

IMPLEMENTATION OF PROJECT BASED LEARNING TO IMPROVE THE ABILITY TO COOPERATE WITH CHILDREN AGED 5-6 YEARS AT SRITANJUNG BANGUNSARI INDERGARTEN BANYUWANGI ACADEMIC YEAR 2023/2024

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ABSTRACT

The aim of this research is to determine the application of project based learning to improve the collaboration abilities of children aged 5-6 years at Sritanjung Bangunsari Banyuwangi Kindergarten for the 2023/2024 academic year. The object of this research is group B with a total of 11 children consisting of 6 boys and 5 girls. The type of research used in this research is classroom action research (PTK).

In this research, there are two instruments used to collect data, namely observation and documentation. The indicators in this research are: 1) Children are able to stick to pictures in their group, 2) Children are able to tell about their own work that has been made in their group, 3) Children are able to differentiate between plant-eating animals, meat-eating animals, giving birth animals and egg-laying animals. The results of observations on the pre-cycle of children's cooperative abilities were 9 out of 11 children or 81.8% of the children's cooperative abilities (BB), 2 out of 11 children or 18.1% of the children were beginning to develop (MB), the criteria were developing according to expectations (BSH) and very well developed (BSB) have not been found or 0%. In the Pre-Cycle the child's language proficiency level reached 24.5%. In Cycle I, children's ability to cooperate under the criteria of not yet developing (BB) was 2 out of 11 children or 18.1%, under the criteria starting to develop (MB) there were 6 out of 11 children or 54.5%. There were 3 children out of 11 who got a score of developing according to expectations (BSH) or 27.2%. The criteria for very well developed (BSB) have not been found or 0%. In the first cycle, the level of children's language skills increased to 50.3%. In Cycle II, children's ability to work together on the criteria of developing very well (BSB) reached the highest score, namely 72.7% or 8 out of 11 children, on the criteria of developing according to expectations (BSH) there were 3 children out of 11 children with a percentage of 27.2%. The criteria for starting to develop (MB) and not yet developing (BB) are no longer there or 0%.

Thus, it can be concluded that the application of Project-Based Learning can improve children's cooperation abilities because there are 8 children who have achieved the specified indicators, namely the criteria for very good development (BSB) with a percentage of 72.7% of the total number of children. In cycle II, the level of children's cooperation abilities had reached the success indicator with an average value of 93.9%.

Keywords: Children's Cooperation Ability, Project Based Learning



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INTRODUCTION

Education is a determining element in the development of human resources. Human resources are more valuable if they have attitudes, behaviors, insights, abilities, expertise and skills that are in accordance with the needs of various fields and sectors. Education is also oriented towards life skills, competency-based learning, and learning processes that are expected to produce valuable products,

demanding a comfortable and real learning environment that can provide learning experiences in the competency dimension in an integrative manner. (Dhaniyar, 2019)

The learning environment in question is characterized by: (1) Learning situations, environments, content and tasks that are relevant, realistic, authentic and present the natural complexity of the “real world”; (2) Primary data sources are used to ensure the authenticity and complexity of the real world; (3) Developing life skills and not the reproduction of knowledge; (4) The development of these skills is in an individual context and through social negotiation, collaboration and experience; (5) Prior competencies, beliefs and attitudes are considered as prerequisites; (6) Problem-solving skills, higher-order thinking and deep understanding are emphasized; (7) Learners are given opportunities to learn through apprenticeships where there is an increase in the complexity of tasks, knowledge and skill acquisition; (8) The complexity of knowledge is reflected by an emphasis on learning conceptual connectedness and interdisciplinary learning; (9) Cooperative and collaborative learning is prioritized in order to expose learners to alternative views; and (10) Measurement is authentic and becomes an integral part of the learning activity. (Nurbayanni et al., 2023).

Considering its unique and comprehensive characteristics, the Project Based Learning method is quite potential to meet the demands of such learning. The Project Based Learning method is a refinement of the Problem Based Learning method. Project Based Learning is one of the training strategies that is oriented towards CTL or contextual teaching and learning process. (Hasanah et al., 2019). CTL is a learning concept that helps educators link learning materials with real-world situations and encourages students to use the knowledge they have to apply it in their lives as members of society..

Project Based Learning is a form of learning that places more emphasis on solving authentic problems that occur every day through direct practical learning experiences in the community (Nurfitriyanti, 2016). Project Based Learning has also referred to by other names, such as project-based teaching, experienced-based education, authentic learning or anchored instruction (Arends, 2015). Project Based Learning can also be interpreted as project-based learning, experience-based education, authentic learning, learning that is rooted in real-life problems, one example of which is working together with other children (Yuristia et al., 2022)

The use of appropriate learning methods can be a solution to realize interactive, inspiring, fun, challenging learning, motivating students to actively participate, and providing sufficient space for initiative, creativity, and independence according to the talents, interests, and physical and psychological development of students. One of the learning methods that has characteristics in accordance with the material and regulated in the 2013 Curriculum is the Project Based-Learning method. The Project Based-Learning method (Teaching Team: 2010) is part of the learning strategy in the PAIKEM-based learning model (Active, Innovative, Creative, Effective, and Fun Learning).

The implementation of project-based learning for Early Childhood (AUD) is different from other school levels. This is because teaching PAUD students has its own challenges compared to other levels. (Insyasiska et al., 2015) Implementation must be based on and started from the closest environment of PAUD students, for example about family, toys, gardening, animals, and others. Adjust to the interests of PAUD students. What makes them interested. However, of course PAUD students have their own challenges compared to other levels. Implementation (PjBL) must basically start from the closest environment, for example about family, toys, gardening, animals, and others.

The results of observations conducted by researchers with one of the teachers of Group B at Sritanjung Bangunsari Banyuwangi Kindergarten in group B totaling 11 children aged 5-6 years, researchers found that there were still children aged 5-6 years who could not cooperate with their peers. One example of not being able to cooperate is that children want to win alone. Not being able to cooperate causes the attitude of 5-6 year olds to want to be involved in an activity together and group tasks are not completed on time. This is in accordance with the opinion (Prabandari & Fidesrinur, 2021) states that cooperation is an attitude of wanting to be involved in an activity that is carried out together.

The results of the problem analysis in the pre-cycle lead to four crucial problems that are obstacles and must be resolved in this study, there are 3 things, namely: 1) awareness of cooperation between peers has not grown and developed; 2) learning is less than optimal because it does not encourage learning activities and creativity for children aged 5-6 years, 3) there has not been any enjoyable learning for children aged 5-6 years.

Based on the problems and descriptions above, it can be concluded that the ability to work together with peers is very important, this is in line with the opinion of (Prabandari & Fidesrinur, 2021) mengatakan bahwa kemampuan berjasama merupakan hal penting untuk anak karena kemampuan bekerjasama dapat menjadi bekal anak untuk hidup di dalam masyarakat. Kemampuan bekerjasama rendah karena rata-rata di tiap sekolah kurang memperkenalkan bermain secara kelompok. Oleh karena itu peneliti tertarik untuk mengadakan penelitian dengan judul: "Penerapan Project Based Learning untuk meningkatkan kemampuan bekerjasama anak usia 5-6 tahun di TK Sritanjung Bangunsari Banyuwangi".

The formulation of the problem in this study is How the Implementation of Project Based Learning can improve the ability to work together of children aged 5-6 years at Sritanjung Bangunsari Banyuwangi Kindergarten in the 2023/2024 Academic Year. Based on the formulation of the problem, the purpose of this study is to find out how the implementation of project based learning can improve the ability to work together of children aged 5-6 years at Sritanjung Bangunsari Banyuwangi Kindergarten in the 2023/2024 Academic Year..

Theoretical Framework

Project Based Learning (PBL) is an innovative educational paradigm that transforms the traditional learning process into a more dynamic and meaningful learning experience. According to (Law & Chuah, 2004) PBL is defined as a learning model that involves students in in-depth investigations of authentic and complex problems. It emphasizes the activeness of students to explore, analyze, and produce real solutions through a series of structured project activities (Mckibben & Murphy, 2021).

The main concept of PBL is to place students at the center of learning, where they have full autonomy in designing, managing, and evaluating their own learning process. (Jensen & Lassen, 2020) emphasizes that PBL is not just about working on projects, but rather about guiding students to develop complex skills such as critical thinking, collaboration, communication, and creativity. This approach allows students to engage in meaningful learning experiences, where they construct knowledge through active exploration and personal reflection..

Conceptually, PBL combines the principles of constructivism and contextual pedagogy, which view learning as an active process of building understanding through interaction with the environment and real experiences. According to research (Nugraha et al., 2017), The success of PBL lies in its ability to create a learning environment that encourages learners to engage in deep inquiry, complex problem solving, and productive collaboration. Well-designed projects develop not only academic competencies, but also social skills, self-management, and metacognitive abilities.f.

Effective implementation of PBL requires careful design, ongoing support from educators, and a focus on the process as much as the outcome. Unlike conventional learning models, PBL encourages learners to go beyond simply receiving information, and instead invites them to become active researchers, critical thinkers, and problem solvers. (Chiang & Lee, 2016) emphasizes that through PBL, learners not only develop a deep understanding of academic content, but also build self-confidence, intrinsic motivation, and readiness to face complex challenges in the real world.

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The concept of early childhood cooperation

The ability to cooperate in early childhood is a fundamental social skill that develops through complex interactions with the environment and peers. According to research (Surni et al., 2022), Collaborative skills are defined as a child's capacity to interact positively, share resources, communicate effectively, and complete tasks together in a group context. This includes interpersonal skills including the ability to negotiate, listen to others' opinions, share responsibilities, and show empathy. (Melawati et al., 2014) emphasizes that the development of cooperative skills in early childhood is a critical foundation for the formation of more complex social skills in later years.

The process of forming the ability to work together involves a number of interrelated psychological and social mechanisms. Studies (Nur Shofiah, 2023) revealed that children develop cooperation skills through repeated interactions, environmental scaffolding, and collaborative play experiences. They learn to identify and respond to social cues, regulate emotions, and build positive relationships with peers.. (Nur Shofiah, 2023) adding that the ability to collaborate is not just an innate skill, but a skill that

can be stimulated and developed through a supportive learning environment, appropriate teaching methods, and opportunities to engage in meaningful collaborative activities..

The importance of the ability to work together in early childhood lies in its potential to form the foundation for future social, emotional, and academic success. According to a comprehensive study (Hadaina et al., 2021) Children who have good cooperative skills tend to have superior self-regulation, higher emotional intelligence, and better social adaptability. They are better able to resolve conflict, develop positive relationships, and contribute constructively in groups. Furthermore, this research underscores the critical role of educational and parenting environments in facilitating the development of cooperative skills, emphasizing the need for a deliberate and structured approach to supporting children's social growth..(Pratiwi et al., 2018)

Characteristics of child development aged 5-6 years

Children aged 5-6 years are at a critical stage of development of cooperative skills, which is marked by significant increases in social skills and group interactions. According to research (Kusumanugraha, 2020) This period is an important transitional period in which children begin to develop the ability to interact more complexly with peers. They begin to understand the concept of dividing tasks, express a desire to work together, and demonstrate early abilities to understand the perspectives of others.. (Melawati et al., 2014) explains that at this age, children begin to develop communication skills that allow them to negotiate, share resources, and engage in collaborative activities that require simple coordination.

The development of cooperation skills at the age of 5-6 years is marked by a significant increase in social-emotional and cognitive abilities. (Sopiah & Fitria, 2019) identified several key characteristics, including the ability to: (1) wait one's turn, (2) share tools and toys, (3) follow simple rules in group activities, and (4) show basic empathy for the feelings of peers. The (Pratiwi et al., 2018) emphasizes that at this stage, children begin to develop an awareness of teamwork, although still with certain limitations. They begin to understand the concept of cooperation, but still need consistent guidance from adults to manage conflict and complete tasks together..

Play and educational environments have a crucial role in developing the cooperative skills of children aged 5-6 years.. (Surni et al., 2022) showed that structured interventions, such as carefully designed group activities, can significantly improve children's collaborative skills. The study revealed that at this age, children begin to show a preference for playing and working together, although they still have difficulty in sharing attention, listening to others' points of view, and resolving conflicts independently. (Liao et al., 2019) emphasizes that the ability to work together at this stage is fragile and very dependent on environmental support, both at home and in early childhood education institutions..

The relationship between cooperation skills and Project Based Learning (PBL)

Project Based Learning (PBL) is closely related to the development of cooperation skills in children aged 5-6 years. PBL actively involves children in the project-based learning process, allowing them to work in groups, discuss, share responsibilities, and solve problems together. This approach encourages intensive social interaction, so that children can develop the ability to understand other people's perspectives, work together, and build empathy

Research shows that the implementation of PBL in early childhood education (PAUD) can significantly improve cooperation skills. For example, a study at TK PKK Kartini showed that children's cooperation increased from 50.3% before the implementation of the project method to 89.6% after two cycles of implementation. Activities designed in PBL, such as group discussions and project evaluations, provide opportunities for children to learn to work together in a fun and contextual way.

In addition, PBL helps children develop other social skills, such as sharing, communicating effectively, and resolving conflicts. A study at the Islamic Kindergarten of Al-Muttaqin showed an increase in collaboration skills of up to 87.17% in the experimental group using PBL, compared to 51.26% in the control group. This confirms that PBL not only improves learning outcomes but also creates an environment that supports children's social development

Thus, PBL is very relevant to be applied in early childhood education to support the development of cooperation. This strategy integrates learning with direct experience, utilizes children's natural curiosity,

and creates meaningful learning experiences. With this approach, teachers can prepare children to become individuals who are able to work together in various contexts of life in the future.

METODE

The type of research used in this study is Classroom Action Research (CAR), with the research subjects being children in group B (age 5-6 years) of Sritanjung Bangunsari Kindergarten, Banyuwangi. According to Kemmis and Taggart in (Arikunto, 2009) said that classroom action research is action research conducted by teachers in social situations to improve reasoning and social education practices. In this study, collaboration was carried out between researchers and class teachers, where researchers acted as observers and teachers acted as implementers of the Action. (Sarmanu, 2017).

In this Classroom Action Research, the actions taken are to improve 3 things, namely: 1) awareness of cooperation between peers has not grown and developed; 2) learning is less than optimal because it does not encourage learning activities and creativity of children aged 5-6 years, 3) there has not been a fun learning for children aged 5-6 years, with a focus on improving the ability to cooperate between children aged 5-6 years through the application (project based learning). Therefore, how important the ability to cooperate between peers is in completing tasks given by teachers to children aged 5-6 years in the classroom

The research design used is the Kemmis and Taggart model, which is carried out in two cycles and two actions/meetings in each cycle. The stages in this study are: 1) planning, 2) implementation/action, 3) observation and 4) reflection. The instruments used in this study are in the form of assessment sheets in the form of observation lists, field notes and documentation. The data analysis techniques used are in the form of quantitative data and qualitative data. (Nurhasanah, Sari & Kurniawan, 2021).

RESULTS AND DISCUSSION

Based on previous observations, the ability of children to work together to tell stories and recognize types of animals in Sritanjung Bangunsari Kindergarten Banyuwangi is still less than optimal due to less interesting learning methods. To overcome these difficulties, an activity is needed that can help improve children's language skills in remembering four-legged animals. This activity is by presenting Project Based Learning which is more interesting to focus on children's learning. The implementation of Project Based Learning media that has been implemented in Sritanjung Bangunsari Banyuwangi Kindergarten has increased in helping children's ability to work together, namely children who get Very Good Development (BSB) scores have achieved the Action success indicator, namely 72.7% of the total 11 children.

Furthermore, the results of the ability to tell the results of their own work that has been made in their groups with Project Based Learning media can be seen from the comparison of Pre-cycle, Cycle I and Cycle II can be seen in the following table:

Comparison of Children's Ability to Cooperate in Each Cycle

No	Criteria	Pra Siklus		Siklus I		Siklus II	
		Number of children	Presentase	Number of children	Presentase	Number of children	Presentase
1.	BB	9	81,8%	2	18,1%	0	0 %
2.	MB	2	18,1%	6	54,5%	0	0 %
3.	BSH	0	0 %	3	27,2%	3	27,2%
4.	BSB	0	0 %	0	0 %	8	72,7%
Comparison		11	24,5%	11	50%	11	89,3%.

The table above shows that the Pre-Cycle shows that the observation results in the ability to cooperate of children aged 5-6 years who received a score of Not Developing (BB) were 9 children out of 11 children or 81.8%.

In cycle I there was an increase, namely there were 3 children or 30% of the number of children who received a score of Developing According to Expectations (BSH) of 3 children out of 11 children or 27.2%, and the value of Developing Very Well (BSB) had not increased, namely remaining at 0%.

From these results it can be seen that the ability to cooperate of children aged 5-6 years who were Not Developing (BB) had decreased, namely 2 children out of 11 children or 18.1%

In cycle II, there was an increase in children who received Very Good Development (BSB) scores, namely 8 children or 72.7% of 11 children. In cycle II, children who received Still Developing (MB) and Not Yet Developing (BB) scores were 0%.

Based on the results of cycle II, the ability to cooperate of children aged 5-6 years has reached the target of 72.7% with the criteria of Very Good Development (BSB) scores. Meanwhile, there were 3 children who received Developing According to Expectations (BSH) scores of 27.2%.

In cycle II, the level of children's ability to cooperate has reached the success indicator with an average score of 89.3%. This shows that Project-Based Learning media can improve the ability to cooperate of children in group B at Sritanjung Bangunsari Kindergarten, Banyuwangi.

These results show that children's ability to cooperate before and after receiving Project-Based Learning media learning. This shows that the use of learning using Project-Based Learning media is better than previous learning.

The use of Project-Based Learning media is one of the good stimulations to develop children's ability to cooperate. Because this media is very easy to follow and fun. By using Project-Based Learning media, it provides benefits to develop children's ability to cooperate because children will find it easier to understand the learning material given by the teacher. (Corral-Lage et al., 2021; Jensen & Lassen, 2020; Sormunen et al., 2020)

Discussion

Project Based Learning (PBL) plays an important role in developing early childhood collaboration skills. Mutakinati & Supartono's (2020) research in the Indonesian Science Education Journal revealed that PBL significantly improves social and collaboration skills. Through group projects, children learn to communicate effectively, share tasks, and achieve common goals. (Dhaningtyas et al., 2021) strengthens these findings, showing that structured projects help children interact, negotiate, and resolve conflicts constructively.

Based on recent research in early childhood education, collaboration skills have a significant relationship with the Project Based Learning (PBL) approach. According to Mutakinati & (Nugraha et al., 2017) In their research, PBL has been proven to be effective in developing social and collaboration skills in early childhood. This approach allows children to interact actively, share tasks, and achieve common goals through structured project activities. Their research shows that through PBL, children experience increased communication skills, mutual respect, and teamwork..

Recent research by (Haryanti, 2020) about the importance of collaboration in Project Based Learning. They found that a learning environment that encourages active collaboration can increase learning motivation, self-confidence, and problem-solving skills in young children. Their research results show that through PBL, children not only learn to collaborate, but also develop a deeper understanding of the importance of interdependence and support in achieving common goals. Thus, Project Based Learning has proven to be an effective approach to developing collaboration skills from an early age.

Furthermore, a study conducted by (Sandrayati, 2021) stated that Project Based Learning can develop cooperation skills through various interactive strategies. They found that well-designed group projects can train children to negotiate, share ideas, and resolve conflicts constructively. This approach not only improves social skills, but also builds a foundation for cooperation skills that are important for children's future social-emotional development.

CONCLUSION

Based on the results of the study above, it can be concluded that the ability to cooperate of children aged 5-6 years in Sritanjung Bangunsari Banyuwangi Kindergarten can be improved through the implementation of Project-Based Learning. This can be seen in the results of the study that have been obtained from each cycle that has increased. Based on the results of cycle I and cycle II, the implementation of Project-Based Learning can improve children's ability to cooperate because there are 8 children who have achieved the established indicators, namely with the criteria of developing very well (BSB) with a percentage of 72.7% of the total number of children. In cycle II, the level of children's ability to cooperate has reached the success indicator with an average value of 89.3%.

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