

*International Journal of Learning, Teaching and Educational Research*  
Vol. 23, No. 3, pp. 469-485, March 2024  
<https://doi.org/10.26803/ijlter.23.3.23>  
Received Jan 30, 2024; Revised Mar 24, 2024; Accepted Mar 30, 2024

# Typical Challenges Faced by Sub-Urban State Primary Schools Implementing Inclusive Education in Indonesia

Sunardi , Donni Prakosha , Sugini , Mohammad Anwar   
and Tias Martika   
Universitas Sebelas Maret  
Surakarta, Indonesia

**Abstract.** The aim of this study was to determine the common obstacles that Indonesian state primary schools have in attempting to provide inclusive education since there are gaps between sub-urban with urban areas. The objects were five state primary schools in one supervisory area in Central Java, one of which was the appointed inclusive school in the area. The four focuses of the research were the physical facilities, teacher perceptions, peer perceptions, and parents' perceptions. Questionnaires were used to collect data from the headmasters, teachers, peers and parents of children with special needs. The results indicated that peers and parents of children with disabilities tended to have positive attitudes towards children with disabilities. Teachers had positive attitudes towards children with disabilities, but not to inclusive education. Another significant challenge was the limited physical school facilities, including building accessibility. The implication of these findings is that the development of inclusive education in sub-urban areas in Indonesia needs to pay attention to the physical facilities and teacher training.

**Keywords:** Challenges; children with disabilities; primary school; inclusive education

## 1. Introduction

Humans require a variety of needs to sustain their lives: food, housing, clothing, transportation, education, and environment are among them. Compared with other needs, education could be one of the most influential needs because good education contributes significantly to solving global poverty, controlling population growth, improving health and the environment, enabling technological innovation for a variety of work, and helping people participate actively in the community. Sustainability is a paradigm for contemplating the future, wherein considerations of environmental, social, and economic factors are integrated into the pursuit of development and the enhancement of a good quality of life. This is referenced in numerous processes, including research and

education. The limited availability of participatory educational institutions results in difficulties for learners to access education tailored to their needs, consequently diminishing their active participation in societal environments upon graduation (UNESCO, 2012; Efendi et al., 2022).

The right of all children to education has been acknowledged since the 1948 Universal Declaration of Human Rights (Stubbs, 2008); yet, at the end of the 21st century, there were 72 million children whose right to education was violated because they could not benefit from the regular education systems provided by their governments. These children include those who are impoverished, reside in remote rural areas or slums, who face conflict or are refugees; they also include girls and women, indigenous peoples, migrants, members of minority language groups, working-class and street children, people with disabilities, and those afflicted with HIV/AIDS and other illnesses.

Individuals with disabilities are among the group of people who do not benefit from regular education services. Showing great concern that every child receives an appropriate education, the UNESCO has continuously sponsored international conferences, declarations, programmes, conventions, actions, and the like, involving member countries and non-government agencies working in education, among them:

- The 1960 convention against discrimination in education by the UN Higher Commission for Human Rights.
- The 1971 Declaration of the right for mentally retarded individuals by the UN Higher Commission for Human Rights.
- The 1975 Declaration of the Rights of Individuals with Disabilities.
- The 1981 Sundberg Declaration of the right of all children to get access to life-long education in a normal community, in the Malaga (Spain) UNESCO world conference on action and educational strategies, prevention and integration, attended by representatives of 103 countries.
- The 1982 World Action Programmes for Individuals with Disabilities.
- The 1989 Action Guide for Manpower Development, by the UNICEF.
- The 1990 Convention of the Rights of Children, by the UNICEF.
- The 1990 World Declaration of Education for All, in the Jomstein (Thailand) UNESCO Congress, attended by representatives from 155 countries.
- The 1993 regulation on the equal right and opportunity for individuals with disabilities.

The continuous support of the United Nations (UN) significantly changes the paradigms in the provision of education for individuals with disabilities, from segregated, to integrated and recently, inclusive. The segregation paradigm, the oldest, is based on the medical approach that the problem is located in the individual (Stubbs, 2008), and the solution was to fix or fail the child. There could be a variety of problems within the child, and not all of these problems could be solved with education. Individuals with disabilities had to be separated from the non-disabled to make it simpler and easier to provide services such as education, medical, and social services (Barnes & Mercer, 2003). Segregation has been used in providing educational services for many centuries all over the world. The most

popular placement is special schools for individual with disabilities; in many parts of the world, a separate school is provided for each type of disability. The main points of the medical view of disabilities are that (1) disabilities are problems at the individual level; (2) disabilities are physical or mental limitations or weaknesses; (3) the most appropriate solutions for disabilities are professional interventions, medical and/or psychological.

The second approach is the integrated one. This paradigm has grown and is widely used in the United States with other popular terms: mainstreaming or normalisation. The Individuals with Disabilities Education Act (IDEA) which was enacted in 1975 and then revamped in 2004 authorizes flexible and temporal placement of individuals with special needs (Siegel, 2007). The continuum options of educational placement for disabled students include:

- Part-time regular class placement
- Special class in regular school placement
- Special public or private school placement (for children with significant difficulties, such as a school for emotionally troubled students)
- Charter school placement
- Residential programmes
- Home instruction, and
- Hospital and institutional placement.

The third, the newest paradigm, is inclusive education, based on the premise of a social model that the problem and solution are located in the society and education system (Stubbs, 2008). According to Hornby's (2014) multifaceted idea, inclusive learning takes into account human rights, social justice, equality, the societal concept of disability, and a socio-political framework of education. It also celebrates and values variety and individuality. The ideas of inclusive education have been initiated by experts and practitioners in special education from American and European countries since the last decades of the twentieth century. The concepts then gained international legal support in the 1994 World Congress on Special Education held in Salamanca (Spain) which was organised by the UNESCO, attended by representatives of 92 countries and 25 other international organisations. The Salamanca Declaration came to the following conclusion: regular schools with [an] inclusive approach are the most efficient way to fight prejudices, build hospitable neighbourhoods, create a society that embraces everyone, and achieve education for all; additionally, they give the majority of children an effective education and enhance the effectiveness and, therefore, the cost-effectiveness of every aspect of learning.

The education system has been pushing for inclusive education programmes for several years (Oyarce, Macaya & Vallejos, 2023). In 2000, in a meeting in Dakar, the UNESCO published the Framework Action on Education for All. It reaffirmed that the main barriers to the inclusion of individuals with disabilities are the exclusive government policies in relation to curriculum, culture, and instructional practices. Salend (2011) outlined four essential elements for moving the inclusion philosophy into reality in a study of the existing research on inclusive education.

These are:

- providing challenging, engaging, and flexible general education curricula for all learners;
- embracing diversity and responsiveness to individual strengths and challenges;
- using reflective practices and differentiated instruction; and
- establishing a community based on collaboration among students, teachers, families, other professionals, and community agencies.

According to Sanjeev and Kumar (2007), the Ministry of Social Justice and Empowerment in India is now in charge of caring for children with special needs; this Ministry's main objective is rehabilitation rather than education. Special needs children used to be under the purview of the Development of Human Resources Ministry. Approximately 36 million disabled children, mostly living in rural areas had no provision for special schools. Inclusive education was recommended as the best solution. The Right to Education Act of 2009 was promulgated to provide education to all children, regardless of their socioeconomic background, faith, or aptitude (Singh, 2016). The federal government policy aimed to promote inclusive education by providing assistance to integrate children with special needs into regular schools. Three major challenges were identified: complex problems, scarce available resources, damaging social attitudes. Complex problems could be attributed to the fact that India is a nation with many languages, cultures, and religions, and its inhabitants are divided into many castes and socioeconomic strata. Scarce resources refer to inadequate quality and quantity of human and material resources. Damaging attitudes are the negative attitudes towards disabled individuals, shown by teachers, parents, and non-disabled people. Involvement and cooperation of educators, parents and community were recommended, in addition to the need for government policy to improve the education system to make it more inclusive.

A review of 20 studies on the attitudes of students towards peers with disabilities from seven countries was carried out by de Boer, Pijl, and Minnaert (2012) and concluded that, in general, students held neutral attitudes towards their peers with disabilities. The study identified factors related to attitudes that included gender, age, parental influence, and experience and knowledge about disabilities. A study on the challenges of implementation of inclusive education in Ethiopia was conducted by Mitiku, Alemu, and Mengsitu (2014), the object of which was two existing primary schools in one area. Using a stratified technique, a sample was selected consisting of four principals, 16 professional special education teachers, and 51 students with disabilities. Questionnaires and interviews were used as the main instruments of data collection. The physical environment of the schools was neither conducive nor suitable for wheelchair users and students with visual impairments. The other challenges faced by schools were the negative attitudes of teachers and parents, lack of attention from educational offices, lack of educational materials, large class sizes and lack of skilled manpower, shortage of material and equipment in the library and resource rooms.

Based on a review of practices in many countries, Suleymanov (2015) described that a wide variety of efforts and strategies had been used for including all children in education, but satisfactory results were shown only after serious and energy-consuming reforms and innovations. He then identified four main barriers to the implementation of inclusive education presented in the table below:

**Table 1. Barriers to the Implementation of Inclusive Education**

No.	Type of Barriers	Explanation
1.	Value barriers	How people value differences in cultures, races, religions, disabilities.
2.	Power barriers	Power distribution and changes in school management due to system changes from heterogeneous children.
3.	Practical barriers	Related to practices, adequacy of competence, availability of resources.
4.	Psychological barriers	Attitudes, tolerance of all involved in school management and operation.

Teachers determine the progress, stagnation and even decline in the world of education, and the whole world has recognised teachers as the core of all programmes and activities to improve the quality of education (Ibda, Syamsi, & Rukiyati. 2023). The roles and duties of teacher assistants and classroom teachers, methods to cooperation and co-teaching, and alterations to the curriculum all benefited from innovations. Two studies were conducted on parental attitudes towards inclusive education. Paseka and Schwab (2019) conducted a nationwide survey to 2000 parents (of non-disabled children) in Germany to investigate the attitudes of parents towards inclusive education. Digitally recorded semi-structured telephone interviews were used to collect data. The findings showed that parents generally had favourable opinions on including children with physical and learning problems and showed neutral attitudes towards the inclusion of behaviour disorders or mental disabilities. Parents whose children studied in inclusive schools showed significantly more positive responses than those whose children studied in schools without special-need students.

Using a mixed method, Sharma and Trory (2019) investigated the attitudes of 71 parents of children with disabilities in Thailand. Parental attitudes towards inclusion were generally positive: 75% of parents concurred that inclusion had advantages, provided that instructors have the necessary training to create individualised education plans (IEPs) and run the classroom efficiently to keep pupils from being labelled as well as ostracised.

Debele's (2016) observation, unstructured interviews, photography, and questionnaires were among several techniques used to gather data in 70 of 728 schools. Access to the school, primary entrance entries and exits, buildings, classrooms, various offices, and the supportive physical setting of the educational institution were deemed to be inadequate for the implementation of inclusive education (Allam & Martin, 2021). Qualitative data was sourced from interviewing 15 special education teachers in the City Division of Ilagan, the Philippines:

1. The majority of educators who work with students who have learning problems believe they are unable to educate these students since they had not received any special needs education training from the school.
2. The absence of techniques among teachers assigned to SPED classrooms for working with students with impairments.
3. The general Division of Ilagan's education facility for students with learning difficulties was inadequate owing to a lack of funding and curriculum guides.
4. Students enrolling in SPED courses obtained relatively little help from stakeholders, and learner with disabilities did not obtain all the necessary amenities and assistance needed to utilise curricular facilities.

Mel Ainscow (2020) described her experiences in promoting inclusive education in many countries, and noted that different challenges were faced by education systems in economically poor countries and wealthier countries. In most economically poor countries, the challenges were quantitative, related to opportunities to attend formal schools, whereas in most wealthier countries, the challenges were qualitative, related to individual appropriate education. Three strategies were used in promoting inclusive education: evidence based, the school development, and improving the wider community approaches. In the evidence-based approach, collaboration among staff was developed through experimenting with new practices and inquiry activities to reach out to all students. Such activities include discussion among teachers and their students on how to make lessons more inclusive, using research techniques to gather the views of their classmates. In the second strategy, the school development approach, the equal rights policies for children with disabilities to go to mainstream settings significantly increased the proportion of children categorised as disabled in regular schools in order that schools could obtain additional resources. This continued use of a medical model drew the schools' attention to the deficits of the children, rather than to teaching students successfully. More inclusive cultures could be developed within schools, for example by having a specialist group in a cooperative culture within the classroom.

The third strategy, known as the "enhancing the larger community approach", involved partnerships among stakeholders, including parents/caregivers, educators along with other education professionals, trainers for educators and researchers, administrators and managers at the national, local, and school levels; policymakers and service providers in other sectors (such as health, protection for children, and social assistance); community civic groups, and members of minority groups who are at risk of being excluded. This partnership is urgently needed to mobilise human and financial resources, manage schools and educational processes, and reduce variation among schools. The collaboration may also develop multi-agency assistance, a culture of education awareness among household members, and encourage communities of educators, parents, and students.

In the Indonesian context, the education system separates teacher education into general education and special education. Teachers for students with disabilities

are graduates of special education programmes; however, the special education department does not adequately supply teachers for students with disabilities. Additionally, facilities in inclusive schools, especially at the elementary level, are still not conducive for students with disabilities. For instance, there is still a lack of guiding blocks to assist visually impaired students in navigating the school environment; schools still face limitations in providing Braille-printed books or computers equipped with screen readers. Thus far, Indonesia has employed a system of segregation, and has initiated the process of establishing inclusive schools for specific disabilities. This approach involves encouraging those capable of attending inclusive education to enrol in inclusive schools. Consequently, the government is preparing more inclusive schools to accommodate this initiative.

The existing special schools, mostly located in the cities, were able to educate no more than 3000 disabled children, a very small proportion of the estimated number of disabled children in the country. In 1984, in a national compulsory primary school project, new state special schools were built in 250 districts that previously had no special schools. The enrolment rates of disabled children in schools increased significantly in the subsequent years. In 1990, there were around 33,000 special needs children being taught in 525 special schools (23 of which were state administered) and 208 special primary schools (all of which were government administered). The number of schools rose to 752 by 2002–2003, serving 35,000 pupils (Ministry of National Education, 2003).

The movement towards inclusive education in Indonesia was marked by Government Act Number 70/2009 on Inclusive Education, signed by the Ministry of Education in 2009. This Act entails the implementation of inclusive schools in the primary, secondary, and high school levels in every sub-district all over Indonesia. At least one high school in every district, one secondary school and one primary school in each sub-district must be prepared to become inclusive schools. Budgets were provided by the government for teacher training and facility improvement in these 'model' inclusive schools. Data in 2009 (Ministry of Education, 2010) showed that there were 925 inclusive schools distributed in all provinces and districts across the country.

Sunardi et al. (2011) conducted a study to evaluate the implementation of inclusive education. Because it was difficult to do random sampling, 186 inclusive schools were selected using a purposive technique. The sample consisted of seven schools in Palembang (South Sumatra), eight schools in Makassar (South Sulawesi), eight in Solo, 80 in Wonogiri, three in Sukoharjo, 12 Karanganyar, and 75 schools in Boyolali, all in Central Java. Regarding institutional management, the findings indicated that most inclusive schools had created inclusion-focused strategic plans, appointed coordinators with legal authority, included pertinent and connected parties, and had frequent coordination meetings. Many schools, however, had not reorganised their school organisations. Fifty-four percent of schools impose quotas on SEN pupils in terms of entrance, identification, and evaluation. Merely 19% employed a screening process for student admission, with 50% using distinct protocols for individuals with special needs. Roughly half of inclusive schools had changed their curricula to include other standards.

Regarding education, 68% of inclusive schools stated that they had changed their method of instruction. However, barely any schools offered specialised equipment for bright and talented children as well as those with autism, physical impairments, speech and hearing issues, and visual impairment. More than half of the students who participated in the evaluation said the exam items, administration, time allotments, and student reports had been changed. This number dropped sharply for the national exam. Lastly, the majority of outside assistance came from the Directorate of Special Education and the province governments in the form of funds, mentoring, and infrastructure.

The policy of operating selected inclusive schools at the district level has proven to significantly increase the enrolment rates of children with disabilities. However, several problems were identified. Many selected inclusive schools felt that the presence of disabled students downgraded the quality of their graduates in the area of a school competitive atmosphere. They also complained that they did not have enough capacity to provide services for all disabled children. There were also a few disabled children who refused to be transferred to the appointed inclusive schools.

Amka (2017) conducted a study to identify problems in the implementation of inclusive education. The study involved 238 participants from all over the country, consisting of principals and teachers in inclusive schools, parents of students with special needs, and representatives of local education offices. Participant observation and in-depth interviews were used to collect data, either by phone or in person, focussing on constraints, problems, barriers and challenges faced in the implementation of inclusive education and policies and actions to solve them. The findings of the study identified limited resources, negative attitudes, lack of knowledge and skills, and low self-confidence as the main barriers in inclusive education.

The Merdeka Belajar (freedom to learn) policy launched by the Ministry of Education in 2019 Kementerian Pendidikan dan Kebudayaan (2019) seemed to drive some changes in the practice of inclusive education in the country. One of the four basic policies is the zona system in new student school admission. Formerly, a child could go to any school he wanted to, on a competitive basis. Consequently, there were more favourite schools, and there were fewer favourite schools. In the zona system, new student admission is based on the distance from the student's home. Each child, including a disabled child, should go the nearest school, and thus, all schools should be ready to become inclusive schools for children with disabilities.

Affective, cognitive, and conative factors exert significant influence on students' learning performance (Li et al., 2023). In the realm of cognitive functioning, one finds the storage and retrieval of factual information, procedural sequences, and conceptual frameworks, all of which shape the acquisition of intellectual capacities and skills. Moving beyond cognition lies the affective sphere, encompassing the cultivation of emotions, attitudes, values, and sentiments.

Within the psychomotor domain, one encounters tasks involving manual dexterity or the refinement of motor abilities. Effective learning induces favorable transformations, fostering advancement across the tripartite structure of Bloom's taxonomy (Magdalena et al., 2020).

Another important government regulation that enhances education for individuals with disabilities was issued in 2020, known as Government Regulation No 13 on Appropriate Accommodation for Individuals with Disabilities. The central government, regional governments and education institutions are responsible for the provision of appropriate accommodation for individual with disabilities, which includes financial funding support, facilities, staff (teaching and non-teaching), and curriculum. Forms of appropriate accommodation are described in great detail for all types of disabilities, including physical, intellectual, mental, visual, speech and hearing, and multiple disabilities.

## **2. Research objective**

The objective of this research was to identify challenges typically faced by suburban state primary schools in Indonesia in implementing inclusive education for children with disabilities. More specifically, this study focussed on:

- School facilities
- Peer acceptance
- Teachers' perceptions
- Parents' perceptions

## **3. Methodology**

This study used quantitative methods and a survey design. It was decided that the most appropriate method was quantitative as the main focus was (i) to corroborate the overall response tendencies of individuals, and (ii) to explore variations in tendencies among the participants involved. This review's objective was to identify the components that the researchers thought were crucial (Shaharudin et al., 2020). Surveys are used to address significant issues or large-scale concerns with a sizable population, necessitating a large sample size to discern the outcomes of the ongoing issues. This study was conducted in a primary supervisory area in one district in Central Java, Indonesia. In the area of autonomy, primary and secondary schools are managed by districts, while high schools are managed by provinces. For supervision and evaluation purposes, one district is divided into supervisory areas, consisting of five to ten primary schools, state and private. The objects of this study were all state primary schools in the supervisory area in the district of Boyolali. The reason for selecting only state schools was that they were fully managed by the government, whereas private schools are under the responsibility of their foundations.

The information of tools, number of samples, instrument, and methods to gather data about the school facilities, peer acceptance, teachers' perception, and parents' perceptions are presented in the table below.

**Table 2. Methodology of Research**

No.	Aspects	Information
1.	Methods	Quantitative methods
2.	Research design	Survey design
3.	Sampling	Cluster random sampling
4.	Sample	5 inclusive schools in sub-urban area
5.	Research subjects	5 school headmasters 32 students of 4 <sup>th</sup> grade 52 teachers in all five schools 6 parents of children with disabilities
6.	Procedures for data collection	Questionnaire
7.	Validity and reliability	Validity: content validity Reliability: split half reliability
8.	Respondents of the data about: School facilities  Peer acceptance Teachers' perceptions Parents' perceptions	5 school headmasters and 32 students of 4 <sup>th</sup> grade 32 students of 4 <sup>th</sup> grade 52 teachers in all five school 6 parents of children with disabilities
9.	Instruments of the data about: School facilities  Peer acceptance  Teachers' perceptions Parents' perceptions	22-item inventory of physical and academic school accessibility 44-item Likert scale with three factors: cognitive, affective, conative 32-item four option Likert scale 21-item Likert scale

To collect data about the school facilities, the respondents were the five school headmasters and 32 Grade 4 students. The instrument was a 22-item inventory of physical and academic school accessibility, consisting of general accessibility and specific accessibility for visual impairment, hearing impairment, intellectual problems, motoric problems, behavioural problems, autistic, and gifted children.

Data about peer acceptance was collected using a 44-item Likert scale with three factors: cognitive, affective, conative. The respondents were 32 Grade 4 students, the only school having students with disabilities.

A 32-item four-option Likert scale was used to collect data about teachers' perceptions. The scale consisted of seven factors: concept of disabilities, rights for education, inclusive preferences, admit diversity, support disabilities friendly environment, appropriate expectation, and willingness to help. The respondents were all 52 teachers in five schools, with ages ranging from 24 to 58 with a mean of 38 years; working experience ranged from 2 to 38 with a mean of 13 years. Data about parents' perceptions were collected from six parents of children with disabilities using a 21-item Likert scale, consisting of expectations, child placement, acceptance, knowledge of disabilities, attitudes. The reliability of the instruments was 0.538.

#### 4. Results and discussion.

All results obtained in this research are followed by the discussion related to the results.

##### *School facilities*

In general, most state primary school buildings were not accessible for individuals with disabilities. These schools were located in the capital of the district; only phone connection was not a problem. However, with regard to building accessibility, only one school (the appointed inclusive school) was reported to have wheelchair-accessible doors and resource rooms, but none of them had school buildings with guiding blocks, pedestrian pathways, ramps, special toilets or special parking (Table 1).

**Table 1: School building accessibility**

No.	Building facilities	YES	NO
1	Guiding blocks	0	37
2	Pedestrian	0	37
3	Ramps	0	37
4	Wheelchair accessible doors	3	34
5	Special toilets	0	37
7	Phone connection	37	0
8	Special parking	0	37
9	Resource rooms	5	32

The table above presents a breakdown of school facilities. None of the schools have guiding blocks, pedestrian pathways, ramps, special toilets, or special parking. Three respondents indicated the presence of wheelchair-accessible doors, while five respondents stated the existence of resource rooms in their schools. Only the item "phone connection" was available in all schools.

This challenge is found in other developing countries, for example, in Ethiopia, where Mitiku, Alemu and Mengsitu (2014) reported that the physical environment of the schools was not conducive to nor suitable for wheelchair users and students with visual impairments. In India (Singh, 2016), there was a challenge of scarce resources, that is, inadequate quality and quantity of human and material resources. Suleymanov (2015) described practical barriers as related to practices, adequacy of competence, availability of resources. In the current Indonesian context this is a big challenge. In terms of the recent regulation, all children, including those with disabilities, are supposed to go to nearby schools, but none of the existing state school buildings in the area are fully accessible for children with special needs. The difference in Suleymanov's research is that the research examined the concept of inclusion based on learning achievements and the definition of inclusive education according to current international principles. Additionally, Suleymanov's research elucidates learning theories such as constructivism cooperative learning. The primary objective of this research is to provide an initial overview of the implementation of education in Indonesia, which initially operated on integrative principles but is transitioning towards a more inclusive educational framework.

**Table 2: Schools having support materials for students with special needs**

No.	Types of children with special needs	YES	NO
1	VISUAL (Braille materials, touch media)	6	31
2	HEARING (hearing aids, signs for deaf, sign lang teacher)	0	37
3	INTELLECTUAL DISABILITIES (motoric practicum, special aids)	3	34
4	MOTORIC PROBLEMS (wheelchairs)	0	37
5	BEHAVIOUR PROBLEMS (playing area, therapy room)	9	28
6	AUTISTIC (special space)	0	37
7	GIFTED (rich learning resources)	5	32

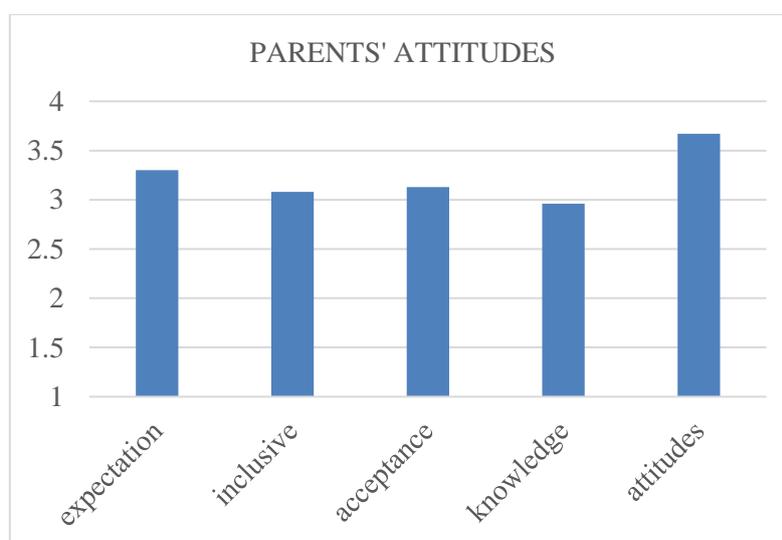
The table above represents the results of school facilities for various types of students with special needs. Overall, support materials are still inadequate to fully support the implementation of inclusive education for all types of students with special needs. Facilities for deaf students, students with mobility impairments, and autistic students are entirely absent. Only three respondents reported the presence of facilities for students with intellectual disabilities, five respondents reported facilities for gifted students, six respondents reported facilities for students with visual impairments, and nine respondents reported facilities for students with behavioural challenges.

The design of the environment for the school will either support or restrict people in doing the activities they need to do. Accessibility to the school environment has a significant impact on the participation of the school community (Carlsson et al., 2022). Another aspect of physical facilities is related to the availability of support materials for students with disabilities. Table 2 shows that none of the five existing state schools had instructional support materials for the types of disabilities listed. Only one school, the one that was appointed as an inclusive school, reported having support materials for visual disabilities, intellectual disabilities, and behaviour problems. This is a further challenge related to the physical facilities of the schools in implementing inclusive education, supporting the results of a previous national survey of Indonesian teachers (Amka, 2017) that limited resources were a barrier to inclusive education. Such a challenge is also faced by inclusive schools in Sichuan Province, China. According to Wanbin et al. (2023), Sichuan Province's inclusive education programme offers sub-par instruction and insufficient resources; therefore, strengthening a supportive network may help to raise the standard of inclusive education. Hermanto and Pamungkas (2023) add to this assertion by stating that the establishment of access for education may be supported by surroundings with readily accessible facilities and amenities, as well as suitable media and learning materials. When implementing inclusive education initiatives, it is widely expected that connected parties would be involved. The Indonesian government is currently improving educational services for students with special needs. As part of these efforts, the government has enacted legislation regarding appropriate accommodation for students with special needs in inclusive schools. This legislation is outlined in Ministry of Education,

Research, and Technology Regulation Number 48 of 2023 concerning suitable accommodation for students with special needs.

#### *Parents of children with disabilities*

Responses from the parents of children with special needs showed positive perceptions about their children and inclusive education. As illustrated in Figure 1, parents had high expectations of the children; they had adequate knowledge about the condition of their children and accepted the condition. Parents also showed positive attitudes and, more importantly, they supported the inclusion of their children in schools. Thus, parents' attitudes were not a barrier here.



**Figure 1: Perceptions of parents of children with disabilities.**

This finding supported a previous study of parents of children with disabilities in Thailand (Sharma & Trory (2019) which indicated that parental attitudes toward inclusion were generally positive. Indonesia and Thailand have many similarities to those developing countries located in Southeast Asia. However, this finding is different from other findings by Mitiku, Alemu and Mengsitu (2014) in Ethiopia where negative parental attitudes were one of the main challenges. Although the three countries are developing countries, the Ethiopian study involved all parents, whereas in the Thai and the Indonesian studies, only parents of children with disabilities were surveyed. If parents of non-disabled children had been included, the result could have been different. The study of parents of non-disabled children in Germany by Paseka & Schwab (2019) indicated positive attitudes, but Germany is a developed country with more a progressive orientation than the developing countries of Indonesia, Thailand, and Ethiopia. Intensive efforts are required to guarantee that inclusive education is accepted by all parents in the developing countries.

#### *Peers*

The attitudes of peers are presented in Figure 2. In general, students had positive perceptions about disabilities. Using a 1-4 scale, their cognitive score was 3.35,

their affective score was 3.1, and their conative score was 3.68. They are involved in daily classroom activities with their disabled peers, although their understanding and feeling were lower. This finding was in line with a review of research by de Boer, Pijl and Minnaert (2012) in that these students did not have negative attitudes. Their intensive social interaction with their disabled peers in the classroom could have been a factor that improved their cognitive, affective, and conative attitudes.

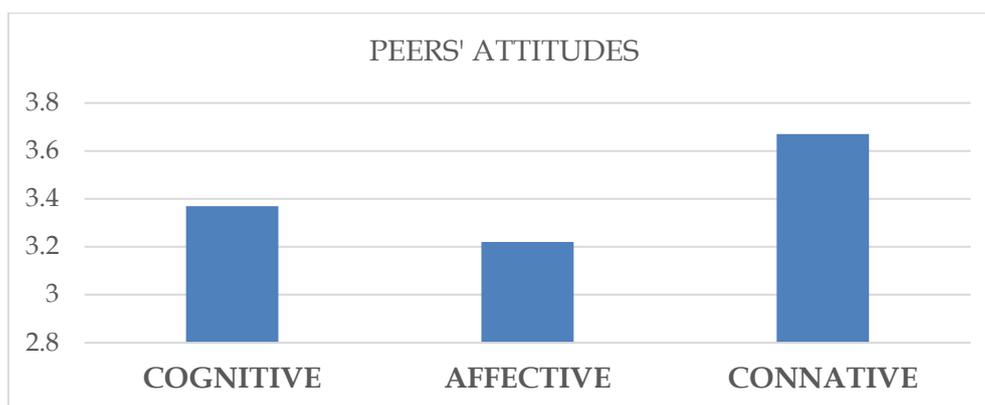


Figure 2: Peers' attitudes

#### Teachers

The results of the survey of teachers were very interesting. As presented in Figure 3, teachers showed an adequate knowledge about disabilities and the rights of individuals with disabilities, had appropriate expectations and willingness to help, accepted heterogeneity, but they held negative perceptions about inclusive education and a disability-friendly environment. In other words, they had positive attitudes towards disabilities, but not to inclusive education.

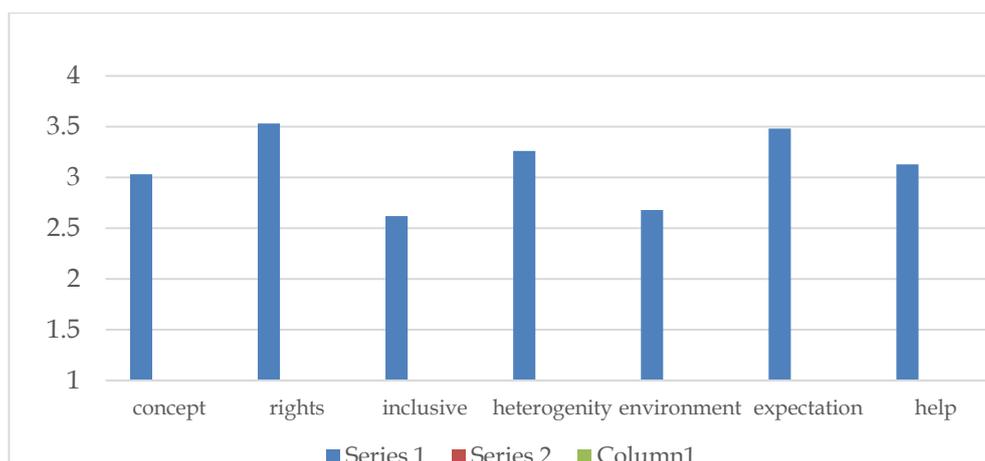


Figure 3. Teachers' perceptions

Teachers' attitudes and perceptions had significantly positive correlations with experiences with disabilities, understanding disabilities and their needs, but surprisingly, correlated negatively with ages and working experience (Table 3). These teachers had long experience teaching non-disabled students in regular

classes; they felt comfortable and enjoyed the work. They might predict a variety of problems and barriers when their classes become inclusive for children with disabilities. According to Alnaim's (2023) research, it is imperative that educators receive training on how to work with pupils that have particular requirements, such as ADHD.

**Table 3: Correlations with perception about disabilities.**

No.	Aspects	r	sig
1	Experience with disabilities	0.6062	P<0.01
2	Understanding disabilities	0.4009	P<0.01
3	Understanding needs and services for individuals with disabilities	0.3802	P<0.01
4	Working experience	-0.4806	P<0.01
5	Ages	-0.403	P<0.01

## 5. Conclusion and recommendation

The investigation into the physical condition of schools showed that most state primary school buildings were not accessible to individuals with disabilities, no did they have instructional support materials for students with disabilities. To promote the inclusion of children with disabilities in the existing regular schools, funding will be required to make school buildings physically accessible for disabled persons and academically equipped with educational materials for students with disabilities. Indonesia has historically employed a system of segregation and has only recently initiated inclusive schools for specific disabilities. There is a push to encourage those who are capable to attend inclusive schools. Consequently, the government is preparing more inclusive schools, and most state schools would rely on government funding.

Parents of children with special needs had positive perceptions about their children and inclusive education. Similar attitudes were shown by peers of disabled children. This finding supports the inclusion of children with special needs in the existing regular schools. But some kinds of socialisation might be needed by parents of non-disabled children, which were not investigated in this study.

Teachers showed adequate knowledge about disabilities and the rights of individuals with disabilities, had appropriate expectations and were willing to help, accepted heterogeneity, but they held negative perceptions about inclusive education and a disability-friendly environment. Teacher attitudes and perceptions had significantly positive correlations with experiences with disabilities, understanding disabilities and their needs, but negatively correlated with age and working experiences. A great deal of effort is still required to prepare all teachers to work in inclusive settings. These teachers showed adequate knowledge about disabilities and their rights, but because their long experience was with non-disabled children, they showed reluctance to have disabled children included in their classrooms. They need experience with individuals with disabilities. Intensive in-service training for teachers, and courses in special

education for all teacher education students in universities, with field experience would be appropriate.

In line with Ainscow's recommendation based on her experiences (2020), partnerships between stakeholders (parents/caregivers; educators along with other experts in the field; trainers for teachers and researchers; administrators and managers at the local, state, and federal levels; policymakers and service providers in other sectors) are necessary to implement a community-enhancement strategy. These findings support Salend's conclusion (2011) that it is critical to build a community that values cooperation between educators, parents, students, other professionals in the field, and community organisations to provide inclusive education for children with special needs. As a contribution, this research will serve as a foundation for the implementation of inclusive education in Indonesia, particularly in sub-urban areas. Limitations are still evident in urban and remote areas. Children with special needs in sub-urban areas still require special attention in terms of physical services, teachers' perceptions towards them, parental acceptance, and peer attitudes when interacting with children with special needs. In this case, children with special needs in inclusive schools in sub-urban areas face challenges due to inadequate infrastructure and supporting resources.

## 6. References

- Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *NORDIC JOURNAL OF STUDIES IN EDUCATIONAL POLICY* (VOL. 6) NO. 1, 7–16. <https://doi.org/10.1080/20020317.2020.1729587>
- Allam, F. C. & Martin, M. M. (2021). Issues and challenges in special education: A qualitative analysis from teacher's perspective. *Southeast Asia Early Childhood Journal*, 10(1), 37–49. <https://doi.org/10.37134/saecj.vol10.1.4.2021>
- Alnaim, M. (2023). The Services Provided to Students with Attention Deficit Hyperactivity Disorder in Primary Schools from the Special Education Teachers' Perspectives. *International Journal of Learning, Teaching and Educational Research*. 22 (9), 20–42. <https://doi.org/10.26803/ijlter.22.9.2>
- Amka (2017). Problems and Challenges in the Implementation of Inclusive Education in Indonesia. *International Journal of Humanities and Social Science*. Volume 7 Number 10. 1–9
- Barnes, C. & Mercer, G. (2003). *Disability*. Cambridge: Polity Press
- de Boer, A., Pijl, S. J. & Minnaert A. (2012): Students' Attitudes towards Peers with Disabilities: A review of the literature, *International Journal of Disability, Development and Education*, 59:4, 379–392. <https://doi.org/10.1080/1034912X.2012.723944>
- Carlsson, G., Slaug, B., Schmidt, S.M., Norin, L., Ronchi, E., Gefenaite, G. (2022). A scoping review of public building accessibility. *Disability and Health Journal*. Vol 15. Pp 1–11. <https://doi.org/10.1016/j.dhjo.2021.101227>
- Debele, A. F. (2016) The Study of Accessibility of the Physical Environment of Primary Schools to Implement Inclusive Education: The Case of Addis Ababa, Ethiopia. *Imperial Journal of Interdisciplinary Research (IJIR)*. Vol.2, Issue 1, 2016. 26–36. <https://www.gssrr.org/index.php/JournalOfBasicAndApplied/article/view/4889>
- Efendi, M., et al. 2022. *Inclusive Education for Student with Special Needs at Indonesian Public Schools*. *International Journal of Instruction*. Vol.15, No.2. pp. 967–980. <https://doi.org/10.29333/iji.2022.15253a>

- Hermanto & Pamungkas, B. (2023). Teacher Strategies for Providing Access to Learning for Students with Special Needs in Elementary Schools. *International Journal of Learning, Teaching and Educational Research*. 22 (4), 345–361, <https://doi.org/10.26803/ijlter.22.4.20>
- Hornby, A. S. (2014). *Inclusive Special Education. Evidence-Based Practices for Children with Special Needs and Disabilities*. New York: Springer.
- Ibda, H., Syamsi, I., Rukiyati. (2023). Professional elementary teachers in the digital era: A systematic literature review. *International Journal of Evaluation and Research in Education (IJERE)*. Vol. 12, No. 1, pp. 459–467. <http://doi.org/10.11591/ijere.v12i1.23565>
- Indonesian Government Regulation No 13, 2020. *Appropriate Accommodations for Students with Disabilities*
- Indonesian Ministry of National Education Regulation No. 70/2009. *Inclusive Education*.
- Indonesian Ministry of Education and Culture (2019). *Principle Policies on Freedom in Learning*. Jakarta: Author.
- Li, J., Xue, E., Li, C., He, Y. (2023). Investigating Latent Interactions between Students' Affective Cognition and Learning Performance: Meta-Analysis of Affective and Cognitive Factors. *Behavioural Science. Sci*. 13,555. <https://doi.org/10.3390/bs13070555>
- Magdalena, Ina., et.al. (2020). Tiga Ranah Taksonomi Bloom dalam Pendidikan. *Jurnal STITPN*, 2 (1). <https://ejournal.stitpn.ac.id/index.php/>
- Ministry of National Education. (2003). *Indonesia: Educational Statistics in Brief 2002/2003*. Jakarta: Ministry of National Education
- Ministry of National Education. (2010). *Indonesia: Educational Indicators 2009/2010*. Jakarta: Ministry of National Education
- Mitiku, W., Alemu, Y.A., Mengsitu, S. (2014). *Challenges and Opportunities to Implement Inclusive Education*. *Asian Journal of Humanity, Art and Literature*, Volume 1, No 2, 118–137. <http://dx.doi.org/10.18034/ajhal.v1i2.288>
- Oyarce, M., Macaya, M. M., Vallejos, S. S. (2023). Teachers' social representations of inclusive education: A systematic review of literature 2010-2020. *International Journal of Evaluation and Research in Education (IJERE)*. Vol. 12, No. 2, June 2023, pp. 720–728. <http://doi.org/10.11591/ijere.v12i2.24070>
- Paseka, A. & Schwab, S. (2019). Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resources. *European Journal of Special Needs Education*. <https://doi.org/10.1080/08856257.2019.1665232>
- Salend, S. J. (2011). *Creating inclusive classrooms: Effective and reflective practices (7th ed.)*. Boston: Pearson.
- Sanjeev, K. & Kumar, K. (2007). Inclusive Education in India. *Electronic Journal for Inclusive Education*, 2 (2). <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1086&context=ejie>
- Sharma, J. & Trory, H. (2011) Parents' Attitudes to Inclusive Education: A Study Conducted in Early Years Settings in Inclusive Mainstream Schools in Bangkok, Thailand. *International Journal of Special Education* Vol. 33, No.4, 2019.1–17. <https://eric.ed.gov/?id=EJ1219309>
- Shaharudin, S. M., Rajak, N. A., Junus, N. W., Samat, N. A. (2020). Development and validation of early childhood care and education pre-service lecturer instrument. *International Journal of Evaluation and Research in Education (IJERE)*. Vol. 9, No. 1, pp. 188–194. <http://doi.org/10.11591/ijere.v9i1.20415>
- Siegel, L. M. (2007). *The complete IEP guide : how to advocate for your special ed child*. Berkeley, CA: Noro. <https://eric.ed.gov/?id=ED453610>

- Singh, J. D. (2016). Inclusive education in India – concept, need, and challenges. *Scholarly Research Journal for Humanity Science and English*. VOL. 3/13, 3222–3232. [https://www.researchgate.net/publication/301675529\\_INCLUSIVE\\_EDUCATION\\_IN\\_INDIA\\_-\\_CONCEPT\\_NEED\\_AND\\_CHALLENGES](https://www.researchgate.net/publication/301675529_INCLUSIVE_EDUCATION_IN_INDIA_-_CONCEPT_NEED_AND_CHALLENGES)
- Stubbs, S. (2008). *Inclusive Education: Where There Are Few Resources*. Oslo: The Atlas Alliance.
- Suleymanov, F. (2015). Issues of Inclusive Education: Some Aspects to be Considered. *Electronic Journal for Inclusive Education*, 3 (4). 1–24. <https://corescholar.libraries.wright.edu/ejie/vol3/iss4/8/>
- Sunardi, Yusuf, M, Gunarhadi, Priyono, Yeager, J. L. (2011) The Implementation of Inclusive Education for Students with Special Needs in Indonesia. *Excellence in Higher Education* 2 (2011): 1–10. <https://doi.org/10.5195/ehe.2011.27>
- Triyanto., D., Gunawati., I.T. Kurniawan., R. V. P. Hartanto., T. Rejekiingsih., H. Suryono., & Y. Ariana. 2023. Teacher’s perspective concerning students with Disabilities in Indonesia inklusif schools. *Asia Pacific Education Review*. 24:291–301. <https://doi.org/10.1007/s12564-022-09745-w>
- Wanbin, S., Horadal, P., Teekasap, S., & Ling, G. (2023). Quality Improvement in Inclusive Education for Support Systems and Attitudes - Evidence form the Sichuan Province of China. *International Journal of Learning, Teaching and Educational Research*, 22, (11), 212–242. <https://doi.org/10.26803/ijlter.22.11.12>