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Reimagining inclusive education from the margins: Multi-sectoral collaboration and spatial justice in Rural Bali

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ABSTRACT

This study critically explores the dynamics of inclusive education in Bengkala, Bali. It situates inclusion as a socio-spatial practice that is continuously negotiated through intersecting relations of power, culture, and geography. Using critical-interpretive qualitative methodology, this study combines ethnographic investigation, document analysis, and spatial mapping (GIS) to examine how multi-sectoral collaboration. The findings of this study suggest that although grassroots actors act as epistemic connectors, the institutionalization of inclusion remains fragile, uneven, and highly dependent on relational infrastructures. Furthermore, spatial analysis reveals how geographic exclusion persists under the guise of formal inclusivity, especially for marginalized hamlets that are beyond the reach of infrastructure support. By combining Critical Inclusion Theory, interdisciplinary collaboration models, and spatial justice frameworks, this study offers a conceptual overview of inclusive education that listens from the margins and centers lived experience as an epistemic resource in shaping ethical and place-based inclusion. These findings imply that inclusive policy frameworks must move beyond institutional mandates towards place-sensitive and socially negotiated models that recognise grassroots agency.

KEYWORDS: Bengkala, critical inclusion, epistemic mediation, inclusive education, Kata Kolok, multi-sector collaboration, rural education, spatial justice

Introduction

Over the past twenty years, inclusive education has been one of the key principles in global discussions on education development, driven by normative frameworks such as the Salamanca Declaration, the UN Convention on the Rights of Persons with Disabilities (CRPD), and the Sustainable Development Goals (SDGs), in particular SDG 4 (Ainscow et al., 2019; Haug, 2017; Hernández-Torrano et al., 2022; Meijer & Watkins, 2019; Ydo, 2020; Zhukova et al., 2022). However, when inclusion is driven from above through universal policy, there is often an epistemological tension that is not realized that, inclusion is considered a formula that can be applied from one context to another without change (Gray et al., 2017; Norwich & Koutsouris, 2017). In fact, in many regions of the Global South, especially in rural communities, inclusion does not arise from centrally designed systems, but rather from the daily struggles of local actors working among unique values, relationships, and spaces (Salemink et al., 2017; Stenman & Pettersson, 2020). When inclusive schools only become an institutional label, without exploring how the meaning of inclusion is lived. For this reason, we are witnessing what critical thinkers call performative inclusion, which is a form of inclusion that exists in the narrative, but is not present in social reality (Bengtsson & Andersen, 2020; Riach et al., 2016). This raises a crucial epistemological question: Can a top-down inclusive framework accommodate culturally embedded rural people's lived relationships?

Bengkala Village in Buleleng Regency, Bali, is a space that challenges this normative narrative. It is known as a "mute village" due to the high population of deaf people who use the local sign language *Kata Kolok* (Michi, 2017; Setiawan, 2023). Bengkala is a community that has lived a long life that recognizes the diversity of the body and the expression of communication as part of social normality. However, the irony occurs when these relatively inclusive social practices do not receive adequate structural support from the formal education system (Haes & Novayanti, 2023; Wisudariani et al., 2023). The centralized distribution of schools, the lack of disability-friendly infrastructure, and the uneven institutional support cause spatial inequality that has a direct impact on the educational participation of students with special needs (Haug, 2017; Macaulay et al., 2016; Marlina et al., 2019; Powell & Pfahl, 2019). It is in this condition that inclusion can no longer be understood as 'what is provided by the state', but as 'what is created by the community' (DeMatthews et al., 2021; Marginson, 2016; Qvortrup & Qvortrup, 2018). This raises a fundamental tension for research: whether and how can the multi-sectoral collaborative models often assumed to be effective in policy documents work in communities with hybrid, relational, and rooted in highly local value logics? A condition that is rarely read in its entirety in the inclusion literature that is still dominated by a purely technocratic and administrative approach.

For this reason, this study aims to explore collaborative dynamics in inclusive education in Bengkala, by examining how various aspects: schools, village governments, indigenous communities, parents, and the private sector, by establishing synergies or actually experiencing tension in realizing inclusion as a social practice (Fodo, 2020; Freeman-Green et al., 2025; Gerdes et al., 2020). Not stopping at the actor dimension, this study also uses a *Geographic Information System* (GIS)-based spatial approach to map the inequality of access to education and read how the spatial dimension also shapes, limits, or even hinders idealized inclusion (Liu et al., 2017; Longley, 2004; Senaratne et al., 2017). By bringing together qualitative, ethnographic, and spatial approaches, this study not only documents local practices, but also proposes a new conceptual perspective on inclusion: that meaningful inclusion is not about inviting different into existing systems, but rather about reimagining the system itself from the periphery (Ainscow, 2020). In this sense, Bengkala is not just a research location, but an epistemological arena where the idea of inclusion is challenged, reassembled, and interpreted contextually. By focusing on marginalized but resilient communities such as Bengaluru, the study also offers to contribute to the global conversation on how inclusion can be reinterpreted beyond neoliberal and technocratic schemes (Kiely, 2017; Sánchez-Cuenca, 2020).

Literature Review

Rethinking Inclusion: From Physical Access to Epistemic Justice

Within the framework of *Critical Inclusion Theory*, inclusion is not understood solely as the physical presence of children with special needs in formal classrooms, but rather as a transformative project that aims to dismantle

and reconstruct power structures that have been isolating, marginalizing, or silencing differences. For this reason, (Slee, 2011) emphatically criticizes that inclusion is often reduced to the expansion of access, while pedagogical structures, curricula, and social relations maintain ableist normative exclusivity. In this perspective, inclusion cannot be seen as a technical adoption of policy, but should be interpreted as social engineering that challenges the dominant narrative of who is considered 'normal' and who is categorized as 'other'.

For this, the context of Bengkala invites an in-depth elaboration of this theory. The existence of the deaf community with the local sign language system *Kata Kolok* shows that diversity does not have to be absorbed into the dominant system, but can stand as an autonomous structure of meaning. So, inclusion in Bengkala is not a matter of inviting different people to adjust, but rather a matter of acknowledging that 'different' is the existential condition of society itself. Critical inclusion theory opens up space to read the Bengkala experience as an embodiment of *a counter-narrative* in which inclusion is not designed by institutions, but assembled by communities through living interactions, language, and values (Hanun et al., 2025; Kiliç & Jacquet, 2025; McCauley & Matheson, 2016; Newbury, 2020; Qvortrup & Qvortrup, 2018)

Cross-Sector Collaboration Model: Inclusion as Collective Social Work

The intersectoral collaboration model is an increasingly popular approach in public policy and social services, highlighting the importance of synergies between various sectors such as education, health, government, civil society, and the private sector to address complex social problems (Ahgren et al., 2009; Chircop et al., 2015; Gazley, 2014). In the context of inclusive education, cross-sectoral collaboration serves not only as a coordination strategy, but also as an ethical prerequisite for creating a truly inclusive learning environment. This collaboration must be more than just symbolic or sectoral. It should be based on mutual trust, clear division of roles, and the ability to bridge value differences between formal institutions and local communities.

In this study, the collaborative model is described as a relationship arena filled with tension and negotiation. Bengkala shows that cooperation between actors is not always shaped by policy design, but rather develops from social networks based on cultural closeness and social intimacy. The relationship between teachers, village governments, indigenous leaders, and deaf communities does not occur in structural logic, but through relational mediation that is situational and contextual. Therefore, collaboration in this context is more akin to a flexible social network than an established institutional partnership. This model challenges the technocratic framework that defines collaboration as administrative coordination, and proposes a more affective, dynamic, and value-based model.

The Politics of Educational Space in Rural Peripheries

The concept of spatial justice (Soja, 2010) offers an important perspective for analyzing the spatial dimension in inclusive education. Within this framework, justice operates not only through norms and policies, but also through the distribution of space, i.e. the extent to which educational infrastructure, facilities, and services are distributed equitably in a given geographical context. When inclusive schools are only available in the canter of the village, while the suburbs have to face limited infrastructure and transport, then the exclusion is no longer purely cultural or social, but also geographical. This is a form of geospatial exclusion that is rarely highlighted in mainstream inclusion discourse.

This study uses *Geographic Information System (GIS)*-based mapping to show that the spatial distribution of schools and educational services in Bengkala is directly correlated with the participation rate of children with special needs. Spatial buffers created within a radius of 1 km and 2 km show that most of the southern and eastern areas of the village are beyond the range of functional inclusion. Thus, spatial justice is a prerequisite for educational justice. True inclusion cannot be achieved as long as distance and topography are barriers to participation. In this context, *maps are not just visual instruments, but political arguments* that demand the reconstruction of space-based policies as a new foundation of inclusion in rural and marginalized areas.

Methods

This research adopts a qualitative-descriptive approach rooted in an interpretive-critical paradigm, viewing inclusive education not as a neutral evaluative object, but as a social praxis that is dynamically negotiated in the context of local power and values. This approach was chosen because it allows for a more in-depth analysis of the social, symbolic, and spatial configurations that shape inclusive practices in rural communities such as Bengkala, where the formal structure of education often intersects, even conflicts, with the logic of indigenous peoples' daily lives.

The data collection process is carried out through four main techniques that reinforce each other methodologically. First, in-depth interviews with teachers, principals, village officials, parents, and members of the deaf community are conducted openly and reflectively, allowing for the emergence of narratives that are not constrained by formal policy frameworks, but rather develop from contextual life experiences. Second, participatory observation provides access to forms of social praxis that are not always linguistic—such as the rhythm of interaction in the classroom, community participation in school activities, and affective dynamics that are difficult to capture by survey instruments. Third, document analysis of inclusive education policies, program reports, and local documents enriches the analytical framework by reading the relationship between formal norms and actual practices. Fourth, Google Earth and GIS-based spatial mapping is used as a visual-epistemic approach to examine how school distribution, geographic distance, and mobility infrastructure contribute to determining who can be reached by inclusion, and who is left unserved. Interpretive validity is strengthened through triangulation between narratives, spatial visualization, and policy discourse analysis.

As a visual form of the spatial approach, Figure 3 shows a distribution map of the main schools in Bengkala, with an emphasis on SDN 2 Bengkala as the only formal inclusive school.
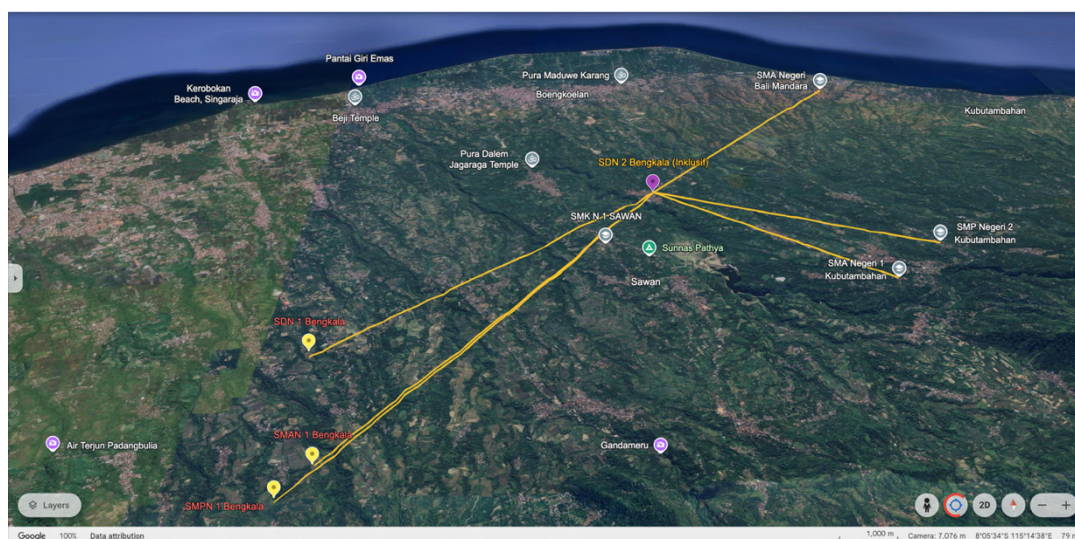

Figure 1. shows a spatial visualization using Google Earth showing the distribution of inclusive schools in Bengkala. The red dot shows SDN 2 Bengkala as the main inclusive school. The average distance between inclusive schools and densely populated points shows a potential access gap, which is reinforced by an analysis radius of 2 km. This map emphasizes the importance of policy-based spatial interventions to ensure the equitable distribution of inclusive education services in rural areas.

Through spatial distance analysis from dense residential points, radius of 1 km and 2 km were determined as ideal and reasonable accessibility zones. The findings suggest that the southern and eastern regions of the village are significantly outside the spatial range of functional inclusion. In this context, maps act not only as a representation tool, but as a visual argument that challenges the technocratic understanding of access that, inclusion cannot be reduced to a mere institutional label, without a reading of concrete spatial conditions and sometimes exclusion.

The data analysis process follows a framework (Miles, 1994) which consists of three stages: data reduction, data presentation, and conclusions/verification. Reduction is done by identifying key patterns and

themes from the collected narratives, while the presentation is reinforced with the help of visualizations such as sociograms of cross-sector collaboration and spatial maps of inclusion. Conclusions are drawn iteratively, reflectively, and contextually, by re-reading local narratives in a productive tension to the global discourse of inclusive education. This approach is enriched by the spatial justice framework of (Soja, 2010), which emphasizes that space is not just a passive setting, but an active actor in the production of social inclusion and exclusion. With this perspective, inclusive education is read as a spatial practice as well as an ethical praxis that touches on the distribution of presence, distance, and visibility.

The researcher takes the position of a reflective participant-observer, with a track record of involvement in inclusive research networks in Bali. This position provides cultural and epistemic proximity to the context, while also demanding ethical vigilance to avoid romantic distortions or relational biases. Therefore, the entire research process is directed to maintain a balance between ethnographic intimacy and critical tension, so that the resulting narrative is not trapped in bureaucratic repetition, but rather voices inclusion as a living social project—fought for together, and formed in a complex network of meaning, space, and social relations.

Result and Discussion

The results of this study are not presented as a static list, but rather as a structured narrative that describes how inclusion is generated, negotiated, and debated in the complex social context of Bengkala. Rather than describing inclusion as a program success or policy failure, this study explores the interrelated configuration of relationships, cultural meanings, and spatial inequalities that form an inclusive practice field. Therefore, this section is divided into three main themes that arise from the interaction between field data, spatial analysis, and critical theoretical frameworks. The first theme emphasizes that inclusion in Bengkala is not the result of policies implemented in a linear manner, but rather the result of complex and contextual social negotiations. The second theme analyzes the structure of multi-sectoral collaboration that, while appearing strong in relationships, shows vulnerabilities in institutional aspects. The third theme highlights the spatial dimension as an invisible determinant factor in the distribution of education access, which is often overlooked in policy-based inclusion discussions. Each theme does not stand alone, but rather forms a single narrative to understand inclusion. For this reason, the phenomenon of inclusion is not as something "given", but as something that is actively assembled by local actors within the boundaries of space, time, and structures that are not always in sync. With this framework, the following three sub-outcomes will be explained in depth.

Inclusion as a Social Negotiation Product

One of the fundamental fallacies in understanding inclusive education is the tendency to view it as the result of mere policy instruction. In reality, in certain social contexts, inclusion is not necessarily provided, but it is negotiated, exchanged, and assembled through dynamic social interactions. These findings position Bengkala as an important case study that encourages us to revisit how inclusion works, not as a product of a formal system, but as a result of articulation and mediation between local actors. As illustrated in Figure 2, the relationship path that connects teachers with village governments, traditional leaders, and deaf communities affirms the central position of teachers as epistemic intermediaries. The pathways do not show a linear hierarchy, but rather form lateral and diagonal patterns that reflect fluid, adaptive, and contextual inclusion structures.

The sociogram in Figure 2 visualizes the complex configuration of relationships between actors in inclusive education practices in Bengkala. Unlike national policy approaches that often assume a universal approach, practices in Bengkala show that inclusion is built through a decentralized social ecosystem. Inclusions don't move from top to bottom; Instead, it grew from the ground up, from the process of social negotiation, cultural mediation, and grassroots community initiatives that supported each other. Instead of encouraging diversity, national inclusion policies tend to impose single practices that are often inaligned with socio-cultural diversity at the local level. In the midst of a contextual regulatory vacuum, Bengkala proves that communities can design and implement inclusion models that are more relevant and rooted in local values. In this context, decentralization is not a weakness, but a prerequisite for social innovation.
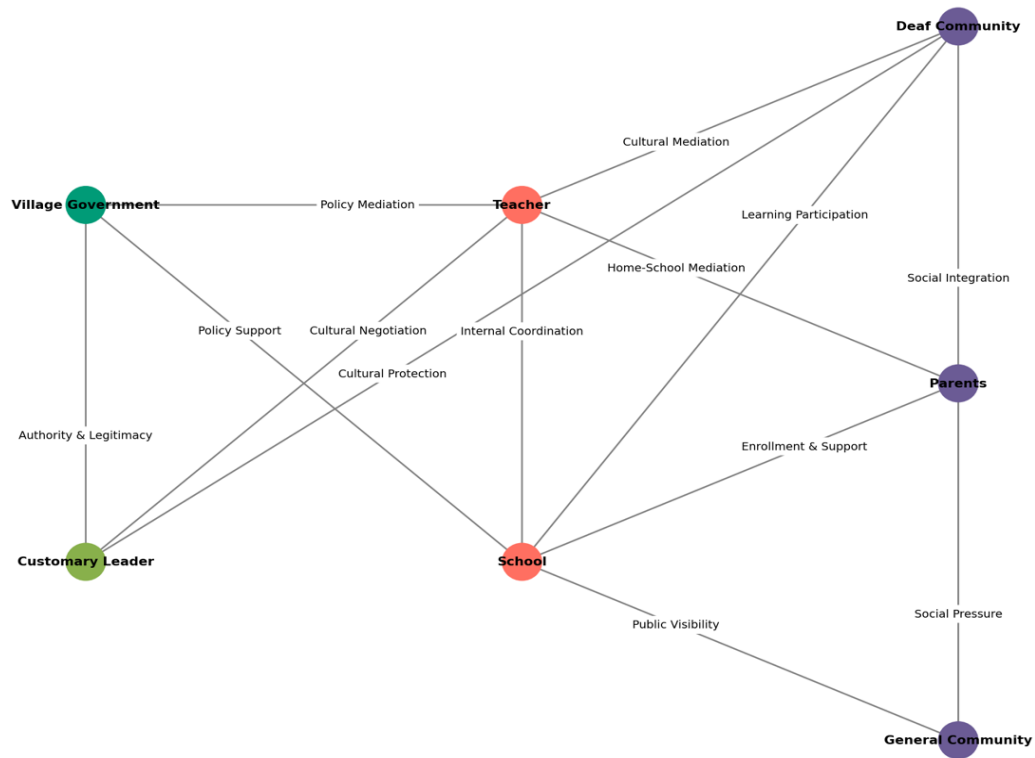
Figure 2. Hierarchical Sociogram of Multi-Sectoral Collaboration in Inclusive Education in Bengkala

In the configuration of social networks in Figure 2, teachers appear as the main nodes that bridge three structural domains: formal education (schools), local government structures (village governments), and cultural communities (indigenous leaders, parents, and deaf communities). The role of teachers in the context of Bengkala goes beyond pedagogical functions, including:

- Home-School Mediation: being the liaison between parents and educational institutions;
- Cultural Mediation: translating cultural values into learning practices;
- Policy Mediation: plays a role in policy advocacy at the village level.

In this capacity, teachers act as "epistemic liaison", i.e. individuals who cross social boundaries by not only teaching the curriculum, but also crafting the meaning of inclusion from community stories. Interestingly, actors who are usually on the fringes of national education policies, such as the deaf community and indigenous leaders, play a key role in the inclusive ecosystem in Bengkala. The relationship between indigenous leaders and deaf communities indicates that social legitimacy does not depend on regulatory documents, but rather is built through internalized collective norms. This is in line with the Third Space Theory (Bhabha, 1994), where inclusive spaces are formed from the encounter between formal structures and local cultures, rather than from the dominance of either of them. Meanwhile, the village government and the general public play a role as facilitators who create social infrastructure for the implementation of inclusion. Their role as enablers, not controllers, indicates that inclusion in Bengkala is the result of social connection, not administrative authority. These findings led to the formation of a conceptual model of locally-based inclusion, with the following characteristics:

Tabel 1. Formation of a conceptual model of locally-based inclusion

Dimensions of Visual	Visual Findings	Theoretical Contribution
Key Actors	Teachers as a cross-sector liaison	Expanding the concept of inclusion as a relational, not instructional system
Decentralized Dynamics	Lateral and diagonal relationships	Offers *a community-based* polycentric inclusion model
Cultural Legitimacy	Traditional figures as guardians of inclusion	Shifting the focus from formal regulation to local social norms
Active Subjectivity	Deaf communities as producers	Redefining inclusion as an agency, not an accommodation
Government as a Supporter	Village as a facilitator	Criticizing the role of the state as a dominator of inclusion

This sociogram is not only a visual representation, but also opens up space for conceptual development in inclusive education studies. First, it expands the framework of Critical Inclusion Theory (Moore & Slee, 2013; Slee, 2011) by showing that inclusion can emerge and survive effectively outside of formal institutional channels, as long as there is social legitimacy and vibrant cross-sectoral interactions. Second, this model offers an alternative approach to the Global South region: inclusion as a result of context-sensitive collective social engineering, rather than a universal product of policy. Thus, the inclusion model in Bengkala shows that when people are given space to define their own values, then inclusion is no longer just a policy, but it becomes a culture. And, when inclusion becomes cultural, it is not only revived, but it is inherited. This role shows that inclusion in Bengkala is not just about curriculum or facilities, but about the presence of social actors who are able to bridge the system with community values.

The Strengths and Fragility of Multi-Sector Collaboration

One of the dominant narratives in the inclusive education literature is the importance of cross-sectoral collaboration. However, field findings in Bengkala show that the collaborations that are formed are not always symmetrical and sustainable. Multi-sector collaboration here appears to be strong in social and cultural aspects, but at the same time fragile in structural and institutional aspects. In many cases, seemingly solid partnerships operate on a personal relational basis, rather than formal, long-lasting institutions. Criticism of structural approaches only becomes more relevant when inclusion is not only demanded to be responsive to the needs of students, but also sensitive to the social networks in which the policy is implemented. As visualized in Figure 3, this sociogram underscores how the intensity of relationships between actors creates a complex and unbalanced pattern of collaboration. Relationships between teachers and indigenous leaders, for example, are built on the basis of trust and social affiliation, not administrative mandates. Similarly, the contribution of village governments in the form of policy support is often situational, depending on who is in office and how sensitive the inclusion is. This shows that the power of inclusion in Bengkala does not come from stagnant systemic buildings, but from the capacity of actors to build relationships across social boundaries affectively and contextually. When inclusion is built on a fluid and person-dependent foundation, the collaboration that is built is likely to fluctuate as key figures and social dynamics change at the local level. In other words, collaboration that is not supported by strong institutionalization has the potential to give birth to inclusion that is flexible but vulnerable, participatory but not sustainable. It is precisely in this tension that Bengkala presents an important lesson: that collaboration in inclusive education cannot be reduced to mere structure, but must be read as a space for continuous negotiation between systems, values, and figures.
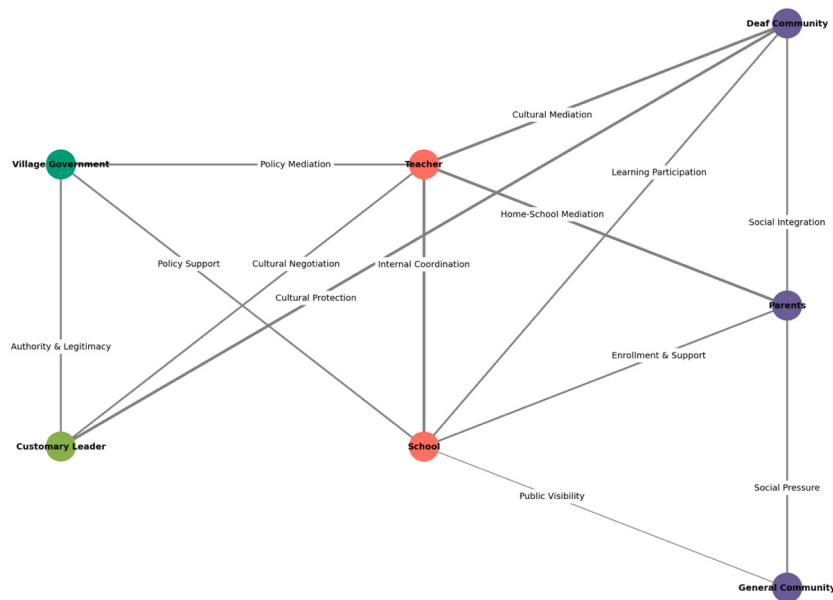
Weighted Sociogram of Multi-Sector Collaboration in Inclusive Education – Bengkala

Figure 3. Constellation of Strengths and Fragility of Multi-Sectoral Relations in Inclusive Education in Bengkala

Inequality in collaboration is also evident in the dominance of formal education actors in decision-making, while the role of the deaf community and parents is often limited to the acceptance of policies, not the designers. Deaf community and parent engagement tends to be reactive. They respond to existing policies, not become co-producers of them. This means that inclusion is indeed manifested in daily social interactions, but it has not yet fully manifested in an equal decision-making structure. In addition, some forms of collaboration show symbolic symptoms. For example, the declaration of schools as "inclusive" is not always accompanied by specific support mechanisms or ongoing training for teachers. Such forms of collaboration tend to be performative, aimed at meeting policy standards without delving into the realities of actual needs on the ground. This opens up a space for discussion about pseudo-collaboration, that is, collaboration that is formally maintained, but loses its transformational depth. However, it is important to note that in the midst of structural fragility, the power of collaboration in Bengkala actually grows from the social roots of the community. Collaboration is not formed through a document of understanding, but through togetherness in action. This is what makes it flexible and adaptive, while opening up opportunities to be developed into a model of collaboration based on trust and social closeness.

Table 2. Characteristics of the Strengths and Fragility of Multi-Sector Collaboration

Dimension	Field Indicators	Theoretical Implications
Personal Collaboration	The relationship between teachers and traditional leaders is based on social relations, not formal structures	Emphasizing the importance of *trust-based collaboration* in indigenous peoples
Key Figure Dependency	Teachers and village heads as the main drivers	Collaboration becomes *person-dependent*, not *system-driven*
Role Inequality	Deaf parents and communities have not been involved in policy design	Creating asymmetry in the inclusion process
Symbolic Collaboration	The label "inclusive" without any real support	Leads to *performative inclusion* or *pseudo-collaboration*
Social Robustness	Collaboration grows from togetherness, not outside intervention	Offering a value-based collaboration model and solidarity

The findings in this theme show that the power of collaboration in inclusive education does not lie in formal

documents or structures, but in contextual and participatory social relations. However, when collaboration is too dependent on a specific individual or takes place in a symbolic space, the risk of fragility increases. In this context, the Bengkala study invites us to revisit the concept of collaboration in the inclusion literature, from the original structure-based towards a model based on social affiliation and cultural recognition. Thus, cross-sector collaboration in this context resembles trust-based social networks rather than established institutional partnerships. The power born of social relations creates flexibility, but the absence of institutionalization makes it vulnerable to changes in context and actors. This study challenges us to rethink how to design inclusive collaborations that are not only responsive to local contexts, but also institutionally resilient.

Map of Accessibility and Regional Inequality

In the global literature on inclusive education, the spatial dimension is often marginalized, as if space is merely a passive background of policies and curricula. In fact, inclusion as a praxis is not only determined by norms, policy documents, or pedagogical instruments, but also by concrete geographical configurations: distance between regions, topographic shapes, distribution of educational infrastructure, and the quality of connectivity between regions. In the context of rural communities such as Bengkala, with hilly conditions, scattered settlements, and uneven road accessibility, but spatiality becomes a critical variable that determines who can be physically present in the classroom and who is secretly eliminated by geographical structures. Without spatial sensitivity, an inclusive approach risks getting caught up in an administrative logic that generalizes context and ignores the real challenges faced by children on the geographic periphery.

For this, Figure 4 visualizes the reality, where SDN 2 Bengkala, the only formal inclusive school in the region. It covers only a narrow spatial radius, with ideal zones (1 km) and reasonable zones (2 km) characterized by a solid and transparent blue buffer. The southern and eastern regions of Bengkala, which are inhabited by populations with limited mobility, are outside this scope. This spatial inequality is not just a matter of distance, but of representation: who is included in the policy calculations, and who is systemically left invisible. In this case, the spatial distribution of schools not only affects access to education, but is a reflection of how inclusion is imagined and realized. This raises the question of whether it is really a universal right, or simply a rhetoric that stops at the administrative center. Therefore, without correction of spatial distribution and contextual intervention design, inclusion in Bengkala will continue to experience invisible, silent but systemic exclusion.
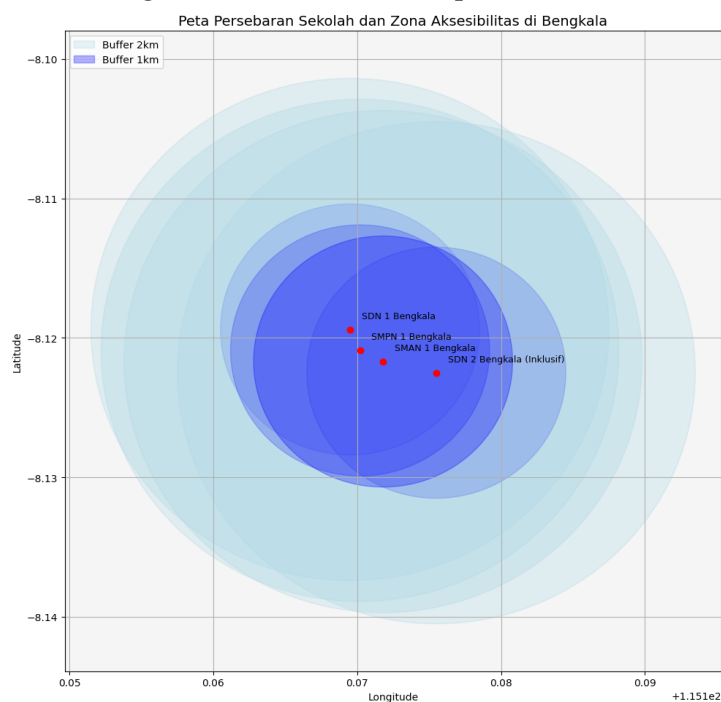

Figure 4. Map of the distribution of schools and spatial accessibility zones in Bengkala. The blue circle indicates a buffer of 1 km (ideal access), while the light blue circle indicates a buffer of 2 km (reasonable access). This visualization shows that the spatial scope of inclusive schools is still limited and has not yet reached all village areas, especially remote hamlets in the south and east.

This condition shows that the presence of inclusive institutions does not necessarily guarantee accessibility. Children from remote hamlets face structural barriers: long distances, uphill and disability-friendly road infrastructure, and the absence of regular transportation. As a result, many children with special needs experience late attendance, chronic fatigue, and the risk of dropping out of school. When inclusion is designed as an administrative entity without considering spatial distribution, what happens is normative inclusion—embodied in policy, but absent in practice.

Tabel 3. Indicators of Spatial Inequality and Their Implications for Education Inclusion

Spatial Indicators	Field Findings	Impact on Inclusion
School Concentration	The majority of schools are located in the center of the village	Inequality of access in suburban areas
Distance to Inclusive Schools	Some hamlets are >2 km away with no fixed transportation	Unequal participation, especially for students with disabilities
Road Infrastructure	Some of the trails are uphill and not disability-friendly	Mobility of ABK students is hampered
Special Facility Distribution	Only SDN 2 has supporting facilities	Inclusion burden is concentrated on a single school
Region Topography	Scattered hills and settlements	Long-term logistical and pedagogical challenges

This spatial discovery emphasizes the importance of integrating the principles of spatial justice (Soja, 2010) in designing and implementing inclusive education policies. The deployment of school locations, the provision of disability-friendly transportation, and the distribution of supporting facilities must be seen as part of substantive justice, not just administrative. If inclusion is to be realized as a universal right, then maps and distances should not only be additional information, but the basis for policy planning. More than just visualizations, maps in this context serve as epistemic tools, revealing layers of injustice that are often hidden in national policy narratives. Images and distances reveal what is not written: that exclusion can occur silently, through unfair spatial design. This is where it is important to change the position of spatiality from a technical element to a political arena of distribution. Thus, inclusion in rural areas such as Bengkala is not enough to be measured from the existence of inclusive schools alone, but must be seen from the geographical connectivity between regions, the mobility capacity of children with special needs, and the ability of the system to be present in a close and adaptive manner. True inclusion, in this context, is not just about accepting all children in the same classroom, but ensuring that every child can reach that classroom, with dignity and without unfair burdens.

This research challenges the common view that education inclusion has been considered to be the result of formal policies and institutional design. In various national and international documents, inclusion is often defined as the implementation of an adaptive curriculum, teacher training, or the administrative designation of inclusive schools. However, the reality revealed in Bengkala shows a much more complicated picture. Here, inclusion does not emerge as a top-down implementation of the system, but rather as the result of social dynamics negotiated locally, through a network of beliefs, cultural affiliations, and unique geographical articulations. Therefore, inclusion is not just a policy, but rather it is the result of dynamic social relations. These findings suggest that in certain social contexts, local actors, especially teachers, indigenous leaders, deaf communities, and village governments, play roles that go far beyond the role assumed by state policies. Teachers, in particular, not only carry out pedagogical functions, but also act as epistemic links between different domains: between the classroom and the living space, between formal policy and customary values, as well as between the institutional structure and the emotional structure of the community. This kind of role cannot be regulated only through training or regulatory modules, as it develops from social sensitivities shaped by relational proximity, not administrative necessity.

A similar phenomenon occurs in multi-sector collaboration settings. The term "cross-sectoral

cooperation", which often appears in various policy documents, in Bengkala is manifested through informal but significant social mechanisms: mutual trust, personal relationships, and shared values regarding the importance of education sustainability for all. However, this strength is also a source of weakness. When collaboration relies on key figures and is not supported by strong institutions, the sustainability of inclusion is threatened whenever there is a change of actors or a change in local political dynamics. Collaboration based on human relationships creates flexibility and closeness, but it also requires a support system so that it does not break up when social networks are shaken. The spatial dimension mapped in this study reinforces the argument that educational justice is inseparable from spatial logic. When inclusive schools are only available in the village center and access to them is not supported by adequate transportation systems or infrastructure, then inclusion becomes normative but functionally exclusive. Children with special needs in remote hamlets face not only distance, but also structural burdens that are not seen in policy documents. In this context, administrative inclusivity, simply referring to schools as "inclusive" without considering their affordability, risks reinforcing exclusion in a new form that is not always recognized: hidden spatial exclusion.

Referring to the concept of spatial justice (Soja, 2010), the results of this study reveal that justice in inclusive education requires more than just the spread of institutions. It requires the redistribution of space, recognition of social geography, and partisan spatial planning. Maps in this study are not just visual tools; It serves as an alternative narrative that exposes hidden injustices, injustices that are not detected in formal success indicators, but are perceived as real by those who cannot access the idealized learning space. In addition, this research encourages deeper epistemological reflection. Should inclusion always be interpreted with reference to global policy design? Or is authentic inclusion one built through local values, active community participation, and recognition of diversity as the basis of social relations, not as a deviation from norms? In this context, inclusion practices in Bengkala show that indigenous communities and disability groups are not only beneficiaries, but also active actors in creating inclusive values and systems. They are not objects of integration; They are subjects in social organizing.

Ultimately, true inclusion is not only about the existence of policy documents or the fulfillment of institutional indicators, but about the creation of a social space that allows every individual to participate equally, meaningfully, and empowered. Bengkala shows that inclusion is not just a physical space in the classroom, but a social process built through negotiation, trust, and authentic interaction between community members. For inclusive education to become a fair global agenda, it is important to listen to voices from the periphery and learn from the ways in which these communities build their own worlds. This study contributes to inclusive education theory by shifting the focus from formal policymakers to community-based mediators. The study proposes to reconsider inclusion as a relational and spatial concept, moving from institutional accessibility to a sense of belonging that is experienced and negotiated.

Conflicts of Interest

We declare no conflicts of interest in this study.

References

1) Ahgren, B., Axelsson, S. B., & Axelsson, R. (2009). Evaluating intersectoral collaboration: A model for assessment by service users. *International Journal of Integrated Care*, *9*(1), 1–10. https://doi.org/10.5334/ijic.304

2) Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, *6*(1), 7–16. https://doi.org/10.1080/20020317.2020.1729587

3) Ainscow, M., Slee, R., & Best, M. (2019). Editorial: the Salamanca Statement: 25 years on. *International Journal of Inclusive Education*, Vol. 23, pp. 671–676. https://doi.org/10.1080/13603116.2019.1622800

4) Bengtsson, T. T., & Andersen, D. (2020). Narrative analysis: thematic, structural and performative. In *Qualitative Analysis: Eight Approaches for the Social Sciences* (pp. 265–282).

5) Bhabha, H. K. (1994). The Postcolonial and the Postmodern: Questions of Agency. *The Location of Culture*, 171–197.

6) Chircop, A., Bassett, R., & Taylor, E. (2015). Evidence on how to practice intersectoral collaboration for health equity: a scoping review. *Critical Public Health*, *25*(2), 178–191. https://doi.org/10.1080/09581596.2014.887831

7) DeMatthews, D. E., Serafini, A., & Watson, T. N. (2021). Leading Inclusive Schools: Principal Perceptions, Practices, and Challenges to Meaningful Change. *Educational Administration Quarterly*, *57*(1), 3–48. https://doi.org/10.1177/0013161X20913897

8) Fodo, S. (2020). *Collaboration in Inclusive Education: Teachers' Perspectives and Practices*. UWC.

9) Freeman-Green, S., Williamson, P., & Cornelius, K. (2025). Advancing Collaboration in Inclusive Education. *Teaching Exceptional Children*, p. 00400599241312556. https://doi.org/10.1177/00400599241312556

10) Gazley, B. (2014). Intersectoral collaboration and the motivation to collaborate toward an integrated theory. In *Big Ideas in Collaborative Public Management* (pp. 36–54). https://doi.org/10.4324/9781315706146-9

11) Gerdes, J., Goei, S. L., Huizinga, M., & de Ruyter, D. (2020). Analytic framework for interdisciplinary collaboration in inclusive education. *Journal of Workplace Learning*, *32*(5), 377–388. https://doi.org/10.1108/JWL-08-2019-0099

12) Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology/Psychologie Canadienne*, *58*(3), 203.

13) Haes, P. E., & Novayanti, N. L. P. H. (2023). Learning Comunication: The Humanization of Inclusive Education at Adn2 Bengkala. *Jurnal Pendidikan: Kajian Dan Implementasi*, *5*(4).

14) Hanun, F., Pamungkas, O. Y., Habibullah, A., & Kozin, W. (2025). The Impact of Research-Based Learning and Institutional Support on Student Research Productivity at Madrasah Aliyah Negeri in Jakarta, Indonesia. *Qubahan Academic Journal*, *5*(2), 204–223.

15) Haug, P. (2017). Understanding inclusive education: ideals and reality. *Scandinavian Journal of Disability Research*, *19*(3), 206–217. https://doi.org/10.1080/15017419.2016.1224778

16) Hernández-Torrano, D., Somerton, M., & Helmer, J. (2022). Mapping research on inclusive education since Salamanca Statement: a bibliometric review of the literature over 25 years. *International Journal of Inclusive Education*, *26*(9), 893–912. https://doi.org/10.1080/13603116.2020.1747555

17) Kiely, R. (2017). From Authoritarian Liberalism to Economic Technocracy: Neoliberalism, Politics and 'De-democratization.' *Critical Sociology*, *43*(4–5), 725–745. https://doi.org/10.1177/0896920516668386

18) Kiliç, E., & Jacquet, W. (2025). Embracing diversity in adult education: creating an inclusive environment for Turkish-speaking newcomers in community settings. *Humanities and Social Sciences Communications*, *12*(1), 21–37. https://doi.org/10.1057/s41599-025-04415-9

19) Liu, X., Wang, X., Wright, G., Cheng, J. C. P., Li, X., & Liu, R. (2017). A state-of-the-art review on the integration of Building Information Modeling (BIM) and Geographic Information System (GIS). *ISPRS International Journal of Geo-Information*, Vol. 6, p. 53. https://doi.org/10.3390/ijgi6020053

20) Longley, P. A. (2004). Geographical information systems. In *The Social Science Encyclopedia* (pp. 416–417). Routledge.

21) Macaulay, L., Deppeler, J., & Agbenyega, J. (2016). Access to Quality Education for Students with Disability. *Journal of Social Inclusion*, 7(2), 3–17. https://doi.org/10.36251/josi.108

22) Marginson, S. (2016). The worldwide trend to high participation higher education: dynamics of social stratification in inclusive systems. *Higher Education*, 72(4), 413–434. https://doi.org/10.1007/s10734-016-0016-x

23) Marlina, M., Efrina, E., & Kusumastuti, G. (2019). Differentiated Learning for Students with Special Needs in Inclusive Schools. *5th International Conference on Education and Technology (ICET 2019)*, 678–681. Atlantis Press.

24) McCauley, K., & Matheson, D. (2016). From institution to community living, to social inclusion-Unrealized policy promises. *Journal on Developmental Disabilities*, 22(1), 3–9.

25) Meijer, C. J. W., & Watkins, A. (2019). Financing special needs and inclusive education–from Salamanca to the present. *International Journal of Inclusive Education*, 23(7–8), 705–721. https://doi.org/10.1080/13603116.2019.1623330

26) Michi, S. A. (2017). Analisi genealogi & mean matrimonial radius populasi tuli-bisu di Desa Bengkala, Buleleng, Bali. *LIBRI-NET*, 6(2), 213–222.

27) Miles, M. B. (1994). Qualitative data analysis: An expanded sourcebook. *Thousand Oaks*.

28) Moore, M., & Slee, R. (2013). Disability studies, inclusive education and exclusion. In *Routledge Handbook of Disability Studies* (pp. 225–239). https://doi.org/10.4324/9780203144114-25

29) Newbury, J. (2020). Inclusion and Community Building: Profoundly Particular. In *The Sage Handbook of Social Constructionist Practice* (pp. 548–558). https://doi.org/10.4135/9781529714326.n53

30) Norwich, B., & Koutsouris, G. (2017). Addressing Dilemmas and Tensions in Inclusive Education. In *Oxford Research Encyclopedia of Education*. https://doi.org/10.1093/acrefore/9780190264093.013.154

31) Powell, J. J. W., & Pfahl, L. (2019). Disability and inequality in educational opportunities from a life course perspective. In *Research Handbook on the Sociology of Education* (pp. 383–406). https://doi.org/10.4337/9781788110426.00031

32) Qvortrup, A., & Qvortrup, L. (2018). Inclusion: Dimensions of inclusion in education. *International Journal of Inclusive Education*, Vol. 22, pp. 803–817. https://doi.org/10.1080/13603116.2017.1412506

33) Riach, K., Rumens, N., & Tyler, M. (2016). Towards a Butlerian methodology: Undoing organizational performativity through anti-narrative research. *Human Relations*, 69(11), 2069–2089. https://doi.org/10.1177/0018726716632050

34) Salemink, K., Strijker, D., & Bosworth, G. (2017). Rural development in the digital age: A systematic literature review on unequal ICT availability, adoption, and use in rural areas. *Journal of Rural Studies*, 54, 360–371. https://doi.org/10.1016/j.jrurstud.2015.09.001

35) Sánchez-Cuenca, I. (2020). Neoliberal technocracy : The challenge to democratic self-government. *The Technocratic Challenge to Democracy*, 44–60.

36) Senaratne, H., Mobasheri, A., Ali, A. L., Capineri, C., & Haklay, M. (Muki). (2017). A review of volunteered geographic information quality assessment methods. *International Journal of Geographical Information Science*, Vol. 31, pp. 139–167. https://doi.org/10.1080/13658816.2016.1189556

37) Setiawan, A. R. (2023). *TA: Pembuatan Film Pendek Dokumenter tentang Kehidupan di Desa Bengkala Provinsi Bali dengan Judul" Bengkala: Diam & Berarti"*. Universitas Dinamika.

38) Slee, R. (2011). The irregular school: Exclusion, schooling and inclusive education. In *The Irregular School: Exclusion, Schooling and Inclusive Education*. https://doi.org/10.4324/9780203831564

39) Soja, E. (2010). Spatializing the urban, part I. *City*, 14(6), 629–635. https://doi.org/10.1080/13604813.2010.539371

40) Stenman, S., & Pettersson, F. (2020). Remote teaching for equal and inclusive education in rural areas? An analysis of teachers' perspectives on remote teaching. *International Journal of Information and*

Learning Technology, *37*(3), 87–98. https://doi.org/10.1108/IJILT-10-2019-0096

41) Wisudariani, N. M. R., Adnyani, N. L. P. S., Sriasih, S. A. P., Seniwati, N. P., & Made Wisnugiri, I. (2023). Problems of Teachers in Inclusive Class Learning in Public Elementary School Bengkala Buleleng. In *Proceedings of the 2nd International Conference on Languages and Arts across Cultures (ICLAAC 2022)* (pp. 200–207). https://doi.org/10.2991/978-2-494069-29-9_22

42) Ydo, Y. (2020). Inclusive education: Global priority, collective responsibility. *Prospects*, *49*(3), 97–101.

43) Zhukova, O., Platash, L., & Tymchuk, L. (2022). Inclusive education as a tool for implementing the sustainable development goals on the basis of humanization of society. *Problemy Ekorozwoju*, *17*(1), 114–122. https://doi.org/10.35784/pe.2022.1.11