

# The Implementation of a Center-Based Learning Model in Early Childhood Education at TK Negeri Pembina Pacitan

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## ABSTRACT

This study aims to describe the implementation of the center-based learning model in early childhood education, its implications for child development, and to identify its strengths and challenges at TK Negeri Pembina Pacitan. This research uses a qualitative approach with a field research method. Data was collected through observation, interviews, and documentation. The results show that the implementation of the center-based learning model has been carried out quite well through planning, learning environment arrangement, core activities in learning centers, and closing activities. The model positively impacts children's development, including cognitive, social-emotional, language, and motor aspects in a holistic way through play-based learning. In addition, the model increases children's activeness, independence, and enthusiasm. However, several challenges were found, such as limited facilities, time management issues, and varying teacher competencies in managing learning centers.

**Keywords:** Center-Based Learning, Early Childhood Education, Child Development.

## I. Introduction

Education is a fundamental aspect of human life that plays a strategic role in shaping individual quality and determining the progress of a nation. Education is not merely understood as a process of knowledge transfer, but also as a systematic effort to develop human potential comprehensively, including cognitive, affective, and psychomotor aspects. Fatiha et al. (2024) explains that education encompasses all influences exerted by schools on children and adolescents entrusted to educational institutions, enabling them to develop cognitive abilities, mature mental readiness, and progressive social awareness. These competencies allow individuals to actively participate in society, build social relationships, and assume responsibilities as both individuals and social beings. In the era of globalization, characterized by rapid advancements in science and technology, education has become a key factor in enhancing a nation's competitiveness. A high-quality education system can produce superior, adaptive, creative, and innovative human resources to face continuously evolving challenges (Nagel, 2020). Therefore, improving the quality of education is an urgent necessity that must be carried out continuously. Such efforts include curriculum reform, enhancement of teacher competencies, and the development of more effective, innovative, and learner-centered instructional models that align with the needs of students in the modern era.

One level of education that plays a crucial role in laying the foundation for child development is Early Childhood Education (ECE). ECE serves as the initial foundation for shaping children's character, personality,



and basic potential before they enter higher levels of formal education (Kalsum et al., 2023). Early childhood, ranging from 0 to 6 years of age, is a period of rapid development across physical, cognitive, language, social, and emotional domains (Dwijantie, 2025). During this stage, children's brain development occurs very rapidly, often referred to as the "golden age," a critical period that determines the quality of future development (Amiliya & Susanti, 2024). Dwijantie (2024) further explains that early childhood education is a form of guidance provided from birth to six years of age through educational stimulation to support both physical and psychological growth, ensuring children's readiness for further education. Therefore, ECE is not solely oriented toward academic achievement but emphasizes holistic developmental stimulation. In practice, learning in ECE must be designed in accordance with children's developmental characteristics, particularly through learning by playing (Wahyuni & Azizah, 2020). Young children are not yet ready to engage in abstract and formal learning; therefore, instructional approaches should be concrete, enjoyable, contextual, and interactive. According to Azhari et al. (2024), creatively designed learning activities can foster children's curiosity, exploratory skills, independence, and social abilities. In line with this, ECE also plays an important role in instilling fundamental life values such as discipline, responsibility, cooperation, empathy, and independence. These values form the foundation of children's character development in the future. Therefore, the ECE learning environment must be carefully designed to provide positive, enjoyable, and meaningful learning experiences.

In its implementation, one of the widely used approaches in ECE is the center-based learning model. This model is a child-centered approach in which children act as the main subjects of learning, while teachers function as facilitators. Susanto (2021) states that the center-based learning model is an approach developed based on theoretical and empirical studies, emphasizing play activities in various learning centers. According to Lailan (2017), this model typically consists of several types of centers, such as block centers, art centers, natural materials centers, preparation centers, religious (IMTAQ) centers, and role-play centers. Each center has different objectives and developmental stimulations, yet they are integrated to support holistic child development (Qori'ah et al., 2019). For example, block centers focus on developing cognitive, logical, and fine motor skills, while art centers emphasize creativity and self-expression. In the center-based learning model, children are given the freedom to choose activities according to their interests and needs. This approach aims to enhance children's intrinsic motivation to learn. Teachers act as facilitators who provide scaffolding before, during, and after learning activities. Erwati et al. (2026) explain that the teacher's role in this model is characterized by the ability to help children understand simple concepts in daily life through guided yet flexible learning experiences. Additionally, this model emphasizes the importance of stimulating a learning environment. Classrooms are designed to be engaging, safe, and aligned with children's world, allowing them to learn actively through interaction with the environment, peers, and teachers.

The phenomenon observed in the implementation of the center-based learning model at TK Negeri Pembina Pacitan indicates that learning practices have begun to shift toward a child-centered approach, where children are given opportunities to learn through various activity centers. However, several challenges remain, including limited learning media, varying levels of teacher understanding in managing centers, and suboptimal time and classroom management. On the other hand, this model has shown positive impacts on children's enthusiasm and engagement in learning activities. This suggests that the implementation of center-based learning still requires continuous improvement and development to achieve optimal effectiveness. Various previous studies have demonstrated that the center-based learning model positively influences early childhood development. These studies generally indicate improvements in cognitive, social-emotional, motor, and language development. Safitri et al. (2026) found that the model enhances children's critical thinking and creativity by providing opportunities for independent exploration. Ernawati et al. (2024) also found improvements in children's social skills through peer interaction during play activities. Similarly, Solihin (2024) reported increased active participation in learning, while Novia and Mahyuddin (2020) found that center-based learning optimizes early childhood development, particularly in cognitive and social-emotional aspects through structured and meaningful play. However, most previous studies focus on only one aspect of development, such as cognition or creativity, and thus do not comprehensively illustrate the effectiveness of

the model in supporting holistic child development. Additionally, implementation challenges such as limited facilities, insufficient teacher understanding, and suboptimal planning are still commonly encountered.

Based on the review of previous studies, several research gaps emerge, forming the basis for the novelty of this study. This research seeks to examine the implementation of the center-based learning model more comprehensively in supporting holistic early childhood development, rather than focusing on a single developmental aspect. Furthermore, this study emphasizes the role of teachers as facilitators, particularly in providing appropriate scaffolding tailored to children's needs. Another novelty lies in analyzing the relationship between the learning environment provided in each center and the optimization of children's development. Therefore, this research is expected to contribute to the development of ECE learning theory, particularly in the context of effective, innovative, and developmentally appropriate center-based learning models in the modern era. The objectives of this study are to describe the implementation of the center-based learning model in early childhood education, to examine its implications for child development, and to identify the strengths and challenges in its application at TK Negeri Pembina Pacitan. The findings of this study are expected to serve as an evaluation resource for teachers and schools in improving the quality of center-based learning. Additionally, this research is expected to contribute to the development of more effective, innovative, and developmentally appropriate ECE learning models in the future.

## II. Literature Review and Hypothesis Development

Early Childhood Education (ECE) is widely recognized as a critical phase in human development, as it lays the foundation for children's future learning, behavior, and overall well-being. Scholars emphasize that during early childhood, particularly between the ages of 0–6 years, children experience rapid growth across multiple developmental domains, including cognitive, social-emotional, language, and motor skills. This period is often referred to as the "golden age," highlighting its significance in shaping long-term developmental outcomes. Therefore, educational practices at this stage must be carefully designed to support holistic development rather than focusing solely on academic achievement. One of the key principles in ECE is the use of developmentally appropriate practices, particularly learning through play. Play-based learning allows children to explore, experiment, and construct knowledge actively within meaningful contexts. It fosters creativity, problem-solving skills, and social interaction while maintaining children's natural curiosity and motivation to learn. In this regard, learning environments should be interactive, engaging, and responsive to children's individual needs and interests. Teachers are expected to act not merely as instructors but as facilitators who guide and support children's learning experiences through appropriate scaffolding.

A widely implemented approach that aligns with these principles is the center-based learning model. This model is grounded in child-centered learning theory, which positions children as active participants in the learning process. In center-based learning, classrooms are organized into various activity centers, such as block centers, art centers, role-play centers, and natural material centers. Each center is designed to stimulate specific aspects of child development while maintaining integration across domains. For instance, block centers promote logical thinking and fine motor skills, while art centers encourage creativity and emotional expression. The theoretical foundation of center-based learning is closely related to constructivist learning theory, which asserts that children build knowledge through direct interaction with their environment. Through hands-on activities and social interaction, children are able to develop deeper understanding and meaning. Furthermore, the concept of scaffolding, derived from socio-cultural theory, plays a crucial role in this model. Teachers provide guidance and support tailored to children's developmental levels, gradually reducing assistance as children become more independent learners. This approach not only enhances cognitive development but also fosters autonomy and confidence.

Previous studies have consistently demonstrated the effectiveness of center-based learning in improving various aspects of early childhood development. Research findings indicate that this model enhances children's creativity, critical thinking, and problem-solving abilities by allowing them to engage in exploratory and self-directed activities. Additionally, it promotes social-emotional development through peer

interaction and collaborative play. Children also show increased engagement and motivation, as they are given the freedom to choose activities based on their interests. However, despite its advantages, the implementation of center-based learning often faces several challenges, including limited learning resources, variations in teacher competence, and constraints in classroom management. Based on the existing literature, it can be concluded that the center-based learning model is a relevant and effective approach for supporting holistic development in early childhood education. Nevertheless, there remains a need for further research that examines its implementation comprehensively, particularly in relation to the role of teachers, the quality of learning environments, and the integration of developmental aspects. Such studies are essential to ensure that the application of this model can be optimized in various educational contexts and aligned with the evolving needs of early childhood learners.

### III. Research Method

This study employs a qualitative approach using a field research design (Elitear & Koto, 2016). A qualitative approach was chosen because this study aims to gain an in-depth understanding of the phenomenon of the implementation of the center-based learning model in early childhood education at TK Negeri Pembina Pacitan, particularly in relation to the implementation process, the role of teachers, and its impact on children's development. Sugiyono (2015) explains that qualitative research is intended to understand phenomena experienced by research subjects holistically through descriptions in the form of words and language within a natural context. The research was conducted at TK Negeri Pembina Pacitan, which serves as the primary site for observing the implementation of the center-based learning model. The site was selected purposively because the institution has implemented the center-based learning model in its daily instructional activities, making it relevant to the focus of this study.

The subjects of this study consist of the principal, classroom teachers, and students at TK Negeri Pembina Pacitan. The principal and teachers were selected as key informants because they play a direct role in planning and implementing center-based learning, while the students were observed as subjects within the learning process to examine the impact of the model's implementation. Data collection techniques in this study include observation, interviews, and documentation. Observation was conducted to directly examine the ongoing center-based learning process in the classroom, including children's activities, the role of teachers, and the use of learning media in each center. In-depth interviews were carried out with the principal and teachers to obtain information regarding the planning, implementation, and challenges in applying the center-based learning model. Meanwhile, documentation was used to support the research data in the form of photographs of learning activities, lesson plans (RPPH), and other supporting documents.

The data analysis technique in this study follows the interactive model proposed by Miles and Huberman, which includes three stages: data reduction, data display, and conclusion drawing. Data reduction was carried out by selecting and focusing on data relevant to the research. Subsequently, the data were presented in the form of narrative descriptions to facilitate understanding. The final stage involved drawing conclusions, which was conducted gradually throughout the research process. To ensure the validity of the data, this study employed source triangulation and technique triangulation. Source triangulation was conducted by comparing data obtained from the principal, teachers, and observations, while technique triangulation was carried out by comparing the results of observations, interviews, and documentation. Thus, the data obtained are expected to have a high level of validity.

### IV. Result and Discussion

Based on the findings obtained at TK Negeri Pembina Pacitan through observation, interviews, and documentation techniques, data were collected regarding the implementation of the center-based learning model, its implications for child development, as well as its strengths and challenges. The findings are presented according to the research focus as follows.

#### 4.1. Implementation of the Center-Based Learning Model in Early Childhood Education at TK Negeri Pembina Pacitan

The results indicate that the implementation of the center-based learning model at TK Negeri Pembina Pacitan has been carried out quite effectively and is aligned with the principles of child-centered learning. In practice, learning activities are divided into several centers, such as the block center, art center, natural materials center, and role-play center. Based on interviews with classroom teachers, the following information was obtained: *"The center-based learning in this school has been implemented according to the schedule. We divide the children into several centers based on the weekly plan, and each day they rotate activities to prevent boredom."* This is supported by observational findings showing that children actively move from one center to another according to the teacher's guidance. Teachers act as facilitators who accompany the learning process without dominating the activities.

Observations also revealed that the classroom environment has been organized according to the center-based concept, where each corner of the classroom serves a specific function and is equipped with different educational play tools. Children are free to choose activities based on their interests, creating a more active and enjoyable learning atmosphere. In addition, the principal stated: *"We implement this center-based model to provide more meaningful learning experiences for children, allowing them to learn through guided play."* The implementation of the center-based learning model at TK Negeri Pembina Pacitan follows several practical stages: planning, welcoming activities, initial activities (environmental scaffolding), core activities in the centers, and closing activities. During the planning stage, teachers prepare the Daily Lesson Plan (RPPH) and determine the centers to be used according to the learning theme. A teacher explained: *"Before the activities begin, we assign children to different centers and prepare the learning materials according to the daily lesson plan."*

During the core activities, children are directed to their respective centers and are given the freedom to choose activities. Teachers provide scaffolding before and during the activities. This is reinforced by a teacher's statement: *"We assist children in each center, provide examples, and then allow them to explore independently according to their interests."* After the core activities, children engage in a recall session to reflect on what they have done, followed by closing activities. Through these steps, center-based learning becomes more structured while remaining flexible and enjoyable for children. Thus, the implementation of the center-based learning model at TK Negeri Pembina Pacitan has been carried out fairly well and is consistent with the fundamental principles of early childhood education, which emphasize learning through play and child-centered approaches. The process is systematic and practical, beginning with lesson planning, organizing the learning environment, conducting initial activities, implementing core activities in each center, and concluding with closing activities. Although the process has demonstrated active child participation and effective teacher facilitation, several aspects still need improvement, such as the management of learning media, time allocation, and optimization of each center to achieve more comprehensive developmental outcomes.

#### 4.2. Implications of the Center-Based Learning Model on Early Childhood Development at TK Negeri Pembina Pacitan

The findings show that the center-based learning model has positive implications for early childhood development, including cognitive, socio-emotional, language, and motor aspects. Based on interviews with teachers, it was stated: *"Children become more active and confident. They also interact more easily with peers and can express their opinions during center activities."* Observations indicate that children participating in center activities tend to be more independent in choosing activities, capable of working collaboratively in small groups, and demonstrate high curiosity. For example, in the block center, children are able to construct simple structures collaboratively, reflecting both cognitive and social development. In terms of language development, children appear more confident in speaking during role-play activities. They are able to express

ideas and emotions in simple ways, indicating that the center-based learning model effectively stimulates language development.

Regarding motor development, children are actively engaged in movement, utilize educational play tools, and practice hand-eye coordination. A teacher stated: *"Children's motor development is quite good because they are involved in many hands-on activities such as building with blocks, drawing, and role-playing."* Overall, the center-based learning model at TK Negeri Pembina Pacitan demonstrates a positive impact on holistic child development. It enhances cognitive abilities through exploration activities that promote thinking and problem-solving skills. Socio-emotional development is also improved, as evidenced by increased cooperation, independence, and self-confidence in peer interactions. Language skills are stimulated through active communication and expression during play, while motor skills develop through coordinated physical activities. Therefore, the center-based learning model is proven to be effective in fostering balanced and comprehensive early childhood development.

#### 4.3. Strengths and Challenges in the Implementation of the Center-Based Learning Model at TK Negeri Pembina Pacitan

The findings reveal several strengths in the implementation of the center-based learning model. Based on teacher interviews: *"The advantages are that children become more active, less easily bored, and learning becomes more meaningful because they learn through play."* Observations also show that children are more enthusiastic in participating in learning activities. They enjoy each center and remain actively engaged throughout the learning process. Additionally, the principal noted: *"The center-based model helps teachers observe children's development more easily, as each activity can be directly monitored."* However, several challenges were also identified. One of the main challenges is the limited availability of learning media. A teacher explained: *"Sometimes the educational play tools in each center are still limited, so they need to be used alternately."*

Other challenges include time management and teacher readiness in handling multiple centers simultaneously. Observations indicate that classroom management is not always optimal, particularly when the number of children exceeds the number of assisting teachers. The principal added: *"We are continuously working to improve teachers' competencies through training so that the implementation of the center-based model can be more effective."* In conclusion, the implementation of the center-based learning model at TK Negeri Pembina Pacitan has various strengths and challenges. Its strengths lie in creating active, enjoyable, and meaningful learning experiences, as well as facilitating comprehensive observation of child development. However, challenges such as limited learning media, suboptimal time management, and an imbalance between the number of teachers and students still need to be addressed. These findings suggest that while the center-based learning model is effective in improving the quality of early childhood education, further improvements in facilities, teacher competencies, and classroom management are necessary to ensure optimal and sustainable implementation.

#### 4.4. Discussion

##### a. Implementation of the Center-Based Learning Model in Early Childhood Education at TK Negeri Pembina Pacitan

The findings indicate that the implementation of the center-based learning model at TK Negeri Pembina Pacitan has been carried out fairly well and aligns with the principles of child-centered learning. This model positions children as the primary subjects in the learning process, while teachers act as facilitators who provide stimulation, guidance, and reinforcement through a play-based approach. These findings are consistent with the concept proposed by Susanto (2021), which states that center-based learning is a play-based approach that allows children to learn through direct experiences in various activity centers. In addition, Vygotsky's theory supports these findings through the concept of the Zone of Proximal Development (ZPD)

(Kurniati, 2025), emphasizing the importance of teacher guidance in optimizing children's development. In this study, the centers implemented include block, art, natural materials, and role-play centers, each designed to stimulate different aspects of child development while remaining integrated into a holistic and meaningful learning experience.

In practice, the center-based learning model at TK Negeri Pembina Pacitan is implemented through several systematic stages: planning, environmental arrangement, opening activities, core activities, and closing activities. During the planning stage, teachers prepare daily lesson plans (RPPH) and determine the types of centers to be used based on the learning theme. This indicates that teachers have demonstrated adequate planning in organizing learning activities. During implementation, children are given the opportunity to choose activities based on their interests and needs, creating a flexible and child-centered learning environment. This principle shows that learning is not rigid but adapts to the developmental characteristics of early childhood, who tend to learn through play and direct exploration (Novia & Mahyuddin, 2020). In this process, teachers do not act as the main source of information but as facilitators who provide scaffolding before, during, and after activities. This scaffolding includes guidance, examples, and assistance as needed, enabling children to complete tasks independently.

This aligns with Vygotsky's theory of the Zone of Proximal Development (ZPD) (Kurniati, 2025), which states that children's development can be optimized when they receive assistance from adults or more capable peers. Within the ZPD, children are at a potential developmental stage that can be achieved through appropriate guidance. Furthermore, this concept is reinforced by Bruner's discovery learning theory, which emphasizes that children better understand concepts when they discover them through meaningful learning experiences. Therefore, the teacher's role in center-based learning is crucial in creating an environment that supports optimal, independent, and active child development. Observations show that children actively move from one center to another, demonstrate high curiosity, and interact well with peers. The classroom environment has been arranged according to the center concept, where each area serves a different learning function. This indicates that the learning environment plays a significant role in supporting the effectiveness of center-based learning. However, several challenges remain, such as limited learning media and less-than-optimal time management. This suggests that although the implementation is generally good, improvements are still needed in classroom management and the provision of learning resources.

#### b. Implications of the Center-Based Learning Model on Early Childhood Development at TK Negeri Pembina Pacitan

The findings show that the center-based learning model has significant implications for children's holistic development, including cognitive, socio-emotional, language, and motor aspects. In terms of cognitive development, children demonstrate more active thinking through exploratory activities across centers. For example, in the block center, children can independently or collaboratively construct simple structures, indicating enhanced problem-solving and logical thinking skills. These findings are consistent with the study by Novia & Mahyuddin (2020), which states that center-based learning can optimize children's cognitive development through structured and meaningful play activities. Children are given opportunities to explore various activities in each center, enabling the development of thinking skills, problem-solving abilities, and understanding of simple concepts. Vygotsky's theory is also relevant here, emphasizing the teacher's role as a facilitator who provides scaffolding to help children achieve higher levels of development through social interaction and direct learning experiences (Habsy et al., 2023).

In terms of socio-emotional development, children show improved interaction skills, cooperation, and emotional regulation. They adapt more easily to their environment and peers and demonstrate increased confidence in various learning activities. This occurs because center-based learning provides ample opportunities for social interaction and collaborative learning in small groups. This is in line with Erik Erikson's theory, particularly the stage of initiative vs. guilt, where young children need opportunities to take initiative to develop confidence and independence (Jimatul Rizki, 2022). Regarding language development, children appear more active in communication, especially during role-play activities. They can express simple ideas,

ask questions, and convey feelings through conversations with peers and teachers. This indicates that center-based learning creates a natural and meaningful communication environment. Bruner's theory of social interactionism also supports this finding, emphasizing that children's language development is strongly influenced by social interaction in a stimulating learning environment (Yusup & Herdiana, 2024). Thus, the center-based learning model effectively develops children's cognitive, socio-emotional, and language aspects in a balanced and holistic manner.

In terms of motor development, children engage in various physical activities such as building with blocks, drawing, threading beads, and using learning tools in each center. These activities support the development of fine motor skills and body coordination through hands-on experiences (learning by doing). These findings are consistent with Piaget's theory, which states that early childhood falls within the preoperational stage, where learning is most effective through concrete and manipulative activities (Alhabib, 2021). Montessori's theory also supports this, emphasizing the importance of an environment that allows children to move actively and engage their senses directly in the learning process. Therefore, the center-based learning model provides comprehensive motor development stimulation while supporting the principles of early childhood education, which emphasize holistic and balanced development according to children's developmental stages.

c. Strengths and Challenges in the Implementation of the Center-Based Learning Model at TK Negeri Pembina Pacitan

The findings reveal several key strengths of the center-based learning model. First, learning becomes more active, enjoyable, and less monotonous, as children learn through play, which enhances intrinsic motivation. Second, the model allows teachers to observe children's development in greater detail, as each activity can be directly monitored within each center, supporting more objective developmental assessment. Third, it provides children with the freedom to choose activities based on their interests, supporting the principle of child-centered learning, which is essential in early childhood education (Assyifa et al., 2023). Fourth, the model supports the balanced development of all aspects of child development, including cognitive, social, emotional, language, and motor skills. These findings are consistent with Safitri et al. (2026), who state that center-based learning can enhance children's creativity and active participation. Through active play centers, children are physically and mentally engaged, gaining diverse learning experiences (Qori'ah et al., 2019).

Despite its strengths, several challenges were identified. The first is the limited availability of learning media. Educational play tools in each center are still insufficient and must be used alternately, which can reduce learning effectiveness if not properly managed. The second challenge is time and classroom management. With a relatively large number of children, teachers sometimes face difficulties managing multiple centers simultaneously, indicating the need for additional teaching staff or improved classroom management skills. The third challenge is the variation in teachers' abilities to implement center-based learning. Not all teachers have the same level of understanding regarding scaffolding and center management. These findings are consistent with Ernawati et al. (2024), who state that teacher readiness and the availability of learning resources are key challenges in implementing center-based learning. Similarly, Lailan (2017) highlights that major obstacles include limited facilities, insufficient teacher competence in managing centers, ineffective scaffolding time management, and limited parental understanding.

Based on the overall discussion, it can be concluded that the center-based learning model is an effective approach for improving the quality of early childhood education. This model not only focuses on academic aspects but also promotes holistic child development. However, its effectiveness is highly influenced by supporting factors such as teacher competence, availability of resources, and effective learning management. Therefore, continuous improvement efforts are necessary to optimize the implementation of the center-based learning model.

## V. Conclusion

Based on the results of the research and discussion, it can be concluded that the implementation of the center-based learning model at TK Negeri Pembina Pacitan has been carried out fairly well and is in line with the principles of child-centered early childhood education. The learning process is conducted through systematic stages, starting from planning, organizing the learning centers, core activities, and closing sessions, with the teacher acting as a facilitator. The center-based learning model has positive implications for early childhood development, including cognitive, socio-emotional, language, and motor aspects, which develop more optimally through play-based activities in various centers. In addition, this model offers advantages such as increased student engagement and independence. However, several challenges remain, including limited learning media, time management issues, and an insufficient number of assistant teachers.

Based on these conclusions, it is recommended that the school continue to improve the quality of learning facilities and infrastructure, particularly educational play materials in each center. Teachers are also expected to enhance their competencies through regular training to optimize the implementation of center-based learning. Furthermore, it is necessary to increase or better manage the number of teaching staff so that the learning process can run more effectively and proportionally. Future researchers are encouraged to examine the center-based learning model with a broader focus, such as investigating the effectiveness of each type of learning center in greater depth. The limitations of this study lie in its scope, as it was conducted in only one early childhood education institution, making the findings not yet generalizable. In addition, the limited duration of the study affected the depth of observation of the overall implementation of the center-based learning process.

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