years in learning at natural materials centers is very high, this can happen through the model used, namely the central learning model. In the central learning model process there are 4 steps, the first is the playing environment, before playing, during playing and after playing.

A scientific approach using learning centered on natural materials can develop children's thinking abilities. The scientific approach is used when children are involved in play activities (including during science learning activities), as well as other activities, for example role playing, playing with blocks, playing literacy games, or doing art activities. (Dewi Ishak, Abdul Rahmat, Mohammad Zubaidi., 2020)

Research (Dewi Ishak, Abdul Rahmat, Mohammad Zubaidi., 2020) Interaction between students during learning activities at the natural materials center at every step in the center activities that take place for each aspect of the students' learning activities, indicators used in play activities at the natural materials center through a scientific approach to early childhood, the average learning development of students is in the very well developed category.



## CONCLUSIONS AN RECOMMENDATIONS

### Conclusions

Learning using the materials center method in several areas has been well implemented. Learning natural materials can be a rich learning source and support the development of various aspects of children's intelligence. The focus is on exploration, experimentation, and the use of materials derived from nature to enhance the learning experience. With proper planning and implementation, it not only enriches students' knowledge but also develops creativity and a positive attitude towards nature and the environment.

### Recommendations

To enrich natural materials center learning, allowing the learning approach to be more interactive and integrated with various fields of study, using technology to enhance the learning experience, and involving the community and local stakeholders to provide real context and increase student awareness about the importance of environmental conservation and resource management nature wisely.

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