

Project-Based Learning Trends in Early Childhood Education: Building Children's Creativity and Independence

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ABSTRACT

This study aims to describe the implementation of Project-Based Learning (PjBL) in Early Childhood Education (PAUD) and analyze its influence on the development of children's creativity and independence. The method used is descriptive qualitative with data collection techniques in the form of observation, in-depth interviews, and documentation of teachers, students, and parents in several PAUD institutions. The results of the study indicate that the implementation of PjBL can stimulate children's creativity through exploratory activities and the creation of real works relevant to their world. In addition, children show increased independence in completing tasks, making decisions, and being responsible for project results. The role of teachers as facilitators and parental involvement greatly influence the success of PjBL implementation. Despite facing several challenges, such as limited resources and teacher understanding, project-based learning has proven to be an effective and enjoyable approach in building character in early childhood.

INTRODUCTION

The need for early childhood education (PAUD) is a fundamental aspect that cannot be ignored, because at this stage there is rapid development in the cognitive, social-emotional, language and motor aspects of children (Gobena, 2024). Education during this period plays a crucial role in shaping the foundation of character, creativity, and independence, which will serve as the foundation for the learning process at the next level. Early childhood is in a golden age, highly sensitive to environmental stimulation. Therefore, a holistic, enjoyable, and contextual learning approach is needed to optimally develop their potential (Natalia et al., 2023). Therefore, the planning and implementation of PAUD programs must pay attention to the needs of children's overall development, including intellectual, emotional, and social stimulation, as well as strengthening moral and spiritual values from an early age (Karwati & Nurhayati, 2024).

The current paradigm shift in learning is marked by a shift from a traditional teacher-centered approach to a more active, participatory, and child-centered approach (Trismayanti, 2025). The government's Independent Curriculum represents this transformation, requiring teachers to be facilitators capable of creating a conducive, meaningful, and contextual learning environment.

The constructivist approach underlying the Independent Curriculum emphasizes the importance of children's active involvement in the learning process, providing space

for them to explore, ask questions, experiment, and build understanding through real-life experiences. Learning is no longer one-way, but rather interactive, accommodating each child's uniqueness, interests, and learning style. Therefore, teachers need to design activities that encourage independent thinking, creativity, and collaboration, so that children not only acquire knowledge but also develop essential life skills from an early age (Kumayas et al., 2025).

The relevance of Project-Based Learning (PjBL) in the context of early childhood education is increasingly prominent in line with the demands of 21st-century learning which emphasizes the importance of developing critical, creative, collaborative, and communicative thinking skills (Kusumawati et al., 2025). The PjBL model is considered highly aligned with the characteristics of active learning because it provides opportunities for children to be directly involved in meaningful activities through the exploration of real-life projects. This approach not only stimulates children's thinking and curiosity but also encourages them to take an active role in the learning process, observe surrounding phenomena, and find solutions to various simple problems in everyday life (Sausan et al., 2023).

Through Project-Based Learning (PjBL), children learn to collaborate, share ideas, make decisions, and express creativity authentically. Furthermore, project-based learning enables the integration of various developmental areas, such as cognitive, language, social-emotional, and motor skills, into a cohesive and enjoyable learning process. Therefore, Project-Based Learning (PjBL) is a relevant and strategic approach to addressing the need for adaptive learning that focuses on holistic child development (Nurhamidah & Nurachadijat, 2023).

Creativity and independence are two important aspects that are the main goals in early childhood education (PAUD), because both reflect the child's readiness to face challenges in the learning process and social life in the future (Aswa et al., 2025). One indicator of the success of an early childhood education (PAUD) program is the creation of a learning environment that fosters both abilities in a balanced way. Creativity encompasses a child's ability to think originally, generate new ideas, and express themselves freely, while independence refers to a child's ability to take initiative, make simple decisions, and take responsibility for their actions. Both aspects can develop optimally through exploratory activities that provide space for children to try, fail, improve, and find their own solutions (Setiawati et al., 2022).

Project-Based Learning is an effective approach to fostering creativity and independence, because children are directly involved in the process of designing, developing, and completing a project based on their interests and experiences (Shalehah, 2023). Thus, PAUD that integrates project activities in a planned and systematic manner not only encourages the achievement of child development indicators but also prepares an important foundation for the growth of the character of lifelong learners.

The emerging trend of implementing Project-Based Learning (PjBL) in early childhood education institutions reflects a growing awareness of the importance of active, contextual learning that is oriented towards children's developmental needs. More and more educators and early childhood education institutions are beginning to integrate this approach into daily learning activities in response to the demands of the Independent Curriculum and the modern educational paradigm that positions children as the subject of learning. PjBL is considered capable of creating a fun and challenging learning environment, as children are encouraged to learn through direct experience,

collaboration, and simple problem-solving. However, the implementation of this model in the field still shows significant variation, both in terms of teachers' understanding of the PjBL concept, the readiness of infrastructure, parental involvement, and the quality of project planning and implementation (Ashfarina et al., 2023).

Some institutions have implemented PjBL systematically and successfully fostered children's creativity and independence, while others still face challenges in translating this approach into learning practices that are appropriate to the characteristics of early childhood. Therefore, efforts to improve teacher capacity, ongoing mentoring, and documentation of good practices are needed so that this positive trend can be implemented more consistently and have a real impact on child development (Sastradiharja & Febriani, 2022).

The novelty of this research lies in the presentation of a contextual and descriptive study of the implementation of Project-Based Learning (PjBL) in early childhood education (PAUD) settings, which specifically reveals the relationship between the PjBL approach and aspects of children's creativity and independence development issues that have rarely been discussed in depth in previous research. This research not only provides a concrete picture of how PjBL is implemented in the field, but also presents practical and relevant implementation recommendations, tailored to the learning characteristics of early childhood. These recommendations are compiled based on empirical data and the direct experiences of teachers, so it is hoped that they can serve as an important reference in developing more effective learning strategies oriented towards holistic child development.

This research is motivated by a gap in the literature regarding the implementation of Project-Based Learning (PjBL) in early childhood education (PAUD), particularly in the context of an in-depth qualitative approach. Most studies on PjBL still focus on elementary to secondary education levels (SD to SMA), so exploration of how this approach can be appropriately adapted for early childhood is still very limited. Furthermore, there are not many studies that specifically link the implementation of PjBL with two crucial aspects of PAUD child development: creativity and independence. Therefore, this study aims to fill this gap by providing a contextual understanding of how PjBL is implemented in PAUD and its impact on child development in these two important dimensions.

This study aims to describe the implementation of project-based learning (PjBL) in early childhood education institutions, analyze the impact of this approach on the development of children's creativity and independence, and identify various factors that support and hinder its implementation in early childhood education environments. With this approach, it is hoped to obtain a comprehensive picture of the effectiveness of PjBL in supporting child development goals as well as a contextual understanding of the challenges and opportunities in its implementation.

METHODOLOGY

This study uses a descriptive qualitative approach with the aim of in-depth description of the implementation of Project-Based Learning (PjBL) in Early Childhood Education (PAUD), with a focus on the meaning of the experiences of teachers, students, and parents in the learning process. The research location includes PAUD that have implemented the PjBL model in both urban and rural areas, with research subjects including PAUD teachers as implementers, early childhood as learners, and parents as supporters of learning at home. Data collection techniques were carried out through

direct observation of learning activities, in-depth interviews with teachers and parents regarding the implementation, challenges, and impacts of PjBL, and documentation in the form of RPPH, student work, and project activity notes. Data analysis used the Miles and Huberman model which includes data reduction, presentation of data in the form of narratives or quotations, and drawing conclusions based on the patterns found. Data validity was maintained through source triangulation (teachers, students, parents), technical triangulation (interviews, observations, documentation), and member checking by confirming the interpretation results with participants. This research also pays attention to ethics by requesting permission from the PAUD institution and parents of students, maintaining the confidentiality of respondents' identities, and ensuring there is no coercion of participation and maintaining children's comfort.

RESULTS AND DISCUSSION

The implementation of Project-Based Learning (PjBL) in PAUD is carried out through the use of project themes close to children's lives, such as "My Garden," "Transportation," or "My Environment," which allows children to be actively involved in the process of exploration, discussion, and making simple products. In this process, the teacher acts as a facilitator who guides children in thinking and creating independently. As a result, children show significant development in creativity, seen from the emergence of original ideas, the use of various media in their work, as well as the ability to think divergently and create creative solutions, such as through free drawing activities, building miniatures, and designing short stories that showcase the unique expressions of each child.

On the other hand, children's independence also develops, demonstrated through their ability to make simple decisions, growing responsibility for project assignments, and increased self-confidence when presenting their work to peers and teachers. However, the implementation of Project-Based Learning (PjBL) still faces challenges, such as lengthy preparation times, limited learning resources, teachers' limited understanding of Project-Based Learning (PjBL) principles, and the varying roles of parents in supporting projects at home. The success of PjBL is strongly supported by a flexible and media-rich learning environment, strong collaboration between teachers and parents, and ongoing training for teachers on active and project-based learning.

Effectiveness of PjBL in PAUD:

Project-Based Learning (PjBL) has been proven effective in improving two important aspects of early childhood development, namely creativity and independence, because this approach positions children as active subjects in a meaningful and contextual learning process (Ferrero et al., 2021). Through direct involvement in the planning, implementation, and completion of projects, children not only learn to understand concepts concretely, but are also encouraged to think creatively in generating new ideas and expressing their thoughts uniquely.

In addition, the project-based learning process requires children to make simple decisions, complete tasks independently, and take responsibility for their work, which gradually fosters independence and self-confidence. Activities designed within Project-Based Learning (PjBL), such as exploring the surrounding environment, creating works from recycled materials, or composing group stories, provide opportunities for children to learn through direct experience, foster curiosity, and develop problem-solving skills from an early age. Thus, Project-Based Learning (PjBL) is a relevant and strategic

approach to achieving holistic early childhood learning objectives (Sakila et al., 2023).

Compliance of PjBL with PAUD Principles:

Project-Based Learning (PjBL) strongly aligns with the principles of early childhood education, as it aligns with the thematic approach and play-while-learning concept that characterize early childhood education. PjBL enables the integration of various areas of child development into one comprehensive and meaningful project, such as cognitive, language, social-emotional, motor, and moral aspects. Through projects developed based on themes close to children's daily experiences, the learning process becomes more concrete, enjoyable, and relevant to their world (Junaedah et al., 2024).

This approach also values the characteristics of early childhood, who enjoy exploring, asking questions, and constructing knowledge through social interactions and hands-on activities. Furthermore, PjBL provides space for children to learn actively, collaboratively, and reflectively, which is highly appropriate for their stage of social-emotional development. By prioritizing holistic learning experiences, PjBL supports the creation of a learning environment that is responsive to the needs of children's overall growth and development, and reinforces the principles of early childhood education (PAUD) based on children's interests, curiosity, and active participation in the learning process (Furtak & Penuel, 2019).

PjBL Contribution to Character Education:

Project-Based Learning (PjBL) not only contributes to improving children's academic aspects, but also plays an important role in the formation of character education from an early age (Rizal et al., 2025). Through active involvement in every stage of the project from planning to presentation of results, children learn to take responsibility for the tasks they choose and undertake, complete them to completion, and understand the importance of commitment to the process. In group activities, PjBL encourages healthy social interactions, such as sharing ideas, listening to friends' opinions, resolving conflicts peacefully, and working together to achieve common goals, so that the values of cooperation and tolerance can grow naturally. In addition, this approach stimulates children's curiosity through challenges that encourage them to ask questions, explore, and find creative solutions, which in turn fosters a persistent attitude and a spirit of lifelong learning. Thus, PjBL becomes a strategic tool in instilling positive character values that are essential in the holistic formation of children's personalities from an early age (Sari & Malik, 2024).

The Role of Teachers in the Success of PjBL:

The role of teachers is very crucial in determining the success of the implementation of Project-Based Learning (PjBL) in PAUD environments, because teachers not only function as teachers, but also as designers, facilitators, and active companions in every stage of the project (Zahra & Koimah, 2024). Teachers' competence in designing projects appropriate to children's developmental levels, managing group dynamics, and guiding exploration and reflection is crucial to the effectiveness of this approach in achieving learning objectives. Teachers are required to integrate various aspects of children's development into meaningful projects, while maintaining a balance between creative freedom and a directed learning structure.

Therefore, ongoing training that equips teachers with an understanding of Project-Based Learning (PjBL) concepts, implementation strategies, and project-based

assessment techniques is crucial. In addition to training, professional mentoring in the field is also necessary to provide examples of good practices, reflective feedback, and problem-solving support. By systematically strengthening teacher capacity, Project-Based Learning (PjBL) can not only be implemented consistently but also have a tangible impact on the development of creativity, independence, and character in early childhood.

Contextualization of PjBL in Local PAUD:

Contextualizing Project-Based Learning (PjBL) in local early childhood education (PAUD) settings is a crucial step to ensure this approach is truly relevant, meaningful, and effective for early childhood development. Given that children's characteristics are strongly influenced by their social, cultural, and everyday experiences, designed projects must be tailored to local realities both in terms of themes, materials, and activities. Projects that relate to children's lives at home, the customs of the surrounding community, and the richness of local culture will be more easily understood and responded to enthusiastically by children (Aries, 2023).

Thus, PjBL in Early Childhood Education (PAUD) does not simply imitate concepts or models from higher levels of education, but rather is creatively adapted to suit the concrete, simple, and contextual world of children. Furthermore, this approach also opens up opportunities to promote local wisdom values as part of the learning process, such as mutual cooperation, environmental stewardship, or an introduction to regional traditions. Through this process, children not only develop thinking and creative skills but also develop cultural and social identities from an early age.

CONCLUSION

Project-Based Learning (PjBL) has been proven effective in early childhood education (PAUD) when designed according to the developmental characteristics of early childhood, through a thematic, exploratory, and play-based approach. PjBL can enhance children's creativity, reflected in their ability to generate new ideas, use various media to create, and express ideas freely and originally. Furthermore, this approach also encourages the growth of children's independence, especially in terms of making simple decisions, completing tasks without much assistance, and fostering a sense of responsibility for their work. The role of teachers as facilitators is crucial to the success of PjBL, especially in designing projects relevant to children's needs and interests and creating an active and enjoyable learning process. The successful implementation of PjBL is also greatly influenced by the support of a conducive learning environment and active collaboration with parents. However, challenges remain, particularly related to limited resources, time, and teachers' understanding of the concepts and stages of PjBL, which require ongoing training and professional development.

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