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## Managing Inclusive Early Childhood Education in Resource-Limited Settings: A Qualitative Case Study of Learning Provisions for Children with Special Needs in Indonesian Preschools

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**ABSTRACT:** Indonesia has extended inclusive early childhood education to ensure equal provision of learning experiences for children with special needs, but implementation outside large metropolitan centers differs. The objective of this study was to explore how inclusive early childhood education providers implement educational activities for children with special needs and identify factors affecting implementation in a non-metropolitan regency in Indonesia. A qualitative case study design employed in-depth interviews, non-participant observation, and document analysis at four inclusive kindergartens. The Mazmanian–Sabatier policy implementation framework and thematic analysis were applied in analyzing data. Overall, inclusive learning management included planning, organizing, implementing, and evaluation; however, coordination between these functions remained largely informal. The key enabling factors were defined as committed leadership, parental involvement, teacher collaboration, and partnerships with disability associations. On the negative side, implementation was constrained by insufficient physical resources, a lack of special assistant teachers, limited curriculum flexibility, poor intergovernmental collaboration, socio-cultural views on disability, and family financial limitations. Inclusive learning management is feasible in resource-constrained settings, conditional on sustained district-level funding, the availability of special assistant teachers, curriculum differentiation, and strengthened cross-level governance. Implications: These findings provide empirical evidence to inform policy and practice in inclusive early childhood education.

## 1. INTRODUCTION

The early childhood stage is becoming more and more recognised as the most critical period for social, cognitive, and emotional development in every child, including children with disabilities or other special needs (Roy, 2025). The Sustainable Development Goals (SDGs), in particular Target 4.2, require governments to ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so they are ready for primary school (Richter et al., 2016). Towards this global perspective, recent commentaries suggest that Universal Design for Learning (UDL) offers a proactive and flexible set of guidelines for developing curricula, materials, and assessments designed to accommodate learner variability as opposed to subsequent provision of support (García et al., 2024; Nagarajan & Martino, 2025; Quirke & Galvin, 2025). Evidence from empirical research in both middle-income and lower-income contexts reveals that young disabled children benefit significantly in terms of social-emotional, cognitive, and language outcomes when UDL is paired with differentiated instruction, individualized learning plans, and assistive technologies.

This movement has been channelled through a series of ministerial regulations in Indonesia. According to Ministerial Regulation No. 70 of 2009, each sub-district is required to have at least one primary, one junior secondary, and one upper-secondary

provider assigned to provide inclusive education (Hikmat, 2022). In 2014, Ministerial Regulation No. 146 concerning the Inclusion of Children with Special Needs (CSN) in the ECE pathway reinforced the abovementioned commitment to inclusive early childhood education within that country (Arriani, 2017). More recent empirical estimates suggest that 3.3 per cent of the 5–17-year age group in Indonesia has disabilities, and only a small minority has been reached by inclusive programmes, leaving a significant proportion of those with disabilities out of school (Mareza et al., 2024). The number of inclusive schools in Indonesia was around 29,317 by 2019, a figure which intensified in every subsequent year, although inclusive provision was inconsistent across curricular, pedagogical, and infrastructural capacity (Sari et al., 2022). Indonesian studies have found that teachers in inclusive programmes are only moderately confident they can work with CSN, and also tend to enter the field with little pre-service preparation for special education (Azizah et al., 2024; Olayvar & Olayvar, 2022).

The current study therefore seeks to explore the everyday experiences of inclusive ECE providers in a different context – namely, how they implement learning for CSN within their daily practice, and what supporting and inhibiting factors exist. The research problem was formulated around two questions: how CSN learning is managed at ECE providers of inclusive education, and what factors facilitate or hinder that management. We rely on data generated from a previous empirical study in West Lombok Regency, and the article reanalyses this field material using a learning-management approach along with an international framework for inclusive early childhood education.

## 2. THEORETICAL AND CONCEPTUAL FRAMEWORK

The analysis is based on a two-layer model. The first layer is the Classical educational management model, consisting of planning, organising, implementing, and evaluating functions (Zdanevych et al., 2020). The Mazmanian–Sabatier model of policy implementation suggests that differences in outcomes can be explained by characteristics of the problem, attributes of the policy itself, and environmental variables (Pratiwi & Kriswibowo, 2022). Together, these layers provide a lexicon for interpreting case study evidence: how inclusive kindergartens enacted the four management functions and how policy factors and environmental variables organized that constellation of supporting and inhibiting factors. This dual lens allows the study to highlight not just the daily behaviours of inclusive practices, but also the systemic contexts in which those practices reside.

## 3. LITERATURE REVIEW

### 3.1. Inclusive Early Childhood Education as a Global Imperative

Inclusive quality early childhood education has its roots in the universal right to involvement for all young children, starting from their first years of schooling and continuing right through the educational and social life of the community they live in (Rad et al., 2022). International declarations have placed inclusion, particularly through the Salamanca Statement, and its understanding has become more sophisticated in recent decades, with UNESCO Global Education Monitoring Reports serving as the major conceptual framework for addressing the diversity of learners (Quirke & Galvin, 2025; Zhang et al., 2020). More recent empirical work claims that Universal Design for Learning offers a flexible and strategic framework to guide the design of curricula, materials, and assessments that anticipate variability in learners, rather than relying on retrofitted accommodations (Sujathamalini et al., 2022). Research conducted in both high- and low-income settings indicates that children with disabilities demonstrate significant improvements in social-emotional, cognitive, and language outcomes when UDL principles are implemented along with differentiated instruction and assistive technology (Adewusi et al., 2023; Mérida et al., 2025).

It is also proposed that IECE can contribute to wider social cohesion (Young et al., 2019). Studies have found that inclusive early-learning environments reduce stigma, increase social-emotional competence among typically developing peers, and create positive attitudinal experiences with diversity (Eden et al., 2024; Rad et al., 2022). The appeal of these benefits has inspired inclusion to be incorporated among the UN Sustainable Development Goals—most notably, Target 4.2 on equitable access to quality pre-primary education (Quirke & Galvin, 2025; Zhang et al., 2020)—and has energized contemporary arguments for boundary-spanning collaboration among educators, families, and disability advocates (Farrand et al., 2023; Sofwanudin, 2025).

### 3.2. Inclusive Early Childhood Education in the Indonesian Context

The Constitution of 1945 stipulates that each child should have the right to education in Indonesia (Hikmat, 2022; Sari et al., 2022), and the introduction of basic laws has contributed towards inclusive education since the issuance of ministerial regulations from various ministries starting in 2003. Ministerial Regulation No. 70 of 2009 requires that each sub-district select at least one primary, junior secondary, and senior secondary provider as an inclusive school, and Ministerial Regulation No. 36

of 2014 extends this commitment to the early childhood level (Hikmat, 2022; Sari et al., 2022). Recent data illustrates the accelerating designation: approximately 814 inclusive schools in 2008, and by early 2019, this number had grown to at least 29,317 (Sari et al.). There is also a significant discrepancy between the number of children with special needs and inclusive slots nationally; around 4.2 million children are thought to have these exceptional needs, meaning that adequate provision is available to only one in four (Hikmat, 2022; Sari et al., 2022).

Budi (2023) indicates that multiple studies confirm that Indonesian inclusive program teachers demonstrate moderate professional competence for working with children who require special assistance, and they are generally poorly prepared in pre-service special education (Olayvar & Olayvar, 2022; Salim, 2019). Combined research on inclusive kindergartens in Indonesia also shows that modifying the learning program, accompanied by professional development and child-centered differentiated learning approaches, is effective, yet it is dependent on competent classroom teachers and special assistants (Siron, 2020; Windiastuti, 2026). Research from other provinces suggests that inclusive teaching approaches in low-resource areas tend to be improvised by a small number of committed practitioners in the classroom and are unsustainable once those individuals move on (Abubakar et al., 2024; Hikmat, 2022; Maulana et al., 2025; Sari et al., 2022). Moreover, contemporary works of Indonesian literature are already starting to articulate the relationships between independent school-level governance and national inclusive targets (Margiyanto, 2022).

### 3.3. Inclusive Learning Management and Educational Leadership

In Indonesian educational discourse, learning management is described as the management of planning, organisation, implementation, and evaluation functions to achieve desired educational outcomes for a given institution (Zdanevych et al., 2020). In the context of inclusive early childhood education, this management includes matching goals to resource allocations, designing classroom environments that address diversity, coordinating many players, and implementing assessment practices that honour difference (Margiyanto, 2022).

Recent international scholarship emphasises that management in inclusive settings is not simply bureaucratic tick-boxing; rather, it needs to be performed as distributed and transformational leadership (Barokatin & Sukinah, 2025). Mirroring this perspective, research on Indonesian principals identifies inclusive values-modeling; mediating parents' concerns regarding assessment and student support; and mobilising systemic collaboration as critical for the sustainability of inclusion implementation in non-metropolitan regencies (Hikmat, 2022). A recent Indonesian study of kindergarten leadership in resource-poor settings provides much-needed specificity on how principals operationalise inclusion with (i) participatory planning involving multi-stakeholder collaboration, (ii) collaborative implementation via co-teaching models and differentiated instruction, and (iii) systematic mechanisms for sustained action, including institutionalised inclusion teams and strategic partnerships external to schools (Barokatin & Sukinah, 2025). Related work on humanistic principal leadership notes comparable findings, in which mediator-and-innovator orientations have emerged as constants of practice across Indonesian inclusive environments (Maulana et al., 2025)..

### 3.4. Barriers to and Facilitators of Inclusive Education

Internationally, it has been shown that implementation is contingent on the interaction between structural, attitudinal, and pedagogical factors. In LMICs, the most commonly reported barriers to implementing inclusive education are insufficiently qualified special education teachers, physical inaccessibility, unclear or poorly funded policy commitments, and negative public perceptions of disability (Bibiana et al., 2020; Khoiriyah et al., 2024; Komabu-Pomeyie, 2023; Odeh & Lach, 2024; Sijuola & Davidova, 2022). In Indonesia, these barriers have been coupled with issues related to low teacher self-efficacy, low routine implementation of the Individualised Education Programme within ECE practice, and the frequent devolution of responsibility for funding inclusion in education from the district level to the province (Hikmat, 2022; Siron, 2020; Sari et al., 2022).

Other studies also highlight a key contributor to this bottleneck, specifically teachers' competence in designing IEPs. Conversely, empirical research conducted among Indonesian early childhood teachers working with children in inclusive settings shows that only one out of five teachers is able to design an acceptable-quality IEP (a competence-based measure well-supported in the literature as good practice) and that teacher literacy about children with special needs relates more strongly to IEP capacity than does teacher self-efficacy (Siron, 2020). International research also indicates that early childhood teachers who are trained in inclusive pedagogy, coupled with supports to develop IEPs in an interactive way, demonstrate a greater capacity to conceive of and implement individualised plans (Akalin et al., 2014; Zdanevych et al., 2020).

Facilitators are transformational principal leadership (Abdullah et al., 2026; Barokatin & Sukinah, 2025); sustained parent–school partnerships (Eden et al., 2024; Sofwanudin, 2025); collaborative relationships with community organisations, particularly those of disabled persons (Rad et al., 2022; Eden et al., 2024); and guaranteed ring-fenced funding from education authorities (Khoiriyah et al., 2024; Komabu-Pomeyie, 2023). Cross-level governance studies in Ghana, Kenya, and elsewhere show that a clear division of responsibilities among national, regional, and district authorities can lead to inclusive-education outcomes only when the resources for their respective areas of responsibility are also available (Bibiana et al., 2020; Komabu-Pomeyie, 2023)..

### 3.5. Parental and Community Engagement

Parental involvement has proven to be one of the strongest predictors of achieving successful inclusive provision across a wide variety of national contexts. International reviews contend that perceiving parents as co-constructionists of inclusive education, rather than consumers of services, can exponentially advance not only the development of children with special needs but also family social-emotional well-being (Rad et al., 2022). Likewise, studies in Indonesia show that how inclusive kindergartens respond to parental needs, communicate transparently and follow the leads of families are crucial to generative engagement (Hikmat, 2022; Sofwanudin, 2025). When schools involve families in the design of IEPs and collaborative decision making about curricular differentiation, parents become steadfast partners instead of anxious onlookers (Barokatin & Sukinah, 2025; Windiastuti, 2026).

### 3.6. Research Gap and Positioning of the Present Study

Although the literature on inclusive education is extensive globally, very few empirical studies have investigated how inclusive learning management is implemented in Indonesian early childhood education settings outside of Java and Bali (Abubakar et al., 2024; Barokatin & Sukinah, 2025; Hikmat, 2022; Maulana et al., 2025). There are two points why the case of West Lombok is telling. First, it indicates a regency where inclusive designations have been granted but without district-level financing, systemic curricular differentiation, or consistent use of special assistance teachers. Such phenomena are probably widespread among Indonesia's 514 regencies and cities (Rahadi, 2017). Second, it provides an opportunity for an empirical exploration of the ways national inclusive education policy interacts with the lived experiences of plural, resource-rich communities. This study aims to address this gap by using empirical field materials from the original Habibi, Jelani and Rachmayani (2023) study in West Lombok and re-analyzing those data with an explicit IECE management lens.

## 4. MATERIALS AND METHODS

### 4.1. Research Design

**Design:** A single-case, multi-site qualitative design was used. The present study was designed as a case study of inclusive early childhood education in one nonmetropolitan Indonesian regency, with four inclusively designated kindergartens acting as embedded units of analysis. This design aligns with recommendations for research on complex systems (Paparini et al., 2020) and is a common approach in educational research (Komabu-Pomeyie, 2023).

### 4.2. Researcher Positionality

The research team included three senior faculty members from Universitas Mataram with prior research experience in either inclusive education or early childhood policy, as well as qualitative methodology. The data-collection protocols were shaped but not strictly defined by their disciplinary backgrounds and previous involvement with field schools.

### 4.3. Participants

Purposive sampling technique was employed to recruit participants who represent key stakeholders responsible for implementing inclusive education in the regency. For this, we defined four informant categories as shown in Table 1.

**Table 1.** Categories of study participants.

| Code | Informant category                       | Representative roles                                                            |
|------|------------------------------------------|---------------------------------------------------------------------------------|
| I1   | Regional legislative                     | Secretary, Commission IV, regional legislature                                  |
| I2   | District education authority             | Staff of the Basic Education Division, district Office of Education and Culture |
| I3-1 | Inclusive kindergarten principals        | Principals of the four case-study kindergartens                                 |
| I3-2 | Classroom and special assistant teachers | Class teachers and special assistant teachers in the case-study settings        |
| I3-3 | Parent committees and parents of CSN     | School committee representatives and parents of children with special needs     |
| I4-1 | Disability association                   | Local chapter of the Indonesian Disability Association                          |
| I4-2 | Blind association                        | Local chapter of the Indonesian Blind Association                               |
| I4-3 | Civil-society organisation               | Non-governmental organisation working in disability education                   |

The sample participants were purposefully selected to represent key stakeholders at policy, institutional, and classroom levels who are involved in the governance and implementation of inclusive early childhood education. The participant list from the original empirical study is summarized in Table 2 and includes provincial legislature members, district education authority personnel, inclusive kindergarten principals/teachers, and a special assistant teacher. This provides the study with a diversity of perspectives on inclusive education management at several levels, including policy formulation, institutional leadership, and classroom practices, thereby strengthening the congruence and credibility of the qualitative findings.

**Table 2.** Specific study participants.

| Code   | Name                    | Institutional affiliation              | Role                            |
|--------|-------------------------|----------------------------------------|---------------------------------|
| I1     | Daddy Kusrady           | Provincial DPRD, Commission IV         | Secretary                       |
| I2     | Dedi Hernawan           | District Office of Education           | Staff, Basic Education Division |
| I3-1.1 | Dra. Nur Fadhliah, M.Pd | TK Lenterahati Islamic Boarding School | Principal                       |
| I3-1.2 | Drs. Ismanuddin Rahman  | TK Pembina 1 West Lombok               | Principal                       |
| I3-1.3 | Apip Sutardi            | TK Lombok Care Foundation              | Principal                       |
| I3-1.4 | Hj. Aryuni, S.Pd        | TK Pembina 2 Gerung                    | Principal                       |
| I3-2.1 | Sri Syayutin            | TK Lenterahati Islamic Boarding School | Class teacher                   |
| I3-2.2 | Fachrur Ryzza           | TK Lombok Care Foundation              | Deputy principal                |
| I3-2.3 | Yosha Yanuar            | SDN Bantar Gebang IV                   | Class teacher                   |
| I3-2.4 | Putri                   | SDS Al Izzah                           | Special assistant teacher       |
| I3-2.5 | Heni Handayani          | SDN Bantar Gebang IV                   | Class teacher (Grades I–II)     |

#### 4.4. Inclusion and Exclusion Criteria

Participating child care centers were formally designated as inclusive providers with at least one child with special needs admitted within the prior 3 years. In each of the categories, participants had been in their institutional roles for at least 2 years.

#### 4.5. Data Collection

Methods: Data collection used a combination of in-depth interviews, non-participant observation and document analysis. The interview guide was clustered into four blocks: the characterisation of inclusive-education problems in the regency, characteristics of inclusive-education policy, environmental variables (social, cultural and economic), and day-to-day

management of learning for children with special needs. Interviews were recorded with verbal consent in Bahasa Indonesia and transcribed verbatim.

Observation focused on accessibility, the arrangement of learning corners, the strategic use of physical teaching resources, interactions between teachers and children and the daily implementation of Merdeka Curriculum. The document analysis drew on each school's inclusive-education proposal submitted to the provincial education office, headmaster annual programme and minutes of inclusive-education coordination meetings.

#### 4.6. Data Analysis

The data analysis was carried out in three iterative phases. Field notes and transcripts were reduced using open coding. This produced a draft codebook organised around the Mazmanian–Sabatier policy-implementation variables (characteristics of the problem, characteristics of the policy, and environmental variables), intersecting with four learning-management functions (planning, organising, implementing, and evaluating). Second, higher-order themes were then developed to cluster the codes within each case and reviewed variations between the four cases. Third, a cross-case synthesis followed.

#### 4.7. Trustworthiness

Source, method and investigator triangulation, an audit trail, and member checking at each participating school ensured trustworthiness. The triangulated data sources assisted in increasing the credibility of the findings; however, a longer duration of engagement was required within the regency.

#### 4.8. Ethical Considerations

This work received ethical clearance from the Universitas Mataram Research Ethics Committee following steps described in the underlying study. Informed written consent was obtained from all adult participants.

### 5. RESULTS

This part is structured according to three thematic clusters. In part a, we present the structural conditions under which inclusive learning management was exercised (Subsection 5.1). Subsection 5.2 describes the operationalisation of the four learning-management functions in the form of practices across the four case-study kindergartens. The constellation of supporting and inhibiting factors is described with respect to the policy-implementation framework in Subsection 5.3. The study was completely empirical, and all the observations were derived from underlying field observation.

#### 5.1. Structural Conditions of Inclusive Education

The aforementioned nationwide curriculum (the Merdeka Curriculum in transition, with the 2013 Curriculum still being implemented in certain cases across centres), was applied to all children—without differentiated documentation for those with special needs. Principals never reported that there were separate curricula available for children with special needs, but they did report making internal school-level adaptations like pacing and using different materials or methods instead of changing curriculum requirements. This pattern resonates with wider evidence from Indonesia that curricular differentiation is more the exception (or perhaps aspiration) than the rule in low- and middle-income country contexts (Mareza et al., 2024; Siron, 2020).

It's also thought to be the first place in Indonesia that has taught children with intellectual disabilities, said the principal of TK Lenterahati Islamic Boarding School, who claimed it became an inclusive kindergarten in 2005 when the provincial authority named it as an inclusive provider for kindergarten children. According to the headmaster of another kindergarten included in the study, TK Lombok Care Foundation, around 300 children are educated there. This principal estimated that there were only about five inclusive kindergartens in the whole regency, indicating that the demand for places for children needing inclusive early childhood education outweighed the supply. Disaggregated district-level enrolment data for children with special needs were not formally collected at the time of the study. Such a pattern is compatible with earlier evidence that neighbouring Indonesian provinces and districts seldom release disability-disaggregated enrolment data (Sari et al., 2022).

Table 3 summarizes the structural conditions that emanated from the cross-case field material.

**Table 3.** Cross-case summary of structural conditions for inclusive early childhood education.

| Dimension                                       | TK Lenterahati<br>Islamic Boarding<br>School      | TK Lombok Care<br>Foundation                      | TK Pembina 1<br>West Lombok        | TK Pembina 2<br>Gerung             |
|-------------------------------------------------|---------------------------------------------------|---------------------------------------------------|------------------------------------|------------------------------------|
| Sector                                          | Private Islamic                                   | Private foundation                                | District model                     | District model                     |
| Year inclusive programme established            | 2005                                              | Not documented                                    | Not documented                     | Not documented                     |
| Curriculum in use at time of study              | Merdeka Curriculum (in transition)                | Merdeka Curriculum (in transition)                | Merdeka Curriculum (in transition) | Merdeka Curriculum (in transition) |
| Presence of special assistant teachers          | Not documented                                    | Not documented                                    | Not documented                     | Not documented                     |
| Most recent provincial assistive-device support | Reported as stalled at the time of the study      | Reported as stalled                               | Not documented                     | Not documented                     |
| District-level monitoring visits                | Reported as irregular / not regularly experienced | Reported as irregular / not regularly experienced | Not documented                     | Not documented                     |

The information is cited from Habibi, Jelani and Rachmayani. The term 'not documented' denotes that the cell was never referred to in the records of a given field.

While Table 3 highlights some of these structural weaknesses, evidence across the implementation theory domains indicates how what might appear to be isolated organisational failures at work in system functioning and integration reflect broader systemic patterns—the built environment of inclusive early childhood education in West Lombok functions at the regency-level. This finding is consistent with the Indonesian and wider Asian regional literature, which shows that school-level creativity in inclusive programmes is generally a case of schools doing their best within a persistent shortfall of district-design resources (Sari et al., 2022; Barokatin & Sukinah, 2025).

Theoretically speaking, these conditions can be considered a partial reflection of Mazmanian and Sabatier's scale on 'characteristics of the problem,' including low standardisation of facilities, accessibility to education, a lack of human resources, and variable understanding among implementers..

## 5.2. Learning Management Functions in Inclusive early childhood education

At the four kindergartens, learning management was carried out through planning, organizing, implementing, and evaluating functions; however, variations existed in their depth and formality.

**Planning.** Planning was seen by principals as something that took place at the beginning of every school year, expressed in relation to the national curriculum, a school-based annual program, and the characteristics of children starting each year. On the other hand, a comprehensive needs assessment for children with special needs was not performed each time upon admission.

**Organizing.** Classrooms were organized into flexible learning corners, communicating through concrete materials like colorful pebbles and balance supports, with shadow teachers to be assigned if available.

**Implementing.** Centers implemented concrete pedagogical strategies tailored to those children. At the time of the study, classroom teachers at TK Lenterahati and TK Lombok Care Foundation reported using multisensory materials and aids, both of which had been ordered but had not yet arrived, based on responses from directors. In the absence of special assistant teachers, inclusive practice continued largely through informal collaboration between the class teacher and principal, and through the individual initiative of teachers—such a pattern of reliance on personal commitment is also in line with documented practices in Indonesian IECE (Barokatin & Sukinah, 2025).

**Evaluating.** Evaluation was based on regular monitoring of child development. Participants made no mention of a formal written evaluation plan for children with special needs, characterizing evaluation based on informal practices that are Gestalt-like judgments rather than tool-based, ritualized routines. In a complementary manner, the work below with Indonesian research in 50 early childhood education settings in East Jakarta shows similarly minimal IEP-design capacity (including teachers, who are qualified to design IEPs), where, for example, the evaluation of developing children from formal-schooling contexts is a recurrent limiting factor (Siron, 2020).

Table 4 provides a synopsis of how each function was enacted across the four kindergartens that feature as case studies..

**Table 4.** Operationalisation of learning-management functions across the four inclusive kindergartens.

| Function     | Stage of enactment                      | Empirical evidence                                                                               |
|--------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|
| Planning     | Partly formal; ex post needs assessment | Annual programme plans; informal post-admission adjustments                                      |
| Organising   | Informal; classroom-level               | Learning corners; multisensory materials; ad hoc teacher collaboration                           |
| Implementing | Teacher-led; improvisational            | Concrete pedagogy; parent–teacher coordination; reliance on personal commitment                  |
| Evaluating   | Formative; informal                     | Observation of developmental progress; no written IEP for children with special needs documented |

Data were extracted from the initial field investigation. Comparing these findings to the structural conditions (Table 3), it can be inferred that while all four functions were expected, the absence of district-level funding, deployment of special assistant teachers, and curricular differentiation led to an improvisational, rather than systematised, management practice emerging daily. This pattern matches international evidence indicating that inclusive practice in resource-poor contexts is often reliant on individual commitment of teachers and principals (Barokatin & Sukinah, 2025).

### 5.3. Supporting and Inhibiting Factors

This subsection draws together the data that participants indicated would either support or hinder Inclusive Learning Management and places it onto the Mazmanian–Sabatier framework.

**Supporting factors.** As the structural barriers outlined above suggested, participants reported many factors supporting its implementation. According to the principals, committed leadership, parent committee engagement, and the personal commitment of classroom teachers were most directly responsible for inclusive practice. Parental engagement was the second most prominent enabling factor, with participants consistently reporting beneficial parent–teacher cooperation regarding the home learning indicators established each term. A third such supporting factor was the existence of community organisations like PPDI and Pertuni; these disability associations gave schools an implicit sense of accountability and an internet forum for exchanging practical experiences. Finally, a Standing Lend & Borrow (SLB) for the wider Mataram area partially backstopped its implementation. All of these supports correspond with international and Indonesian literature indicating that committed leadership (Abdullah et al., 2026), engaged parents (Eden et al., 2024) and community partnerships (Hikmat, 2022) maintain inclusive practice in the absence of systemic resourcing.

**Inhibiting factors.** More inhibitory factors were described, with five recurrent themes emerging.

As for accessibility, some participants noted that many kindergartens were not only refusing to enrol children with special needs—despite sometimes presenting themselves as inclusive—but also simply did not believe they could accommodate them.

With respect to human resources, teachers identified insufficient pre-service training on special education, a lack of in-service training, and a shortage of special assistant teachers. This is consistent with evidence from Indonesia that the average inclusive early childhood education teacher has low levels of pre-service preparation for working with children with special needs, and that teacher literacy regarding children with special needs—not their self-efficacy—appears to be more strongly correlated with IEP design capacity (Farra & Al-Atawi, 2024; Siron, 2020).

On the matter of funding and coordination, participants highlighted that the regency office of education assigned responsibility for inclusive-education funding to the provincial authority. Thus, in the two years leading up to this research, not one cent of funding had reached the inclusive kindergartens, and the process for applying to the provincial authority was labelled as complicated and confusing. This finding mirrors the well-known Indonesian issue of an unclear division of responsibilities between provinces and districts for inclusive education, and the placement of most fiscal responsibility at the level with the weakest implementation capacity (Sari et al., 2022; Seran, 2026).

In terms of socio-cultural factors, informants reported that some sections of the local community still viewed disability as a personal or family tragedy. This perception was often internalised by parents of children with additional needs (Seran, 2026), seemingly limiting their advocacy for inclusive placements.

On the economic side, families who could not get their child into any inclusive kindergartens were usually unable to pay for an alternative—that is, either for a placement in a private inclusive setting or for transport to the SLB. Consequently, a few youngsters did not attend class (Abanit et al., 2020).

We use Table 5 to organise the enabling and constraining factors encountered in relation to each of the three Mazmanian–Sabatier policy-implementation variables..

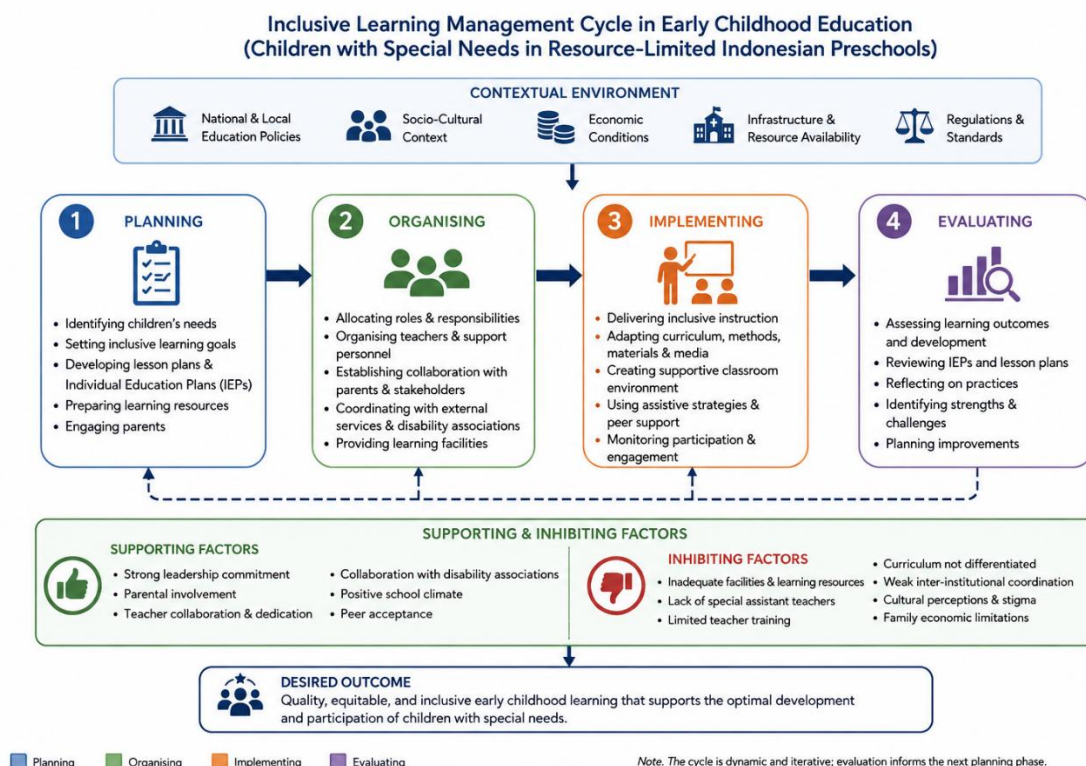
**Table 5.** Supporting and inhibiting factors mapped to the Mazmanian–Sabatier framework.

| Policy-implementation variable                       | Supporting factor                                                                    | Inhibiting factor                                                                                                                  |
|------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics of the problem                       | Adapted physical layouts; improvised use of concrete materials                       | Inadequate standardisation of facilities; refusals to enrol children with special needs; absence of special assistant teachers     |
| Characteristics of the policy                        | Provincial designation (since 2005 in TK Lenterahati); school-committee-led seminars | Under-funding; ambiguous division of authority between provincial and district education offices; inconsistent district monitoring |
| Environmental variables (social, cultural, economic) | Active disability associations; committed parent–school relationships                | Cultural perception of disability as minority misfortune; economic constraints on families; low district visibility                |

## Synthesis of information from the underlying fieldwork

According to the cross-case pattern, the key supporting forces consisted of individual teachers’ improvisational resourcefulness and the involvement of disability associations. In contrast, the most powerful obstacles were environmental, particularly financial issues for families and the framing of disability. These two disabling forces have been cited as among the most commonly documented in the literature on inclusive education within developing-country settings (Odeh & Lach, 2024; Sijuola & Davidova, 2022).

In order to provide a visual synthesis of the case findings, Figure 1 presents inclusive learning management as a system comprised of four interlocking functions (planning, organising, implementing, and evaluating) operating within a policy-and-community frame. The figure should be read clockwise.



**Figure 1.** Inclusive Learning Management Cycle

## 6. DISCUSSION

### 6.1. What the Case Tells Us About Inclusive early childhood education Learning Management

The first noteworthy point is that inclusive learning management in the case-study regency was mostly improvised rather than systematised. While the four learning-management functions were evident in all four case-study kindergartens, their formalisation differed drastically. International research demonstrates that in resource-constrained settings, inclusion tends to take place through informal coordination and personal commitment rather than as a result of institutional routines (Barokatin & Sukinah 2025; Kheroufi-Andriot 2020).

This improvisation, in this case, is partly a manifestation of structural constraints documented across many low- and middle-income countries: the shortage of qualified inclusive-education teachers (Yang et al., 2026), the absence of durable physical accessibility (Odeh & Lach, 2024), and poor diffusion of specialists' know-how beyond metropolitan centres (Sari et al., 2022). This case uniquely exemplifies a particular governance problem -- the local delegation of inclusive-education funding to the provincial education office and the subsequent two-year freeze on funding for the case-study kindergartens. Evidence from international comparative research has shown that inclusive-education outcomes are poor in contexts where there is a failure of fiscal decentralisation and de facto separation of administrative responsibilities across the national, regional, and district levels (Komabu-Pomeyie, 2023). The case of West Lombok provides evidence of this misalignment.

The second observation is that the national curriculum was applied in all four kindergartens with no indication of modification for children with special needs. This finding mirrors international work indicating that commitment to inclusive-education policy in Indonesia has been ahead of detailed curricular guidance for inclusive teaching (Mareza et al., 2024). The timeliness of such guidance is underscored by fresh Indonesian research into the managerial practices that will be needed for pre-service teachers to design such differentiated curricula (Margiyanto, 2022).

The third observation is about parental involvement. This pattern of relatively dense parent–teacher coordination reported in the case is promising as international scholarship identifies parental involvement in inclusive early childhood programs as among the strongest predictors of child outcomes (Eden et al., 2024). Simultaneously, our documentation of the framing of disability

as a minority issue serves as a warning that parental engagement is inadequate by itself and must be paired with broader change to cultural framing..

## 6.2. Comparison with International Scholarship

These results resonate with worldwide scholarship in three respects. First, the structural barriers discussed here—including inadequate funding, lack of trained teachers, and refusals to enroll children with disabilities—were similarly documented in Ghana, Kenya, and Nigeria, among other contexts in the developing world (Bibiana et al., 2020; Khoiriyah et al., 2024; Komabu-Pomeyie, 2023; Sijuola & Davidova, 2022). Second, the fact that it depends too much on the commitment of principals' (Barokatin & Sukinah, 2025; Maulana et al., 2015) reflects issues found in Indonesian literature on transformational and humanistic leadership practices in inclusive kindergartens. Third, the profile of parental and community engagement is consistent with international evidence regarding home–school partnerships and with Indonesian evidence on the role of disability associations in maintaining inclusion (Eden et al., 2024; Hikmat, 2022; Ngadni & Chen, 2024; Rad et al., 2022; Sofwanudin, 2025).

The results contribute to this literature in three ways. First, the case illustrates inclusive learning management in four different types of providers, demonstrating that structural weaknesses are prevalent across these sectors rather than being confined to one sector or another. Second, it shows that the implementation of inclusive early childhood education largely relies on the individual commitment of school principals and advocacy by disability associations when government assistance is lacking (Barokatin & Sukinah, 2025; Maulana et al., 2025; Sofwanudin, 2025). Third, the case indicates that a productive pairing of the Mazmanian–Sabatier framework and thematic case-study analysis reveals insights into multi-level governance relationships and school-level improvisation—this is a methodology currently advocated in related areas of inclusive education research (Barokatin & Sukinah, 2025; Bibiana et al., 2020; Khoiriyah et al., 2024; Komabu-Pomeyie, 2023).

## 6.3. Theoretical Implications

Three theoretical implications follow. First of all, inclusive learning management in early childhood is more accurately conceptualized as a distributed practice in which formal planning (e.g., stimuli for the application, guidelines, and regulations) is combined with informal coordination among teachers, parents, principals, and disability associations (Abdullah et al., 2026; Carrington et al., 2024). Second, as noted above, the standard four-function model of educational management still serves an analytical purpose (such as for burden-of-disease calculations) or requires adaptation in inclusive contexts: in place of summative judgments to assess functional level, formative and child-centered assessment routines must supplement the evaluating function (Mérida et al., 2025; Yang et al., 2026). Third, the Mazmanian–Sabatier framework may be enhanced in low-resource contexts with an informal micro-level resources channel that acknowledges the improvisational nature of inclusive education implementation.

## 6.4. Policy Implications

The results have several policy implications at the country (Indonesia) and similar settings. First, increase federal funding by reviewing and complementing the provincial delegation of inclusive education authority through explicit district-level funding, monitoring, and accountability mechanisms (Bibiana et al., 2020; Khoiriyah et al., 2024; Komabu-Pomeyie, 2023). Second, special assistant teachers must be deployed, and assistive devices must be systematically in place, as policy-prioritised initiatives rather than optional add-ons, because presently the average inclusive early childhood education teacher shows limited IEP-design capacity and in-service preparation (Siron, 2020; Perdana et al., 2023). Third, pre-service and in-service teacher education for inclusive early childhood will need to be expanded but contextually anchored (Akalin et al., 2014; Buiniak & Миронова, 2024; Farra & Al-Atawi, 2024; Maulana et al., 2025; Yang et al., 2026). Fourth, disability associations such as PPDI and Pertuni should be incorporated into formal monitoring and planning processes rather than being consulted on an ad-hoc basis (Eden et al., 2024; Hikmat, 2022; Rad et al., 2022; Sofwanudin, 2025).

## 6.5. Practical Implications

Theoretically, principals in inclusive early childhood education settings are better positioned in practice because they need to facilitate weekly meetings with their inclusive education coordinators, document individualized learning plans, and maintain ongoing liaison with disability associations (Barokatin & Sukinah, 2025; Windiastuti, 2026). With appropriate in-service training, classroom teachers should be encouraged to record tangible evidence of learning outcomes for every child, including those with

special needs, as is already the case informally in TK Lenterahati and TK Lombok Care Foundation (Saputra, 2025). That is, parents should be included in the formal process of designing their child's Individualized Education Program and in future routine review meetings (Ngadni & Chen, 2024; Sofwanudin, 2025; Windiastuti, 2026).

## 6.6. Limitations

Three limitations should be acknowledged. This single-regency qualitative case study is not suitable for statistical generalization to other Indonesian regencies or to a national context in Indonesia, although it has strong theoretical contributions across the wider literature (Barokatin & Sukinah, 2025). Second, since the underlying field data were collected in 2019 and the report was published in 2023, there may have been changes in aspects of the policy environment over that time period — especially with respect to potential instability following introduction of the Merdeka and post-pandemic expansion of inclusive-education funding. Third, purposeful sampling and participants' willingness to share sensitive information about their schools and families contributed to biases in identity data collection. While member-checking and triangulation were used, complete absence of social-desirability bias cannot be guaranteed.

## 7. CONCLUSIONS

**Findings:** This qualitative case study shows that inclusive learning management—operationalised by planning, organising, implementing, and evaluating functions—is possible to enact in practice in the case-study regency but entirely reliant on motivating personal commitment from the principals, classroom teachers, and willing families. Supporting factors—committed leadership, parental involvement, peer support among teachers, and ongoing engagement with disability associations—carry inclusive practices despite the lack of systematic government support, whereas inhibiting factors—poor infrastructure standards, missing special assistant teachers, underfunding, poorly defined inter-level authority, cultural attitudes towards disability, and constraints on family economic well-being—are why implementation remains patchy.

The paper provides a theoretical contribution through its informal micro-level resources channel for low-resource contexts that serves to refine the Mazmanian–Sabatier framework; a methodological contribution through demonstrating that this refinement can be operationalised via thematic case-study analysis, and thus advances both comparative policy implementation inquiry, and contextualisation of comparative pedagogy; as well as a policy contribution by recommending heightened district-level funding, more systematic deployment of special assistant teachers, and clearer delineation of authority between provincial and district education offices.

Subsequent studies could explore how integrated learning management is executed in various Indonesian regencies (urban vs. rural), consider the impact of teacher education programmes, and gain insight into affected families whose children have been excluded from inclusive provision. Doing so would further develop the theoretical framework elaborated on here, and comparative studies in other archipelagic and developing-country contexts are encouraged..

## 8. IMPLICATIONS

**For practitioners.** As we showed in Cape Verde, inclusive early childhood programmes can be implemented in even the most resource-poor settings but only if teachers have been trained specifically in inclusive pedagogy, individualised learning plans are routinely used and parents and disability associations become involved.

**For policymakers.** It recommends that budgets for inclusive education be established as a separate line item in Indonesian district period-to-period budgets and thus earmarked, and that responsibility sharing between provincial and district education offices be clarified.

**For researchers.** When analysing the implementation of inclusive education in low-resource contexts, we can add an informal micro-level-resources channel to the Mazmanian–Sabatier framework.

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## Institutional Review Board Statement

The study rationale was reported previously and aligned with the Declaration of Helsinki. Ethical Clearance. The ethical clearance had already been obtained from the Universitas Mataram Research Ethics Committee based on its procedure as described in the previous study.

## Informed Consent Statement

Adult participants provided written informed consent. Written and verbal assent were obtained from parents or legal guardians for material describing a study involving, or referring to, child participants.

## Data Availability Statement

The qualitative transcripts and field notes were not publicly available due to participant confidentiality and the sensitive nature of the data. De-identified summaries are available from the corresponding author upon reasonable request and with the permission of Universitas Mataram Research Ethics Committee.

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## Conflicts of Interest

The authors declare that they have no competing interests. The funder played no role in the design, conduct, analysis or write-up of the study.

## List of Abbreviations

- **ABK** – Children with Special Needs (Indonesian terminology)
- **CSN** – Children with Special Needs
- **DPRD** – Regional House of Representatives
- **ECE** – Early Childhood Education
- **IECE** – Inclusive Early Childhood Education
- **IEP** – Individualized Education Program
- **LMICs** – Low- and Middle-Income Countries
- **NGO** – Non-Governmental Organization
- **PPDI** – Indonesian Association of Persons with Disabilities
- **SDGs** – Sustainable Development Goals
- **SLB** – Special School
- **TK** – Kindergarten
- **UDL** – Universal Design for Learning

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