



The “My Plants” Project: Enhancing Creativity and Collaboration Skills in Early Childhood Education

Kurnia Sari Suprihatin¹, Herman Taufik², Muhammad Zulkarnaen³

Universitas Muhammadiyah Banjarmasin, Kalimantan Selatan, Indonesia^{1,2,3}

Email Correspondence: kurniasarisuprihatin47029@gmail.com

Abstrak:

Pendidikan anak usia dini menjadi fondasi penting dalam membentuk karakter dan potensi anak, mencakup perkembangan fisik, kognitif, bahasa, sosial-emosional, serta kreativitas. Penelitian ini mengimplementasikan pembelajaran berbasis proyek bertema “Tanamanku” di KB Sejahtera Mandiangin Barat sebagai strategi inovatif untuk meningkatkan kreativitas dan keterampilan kolaborasi anak usia 5-6 tahun. Menggunakan metode kualitatif deskriptif, data dikumpulkan melalui observasi, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa keterlibatan anak dalam kegiatan merancang, menanam, dan merawat tanaman mampu memicu munculnya ide-ide kreatif yang terefleksi dalam berbagai bentuk ekspresi, seperti menggambar, bercerita, dan praktik langsung di lapangan. Selain itu, anak-anak belajar bekerja sama melalui pembagian tugas, diskusi sederhana, dan pengambilan keputusan kelompok. Kolaborasi tersebut tidak hanya meningkatkan keterampilan sosial, tetapi juga menumbuhkan rasa tanggung jawab dan kepedulian terhadap hasil bersama. Hambatan yang ditemui, seperti keterbatasan sarana pendukung dan variasi tingkat partisipasi anak, dapat diminimalkan melalui perencanaan yang matang, penggunaan media alternatif, serta pendampingan intensif dari guru. Temuan ini menguatkan konsep pembelajaran berbasis pengalaman dan interaksi sosial sebagai pendekatan efektif di pendidikan anak usia dini. Proyek “Tanamanku” tidak hanya meningkatkan kreativitas dan kolaborasi, tetapi juga menumbuhkan kepedulian anak terhadap lingkungan. Model ini layak direkomendasikan sebagai praktik baik yang dapat direplikasi di lembaga pendidikan anak usia dini lain yang ada di Indonesia.

Kata Kunci: Pembelajaran Berbasis Proyek, Kreativitas, Keterampilan Kolaborasi, Anak Usia Dini

Abstract:

Early Childhood Education is an important foundation in shaping children's character and potential, encompassing physical, cognitive, language, socio-emotional, and creative development. This study implemented project-based learning with the theme "My Plants" at KB Sejahtera Mandiangin Barat as an innovative strategy to enhance the creativity and collaboration skills of children aged 5-6 years. Using descriptive qualitative methods, data were collected through observation, interviews, and documentation. The results showed that children's involvement in designing, planting, and caring for plants can trigger the emergence of creative ideas that are reflected in various forms of expression, such as drawing, storytelling, and hands-on practice in the field. In addition, children learn to work together through task



allocation, simple discussions, and group decision-making. This collaboration not only improves social skills but also fosters a sense of responsibility and concern for shared outcomes. Barriers encountered, such as limited supporting facilities and varying levels of child participation, can be minimized through careful planning, the use of alternative media, and intensive mentoring from teachers. These findings strengthen the concept of experiential learning and social interaction as an effective approach in ECE. The “My Plants” project not only enhances creativity and collaboration but also fosters children's concern for the environment. This model is worth recommending as a good practice that can be replicated in other early childhood education institutions in Indonesia.

Keywords: Project-Based Learning, Creativity, Collaborative Skills, Early Childhood

Introduction

Early childhood education is a crucial foundation for shaping children's early development, encompassing physical, cognitive, language, socio-emotional, and creative aspects (Hafizi et al., 2025; HMS & Rizqina, 2025; Pangestika et al., 2024; Sapendi & Suratman, 2024; Zhang, 2025). A well-designed, experience-rich learning environment will have a long-term impact on children's readiness to enter the next level of education. The government, through the Independent Curriculum (*Kurikulum Merdeka*), strives to provide contextual, adaptive, and real-life learning. One focus is on integrating experiential learning and the effective use of technology to strengthen educational quality (Amalia et al., 2025; Nur 'Azah et al., 2024; Utami et al., 2024). Implementing learning in early childhood education is not without challenges, particularly limited technological facilities and learning media. This can limit children's opportunities to develop 21st century skills such as creativity, critical thinking, communication, and collaboration. To address these challenges, teachers need to adopt a learning approach that encourages children's active participation, provides space for exploration, and is relevant to their daily lives (Anggraini et al., 2024; Holmes & Hwang, 2016; Kurniawan et al., 2024).

Project-based learning is one method that aligns with these principles. This model positions children as the primary subjects, actively involved in the planning, implementation, and evaluation of projects closely related to everyday life (Larmer et al., 2015; Omelianenko & Artyukhova, 2024; Retno et al., 2025). Previous research has shown that project-based learning can increase learning motivation, train collaboration skills, and foster children's creativity (Christin Souisa et al., 2024; Mona & Rachmawati, 2023). Creativity is defined as a child's ability. Collaboration, on the other hand, encompasses social skills such as working together, respecting the roles of others, and completing tasks collaboratively to generate new ideas, solve problems innovatively, and express original ideas (Christin Souisa et al., 2024; Nikmah et al., 2023). In the context of early childhood education, these two skills are interrelated and can be developed simultaneously through structured yet flexible activities. The “My Plants” theme in the implementation of project-based learning is relevant because it aligns with the spirit of the Independent Curriculum, which emphasizes practice-based learning. Activities such as sowing seeds, applying organic fertilizer, caring for plants, and harvesting produce provide learning experiences that touch the motor, cognitive, and socio-emotional domains, while fostering environmental awareness (Debeturu & Wijayaningsih, 2019; Hatuwe et al., 2023). Research by Mutawally (2021), confirms that learning themes



connected to environmental sustainability issues can foster a caring attitude towards nature from an early age.

Although numerous studies have been conducted on project-based learning in Early Childhood Education, discussions specifically addressing the implementation of the “My Plants” project to develop the creativity and collaboration skills of kindergarten-aged children are still rare. This study focuses on the implementation process, its impacts, and the supporting factors and obstacles encountered in implementing the “My Plants” project at KB Sejahtera West Mandiangin, Karang Intan Subdistrict, Banjar Regency, South Kalimantan Province. The research results are expected to be a real contribution to the development of contextual learning models that encourage creativity, collaboration, and environmental awareness in early childhood.

Method

This study used a qualitative approach with descriptive methods to in-depth describe the implementation of the “My Plants” Project at the Sejahtera Kindergarten (KB Sejahtera) in West Mandiangin. This approach was chosen because it allows for a natural depiction of the learning process, consistent with field conditions. The study subjects consisted of 23 children aged 5-6 years, two classroom teachers, and one school administrator. The research focused on the planning, implementation, and evaluation stages of project-based learning to enhance children’s creativity and collaboration skills.

The study was conducted at the Sejahtera Kindergarten (KB Sejahtera) in West Mandiangin, Jalan Ir. P. M. Noor, Kampung Batu Joreng, Karang Intan, Martapura, from September to December 2024. Primary data was obtained through participant observation, which allowed the researcher to be directly involved in children’s activities, and semi-structured interviews with teachers and administrators to obtain in-depth information on the learning strategies, obstacles, and solutions implemented. Secondary data were drawn from learning documents such as the RPPH (Daily Activity Plan), activity photos, child development records, and student work.

Data collection was conducted using three main techniques: (1) participant observation to record children’s creative activities and interactions, (2) semi-structured interviews to explore teachers’ experiences in implementing project-based learning, and (3) documentation to strengthen evidence of the results of the activities. The collected data were analyzed qualitatively through the stages of data reduction, data presentation, and drawing conclusions. Data analysis was carried out through reduction, coding, presentation, triangulation, and drawing conclusions. Reduction was conducted by grouping and summarizing relevant data according to the research focus (Rijali, 2018). Open coding was applied to break the data into smaller units in order to identify patterns and themes. The data were then presented in the form of narratives, tables, and visuals to facilitate understanding. The validity of the data was strengthened through triangulation from various sources and methods. The final stage was drawing logical conclusions based on the evidence, which also served as the foundation for the research recommendations.

Result and Discussion

This study shows that the “My Plants” project is able to have a significant impact on the development of creativity and collaboration skills of children aged 5-6 years at KB Sejahtera West Mandiangin. Based on participatory observations, teacher interviews, and documentation of children’s work, improvements were identified in four aspects of



creativity according to Guilford, namely originality, fluency, flexibility, and elaboration. In addition, the children showed progress in collaboration skills, such as the ability to share roles, respect peers' opinions, and take responsibility for group tasks. The project-based learning approach proved effective in fostering meaningful contextual learning by integrating elements of science, art, and language, while also strengthening the relationship between school and parents. The learning process, which uses direct experiences, provides opportunities for children to interact with their environment actively, creatively, and collaboratively.

Improvements in creativity were evident in activities such as decorating pots, designing mini gardens, and creating decorations from natural materials. For example, Afida used a recycled plastic bottle as a pot, decorating it to resemble an animal's face with green paint. This work reflected the creative use of recycled materials, neat decorating techniques, and environmental awareness. A learning environment that provides freedom to explore in this way, according to Munandar, can stimulate children's intrinsic motivation to create. In terms of collaboration skills, the children shared roles within their groups, such as watering plants, cleaning the garden, decorating pots, and narrating the growth of the plants (Asmawati, 2017). These activities encouraged them to listen to one another, engage in discussions, and combine ideas into a shared agreement. This aligns with Vygotsky's theory, which emphasizes the importance of social interaction within the Zone of Proximal Development, where children learn from peers and adults (Panhwar et al., 2025).

The following section, the author summarizes the results of observational assessments of creativity and collaboration skills of early childhood during projects carried out by teachers at KB Sejahtera.

Table 1
Results of Observational Assessment on Children's Creativity and Collaboration Skills

Learning Activity	Observed Aspect	Indicator	Assessment (Y/N)	Notes
Planting Seeds	Creativity	Using tools in a different way from the example	Y	AL created his/her own tool from natural materials
Planting seeds	Collaboration	Helping a friend who had difficulty planting	N	KH helped place the seeds into the soil
Watering plants	Creativity	Mixing an imaginative "watering potion"	Y	SA required additional guidance
Watering plants	Collaboration	Reminding peers to participate in watering	Y	All children enthusiastically reminded one



				another
Decorating pots	Creativity	Using various materials for unique decoration	N	AI chose bright colors; KH created unique shapes
Decorating pots	Collaboration	Discussing pot designs and sharing materials	Y	KH was willing to accept peers' ideas
Storytelling about plants	Creativity	Adding fantasy elements to the story	Y	A child added animal characters to the story
Storytelling about plants	Collaboration	Responding to and building on peers' ideas	Y	The story became more varied

Source: Author's Observational Data

This table shows that most indicators achieved a “Yes” (Y) result, indicating that the children were active and creative in every stage of the activity. However, some children required more intensive support, especially in understanding instructions and developing ideas independently. Overall, however, the children demonstrated high engagement, both individually and in groups. The application of project-based learning in “My Plants” provided a real and meaningful learning experience. Children not only understood the concept of plant growth but also related this learning to their daily lives. They learned that plants need water, sunlight, and regular care to thrive. This direct involvement aligns with Krajcik & Blumenfeld’s view that project-based learning effectively builds 21st century skills such as creativity, collaboration, communication, and problem-solving (Ramadhan & Hindun, 2023).

The author’s observations indicate that the “My Plants” project provides a free space for children to express their creative ideas without rigid boundaries. Children participate in activities such as decorating pots, designing miniature gardens, and making decorations from natural materials. For example, Afida uses used plastic bottles as pots, decorating them with green paint to form animal faces. This work reflects the children’s ability to utilize recycled materials, neat decorating techniques, and environmental awareness. This project activity naturally stimulates all four aspects. Children not only create unique works but also add details to the designs of their pots or miniature gardens, such as using certain color combinations or placing miniature animal ornaments. The findings of this study are relevant to those of Mawaddah et al., (2019), who reported that creative gardening activities in kindergarten can increase children’s originality and elaboration through experimentation with natural media. Furthermore, a study by Munandar found that a learning environment that supports free exploration can increase children’s intrinsic motivation to create (Asmawati, 2017).

Collaborative skills improved significantly during the project activities. Children shared roles, such as watering plants, cleaning the garden, or decorating pots as a group. They also learned to listen to their peers’ opinions and combine ideas into a shared



consensus. This aligns with Vygotsky's theory that learning occurs optimally in the Zone of Proximal Development through social interactions with peers and more experienced adults. In this project, the teacher acted as a facilitator providing guidance, while peers served as additional learning (Febrianti et al., 2021; Harland, 2003; Rahman, 2024; Silalahi, 2019). These findings are supported by research by Sadaruddin et al., (2025), who found that collaborative projects in early childhood education improve communication skills, empathy, and collaborative problem-solving skills. In the context of "My Plants", interactions while caring for plants provide a natural platform for children to practice these social skills.

Project-based learning in "My Plants" positions children as active subjects who experience the learning process directly. Activities such as planting seeds, decorating pots, and telling stories about plant development combine cognitive, psychomotor, and affective aspects. According to Krajcik & Blumenfeld, project-based learning is effective in building 21st-century skills, namely creativity, collaboration, communication, and problem-solving (Martina Lona, 2019). This project also integrates a thematic approach according to the early childhood education curriculum, combining elements of science (plant growth), art (decorating pots), and language (telling stories about plants). In addition, project-based learning facilitates meaningful learning, where children understand the connection between the material and everyday life. For example, after participating in this project, children better understand the needs of plants (water, sunlight, soil) and begin to apply them at home.

Conclusion

The "My Plants" project-based learning approach has proven to be an effective strategy for enhancing the creativity and collaboration skills of kindergarten children. Throughout the process, children are given ample opportunity to express their creative ideas through activities such as planting, caring for, and decorating plants according to their imagination. This hands-on and contextual learning experience not only fosters self-confidence but also encourages children to dare to try new things. Their growing creativity is evident in their willingness to modify planting media, utilize recycled materials, and create unique decorations that represent their personal ideas. In addition to creativity, collaborative skills also improved significantly. Children began to demonstrate the ability to share tasks, help each other, respect each other's opinions, and make decisions collectively. Tolerance, open communication, and a sense of responsibility toward the group grew stronger as the project progressed. This success was due to the support of teachers who acted as facilitators, the use of engaging media, and the children's active involvement in every stage of the activity.

These findings align with the concept of constructivist learning, which emphasizes the importance of direct experience and social interaction as drivers of children's cognitive, social, and emotional development. For teachers and schools, project-based learning like "My Plants" should continue to be developed and integrated into early childhood curricula. Teachers are expected to not only repeat the same methods but also innovate themes and media so that children are constantly challenged and stimulate creativity. Training and mentoring for teachers are essential to equip them with the skills to design creative, interactive, and developmentally relevant learning strategies.



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