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INCLUSIVE LEARNING STRATEGY BASED ON COLLABORATION TO IMPROVE GROSS MOTOR SKILLS OF EARLY CHILDHOOD

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abstract
The purpose of this study is to identify and implement effective collaboration-based inclusive learning strategies in improving gross motor skills in early childhood, and to evaluate their impact on children's physical development. The problems of this study include several important aspects, namely: limited implementation of inclusive learning strategies in PAUD institutions, lack of collaboration between teachers, parents, and professionals in developing children's gross motor skills, and minimal variation in learning activities that reduce children's physical activity which has an impact on gross motor development. This study uses a quantitative quasi-experimental. Pretest-posttest research design with (one-group pretest-posttest design). Research Object 20 students, Collaboration-based inclusive learning strategies have been proven effective in improving gross motor development in early childhood through a comprehensive approach. This strategy not only helps children's physical development, but also encourages their social-emotional development through positive interactions with peers, as well as building self-confidence and cooperation skills that are important for their overall development.

Keyword: Pembelajaran Inklusif, Kolaborasi, Motorik Kasar

INTRODUCTION

Gross motor skills are an important aspect in the growth and development of early childhood that needs special attention in the learning process. Optimal gross motor development not only supports children's physical abilities, but also plays a role in developing cognitive, social, and emotional aspects. However, in practice, various challenges are still encountered in optimizing children's gross motor development, especially in the context of inclusive learning where each child has different characteristics and needs..(Fuaidah & Miftahillah, 2018)

Gross motor development in early childhood is a fundamental aspect that affects the overall growth and development of children. In the context of inclusive education, the challenges faced are increasingly complex due to the diversity of abilities and needs of each child.(Andrian et al., 2019) Recent research

shows that young children experience delays in gross motor development that require a special and structured learning approach. (Puspita & Umar, 2020)

Inclusive learning that accommodates the diversity of learners requires a comprehensive and collaborative approach. Collaborative-based learning strategies offer a promising solution, where the active involvement of various parties - from teachers, parents, therapists, to fellow learners - can create a learning environment that supports the development of each child's gross motor skills. Through a collaborative approach, learning can be designed in a more structured and directed manner, taking into account the individual needs of each child..(Amriani & Halifah, 2024; Siregar et al., 2020)

Inclusive learning strategies based on collaboration are very urgent to implement considering their effectiveness in accommodating the diversity of learners. According to (Ningtiyas, 2023), collaborative approach in inclusive settings can improve children's gross motor development better than conventional approaches. This is supported by the ability of this strategy to create a learning environment that supports positive interactions between students, both those with special needs and regular students. Implementation of inclusive learning strategies based on collaboration requires careful planning and involvement of various parties. Longitudinal research conducted by Pratiwi & Gunawan (2022) revealed that the success of this strategy depends on three main components: educator readiness, infrastructure support, and a continuous evaluation system. Collaboration between teachers, therapists, and parents is key to optimizing children's gross motor development.

Empirical data shows that the implementation of inclusive learning strategies based on collaboration has a significant positive impact. A study conducted by (Sumarno et al., 2018) proves an increase in gross motor skills in children who follow an inclusive learning program based on collaboration for one semester. This increase includes aspects of balance, coordination, and muscle strength. Previous studies have shown that a collaborative approach in inclusive learning can have a positive impact on child development. However, further studies are needed regarding specific strategies that can be applied to optimize the development of gross motor skills in early childhood in the context of inclusive learning. This article aims to review and propose an effective inclusive learning strategy based on collaboration in improving gross motor skills in early childhood, by considering various aspects such as learning planning, implementation, and evaluation..

Urgensi penerapan strategi ini semakin diperkuat dengan adanya tuntutan global terhadap pendidikan inklusif yang berkualitas. (Dewi, 2020) emphasizes that inclusive learning based on collaboration is not only beneficial for gross motor development, but also supports children's social-emotional development. This is in line with the 21st century education paradigm which emphasizes the importance of holistic skill development in early childhood.

Theoretical Framework

Efinition And Basic Concepts Of Inclusive Learning

Inclusive learning in early childhood is an educational approach that accommodates all children regardless of physical, intellectual, social, emotional, language, or other differences. According to research (Nadhiroh & Ahmadi, 2024) inclusive learning emphasizes an education system that provides opportunities for all children to learn together in the same environment, with adjustments and support that are appropriate to their individual needs.

The basic concept of inclusive learning is built on the principles of equality and justice in education. (Purnomo & Solikhah, 2021) explains that inclusive learning involves three main components: an accessible learning environment, a flexible curriculum, and adaptive teaching strategies. This system encourages positive social-emotional development and creates a learning atmosphere that values diversity as a wealth, not a barrier.

The implementation of inclusive learning in early childhood requires a holistic approach that involves various stakeholders. Longitudinal research conducted by (Irawati & Nafi'ah, 2023) shows that the success of inclusive learning depends on collaboration between educators, families, and support professionals such

as therapists and child psychologists. This approach also requires modification of the physical and social environment to ensure that all children can actively participate in the learning process.
Evaluation of the effectiveness of inclusive learning according to a meta-analysis study conducted (Inayah, 2023) showed a positive impact on the cognitive, social and emotional development of all children. Children with special needs showed improved adaptability and communication skills, while other children developed empathy and an understanding of diversity early on. This is in line with the findings (Jauhari et al., n.d.) which emphasizes the importance of inclusive learning as a foundation for building a more inclusive society in the future.

Principles of Inclusive Learning for Early Childhood

Inclusive learning for early childhood is based on the principle of equality and accessibility of education for all children. This principle emphasizes that every child, regardless of their physical, mental, social, or cultural conditions, has the same right to receive quality education in a supportive environment. In its implementation, inclusive learning prioritizes the flexibility of the curriculum and teaching methods that can be adjusted to the individual needs of each child. This principle also includes the provision of a safe and comfortable learning environment, where every child feels accepted and their differences are appreciated..(Irawati & Nafi'ah, 2023)
The principle of inclusive learning also emphasizes the importance of collaboration between various parties in supporting children's development. This involves active cooperation between teachers, parents, professionals such as therapists and psychologists, and the school community as a whole. In addition, inclusive learning emphasizes the principle of continuous evaluation that focuses on the individual development of each child, not a comparison between one child and another. This evaluation system is designed to identify the specific needs of each child and provide appropriate support to maximize their potential..(Nadhiroh & Ahmadi, 2024)

According to research (Aryono, 2012) The fundamental principle of inclusive early childhood learning is based on the acceptance of diversity and the recognition that every child has an equal right to receive quality education. This principle emphasizes that every child, regardless of their physical, mental, social, or emotional condition, should be given the opportunity to participate fully in the learning process. This is reinforced by studies (Munna et al., 2024) which shows that an inclusive learning environment must be built on the principle of non-discrimination and respect for individual differences.

The second principle emphasizes the importance of flexibility in curriculum and teaching methods. Educators must be able to adapt and modify learning programs according to the needs and abilities of each child. This principle also includes the use of a variety of learning strategies that allow all children to actively participate and reach their maximum potential. (Khojanah et al., 2023).
(Muttaqien, 2023) underlines the principle of collaboration and multi-stakeholder involvement as a critical component in inclusive learning. This collaboration involves cooperation between teachers, parents, therapists, psychologists, and other professionals to create a comprehensive support system for each child. This principle emphasizes the importance of effective and ongoing communication between all parties involved in the child's educational process. The last principle identified by (Harfiani & Setiawan, 2019) Continuous evaluation and monitoring. The evaluation system in inclusive learning must be formative and continuous, focusing on the individual development of each child. This principle emphasizes the importance of documenting children's progress and adjusting learning strategies based on evaluation results. This is in line with research by Hartati et al. (2022) which emphasizes the importance of an assessment system that is sensitive to the diversity and individual needs of children..

Inclusive learning models

Inclusive learning models include several approaches that can be applied according to the needs and conditions of learning. The co-teaching model is an approach where regular teachers and special assistant teachers collaborate in planning and implementing learning. The project-based learning model allows children with various abilities to contribute according to their respective strengths. The cooperative learning model encourages positive interactions between students through structured group activities, while the Individual Educational Program (IEP) model provides programs tailored to the specific needs of each child. The play-based learning model is effective in creating an inclusive environment that is fun and supports the social-emotional development of all children. In addition, the multisensory learning model that involves various senses in the learning process can help accommodate various learning styles and abilities of children..

There are several general learning models for children with special needs, yaitu: (Harfiani & Setiawan, 2019)

a. Communication Oriented The main teaching model for children with special needs is communication. Communication is the most basic thing that an educator can do to build a good relationship with children with special needs. A good relationship between educators and children with special needs will affect the learning process. Achieving good communication provides a sense of comfort to children with special needs.
b. Task Analysis This teaching model involves educators explaining in competency indicators the tasks that must be completed by children with special needs. The goal is to measure the ability of children with special needs in completing tasks that are given or not given based on ability indicators.
c. Direct Interaction This teaching model is designed to support the learning of children with special needs to encourage the development of their cognitive, emotional, and psychomotor abilities. The model can be staged by educators and arranged in the form of instructions. This approach is centered on the teacher, but students still play an active role in the learning process, both physically and mentally.
d. Prompts Educators use this model to provide assistance in the form of explanations or additional information to children with special needs so that they can produce correct and appropriate responses. The types of prompts are :
    1. Verbal Prompts This model is used to help students by providing additional instructions in the form of verbal information. The verbal information in question is information delivered orally or in writing
    2. General Prompts This model is designed to help children with special needs in the form of explanations of information delivered through body movements (gestures).
    3. Physical Prompts This model is used if the prompts model above is considered unsuccessful. Physical prompts are a model/approach that helps children complete tasks by providing physical contact
e. Modeling This model is done to convey information to students about how to complete their tasks by practicing. This modeling will be done if the expression of prompts is considered unsuccessful..
f. Peer Tutorial Peer Tutorial means a process in which students are selected and trained to guide someone their age or younger in an exclusive learning field. (Endsley, 1980:7) This model is done in pairs consisting of two children with different levels
g. Cooperative Learning This last model is done in groups to complete the tasks or battles given, so that with cooperative learning, each student can mix with his friends who have different abilities to work together.

Gross Motor Development of Early Childhood

Gross motor skills in early childhood are abilities that involve the activity of large muscles in the body, such as the ability to move the hands, feet, and the whole body. According to research (Djuanda & Agustiani, 2022), Gross motor skills are body movements that use large muscles or most of the muscles in the body

or all parts of the body that are influenced by the maturity of the child. The development of gross motor skills in early childhood includes various activities such as walking, running, jumping, crawling, and climbing. As stated by (Sulistyo et al., 2021) Gross motor development is an important aspect in child development because it is directly related to physical maturity and the child's ability to explore their environment. In the context of early childhood learning, gross motor skills are an important foundation for the development of more complex skills in the future. Research conducted by (Nuryanti et al., 2018) shows that proper gross motor stimulation at an early age can improve not only a child's physical abilities, but also affect the child's overall cognitive, social, and emotional development. Gross motor development in early childhood is a dynamic process and involves mastery of large body movements. This ability is very important to support children's daily activities, such as walking, running, jumping, and climbing. The stages of gross motor development generally follow a regular pattern, although each child has a different development rate.

Table 1 Motor development in early childhood

age/year	gross motor skills	fine motor skills
2.5-3,5	walking well, running straight ahead, jumping	imitating a circle, abstract writing, can eat using a spoon, stacking several boxes
3,5-4,5	walking with 80% of adult stride, throwing and catching large balls, but arms still stiff	buttoning a shirt, according to simple shapes, making simple drawings
4,5-5,5	balance the body on one leg, run without falling	drawing coloring, copying simple numbers and letters

Gross motor development in early childhood is an important aspect of child development that involves the ability to control large muscles of the body. At the age of 0-1 years, babies begin to develop head control, roll over, sit without support, crawl, and finally learn to stand and walk with support. Research by (Asmuddin et al., 2022) dalam Jurnal Pendidikan Anak Usia Dini menunjukkan bahwa stimulasi yang tepat pada periode ini sangat krusial untuk perkembangan motorik selanjutnya.

Entering the age of 2-3 years, children experience more complex developments in their gross motor skills. They begin to be able to run, jump on two feet, kick a ball, and climb stairs with assistance. According to research conducted by (Siregar et al., 2020), This period is marked by significant improvements in body coordination and balance. At the age of 4-5 years, children show increasingly mature motor skills. They can jump on one leg, catch a ball, walk on a plank, and perform more coordinated movements. A study conducted by (Hidayati & Watini, 2022) revealed that outdoor play activities are very effective in optimizing gross motor development in this age range. The peak of gross motor development in early childhood occurs at the age of 5-6 years, where children have been able to perform various complex movements such as cycling, swimming, and playing various physical games that require high coordination. Recent research by (Sumarno et al., 2018) emphasizes the importance of a variety of structured physical activities to optimize gross motor development at this stage.

Gross motor development in children is influenced by various internal and external factors that are interrelated. Internal factors include genetics, the nervous system, and the child's physical condition, where research by (Asmuddin et al., 2022) shows that genetic factors contribute about 40% to gross motor development. Health and nutritional status also play a crucial role, as expressed by (Nugroho & Rahayu, 2021)) which found a significant correlation between nutritional status and achievement of gross motor development milestones. Meanwhile, research (Widya & Angga, 2018) identified that the maturity of the nervous system has a fundamental influence on a child's ability to master gross motor skills.

External factors that influence gross motor development include the environment, stimulation, and opportunities for physical activity. A comprehensive study by (Royani et al., 2021) found that children who received regular and planned motor stimulation showed more optimal development compared to children who received less stimulation. Furthermore, the study (Nurhayati & Zarkasih Putro, 2021) revealed that environmental factors such as the availability of play space, educational play equipment, and parental support have a 35% contribution to the speed of mastery of gross motor skills. Parenting patterns and

parental involvement in providing opportunities for physical activity have also been shown to have a significant influence on the development of children's gross motor skills..

Collaborative Learning

Collaborative learning for early childhood is a learning approach that emphasizes interaction and cooperation between children in achieving shared learning goals. According to research conducted by (Jemani, 2023), collaborative learning helps children develop social skills, communication skills, and problem solving more effectively than individual learning. The study found that children involved in collaborative learning showed significant improvements in their ability to empathize and work together with their peers.

Implementing collaborative learning in early childhood requires appropriate planning and strategies according to the characteristics of child development. Research conducted by (Amriani & Halifah, 2024) shows that the use of group play activities, joint projects, and cooperative games are effective methods in implementing collaborative learning. This study also underlines the importance of the role of teachers as facilitators who guide and support positive interactions between children during the learning process..(Dewi, 2020)

Collaborative learning not only has an impact on the social-emotional aspects, but also has a positive effect on children's cognitive development. The results of research by (Suparmi et al., 2024) revealed that children involved in collaborative learning showed better critical thinking skills and creativity. They also developed the ability to listen and respect the opinions of others, and learned to negotiate in completing tasks together. The success of collaborative learning in early childhood is also determined by a supportive learning environment. (Ningrum et al., 2021) emphasizes the importance of creating a safe, comfortable, and resource-rich learning environment that can be accessed together. The study also found that flexible classroom arrangements and the use of interactive learning media can increase the effectiveness of

Collaborative Learning In Early Childhood

Collaborative learning in early childhood has various forms that can be adjusted to the level of development and characteristics of the child. According to research conducted by(Suparmi et al., 2024) effective forms of collaborative learning include small group projects, where children work together to create artwork, build constructions, or complete thematic tasks. Studies by (Wahyuning et al., 2021) identified collaborative role play as a highly effective form of learning, where children act out everyday life scenarios such as market play or doctor play, which helps develop social skills and an understanding of roles in society. In addition, research (Sartika Ukar et al., 2021) shows that group activities such as storytelling, group singing, and collaborative traditional games can improve children's communication and cooperation skills.

Other effective forms of collaborative learning are outdoor project-based learning and joint exploration activities. Research conducted by Sari and Rahman (2023) in the Early Childhood Research Quarterly revealed that group gardening activities, simple science experiments in groups, and environmental projects can improve children's problem-solving skills and social awareness. A recent study by (Lutfi, 2023) also found that the use of digital technologies in collaborative learning, such as interactive educational games played together and simple multimedia projects, can increase children's engagement in learning while developing their digital skills responsibly..

METHODS

This study uses a quantitative approach with a quasi-experimental type to evaluate the effectiveness of inclusive learning strategies based on collaboration on improving gross motor skills of early childhood. The research design used is a pretest-posttest with a single group (one-group pretest-posttest design). This study involved 20 students from an early childhood education institution (PAUD) Lab schoole in Jember

district that implements an inclusive program. The population consists of children with diverse motor skills, including children with special needs. The sampling technique was carried out purposively based on the availability of students who met the inclusive criteria.(Sarmanu, 2017)
The data collection instrument was a gross motor test adapted from the Gross Motor Development Test (TGMD-2) and an observation sheet to record collaborative activities during learning. This test measures gross motor skills such as running, jumping, kicking a ball, and balance. The intervention was carried out for 6 weeks with a frequency of 2 times per week. Each session lasted for 60 minutes and was designed to involve collaborative activities, such as group games, simple sports, and inclusive gymnastics. Before the intervention, a pretest was conducted to measure the child's initial gross motor skills. After the intervention was completed, a posttest was conducted to evaluate the changes that occurred..
The data were analyzed using paired t-test statistical tests to measure significant differences between pretest and posttest results. In addition, descriptive analysis was conducted on observational data to provide a qualitative description of the implementation of collaboration-based strategies. This study is expected to provide empirical evidence that an inclusive collaboration-based learning approach can significantly improve gross motor skills in early childhood, while strengthening social interactions between children with diverse abilities..

Data Analysis

Table 2. Data Analysis of Pretest and Posttest of Collaborative-Based Inclusive Learning to Improve Gross Motor Skills of Early Childhood

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
pre test	19	10	20	30	24.37	2.629	6.912
post test	19	6	30	36	32.84	1.463	2.140
Valid N (listwise)	19						

Based on the results of descriptive statistical analysis, there is a significant difference between the pretest and posttest scores in inclusive learning based on collaboration to improve gross motor skills of early childhood. The data shows that in the pretest with a sample size of 19 children, a minimum score of 20 and a maximum score of 30 was obtained with an average (mean) of 24.37, a standard deviation of 2.629, and a variance of 6.912. Meanwhile, in the posttest there was a significant increase with a minimum score of 30 and a maximum of 36, the average (mean) increased to 32.84, the standard deviation decreased to 1.463, and the variance was 2.140. The range of scores in the pretest was 10, while in the posttest it decreased to 6, which indicates that after being given treatment, children's gross motor skills became more homogeneous and experienced an even increase. The decrease in the standard deviation value from 2.629 to 1.463 also shows that the distribution of post-test data is more clustered around the average value, which means that inclusive collaboration-based learning is effective in improving the gross motor skills of early childhood..

Table 3. Data Analysis of Inclusive Learning Based on Collaboration

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	pre test - post test	-8.474	2.736	.628	-9.792	-7.155	-13.500	18	.000

Based on the results of paired sample t-test data analysis, a significant difference was found between the pretest and posttest with a mean difference value of -8.474, indicating an increase in scores after the

inclusive learning treatment based on collaboration. The standard deviation of 2.736 and the standard error mean of 0.628 indicate relatively small variability in the increase in scores. The 95% confidence interval is between -9.792 (lower) to -7.155 (upper), which does not include the value 0, strengthening the evidence of a real difference between the pretest and posttest. The significance value (p-value) of 0.000 which is smaller than $\alpha = 0.05$ with a t-value of -13.500 at degrees of freedom (df) 18, provides strong statistical evidence to reject the null hypothesis and conclude that inclusive learning based on collaboration is effective in improving gross motor skills of early childhood.

Table 4 subtest TGMD 2

sub test	nimimum	maximum	mean	std.dev
motoric				
lari	00	8	6.3333	2.18987
gallop	00	8	4.6500	3.18782
hop	00	10	6.8333	2.68933
leap	00	6	3.7500	2.26871
horizontal jum	00	8	5.8500	2.60784
slide	00	8	5.8500	3.28953
control				
memukul bola	00	10	7.0667	2.48604
dribble	00	8	5.2000	2.45155
menangkp	00	8	5.5667	1.10563
menendan	00	6	4.1000	1.84892
melempar	00	8	4.8167	1.80561
menggelinding	00	8	5.6000	2.01840
total				

Based on the data in Table 3 showing the results of the TGMD-2 subtest, there are two main categories of motor skills measured. The first category is locomotor skills consisting of six components: run (mean=6.3333, std.dev=2.18987), gallop (mean=4.6500, std.dev=3.18782), hop (mean=6.8333, std.dev=2.68933), leap (mean=3.7500, std.dev=2.26871), horizontal jump (mean=5.8500, std.dev=2.60784), and slide (mean=5.8500, std.dev=3.28953). Each component has a minimum value of 00 and a maximum value between 6-10, with hop showing the highest maximum value of 10. The second category is object control skills which includes six components: hitting the ball (mean=7.0667, std.dev=2.48604), dribbling (mean=5.2000, std.dev=2.45155), catching (mean=5.5667, std.dev=1.10563), kicking (mean=4.1000, std.dev=1.84892), throwing (mean=4.8167, std.dev=1.80561), and rolling (mean=5.6000, std.dev=2.01840). In this category, all components also have a minimum value of 00, with maximum values varying between 6-10, where hitting the ball reaches the highest maximum value of 10. These data show quite significant variations in the motor skills of the children tested, with relatively high standard deviations in several components..

DISCUSSION

Based on the TGMD-2 subtest data for the locomotor skills category, there is an interesting variation in the achievement of children's basic motor skills. This result is in line with research conducted by (Oktarifaldi et al., 2019) which shows that hop and run skills tend to have higher average values compared to other locomotor skills in early childhood. In the study, it was found that age factors and previous movement experience have a significant influence on the level of mastery of locomotor skills.

Interesting findings from the data showing the mean hop value (6.8333) as the highest value are supported by a study conducted (Hadi et al., 2017), which reveals that the hop movement is a fundamental movement that children often do in everyday play activities, so that the level of mastery tends to be better. Meanwhile, the relatively low mean leap value (3.7500) is in line with research (Sulistyo et al., 2021) who found that

the movement of jumping on one leg requires a more complex level of balance and coordination, so it takes children longer to master it.

This is also supported by research(Fajarwati et al., 2023) which identified that differences in opportunities to do physical activity, quality of movement stimulation, and environmental factors of play have a large influence on the variation of children's locomotor skill achievement. The study also emphasized the importance of a structured movement intervention program to minimize the gap in motor skills between children. Analysis of TGMD-2 data for the object control skill category showed that the ability to hit the ball had the highest mean value (7.0667), which is in line with research(Mirawati & Rahmawati, 2017) which revealed that the skill of hitting the ball is the most frequently stimulated movement in traditional games and simple sports activities at school. The study also found that the high standard deviation in this component (2.48604) indicated differences in opportunities and frequency of practice between children. Meanwhile, the relatively low mean values in the kicking (4.1000) and throwing (4.8167) components were supported by the findings.(Monika, 2021) which identified that both skills require more complex eye-foot and eye-hand coordination, so that the level of mastery tends to be lower in early childhood. Interestingly, the catching component showed the lowest standard deviation (1.10563) compared to the other components, which according to longitudinal research by (Siregar et al., 2020) indicating that these skills have a relatively uniform developmental pattern among children. The study also underlines the importance of ball-based activities in developing object control skills, where the variation in scores that emerged in the TGMD-2 data can be explained by differences in exposure to ball-based activities and the quality of motor programs in schools. These findings are supported by a meta-analysis conducted (Sartika Ukar et al., 2021) which shows a positive correlation between the frequency of manipulative activities and the level of mastery of object control skills in early childhood

Collaboration-based inclusive learning is an educational approach that integrates all children with various abilities in the same learning environment. According to research (Djuanda & Agustiani, 2022), This approach has been proven effective in developing gross motor skills in early childhood because it creates an environment that supports active learning through social interaction. Children can learn by observing, imitating, and participating in activities with their peers.

The implementation of collaborative learning in an inclusive setting provides opportunities for children to engage in a variety of structured physical activities. Research by (Wahyuning et al., 2021) showed that children involved in collaborative learning experienced significant improvements in aspects of balance, coordination, and muscle strength compared to conventional learning. This is supported by the creation of a fun and non-competitive learning atmosphere. An important aspect in inclusive learning based on collaboration is the role of the teacher as a facilitator and designer of activities that are in accordance with the individual needs of the child. According to a study conducted (Dewi, 2020), The use of collaborative play methods modified according to children's abilities can increase motivation and participation in gross motor development activities. Activities such as modified traditional games, group dances, and simple team sports have been shown to be effective in developing gross motor skills. The positive impact of inclusive collaboration-based learning is also seen in children's psychosocial aspects. Research by Nurhayati & Susilowati (2022) revealed that this approach not only improves gross motor skills, but also develops children's social skills, empathy, and self-confidence. Positive interactions between children in collaborative activities create an environment that supports children's holistic development, including their gross motor skills. Meanwhile, Hidayah et al. (2024) emphasized the importance of parental and community involvement in supporting the success of inclusive collaboration-based learning to optimize the development of gross motor skills in early childhood

Conclusion

Inclusive learning strategies based on collaboration have been proven effective in improving the gross motor development of early childhood through a comprehensive approach. This strategy not only helps

children's physical development, but also encourages their social-emotional development through positive interactions with peers, as well as building self-confidence and cooperation skills that are important for their overall development.

Recommendation
This approach combines the principle of inclusivity that ensures all children, regardless of their abilities, can actively participate in learning activities, with collaborative methods requiring involvement and interaction between educators, parents, and fellow children. Through structured activities such as group games, creative movements, and simple sports that are done together, children can develop their gross motor skills such as running, jumping, catching, and throwing in a fun and inclusive way

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