Managing Inclusive Early Childhood Education: Strategies and Challenges in Supporting Children with Special Needs

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Abstract:

According to recent data, the number of children with special needs in Indonesia has reached 1,544,184, with 330,764 of these children (21.42%) aged 5-18 years. However, only 85,737 children with special needs are currently enrolled in school. This disparity highlights the urgent need for efforts to ensure that these children receive an appropriate education. The aim of this study is to analyze the management of inclusive Early Childhood Education (PAUD) in the context of inclusive education, focusing on the following aspects: first, the policies supporting inclusive education; second, the implementation of the inclusive education program; third, the challenges faced by educators and other stakeholders in implementing the program; and fourth, the outcomes achieved in improving access to appropriate education for children with special needs. The research adopts a qualitative approach with a case study design. Data collection methods include three primary techniques: interviews, observation, and documentation. The data were analyzed using the Miles and Huberman framework, which includes data reduction, data presentation, and conclusion drawing. The results of this study indicate that the institution in question is committed to providing inclusive education for all children, including those with special needs. The school offers assistant teachers, therapy rooms, creative learning methods, and accessible facilities to support the learning process. Support from the government and related institutions plays a crucial role in improving educator competencies and expanding facilities, both of which are vital for the success of inclusive education programs.

Abstrak:

Menurut data terbaru, jumlah anak dengan kebutuhan khusus di Indonesia mencapai 1.544.184, dengan 330.764 anak (21,42%) berada dalam rentang usia 5–18 tahun. Namun, hanya 85.737 anak dengan kebutuhan khusus yang terdaftar di sekolah. Ketimpangan ini menunjukkan perlunya upaya untuk memastikan anakanak tersebut menerima pendidikan yang sesuai. Tujuan dari penelitian ini adalah untuk menganalisis pengelolaan Pendidikan Anak Usia Dini (PAUD) inklusif dalam konteks pendidikan inklusif, dengan fokus pada aspek-aspek berikut: pertama, kebijakan yang mendukung pendidikan inklusif; kedua, pelaksanaan program pendidikan inklusif; ketiga, tantangan yang dihadapi oleh pendidik dan pihak terkait dalam melaksanakan program ini; dan keempat, hasil yang dicapai dalam meningkatkan akses pendidikan yang sesuai bagi anak-anak dengan kebutuhan khusus. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus. Metode pengumpulan data yang digunakan mencakup tiga teknik utama: wawancara, observasi, dan dokumentasi. Data yang dikumpulkan dianalisis menggunakan teknik analisis Miles dan Huberman, yang mencakup reduksi data,

penyajian data, dan penarikan kesimpulan. Hasil penelitian ini menunjukkan bahwa institusi yang diteliti berkomitmen untuk menyediakan layanan pendidikan inklusif bagi semua anak, termasuk anak-anak dengan kebutuhan khusus. Sekolah ini menawarkan guru pendamping, ruang terapi, metode pembelajaran kreatif, dan fasilitas yang dapat diakses untuk mendukung proses pembelajaran. Dukungan dari pemerintah dan lembaga terkait sangat penting dalam meningkatkan kompetensi pendidik dan memperluas fasilitas, yang keduanya vital untuk keberhasilan program pendidikan inklusif.

Keywords:

Management, Early Childhood Education, Inclusive

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Introduction

Every Indonesian citizen is entitled to an education, as guaranteed by the 1945 Constitution (Article 31, Paragraph 1) and Law No. 20 of 2003 on the National Education System (Article 5, Paragraph 1). On the international stage, the right to education is enshrined in the International Covenant on Economic, Social, and Cultural Rights. Consequently, individuals with special needs are equally entitled to access quality education, thereby ensuring inclusivity in educational opportunities for all. In the Indonesian context, inclusive schools are defined as institutions that provide equitable access to education for all children, including those with special needs, without discrimination. Every child is considered a valuable asset with inherent rights to growth and development (Parpia, Elwood, McQuade, Svensen, Wanjuhi, Jatosh, GCert, Hhando, Houpt, Mduma, DeBoer, Scharf, & Platts-Mills, 2024; Villanueva, Turrell, Alderton, Davern, Brinkman, Gauvin, Goldfeld, & Badland, 2024). During early childhood, children begin to explore new environments, engage in social interactions, form relationships with peers, and undergo critical stages of behavioral and cognitive development (Shmis, Kotnik, & Ustinova, 2014; Gong & Li, 2024; Stumm & Nancarrow, 2024). According to the Minister of Education and Culture Regulation (Permendikbud) No. 70 of 2009, inclusive schools are institutions that accommodate children with diverse abilities, whether with or without disabilities, by providing suitable facilities, support systems, and differentiated learning methods (Menteri Pendidikan dan Kebudayaan, 2014).

Furthermore, Inclusive School Certification can be granted following an evaluation by the Ministry of Education and Culture (MoEC) or an accredited institution, which assesses the extent to which a school adheres to established inclusion standards. These standards include the availability of accessible physical infrastructure, teacher preparedness (specifically competence in teaching children with special needs), and the presence of policies and programs that foster inclusive education. This certification ensures that schools are genuinely equipped to provide appropriate services for children with special needs (Utama & Marlina, 2023). Children with special needs are those who experience physical, intellectual, social, or emotional impairments relative to their peers, necessitating specialized educational interventions (Chen, Chen, Li, & Ren, 2020; Du, Gao, Zhao, & Chen, 2024; Yildirim, Kumaş, & Yazicioğlu, 2025). When integrated into general education settings, children with special needs may face a variety of challenges, such as academic difficulties, comprehension issues, and the risk of social exclusion or bullying, all of which can impede their educational progress (Morrissey, Keating, & King, 2024; Rothenberg, Schmidt, Davidson, Garcia, Barnett, Fernandez, Mills, Jent, & Davis, 2024). Therefore, inclusive education must be carefully structured, meticulously planned, and effectively executed to meet the unique needs of these children.

Children with special needs, such as those with visual or hearing impairments, intellectual disabilities, physical disabilities, emotional disturbances, learning difficulties, autism spectrum disorder, and other conditions, are increasingly present in educational environments and require equitable treatment. According to recent data, the number of children with special needs in Indonesia has reached 1,544,184, with 330,764 children (21.42%) in the age range of 5–18 years. However, only 85,737 children with special needs are currently enrolled in school (Khasanah, Tua, & Khusus, 2024). Given these statistics, it is imperative that concerted efforts are made to ensure these children receive an appropriate and supportive education. In response, the Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud RI) has initiated policies to facilitate access to Special Schools and inclusive education programs.

Inclusive education is a pedagogical framework that provides all students, including those with special needs such as disabilities, impairments, or exceptional talents, the opportunity to learn in a shared educational environment. The goal is for these children to develop their potential, talents, and interests, while receiving individualized educational services tailored to their unique needs (Supena, Nuraeni, Soedjojo, Maret, Paramita, Rasyidi, & Dewey, 2018). Inclusive education seeks to accommodate the diverse abilities of children with special needs by fostering a supportive, inclusive, and engaging learning environment. The primary objective is to enhance self-confidence in these children, as self-assurance is a fundamental trait essential for all learners (Federičová, Pertold, & Smith, 2018; Malandrakis, 2018; Nosouhian & Javadi, 2018). With greater self-confidence, children with special needs are better positioned to access appropriate education aligned with their rights, supported by collaboration between governmental bodies and the broader community (Dalgaard, Bondebjerg, Viinholt, & Filges, 2022; Vairamani, 2024; Zhang, Ming, Zhang, Zeng, Zhou, & Zhang, 2025). Therefore, the curriculum, facilities, and learning systems employed in inclusive education must be thoughtfully adapted to meet the diverse needs of all students(Muñoz-Hinrichsen, Marfan, Contreras, Lagos, Roig, & Pérez-Tejero, 2025; Ortega & Muñoz, 2025; Ziegenfusz, Westerveld, Fluckiger, & Paynter, 2025).

Inclusive education is founded on the principle that children with special needs should not receive special treatment or privileges, but rather, have equal rights and responsibilities alongside their typically developing peers (Ahmed, Kaiser, Rahman, Al Mamun, Rahman, & Mahmud, 2023; Solís-García, Barreiro-Collazo, Rodríguez-Correa, Delgado-Rico, & Real-Castelao, 2025). The effective implementation of inclusive education requires the active collaboration of various stakeholders, including the government, schools, communities, and particularly parents. Given that inclusive education introduces a paradigm shift for both educational institutions and society, it presents distinct challenges that must be addressed (Supena, Nuraeni, Soedjojo, Maret, Paramita, Rasyidi, & Dewey, 2018). The overarching goal is that inclusive education will cultivate a future generation that understands, respects, and embraces diversity, thereby preventing discrimination within society. In addition, inclusive education is an educational framework that seeks to address the diversity and individual needs of all students, ensuring the optimal development of each child's potential (Jacob, Pillay, & Oyewumi, 2025; Rafiquddin, Razak, & Ganesan, 2025; Woodcock & Anderson, 2025). It is a response to individual diversity, aiming to enhance participation in learning, cultural activities, and community life, while minimizing exclusion from various spheres, particularly in education (Bahri, 2022). A fundamental aspect of inclusive education is the acceptance of children with special needs to learn alongside their peers in mainstream classrooms, with an open, non-discriminatory attitude. Inclusive schools are systems that adapt to the individual needs of each child, facilitating academic, physical, social, and emotional development at a pace and level that aligns with the child's abilities (Azad, Williams, Minton, Sheridan, & Mandell, 2020; del Campo & Gomis, 2024; Rosidah, Setyawan, Mardiyah, Wisataone, Wolor, Sabariah, Rufi'i, Harmanto, Safrudin, Gontara, Arien, & Susanto, 2024; Senoo, Oti-Boadi, Senoo-Dogbey, Bampoe, & Laari, 2024).

The Regulation of the Minister of Education, Culture, Research, and Technology No. 48 of 2023 underscores the importance of providing reasonable and appropriate accommodations to ensure that persons with disabilities can enjoy and exercise their human rights and fundamental freedoms on an equal basis with others. Research by Moppes, Nasori, Bont, Es, Visser, & Muijsenbergh (2024), Kohrt, Gresch, & Henschel (2024), Lowy, Magiawala, Mittal, Hall, Roberts, & Kim (2024) and Bjerke, Dalland, Mausethagen, & Knudsmoen (2025) states that effective management of inclusive education requires careful, systematic planning, with both typically developing children and those with special needs being taught together in the same classroom. Regular assessments, often conducted on a monthly basis through narrative evaluations, help track progress. In line with this, Evans, Joseph, Jozwik, & Bartlett (2024), Pozas, Zurita, Pascual, & Pozas (2024), and Tupou, Ataera, Wallace-Watkin, & Waddington (2024) concluded that early childhood education services should prioritize inclusivity in order to cultivate a quality generation that benefits from inclusive educational opportunities. The management of PAUD that incorporates inclusive education faces several significant challenges, one of the most pressing being the shortage of educators equipped with the necessary skills to support children with special needs. Many educators lack specialized training in inclusive teaching strategies, which complicates the creation of a learning environment that caters to the diverse needs of all students (Didaskalou, Stavroussi, & Green, 2024; Woodcock & Anderson, 2025). The provision of targeted teacher training is an essential component of inclusive education, as it equips educators with the tools necessary to address the varying needs of children (Senoo, Oti-Boadi, Senoo-Dogbey, Bampoe, & Laari, 2024). Furthermore, the role of school leaders is pivotal in driving the inclusive education agenda, as they are responsible for guiding and supporting educators and educational staff in creating an inclusive learning environment. School principals play a crucial role in improving the overall quality of education and ensuring that inclusive practices are effectively implemented (Issom, Wulan, Ramadhani, & Fatimatuzzahra, 2022).

In addition to the challenges related to teacher competency, the lack of sufficient disability-friendly facilities remains a significant barrier. Without appropriate physical infrastructure and learning aids, it becomes difficult to create a truly inclusive environment. Another obstacle is the low level of public awareness regarding the importance of inclusive education, which often hampers effective collaboration between parents, schools, and communities. To overcome these challenges, it is imperative that all relevant parties engage in concerted efforts to promote and sustain inclusive education practices. Preliminary data indicate that many regions currently lack inclusive schools capable of accommodating children with mild special needs. One of the key issues is the insufficient availability of educational services tailored to children with mild intellectual disabilities, who often struggle in mainstream educational settings both academically and socially. These children face barriers to inclusion in regular schools, which can negatively impact their academic performance, social integration, and overall well-being. In such contexts, placing children with mild special needs in special schools that focus primarily on more severe cases may not provide the appropriate support, potentially exacerbating their condition. Conversely, enrolling them in general schools that lack the necessary facilities and support systems may expose them to risks such as bullying, academic delays, and challenges in social-emotional development, which can undermine their selfconfidence and sense of belonging (Jesslin & Kurniawati, 2020).

Inclusive education at the early childhood level is particularly critical as it provides children with special needs the opportunity to develop both academically and socially alongside their typically developing peers (Guillemot, Lacroix, & Nocus, 2024). However, the successful implementation of inclusive education at this stage is fraught with challenges, including the lack of disability-friendly facilities, insufficient educator training, and difficulties in adapting teaching methods to meet the individual needs of children with diverse disabilities. To overcome these challenges, the management of inclusive education must adopt a holistic approach that includes policy support, ongoing professional development for educators, and the provision of adequate facilities and resources. Effective management at the early childhood education (ECED) level is crucial in ensuring that all children, including those with special needs, have equal opportunities to learn and grow. This requires careful planning, efficient management of resources, and

the application of teaching methods that accommodate the diverse needs of all students (Hornby, 2014; Namanyane & Shaoan, 2021). Given the increasing emphasis on the educational needs of children with special needs in Indonesia, particularly at the PAUD level, it is essential to identify best practices and strategies for overcoming the challenges faced in inclusive education.

To address these challenges, it is necessary to explore how early childhood education institutions can create learning environments that are inclusive of children with mild special needs, enabling them to learn alongside their peers. This requires the implementation of inclusive teaching practices, including the provision of specialized teaching assistants for children with special needs, and the development of individualized learning plans that meet the specific needs of each child. Therefore, the present study seeks to investigate the strategies and challenges associated with the management of inclusive education at the early childhood education level, focusing on the identification of best practices and effective solutions for overcoming the barriers to inclusion in educational settings.

Research Method

This study employed a qualitative research approach with a case study design. Qualitative research was particularly suited for examining real-world conditions and served as an exploratory method for understanding complex phenomena. The case study design was chosen to explore the specific context of inclusive education management within early childhood education settings. A case study allowed for an in-depth investigation into a particular case or phenomenon, providing a comprehensive understanding of its characteristics (Creswell, 2015). This approach was particularly effective for examining complex data related to experiences, challenges, and strategies implemented in the field. The case study was relevant as it facilitated a detailed analysis of the factors influencing both the successes and challenges of managing inclusive early childhood education, aligned with the research objective of understanding the implementation of inclusive education management.

The study focused on the management of inclusive early childhood education, specifically exploring the strategies and challenges faced by practitioners in this context. Data for this study were collected from a total of nine teachers, all of whom were selected based on their direct involvement and experience in managing inclusive education. These teachers were considered key informants, providing relevant and in-depth insights related to the research focus. Then, data collection involved three main techniques: observation, interviews, and documentation. To ensure the validity and reliability of the findings, the researcher employed both source triangulation and technique triangulation. Source triangulation involved collecting data from multiple sources using the same methodology to cross-check the accuracy of the data, while technique triangulation used different data collection methods to gather information from the same source, allowing for a more robust verification of data accuracy (Ule, Kusumaningtyas, & Widyaningrum, 2023). These triangulation methods enhanced the credibility of the research findings by

providing a more comprehensive and nuanced understanding of the phenomenon under investigation.

Subsequently, the collected data were analyzed using a systematic data processing procedure, which enabled the researcher to identify aspects directly related to the research problem. The data reduction process involved organizing the data from interviews and observations to focus on the most relevant and significant information. The reduced data were then presented in a narrative format to facilitate clearer understanding and further analysis (Ridwan & Nasrulloh, 2022). Finally, the data were subjected to a process of conclusion drawing, where patterns and themes were identified from the data. Preliminary conclusions were initially drawn and then revisited to ensure consistency with the data. This iterative process of analysis and validation continued until the final conclusions were reached.

For data analysis, the study followed the Miles and Huberman framework (2013), which outlined a systematic approach to qualitative data analysis through the processes of data reduction, data presentation, and conclusion drawing. The components of this analysis process were visually represented in Figure 1 below. The dynamic nature of this analysis meant that conclusions were refined as additional insights emerged through the iterative process.

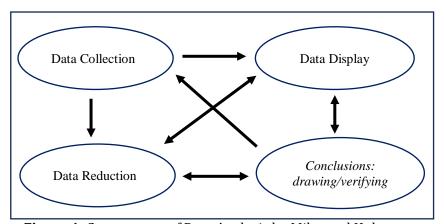


Figure 1. Components of Data Analysis by Miles and Huberman

Results and Discussion

Results

This educational institution is dedicated to providing broad opportunities for all children, including those with mild special needs such as dyslexia, ADHD, and learning disabilities, to receive an appropriate education in an inclusive learning environment. The institution fosters an atmosphere where children from diverse backgrounds, both those with and without special needs, can learn together harmoniously. It upholds the belief that every child, regardless of physical or mental differences, has an equal right to a quality education. This commitment aligns with the mission to deliver comprehensive early childhood education services, including for children with special needs, using an active, innovative, creative, and enjoyable learning approach. Through these methods, the

institution strives to nurture a generation of children who are not only physically healthy but also intellectually capable and of strong character, consistent with its vision and goals.

Although the institution has not yet fully qualified as an inclusive school in a technical sense, significant progress has been made toward this goal. Several key components of an inclusive learning environment have been established, such as the provision of support teachers, a therapy room, and facilities designed to stimulate the development of children with special needs. However, further improvements are needed in infrastructure, including the enhancement of learning aids and additional physical accessibility features. The institution has already implemented various learning strategies that support inclusive education, such as assigning support teachers to assist children with mild special needs. These teachers play a vital role in ensuring that children with special needs receive the necessary attention to engage actively in the learning process. They function not only as supervisors but also as facilitators, helping children with special needs understand lesson material, interact with peers, and develop their abilities in alignment with their potential. While the institution is still in the process of becoming a fully inclusive environment, the steps already taken demonstrate its commitment to creating a supportive and inclusive learning atmosphere that fosters the development of all children, without exception.

In the 2024-2025 academic year, the institution enrolled 90 children, of whom 20 had special needs. These children displayed a range of conditions, including 7 with learning disabilities (e.g., dyslexia), 4 with Attention Deficit Hyperactivity Disorder (ADHD), 1 with Attention Deficit Disorder (ADD), and 8 with speech delays. The school is managed by a principal who oversees all educational operations and activities, supported by a team of eight teachers who serve both as instructors and support teachers, working closely with the children in their daily classroom activities. Each class is typically taught by two to three teachers, and for classes that include children with special needs, a dedicated support teacher is assigned to provide individualized attention to these students. In the classroom, the special assistant teacher provides essential support by offering simplified explanations or physical assistance when necessary. They are also responsible for designing learning materials tailored to each child's specific needs. Additionally, the support teacher compiles regular reports on the child's academic, social, and emotional development to ensure that any interventions made are effective and beneficial.

Teachers at the institution regularly participate in seminars and workshops focused on managing children with special needs. Support teachers engage with children in both one-on-one and small group settings, depending on the individual needs of each child. In one-on-one settings, the support teacher provides individualized attention, guiding the child through the lesson material in a personalized manner. In small group settings, the support teacher works closely with the main teacher to ensure that children with special needs receive the appropriate support in both academic learning and social interaction with peers. The support teacher also provides assistance throughout the

entire class period, helping children stay engaged and follow the lesson in a way that aligns with their abilities. These practices aim to enhance teachers' skills in supporting children with special needs, ensuring that the educational process is inclusive and conducive to the development of all children. Through ongoing professional development and personalized attention, the institution is committed to creating an educational environment where every child can thrive, regardless of their challenges.

Regarding facilities and infrastructure, the institution provides adequate and appropriate resources to support children's learning, including those with special needs. The available infrastructure includes an office for the principal, dedicated to administrative and management activities, a clean and accessible restroom, and three classrooms, each tailored to different age groups and developmental levels. These classrooms include the Moon Class for Playgroup, the Star Class for Kindergarten A, and the Sun Class for Kindergarten B. Each classroom is thoughtfully designed to offer a comfortable and spacious environment conducive to inclusive teaching and learning. Additionally, the institution has established a therapy room specifically designed to support therapeutic interventions for children with special needs. This room is equipped with various tools and materials intended to facilitate developmental therapy. The playground area also features outdoor play facilities, such as slides, climbing structures, and swings, aimed at fostering the children's physical motor skills.

For children with special needs, the institution provides specialized play equipment and resources intended to stimulate various aspects of their development. These include flashcards, which aid in improving visual and cognitive skills; balance boards, which help develop body balance and coordination; sensory balls, which engage sensory and fine motor skills; puzzles, which support problem-solving abilities and handeye coordination; and stickers, used as positive reinforcement for behavioral development. Moreover, oral sensory brushes are available to stimulate the muscles of the mouth and speech organs, particularly benefiting children with speech delays or oral motor difficulties. With these comprehensive and well-suited facilities, the institution ensures that every child, including those with special needs, has access to a safe, supportive, and stimulating learning environment that fosters their optimal development. Figure 2 provides documentation of one activity conducted with a child in the therapy room, illustrating the use of these specialized resources.





Figure 2. Balance Training and Fine Motor Skill Development

The arrangement of classrooms at the institution is an important aspect of its efforts to create a learning environment that supports the development of all children, including those with special needs. The school adopts a "learning on the floor" approach, where children sit on the floor rather than using chairs, utilizing tables as learning surfaces. This arrangement is designed with the consideration that some children, particularly those with special needs, may feel more comfortable and have greater flexibility in movement without being restricted by chairs. Moreover, this method is deemed effective in fostering more space for interaction among children and between the teacher and students, contributing to a more inclusive and participatory learning atmosphere.

Before the formal learning process begins, the school engages all students in warm-up activities outside the classroom. These activities involve light physical exercises such as morning stretches or interactive games, aimed at stimulating gross motor skills and improving focus. These warm-up sessions are particularly beneficial for children with high energy levels, such as those with ADHD, as they help release physical and mental tension before engaging in formal learning activities. Research indicates that physical activity, such as these warm-ups, can enhance the production of dopamine and norepinephrine, hormones involved in regulating attention and impulse control (Hird, Slanina-Davies, Lewis, Hamer, & Roiser, 2024). By participating in these activities, children not only expend excess energy but also learn cooperation and communication skills, which are vital for social development. Furthermore, these activities help to reduce anxiety, making it easier for children to transition smoothly into classroom-based learning.

During these warm-up activities, teachers actively participate by monitoring the children and providing assistance where needed. This ensures that all children, including those with special needs, can participate fully and safely. Teachers also give instructions and offer support to ensure that children feel comfortable and motivated to engage in each activity. This approach not only prepares the children physically and mentally for the learning process but also strengthens the relationship between teachers and students, fostering a harmonious and conducive learning environment.

The institution operates under the auspices of the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), and as such, its learning process aligns with the national curriculum established by the Ministry. The curriculum in use is the Merdeka Curriculum. According to interviews conducted with educators, the implementation of the Merdeka Curriculum at this institution has proven to significantly support the developmental achievements of children with special needs. This curriculum allows for flexibility in teaching methods and promotes a more inclusive learning approach, enabling children with special needs to learn alongside their typically developing peers. By offering a more flexible, child-centered framework, the curriculum allows educators to adapt the material and delivery methods to meet the individual needs and developmental potentials of each child, particularly in academic, social, and emotional domains.

Throughout the learning process, children with special needs participate alongside typically developing children in the same classroom. Teachers play a critical role in providing additional support and guidance to children with special needs during these activities. Teachers' presence in the classroom is essential to ensure that children receive the attention and assistance they need to engage actively in all aspects of the learning process. Furthermore, the teachers' involvement is a key strategy in ensuring that children with special needs receive the appropriate support tailored to their individual conditions.

Every two weeks, the institution provides specialized therapy for children with special needs, which is conducted prior to their formal class activities. These therapy sessions are customized according to the specific needs and profiles of each child, as the school maintains comprehensive records of the conditions of all children with special needs (Fuchs, Meuret, Thiel, & Ta, 2009). This individualized approach ensures that the therapy provided is aligned with each child's developmental needs, optimizing the impact on their learning and daily life. The types of therapy offered include Occupational Therapy (OT), Sensory Therapy, Behavioral Therapy, and Social-Emotional Therapy, all of which contribute to the children's overall development and enhance their educational experience.

In addition to their participation in regular classroom activities, children with special needs are also actively involved in significant school events, such as national celebrations and important commemorations. For example, they take part in the parade during Indonesia's Independence Day and the commemoration of Kartini Day. The involvement of children with special needs in these major events highlights the institution's commitment to fostering an inclusive environment, where all children, irrespective of their needs or conditions, are provided with equal opportunities to contribute and participate in school-wide activities. Engaging in such events not only promotes social interaction but also helps children with special needs to develop key social skills. They learn to interact with their peers, collaborate in group activities, and build self-confidence through these shared experiences. Documentation of one such major school event is presented in Figure 3.



Figure 3. Indonesian Independence Day and Kartini Day Activities

At the educational institution, several children with special needs have demonstrated significant developmental progress, including a child with speech delay. This child, in particular, has made remarkable strides, owing largely to the stimulation provided by the teachers through various educational games, such as letter cards and

puzzles. These engaging and interactive learning tools have not only captivated the child's interest but also created a fun, motivating learning environment. The use of such games has enabled the child to learn more naturally, enhancing both enthusiasm and participation in the learning process. Academically, children with special needs have shown considerable improvement, particularly in their understanding of tailored subject matter, which is delivered through personalized and creative teaching strategies.

In terms of social development, these children have also made progress in their socialization skills. They are now interacting more effectively with their peers and are more actively participating in group activities. Furthermore, some children who have received specialized support have exhibited noticeable improvements in communication and motor skills, such as clearer speech and better body coordination. These advancements are the result of therapy programs and individualized educational approaches. The progress seen in these children underscores the positive impact of inclusive education on their holistic development. Notably, a four-year-old child who had previously struggled with speech has already begun to read, a significant achievement considering the challenges associated with their condition.

The school has also established strong collaboration with parents in managing children with special needs. This collaboration is maintained through regular and open communication, which facilitates the exchange of information regarding the child's condition, habits at home, and academic and social progress at school. Additionally, parents are actively involved in school activities and play a vital role in fostering an inclusive environment both at home and within the school setting. This case exemplifies the dedication and commitment of the educators, who not only focus on academics but also prioritize creating a supportive and enjoyable learning environment. The teachers at this institution are determined to ensure that each child, regardless of their abilities, can adapt and develop according to their unique needs. Their use of engaging educational games and individualized teaching methods reflects their dedication to providing high-quality education for all students.

Discussion

The investigated school is committed to providing inclusive education, including for children with special needs. It strives to create a learning environment where all children, regardless of physical or mental differences, can grow together. Research highlights several benefits of inclusive education, such as: (1) opportunities for children with special needs and typically developing children to interact and communicate with others and their environment; (2) boosting children's self-confidence, as seen in this study, where children with special needs experienced increased self-confidence through enhanced interactions with peers (Wulandari & Hariswi, 2024); (3) teaching children to recognize and respect differences, allowing them to understand both strengths and limitations without diminishing others; and (4) fostering empathy and sympathy among children, reflected in the improved social skills of children with special needs (Dewi, 2017).

While the school demonstrates a clear commitment to fostering an inclusive learning atmosphere, it has not yet fully achieved the status of a completely inclusive school. Several challenges hinder its progress, including limited teacher training on inclusive education, insufficient accessible facilities, constrained funding, low community awareness, lack of supportive government policies, and difficulties in implementing an inclusive curriculum that meets the needs of all students. Despite these challenges, steps have been taken, such as providing teaching assistants for children with special needs. This strategy ensures that children with special needs can actively participate in learning activities alongside their peers while receiving tailored support based on their individual needs. Then, the approach adopted by the school aligns with an integration model, in which children with special needs are included in regular classrooms and are expected to fully participate in the curriculum and school activities. However, they still require additional support to ensure their full engagement. The integration approach emphasizes the need for adjustments within the classroom environment, while the full inclusion model focuses on broader changes within the school system to ensure all students, including those with special needs, can fully participate in learning activities. As Buchner & Proyer (2020) suggests, integration requires children with special needs to adjust, whereas full inclusion requires systemic adjustments from the school to foster equal participation for all students.

The theoretical framework of inclusive education, which emphasizes the principles of equality and accessibility for all children—including those with special needs—aligns closely with the practices observed at the institution in question. The school implements policies ensuring that all children, regardless of ability or disability, have equal access to learning opportunities. In addition, the Collaborative Learning Theory, which underscores the importance of cooperation among teachers, students, and parents, is effectively applied at this institution. Teachers work closely with support staff and collaborate with parents to foster an environment that nurtures the development of all children, including those with special needs (Aquino & Scott, 2023). Furthermore, the Multiple Intelligences Theory, which acknowledges the diversity in children's learning styles, is also reflected in the school's approach. Creative and individualized learning strategies are utilized to meet the varied educational needs of children with special needs, ensuring that learning is both effective and inclusive. By connecting these theories with the school's practices, this research provides a comprehensive view of how inclusive education theory can be practically applied to support children with special needs in early childhood settings.

The optimal use of facilities and infrastructure plays a crucial role in supporting the holistic development of students (Mkwama, 2023). A safe and comfortable school environment not only helps students feel secure but also enhances their ability to focus on learning. Well-equipped facilities support the development of a wide range of skills, including social, emotional, and motor skills (Nugroho & Wibowo, 2020). The appropriate use of resources can significantly enhance inclusivity, creating a supportive learning environment where all students, including those requiring special attention, can

thrive. Research has shown that such inclusive environments foster mutual respect and acceptance among students (Jacob, Pillay, & Oyewumi, 2025). In this context, the institution's strengths lie in its active, creative, and enjoyable learning methods, which are supported by comprehensive facilities such as specialized therapy rooms and educational aids. These resources help children with special needs develop essential motor, cognitive, and language skills while ensuring that they receive the support necessary to learn alongside their peers.

Specialized therapy rooms, for instance, provide children with opportunities to participate in therapies tailored to their individual needs. Sensory therapy, for example, assists children who struggle with processing sensory stimuli, thereby enhancing their ability to focus and adapt to the classroom environment. Educational aids like flashcards and puzzles support cognitive development by facilitating interactive learning and helping children grasp foundational concepts such as numbers, letters, and shapes. Sensory brushes, which assist with fine motor skills, improve hand-eye coordination and tactile sensitivity—skills that are crucial for performing basic tasks in daily life. Research underscores the importance of adequate facilities in supporting inclusive education, including physical spaces such as classrooms, restrooms, and specialized learning aids (Kohrt, Gresch, & Henschel, 2024). The implementation of these principles at the institution demonstrates how the thoughtful use of facilities and resources can foster the development of motor, cognitive, and language skills in children with special needs, ultimately ensuring that they receive the support needed to thrive in an inclusive learning environment.

The Merdeka Curriculum, implemented at the institution, is considered highly suitable and supportive of the development of children with special needs due to its flexibility in teaching and learning methods. This adaptability allows for adjustments based on each child's unique needs and potential, fostering a child-centered approach that promotes individualized attention in academic, social, and emotional domains. Such an approach helps create an inclusive and supportive learning atmosphere for all students, including those requiring special attention, and facilitates their holistic development in an effective and adaptive manner (Aquino & Scott, 2023). In this inclusive setting, the Merdeka Curriculum is applied using an adaptive and collaborative learning model. For instance, teachers organize role-playing activities such as a "minimarket" where children assume roles as sellers and buyers. Typically developing children are encouraged to assist their peers with special needs by helping them use play money or organize merchandise. To further support learning, the teacher provides visual aids, such as product images, to help children with disabilities understand the concept of buying and selling. This approach not only enhances social skills and communication but also fosters empathy and encourages active participation among all children. By adjusting the activities to each child's abilities, the learning process becomes more tailored and effective for children with special needs (Aquino & Scott, 2023).

This practice aligns with findings that demonstrate the Merdeka Curriculum's effectiveness in supporting the educational needs of children with special needs. Overall,

research suggests that the curriculum's implementation is suitable, positively impacting the learning of children with special needs, although there is room for further refinement to more fully address each child's individual needs (Mamas, Daly, Cohen, & Jones, 2021). The Merdeka Curriculum's adaptability proves to be a key factor in creating a more inclusive and responsive educational environment. However, challenges remain, including the need for more time for educators to design evaluations that accommodate the diversity of students, the limited availability of vocational skills training, difficulties in developing initial assessment tools, and obstacles in addressing diverse learning needs (Aquino & Scott, 2023; Kohrt, Gresch, & Henschel, 2024). In this setting, teachers take on a dual role as both instructors and facilitators, guiding children with special needs through the learning process. Teaching assistants in classrooms with children with special needs play a crucial role in providing additional support, helping students understand lessons, and encouraging social interactions. This commitment to inclusive education is further demonstrated by the teachers' active participation in seminars and workshops focused on managing children with special needs. Research supports the notion that effective inclusive education requires educators with professional expertise and competence in special education, emphasizing the importance of teaching assistants in facilitating engagement and learning (Senoo, Oti-Boadi, Senoo-Dogbey, Bampoe, & Laari, 2024).

Moreover, the school has made efforts to create an environment that meets the needs of children with special needs by providing supportive facilities and infrastructure, including the design of specialized activities and regular monthly therapies. These efforts ensure that the developmental needs of children with special needs are addressed comprehensively. The school's strong collaboration with parents, availability of support teachers, and commitment to improving infrastructure highlight its potential to further enhance its inclusive practices and move closer to becoming a fully inclusive institution.

Conclusion

The investigated school in question is committed to providing inclusive educational services for all children, including those with mild special needs. The institution upholds the belief that every child, regardless of physical or mental condition, has the right to receive quality education in a harmonious and inclusive learning environment. Although it is not yet fully classified as an inclusive school, the institution has made significant progress in this direction. These efforts include the provision of both teaching and assistant teachers, specialized facilities such as therapy rooms, and a variety of developmental tools designed to meet the unique needs of each child. For instance, therapy rooms are used to offer specialized support such as sensory therapy for children with sensory processing difficulties, which helps them better prepare for classroom learning. Accessibility features, such as wheelchair ramps, allow children with mobility challenges to navigate the school independently, enhancing their sense of autonomy and confidence. These facilities contribute to creating a more welcoming and inclusive

environment for all students. The commitment to inclusivity is further demonstrated through the implementation of the Merdeka Curriculum, which provides flexibility and adaptability to meet the diverse needs of all students. The Merdeka Curriculum is particularly beneficial for children with special needs (ABK), as it allows for adjustments in teaching methods, materials, and assessment approaches, catering to each child's individual learning style. This child-centered curriculum focuses on holistic development rather than only academic achievement, ensuring that children with special needs can develop optimally in various areas. Teachers are empowered to design inclusive learning experiences, guaranteeing that all students have equal opportunities to learn and reach their full potential.

In addition to the curriculum, the school also provides various facilities to support both the physical and cognitive accessibility of children with special needs. These include ramps, Braille information boards, sensory rooms for children with sensory disorders, and safe spaces for emotional and social development. These resources are vital in creating an inclusive and supportive learning environment that fosters the development of all students. To further improve the effectiveness of inclusive education, it is recommended that government agencies, in collaboration with local educational departments, focus on enhancing the competencies of educators in inclusive early childhood education. This can be achieved by offering professional development opportunities, including regular training for teachers on inclusive teaching practices, adaptive techniques, and the use of appropriate learning materials. Additionally, adequate infrastructure and facilities should be provided to support the diverse needs of children with special needs, ensuring that these students can thrive academically, socially, and emotionally.

For inclusive education to be truly effective, facilities must be equipped to meet the varied needs of children with special needs. This includes physical accessibility features such as ramps, elevators, and disability-friendly restrooms, as well as assistive technology devices, Braille materials, hearing aids, and therapy rooms to support emotional and social development. By addressing these needs, inclusive early childhood education programs can provide significant benefits for all children, including those with special needs. In the long term, inclusive education contributes to a more equitable and compassionate society by fostering greater tolerance, empathy, and appreciation for diversity. By offering equal access to education for children of all abilities, these programs play a crucial role in shaping a generation that values inclusivity and prepares all children for active and meaningful participation in society.

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Ethical Statement

This study adhered to ethical standards throughout the research process, ensuring the rights, privacy, and dignity of participants were respected. Informed consent was obtained from all nine teachers, who were fully briefed on the study's objectives, methods, and potential uses of the findings, with participation being voluntary and participants having the right to withdraw at any time without penalty. To maintain confidentiality and anonymity, pseudonyms were used, and all personal information was securely stored. The research was designed to avoid harm and discomfort, with the goal of benefiting educators and policymakers by providing insights into inclusive early childhood education management. Ethical approval was obtained from the relevant review board, and the researcher maintained transparency in reporting methods, data collection, and analysis procedures, ensuring the integrity and credibility of the findings.

CRediT Authorship Contribution Statement

- Author 1: Conducted observations at the inclusive early childhood education institution to understand the challenges in supporting children with special needs. Additionally, the author conducted interviews with educators and school principals to gather relevant data regarding these challenges. The initial article was drafted based on the research findings and analysis conducted.
- Author 2: Led field research focused on the strategies applied in inclusive early childhood education, particularly those aimed at supporting children with special needs. The author collected data through direct observations at the school and interviews with teachers and other relevant stakeholders. The author also contributed to data analysis and played a significant role in revising and editing the article draft.
- Author 3: Assisted in the editing and revision process by providing critical feedback on the quality of writing and analysis. Additionally, the author contributed to the selection of relevant literature to enrich the article and strengthen the study's theoretical framework.

Conflict of Interest

The authors declared no conflict of interest.

Data Availability

The data are available upon request.

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