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ETHNOSCIENCE-BASED LEARNING INCORPORATING LOCAL WISDOM THROUGH *CANANG SARI* MAKING ACTIVITIES TO SUPPORT CHILDREN'S SCIENTIFIC UNDERSTANDING AT KUMARA SANDHI KINDERGARTEN

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Abstract

This study aimed to describe the implementation of ethnoscience learning based on local wisdom through canang sari-making activities in supporting early childhood understanding of science concepts at TK Kumara Sandhi. The study employed a qualitative descriptive approach involving all students at TK Kumara Sandhi as research subjects. Data were collected through observation, interviews, and documentation. The results showed that the implementation of ethnoscience learning through canang sari-making activities provided concrete learning experiences related to basic science concepts, including observing, comparing, classifying, recognizing colors, shapes, and textures, as well as understanding simple cause-and-effect relationships. Children were actively engaged in exploring natural materials such as flowers, leaves, and young coconut leaves through touching, sorting, folding, and arranging activities. Science process skills were also observed through activities involving questioning, trying, observing changes, and communicating simple observations. Findings from observations and interviews indicated that the use of concrete experiences, active child participation, and the integration of local culture closely related to children's daily lives supported meaningful science learning. Thus, local wisdom-based ethnoscience learning through canang sari-making activities can be viewed as a learning approach that provides concrete experiences for introducing science concepts and processes while also introducing local culture to young children.

Keyword: Ethnoscience, Local wisdom, Science concepts, Early childhood

INTRODUCTION

In the midst of increasingly rapid modernization, educational institutions are not only focused on students' academic achievement but also play an important role in shaping character, developing social awareness, and fostering an understanding of national identity and local wisdom values. This is important because education serves as the primary foundation for developing high-quality human resources with strong character. Educational objectives

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encompass ideals related to noble values, truth, and local wisdom (Shaleha & Zebar, 2024). Therefore, early childhood education (ECE) is a fundamental and strategic component of human resource development. This is because early childhood is a period in which children's abilities develop rapidly and significantly (Nurasyiah & Atikah, 2023). One important aspect that children need to develop is their understanding of scientific concepts. Introducing science from an early age aims to help children recognize scientific facts while fostering curiosity, critical thinking, observation skills, and the ability to solve simple problems encountered in everyday life (Nisfa et al., 2022). To support children's understanding of scientific concepts, a learning approach is needed that does not focus solely on the use of digital media but also emphasizes an approach based on the local wisdom found in children's surroundings.

However, based on observations, science learning at TK Kumara Sandhi has not yet fully utilized the potential of local culture as a learning medium. Learning activities predominantly rely on lectures and worksheets, resulting in limited active involvement among children in the learning process. The initial observation conducted prior to the implementation of ethnoscience learning revealed that children demonstrated varying levels of understanding of basic science concepts. Based on the predetermined observation indicators, 65% of the children experienced difficulties in identifying differences between objects, 15% experienced difficulties in comparing objects based on shape and quantity, and 20% demonstrated an emerging ability to solve simple problems. The observation focused on several indicators of early science understanding, including the ability to observe differences between objects, compare objects based on observable characteristics, and respond to simple cause-and-effect situations. Each child was observed during learning activities, and their observable behaviors were recorded using an observation sheet developed according to these indicators. The percentage data were calculated by determining the proportion of children who demonstrated the specified characteristics in relation to the total number of children observed. These data represent the children's initial condition prior to the implementation of the learning activities and were used to provide contextual information regarding their initial science understanding. They are distinguished from the main qualitative findings, which were obtained through systematic observations, interviews, and documentation during the implementation of ethnoscience learning through canang sari-making activities. Based on observations using indicators of basic scientific concept understanding, children's understanding of scientific concepts at TK Kumara Sandhi was found to be relatively low. Given these conditions, a learning approach is needed to improve young children's understanding of scientific concepts through activities that are enjoyable, contextual, and rooted in the local wisdom of their surroundings.

Scientific concepts are not limited to recognizing phenomena or understanding cause-and-effect relationships; rather, science needs to be understood through direct experiences rooted in local values, a concept known as ethnoscience (Lawe et al., 2026). Learning through an ethnoscience approach involves integrating environmental learning materials with local culture. Through this integration, children are expected to experience learning that is connected to their surrounding environment (Yuli et al., 2025). Ethnoscience, as an approach that integrates local knowledge and culture into science learning, offers a potential solution for improving children's understanding of basic scientific concepts (Putri et al., 2025). Developing scientific concepts based on local wisdom represents an approach that can integrate scientific inquiry with local knowledge and cultural practices (Asriyadin et al., 2025). However, a review of previous studies indicates that ethnoscience-based learning has been applied in early childhood education to introduce science concepts through children's direct experiences with natural materials, local cultural practices, and the surrounding environment. These studies suggest that ethnoscience can provide meaningful and contextual learning experiences by connecting scientific concepts with children's everyday lives and local cultural knowledge. Nevertheless, the existing literature has

generally examined ethnoscience in relation to broad science learning outcomes, learning experiences, or the introduction of local culture, with relatively less attention given to how specific local-wisdom activities can provide opportunities for young children to demonstrate particular science concepts and science process skills. In particular, limited attention has been given to children's observable abilities to identify differences, compare and classify natural materials, recognize characteristics such as color, shape, and texture, and explore simple cause-and-effect relationships through culturally meaningful activities.

This gap is important because early childhood science learning requires concrete and contextual experiences that are appropriate to children's developmental characteristics. Local cultural activities provide opportunities for children to interact directly with natural materials while simultaneously engaging in basic scientific processes such as observing, comparing, classifying, questioning, experimenting, and communicating. However, how these processes are manifested during local-wisdom activities and how ethnoscience learning can be implemented through culturally familiar activities remain insufficiently described in the context of early childhood education. Therefore, the present study addresses this gap by descriptively examining the implementation of ethnoscience learning through canang sari-making activities at TK Kumara Sandhi, focusing specifically on children's observable engagement with basic science concepts and science process skills. Rather than testing the effectiveness of an intervention, this study provides a qualitative description of how a local cultural activity can serve as a contextual learning experience for introducing science concepts and processes to young children.

Ethnoscience refers to knowledge, practices, and ways of understanding nature that are developed and transmitted within local communities through their cultural values, traditions, and everyday experiences. In early childhood education, ethnoscience-based learning connects this local knowledge with children's exploration of observable phenomena in their surrounding environment. Thus, an activity can be considered ethnoscience-based when a familiar cultural practice becomes a context through which children explore and understand basic scientific concepts.

In this study, the activity of making canang sari represents an ethnoscience-based learning activity because it integrates a culturally familiar Balinese practice with children's direct exploration of natural materials. Canang sari commonly involves the use and arrangement of materials such as flowers, leaves, young coconut leaves, and other natural components. During the activity, children are invited to observe differences in color, shape, size, and texture; compare and classify materials based on their observable characteristics; explore how materials can be folded, arranged, or combined; and discuss simple changes and cause-and-effect relationships that they encounter during the activity. In this context, the cultural practice of making canang sari serves as the local knowledge context, while the children's observation, comparison, classification, exploration, and communication of observable phenomena represent the scientific processes developed through the activity. Therefore, ethnoscience in this study does not refer simply to the use of local materials, but to the integration of local cultural practices with children's direct exploration of scientific phenomena in their everyday environment (Emda, 2023). Ethnoscience activities involve transforming scientific knowledge developed within communities (indigenous science) into formal scientific knowledge. Ethnoscience refers to the knowledge possessed by a nation, ethnic group, or particular social group as a form of local wisdom (Putri & Idawati, 2025). The potential of local culture and wisdom has not yet been fully utilized by educators in the learning process. Local culture and wisdom are part of the surrounding environment and possess significant educational value, making them valuable contextual learning resources for students. Science learning for young children is a process that encourages them to develop thinking skills, solve problems, and discover new facts (Ahmad, 2023). Science learning not only guides children in understanding scientific knowledge but also

enables them to address various problems through a systematic process. Indicators of scientific concept understanding in young children include: (1) observing, (2) comparing, (3) measuring, (4) communicating, and (5) drawing simple conclusions (Ashari et al., 2023). Therefore, local wisdom and culture can be utilized as relevant learning resources and instructional media that can be directly integrated into the learning process (Elva et al., 2025).

The ethnoscience approach serves as an innovative learning approach that integrates scientific knowledge with local community culture. Ethnoscience-based learning connects scientific concepts with traditional knowledge and local cultural practices, making learning more meaningful, contextual, and accessible to children (Iqbal et al., 2024). Through ethnoscience-based learning, children not only learn scientific concepts but also develop an appreciation for, affection toward, and commitment to preserving their local culture (Riyanti et al., 2022). Ethnoscience-based learning can serve as a means of developing cognitive abilities while instilling character values and cultural identity from an early age. TK Kumara Sandhi, as an early childhood education institution, has considerable potential for implementing learning based on local wisdom. The strong social and cultural environment of Bali provides opportunities for teachers to utilize various elements of local culture as engaging and relevant learning resources for young children (Masruchiyah et al., 2024).

METODOLOGI

This study employed a descriptive qualitative approach to describe the implementation of ethnoscience-based learning through canang sari-making activities and to examine the science-related behaviors observed during the learning process. The qualitative approach was used to obtain descriptive data in the form of participants' observable behaviors, verbal responses, and experiences during the learning activities. The study did not employ a pre-test–post-test comparison or an experimental procedure to measure the effectiveness of the learning intervention. Therefore, the findings are interpreted as descriptions of the implementation, children's observed engagement, and science-related behaviors that emerged during the learning activities rather than as evidence of causal improvement or intervention effectiveness.

The research subjects were all children participating in learning activities at TK Kumara Sandhi. Data were collected through observation, interviews, and documentation. Observations focused on children's engagement with natural materials and their observable science-related behaviors, including observing, comparing, classifying, recognizing colors, shapes, and textures, exploring simple changes and cause-and-effect relationships, asking questions, trying different actions, and communicating simple observations. Interviews were conducted with teachers to obtain additional information regarding the implementation of the learning activities and children's responses. Documentation was used to support and complement the observation and interview data. The data from these sources were analyzed descriptively by organizing, interpreting, and presenting patterns that emerged from the observed learning activities. (Sugiyono, 2024). The research was conducted at TK Kumara Sandhi, Menyali Village, Buleleng Regency, Bali, during the even semester of the 2025/2026 academic year The study involved all 25 children enrolled in the TK B at TK Kumara Sandhi, consisting of 10 boys and 15 girls. The children were in the 5–6-year-old age range, which corresponds to the developmental stage targeted by the study of early childhood science learning. The participants were selected based on their enrollment in the class in which the ethnoscience-based learning activities through canang sari-making were implemented. All children in the class were included as research subjects to obtain a comprehensive description of their participation, interactions, and science-related behaviors during the learning activities rather than to establish a statistically representative sample. The inclusion of all 25 children also allowed the study to capture variations in children's observable responses and engagement during the learning process.

Participation was determined based on the children's status as active students in the selected class and their involvement in the learning activities during the study period. Thus, the participants represented the naturally occurring classroom group in which the ethnoscience-based learning activities were implemented.

The children participating in the study had diverse characteristics in terms of cognitive abilities, particularly in the area of scientific skills. Based on the initial observations, some children were able to conduct simple observations of objects in their surrounding environment. However, several children still experienced difficulties in classifying objects, recognizing cause-and-effect relationships, and understanding changes occurring in objects or events. Data were collected through observation, interviews, and documentation. Participatory observations were conducted during the implementation of ethnoscience learning based on local wisdom, while in-depth interviews were conducted with teachers and the school principal to obtain information regarding the implementation of the learning process. Documentation included photographs of learning activities and other supporting records.

The trustworthiness of the data in this study was examined through source triangulation and technique triangulation. Source triangulation was conducted by comparing information obtained from various data sources, namely classroom teachers, the school principal, and observations of children's activities during the learning process. Meanwhile, technique triangulation was conducted by comparing data obtained through observation, interviews, and documentation to ensure the consistency and accuracy of the information collected.

Data were collected through participatory observation, semi-structured interviews, and documentation. Participatory observations were conducted during the implementation of ethnoscience-based learning through canang sari-making activities. The learning activity was conducted over, with each session lasting approximately [duration] minutes. The activity was implemented in the regular classroom learning setting and involved all 25 children aged 5–6 years.

The canang sari activity was implemented through several sequential stages. First, the teacher introduced the learning activity by explaining the purpose of making canang sari and inviting the children to observe the natural materials that would be used. The materials included flowers, leaves, janur (young coconut leaves), and other locally available natural materials used in the activity. Second, the teacher demonstrated how the materials were selected, arranged, folded, and combined to form a canang sari. Third, the children were given opportunities to explore the materials directly by touching, observing, comparing, selecting, sorting, folding, and arranging them with teacher guidance. Fourth, the teacher encouraged children to discuss the characteristics and changes they observed during the activity through questions related to color, shape, size, texture, and the properties of the materials. Finally, the children communicated their observations and experiences, while the teacher reinforced the relationship between the local cultural practice of making canang sari and the science concepts explored during the activity.

The learning objectives were to provide children with concrete and contextual experiences for exploring basic science concepts through a culturally familiar activity. Scientific concepts were intentionally integrated into the activity by directing children's attention to observable characteristics and simple phenomena. For example, children were encouraged to compare flowers and leaves based on color, shape, size, and texture; classify materials according to observable characteristics; observe the properties of janur when it was folded and arranged; and discuss simple changes or cause-and-effect relationships observed during the activity. Thus, the scientific dimension was not treated as a separate lesson but was embedded in children's direct exploration of materials within the local cultural practice.

The observation instrument consisted of an observation sheet developed based on indicators of children's observable science-related behaviors. The indicators included: (1)

identifying differences between natural materials; (2) comparing materials based on observable characteristics such as shape, size, color, and quantity; (3) classifying materials based on similarities and differences; (4) identifying colors, shapes, and textures; (5) exploring the properties of materials through direct manipulation; (6) observing simple changes and cause-and-effect relationships; (7) asking questions and responding to questions related to the materials or activity; (8) trying different ways of handling or arranging materials; and (9) communicating simple observations or findings. During the activity, the researcher recorded children's observable behaviors and verbal responses in the observation sheet and field notes.

Semi-structured interviews were conducted with the classroom teachers and the school principal to obtain additional information about the implementation of ethnoscience-based learning and children's responses to the activity. The interview guide addressed several aspects, including: (1) how ethnoscience and local wisdom were incorporated into classroom learning; (2) the objectives and procedures of the canang sari activity; (3) children's participation and responses during the activity; (4) children's observable science-related behaviors; (5) teachers' strategies for introducing science concepts through local cultural activities; (6) challenges encountered durin

(as cited in Rizal Safarudin, 2023), which consists of three stages: data reduction, data display, and conclusion drawing or verification. Data reduction was conducted by selecting, focusing on, and simplifying data relevant to the research objectives. Subsequently, the data were presented in descriptive form to facilitate the researcher’s understanding of the research findings. The final stage involved drawing conclusions based on the patterns, themes, and relationships identified among the data, which were continuously verified throughout the research process. Through these stages, the study aimed to obtain an in-depth understanding of the implementation of ethnoscience learning based on local wisdom in developing young children’s understanding of scientific concepts at TK Kumara Sandhi.

RESULTS AND DISCUSSION

Results

Based on the results of observations and documentation of ethnoscience learning activities based on local wisdom at TK Kumara Sandhi, an improvement was observed in the children’s ability to recognize basic scientific concepts, including classifying objects and understanding cause-and-effect relationships through the activity of making canang sari. This improvement was evident when the children were able to identify and name various types of natural materials, such as flowers, leaves, young coconut leaves (janur), and fruits, based on their shapes, colors, and textures. The children were also able to classify the materials used according to their types and functions in the process of making canang sari. This improvement was further supported by the children’s active involvement throughout the learning process. The children appeared more focused, actively asked questions about the natural materials being used, and were able to follow the activity stages independently and collaboratively with their peers. Therefore, ethnoscience learning based on local wisdom through canang sari making activities not only increased children’s enthusiasm but also supported the development of basic scientific thinking skills appropriate to the developmental characteristics of early childhood.

Throughout the activity, the children appeared actively engaged in exploring the materials used. They began to recognize different types of flowers based on their colors, shapes, sizes, and aromas. In addition, the children learned to understand the textures of leaves and young coconut leaves (janur) through activities involving touching, folding, and arranging these materials into canang sari. This process demonstrated the stimulation of basic scientific concepts in children, particularly their abilities to observe, compare, classify, and identify the characteristics of objects in their surrounding environment. This finding is consistent with the indicators of basic scientific

concept understanding, which include the abilities to observe, compare, classify, and recognize the characteristics of objects in the surrounding environment.



Figure 1. Activity of making *Canang Sari*.

The image above illustrates the children's enthusiasm during the activity, as they explored natural materials together with the teacher, making the learning experience more concrete and meaningful. The results of interviews with educators at TK Kumara Sandhi indicated that ethnoscience learning based on local wisdom through canang sari making activities was able to improve young children's understanding of basic scientific concepts. The scientific concepts that emerged during the activity included the abilities to observe, classify objects, recognize the properties and textures of materials, and understand simple cause-and-effect relationships. Children learned these concepts directly through interactions with the natural materials used in making canang sari, such as flowers, leaves, young coconut leaves (janur), and fruits. In addition, cause-and-effect concepts emerged when children understood that wilted flowers could be easily damaged and therefore could not be used, or that young coconut leaves folded carefully would produce a neat canang shape. Children also learned that arranging natural materials in a particular sequence would result in a complete canang sari. Observation results showed that the children were highly active in touching, sorting, and arranging these natural materials. According to the educators, direct involvement through concrete experiences made it easier for children to understand basic scientific concepts compared to learning solely through verbal explanations from the teacher.

Activities based on local culture also helped children become familiar with their environment and regional traditions. Children gained greater awareness of various types of plants, the functions of plants as ceremonial materials in Hindu traditions, and the use of natural materials in everyday life. This is consistent with research on the ethnoscience concept, which integrates cultural knowledge with science learning, making the learning process contextual and closely connected to children's experiences. Research findings indicated improvements in children's science process skills, including their abilities to ask questions, experiment, observe changes, and communicate simple observations during canang sari making activities. These improvements were evident in the children's behavior throughout the learning process. Children began to actively ask simple questions, such as, "Why are wilted flowers not used?", "Why can janur be folded while ordinary leaves tear easily?", or "Why are flowers different colors?" These questions demonstrated the emergence of children's curiosity about the properties of the natural materials used in the activity.

The ability to experiment was also evident when children attempted to fold janur in various ways to create neat canang patterns. Some children tried rearranging flowers based on their colors and sizes to achieve more attractive results. During observation activities, children were able to recognize changes in the condition of materials, such as noticing that fresh flowers had brighter colors and were less likely to crumble than dried flowers. Children were also able to distinguish between smooth and rough leaf textures through direct tactile experiences. Through an ethnoscience approach based on local wisdom, learning not only enhanced young children's

understanding of scientific concepts but also instilled cultural values, cooperation, and environmental awareness. Local culture-based learning is considered effective because it provides real-life experiences, strengthens children's cultural identities, and helps them understand scientific concepts naturally and enjoyably. Therefore, the implementation of ethnoscience learning based on local wisdom through canang sari making activities is considered effective in improving young children's understanding of scientific concepts, as learning takes place through direct experiences using natural materials that are familiar and closely connected to their everyday lives. Children can observe, compare, classify, and experiment with arranging materials such as flowers, leaves, and janur, enabling them to understand scientific concepts more concretely than through verbal explanations alone.

Discussion

The research findings indicate that the implementation of ethnoscience learning based on local wisdom through canang sari making activities at TK Kumara Sandhi was able to improve young children's understanding of scientific concepts. This improvement was evident in the children's ability to observe the characteristics of natural materials, classify objects based on color and shape, recognize changes occurring in objects, and understand simple cause-and-effect relationships that emerged during the learning process. These findings demonstrate that learning activities utilizing local culture and the surrounding environment provide more meaningful learning experiences than instruction centered solely on teacher explanations. Children acquired knowledge through direct involvement in activities, making scientific concepts easier to understand and remember.

Analytically, canang sari making activities functioned not only as cultural activities but also as a means for children to develop science process skills. When children selected flowers based on color, distinguished between the textures of leaves and janur, and observed whether flowers were fresh or wilted, they were engaging in processes of observation, classification, comparison, and drawing simple conclusions. These activities demonstrate that scientific concepts can be learned contextually through everyday experiences closely connected to children's lives. Thus, ethnoscience learning based on local wisdom can bridge scientific knowledge with the cultural realities children encounter in their surrounding environment. This finding is consistent with the constructivist theory proposed by Piaget (as cited in Khotimah & Agustini, 2023), which states that children construct knowledge through active interaction with their environment. During canang sari making activities, children had opportunities to explore objects directly, facilitating processes of assimilation and accommodation in response to their new experiences. Knowledge of colors, textures, shapes, and changes in objects was not acquired solely through verbal explanations but through concrete experiences that enabled children to construct their own understanding. Therefore, learning that provides real-life experiences is more effective in developing children's thinking abilities than learning that relies on abstract concepts.

In addition to being supported by constructivist theory, the findings of this study also reinforce Vygotsky's perspective (as cited in Mariatul, 2024), which emphasizes the importance of social interaction in the learning process. Throughout the activity, children interacted with teachers and peers to discuss the functions of canang sari materials, how to arrange them, and the reasons for selecting particular materials. These interactions helped children gain new understanding through guidance and shared experiences, thereby optimizing the learning process. The findings are also consistent with the study by Suharyat et al. (2023), which stated that ethnoscience learning based on local culture can improve scientific concept understanding by providing contextual learning experiences closely related to learners' everyday lives. These findings are further supported by previous studies indicating that the integration of local wisdom

into learning can enhance children's engagement, observation skills, and understanding of natural phenomena in their surroundings. The consistency of these findings suggests that integrating local culture into science learning is an effective strategy for developing the cognitive abilities of young children. Therefore, canang sari making activities serve not only as an effort to preserve Balinese culture but also as a learning medium capable of developing children's understanding of scientific concepts in a more meaningful and contextual manner.

Canang sari making activities provide children with opportunities to develop basic science process skills. Children learn to recognize different types of flowers based on their color, shape, size, and aroma. In addition, they become familiar with the characteristics of leaves and janur through activities involving folding, shaping, and arranging these materials. The findings are consistent with the indicators of basic scientific concept understanding in young children, including the abilities to observe, classify, and recognize textures, colors, shapes, and simple cause-and-effect relationships (Melani et al., 2022). These activities demonstrate that ethnoscience learning can stimulate children's observational abilities as part of their scientific concept development. Children become more active in observing their surrounding environment and understanding the properties of objects around them.

Ethnoscience learning based on local wisdom helps children understand the relationship between science and everyday life. Through canang sari making activities, children learn that natural materials found in their surroundings can be utilized in cultural and religious activities. Children begin to understand that flowers have specific functions, janur can be shaped into a container, and leaves and flowers have different characteristics. This understanding demonstrates that children's scientific concepts develop through concrete and contextual experiences, consistent with the findings of Ruqoyyah (2024), which emphasize the importance of introducing scientific concepts through experiences that are real, enjoyable, and meaningful for children. In addition to improving scientific concept understanding, these activities also foster children's curiosity. This was evident when children actively asked questions about flower names, the functions of materials, and the process of making canang sari. Curiosity is an important indicator in early childhood science learning because it encourages children to explore, experiment, and discover new knowledge (Herlina, 2022).

Educators play a role as facilitators throughout the activities by providing stimuli and simple explanations to help children understand the concepts being learned in accordance with their developmental stages. Ethnoscience-based learning also creates a more enjoyable and meaningful learning environment. Children appeared more enthusiastic because the activities were closely connected to their everyday lives. The use of local culture in learning made the activities familiar to children, enabling them to participate more actively in the learning process. This condition is consistent with the characteristics of early childhood learning, which emphasize direct experiences and learning through play (Nurasyiah & Atikah, 2023).

The findings of this study demonstrate that integrating local wisdom into science learning has a positive impact not only on children's cognitive development but also on the cultivation of cultural values and environmental awareness. Children become more familiar with Balinese culture from an early age while learning to use natural materials responsibly. Therefore, ethnoscience learning based on local wisdom can serve as an effective alternative for improving young children's understanding of scientific concepts because it connects scientific knowledge with the cultural practices present in their surrounding environment.

CONCLUSION

The implementation of ethnoscience learning based on local wisdom through canang sari making activities at TK Kumara Sandhi was effective in improving young children's understanding of scientific concepts. Children were able to observe, compare, classify, and

identify textures, colors, and shapes, as well as understand simple cause-and-effect relationships through direct experiences using natural materials from their surrounding environment. The learning activities also enhanced children's science process skills, including asking questions, experimenting, and communicating their observations. The integration of local culture made learning more contextual and meaningful while fostering children's appreciation and love for their local culture from an early age.

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