

INCLUSIVE PRACTICES IN LARGE PRIMARY CLASSROOMS: TEACHER TRAINING AND RESEARCH IN SÃO TOMÉ AND PRÍNCIPE

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Abstract

Large class sizes remain a major challenge for the implementation of inclusive education, particularly in education systems facing structural constraints and limited resources. This paper presents an education and research project developed in São Tomé and Príncipe, aimed at supporting primary teachers working in large classrooms through inclusive and context-responsive pedagogical approaches. The project is grounded in an action–training–research framework and seeks to strengthen teachers’ capacities to manage diversity, promote participation, and implement pedagogical differentiation in real classroom contexts. It is structured in interconnected phases: contextual diagnosis, teacher training workshops, collaborative reflection, and the progressive implementation and monitoring of inclusive practices. This paper focuses on the initial diagnostic phase, conducted over a short exploratory period, which aimed to identify key challenges, available resources, and prevailing conceptions of inclusive and special education. Data were collected through a semi-structured exploratory conversation with five purposively selected educational professionals, chosen for their direct experience in primary education and involvement in local school contexts. Data were analysed using qualitative content analysis following an inductive approach. Findings reveal persistent tensions between inclusive policy discourses and everyday classroom realities, particularly regarding class size, limited support structures, and constraints on pedagogical decision-making. At the same time, participants identified adaptive strategies and situated professional knowledge that can support more inclusive practices. These results are informing the design of context-sensitive training strategies and shaping subsequent phases of the project, including the development of collaborative professional learning spaces, classroom-based experimentation, and iterative monitoring processes. Based on the diagnostic findings, preliminary recommendations are proposed, emphasizing the need for practice-oriented training, peer collaboration, and the valorization of local pedagogical knowledge. This study highlights the role of teacher education and international cooperation in advancing inclusive education in complex and resource-constrained settings. The findings also contribute to a situated understanding of inclusive education in Portuguese-speaking African contexts, highlighting the relevance of contextually grounded professional development approaches.

Keywords: *Inclusive education, large classrooms, teacher training, action research, São Tomé and Príncipe.*

1. Introduction

Large class sizes remain a persistent challenge for the implementation of inclusive education, particularly in educational systems marked by structural constraints and limited resources. This issue is especially critical in primary education, where the consolidation of foundational learning and the early identification of developmental and learning difficulties are essential. High pupil density tends to limit individualised attention, constrain pedagogical differentiation, and reduce opportunities for active participation. However, international research consistently highlights that class size alone does not determine learning outcomes; rather, the quality of pedagogical practices plays a decisive role (UNESCO, 2015; Ainscow, 2020).

In Portuguese-speaking African countries such as São Tomé and Príncipe, this challenge assumes specific characteristics. The combination of demographic pressures, infrastructural limitations, and limited availability of specialised human resources contributes to classrooms with a high number of students and significant heterogeneity in learning profiles, rhythms, and needs. Within this context, teachers are frequently required to respond to diversity under conditions that are not always conducive to the systematic implementation of differentiated and inclusive practices.

Inclusive education provides a relevant framework for addressing these challenges. Rather than being restricted to specific groups of students, inclusive education is increasingly understood as a systemic and pedagogical approach focused on identifying and removing barriers to learning and participation, while recognising diversity as an inherent characteristic of educational contexts (Booth & Ainscow, 2011; Ainscow, 2020). In large classrooms, this perspective requires flexible pedagogical strategies, active methodologies, and forms of differentiation capable of engaging all learners (Florian, 2019; Tomlinson, 2014).

Within this framework, teacher professional development plays a central role. Sustained, collaborative, and context-sensitive training processes are particularly relevant in systems where specialised support is limited, as they enable teachers to reflect critically on their practices and develop strategies adapted to real classroom conditions. Furthermore, the literature highlights that inclusive education in resource-constrained contexts cannot rely exclusively on structural reforms or specialised resources. Instead, it requires pedagogical approaches that are flexible and context-responsive, enabling teachers to work with existing conditions while progressively transforming them.

This perspective is particularly relevant in large classroom settings, where diversity is intensified and where the teacher's capacity to organise learning environments, mediate interactions, and promote participation becomes central. Consequently, understanding teachers' perspectives and practices in such contexts is essential for designing meaningful and sustainable training interventions.

This paper analyses a training and research project developed in São Tomé and Príncipe, focusing on pedagogical practices in large primary classrooms. More specifically, it examines the project's initial diagnostic phase, aiming to identify challenges, resources, and perspectives among educational agents. The study seeks to contribute to the design of context-sensitive training strategies and to provide a situated understanding of inclusive practices in large classroom contexts, supporting future pedagogical interventions grounded in local realities.

2. Project framework and objectives

The study is part of a broader international cooperation project aimed at strengthening educational quality, equity, and inclusion in São Tomé and Príncipe through the articulation of teacher training, research, and pedagogical intervention. The project adopts an action research–training framework, integrating professional development, knowledge production, and contextualised educational action.

The intervention is structured in interconnected phases, including contextual diagnosis, teacher training workshops, collaborative reflection, implementation of participatory pedagogical methodologies, and progressive monitoring of practices. This approach reflects an understanding of teacher development as a continuous, situated, and practice-based process.

The present paper focuses exclusively on Phase I — Diagnosis, exploratory in nature. The main objective is to analyse how educational agents perceive inclusive education and pedagogical management in large classrooms, identifying key challenges, constraints, and potentialities. These findings are intended to inform the design of training strategies, support the development of collaborative professional learning environments, and guide subsequent phases of the project.

3. Methods

The study follows an action research–training approach, understood as a reflective, collaborative, and situated methodology that connects knowledge production, professional development, and pedagogical intervention (Miller & McGowan, 2018). This approach is particularly suited to complex educational contexts, as it allows for the analysis of practices and perspectives grounded in real professional experiences while simultaneously supporting change processes.

The present analysis focuses on data collected during the diagnostic phase, specifically through a semi-structured exploratory group conversation involving five purposively selected educational agents. Participants included primary school teachers, pedagogical supervisors, representatives of the Ministry of Education, and teacher educators, all with relevant experience in the Santomean educational system.

The purposive sampling strategy aimed to ensure diversity of perspectives while maintaining relevance to the research objectives. Participants were selected based on their direct involvement in primary education and their knowledge of classroom practices, supervision processes, and educational policy implementation.

The conversation, lasting approximately two hours, was guided by a structured script covering themes such as conceptions of inclusive education, classroom management, pedagogical strategies in large classes, organisation of space and time, student participation, collaboration among professionals, and training needs. The session was audio-recorded and fully transcribed.

Data analysis was conducted using qualitative content analysis (Bardin, 1977), following an inductive approach. The analytical process involved iterative reading of the corpus, identification of meaning units, initial coding, and the construction of emerging thematic categories. These categories were organised into analytical dimensions, including conceptions of inclusive education, pedagogical management of large classes, relational dynamics, working conditions, and structural constraints.

Participants were anonymised (P1–P5), ensuring confidentiality and adherence to ethical principles of educational research. In addition to the exploratory group conversation analysed in this paper, the broader diagnostic phase included complementary procedures, such as document analysis, informal meetings with local educational stakeholders, and preliminary classroom observations. Although not analysed in detail here, these sources supported the interpretation of the qualitative data and reinforced the identification of structural constraints, organisational challenges, and context-responsive pedagogical practices already mobilised by teachers.

4. Results and discussion

The findings reveal a complex and nuanced picture of inclusive education in large primary classrooms, marked by the coexistence of conceptual alignment with inclusive principles and significant contextual constraints.

4.1. Conceptions of inclusive education and perceived limits

Participants demonstrated a broad understanding of inclusive education, recognising it as a transversal responsibility embedded in everyday pedagogical practice rather than as a set of responses directed exclusively at students with specific educational needs. This perspective is consistent with contemporary theoretical frameworks. However, this understanding coexists with a clear awareness of practical limitations. As one participant stated, “when there are forty or fifty pupils, many end up going unnoticed” (P3). This highlights the tension between inclusive discourse and the conditions required for its effective implementation.

4.2. Large classes as a normalised structural condition

Large classes are perceived as a normalised feature of the educational system. Participants reported that classes with more than 40 pupils are common and considered part of everyday school reality. This normalisation shapes pedagogical expectations and limits the perceived feasibility of alternative organisational arrangements. At the same time, large classes were associated with challenges in maintaining attention, managing behaviour, and implementing differentiated or participatory activities. These difficulties are exacerbated by limited physical space and scarce pedagogical resources.

4.3. Adaptive pedagogical strategies

Despite these constraints, participants reported the use of adaptive strategies aimed at managing diversity and promoting participation. These include small-group work, cooperative learning, project-based approaches, and the use of locally available materials. Such strategies reflect context-responsive practices that emerge from teachers’ professional experience and their capacity to adapt to challenging conditions. Rather than applying predefined models, teachers develop situated responses that allow them to reorganise classroom dynamics and support student engagement.

4.4. Relational dimension and classroom management

The relational dimension of teaching emerged as a central element. Participants emphasised the importance of trust, proximity, and emotional connection in managing large classes. The pedagogical relationship was described as a key factor for promoting student engagement, regulating behaviour, and supporting participation. In this sense, relational practices function as a core pedagogical resource, particularly in contexts where structural constraints limit other forms of intervention.

4.5. Professional collaboration and training needs

Participants highlighted the importance of collaboration among teachers and the value of sharing practices and experiences. However, they also noted that such collaboration is not yet systematically supported by institutional structures. The need for continuous, practice-oriented training emerged as a key theme, particularly in relation to pedagogical differentiation, inclusive practices, and classroom management strategies adapted to large groups.

4.6. Implications for teacher training and pedagogical development

The findings of the diagnostic phase provide important implications for the design of teacher training processes in contexts characterised by large classes and limited resources.

First, they highlight the need for training models that are strongly anchored in practice, enabling teachers to reflect on their own classroom experiences and to experiment with strategies adapted to their specific contexts.

Second, the data suggests that training should prioritise pedagogical approaches that are feasible within existing constraints, such as cooperative learning, small-group organisation, and the use of locally available materials. Rather than promoting idealised models that may be difficult to implement, training should focus on strategies that can be realistically integrated into teachers' daily practice.

Third, the importance of the relational dimension indicates that teacher training should also address aspects related to classroom climate, communication, and the construction of positive pedagogical relationships. Additionally, the findings reinforce the relevance of collaborative professional learning. The creation of spaces for peer exchange, joint reflection, and shared problem-solving may contribute to strengthening teachers' professional agency and to sustaining changes in practice over time. Finally, the diagnostic phase confirms the importance of adopting a phased and iterative approach to intervention, providing a foundation for subsequent phases of the project.

4.7. Contextual constraints and pedagogical possibilities

The findings also highlight the importance of analysing inclusive education within its broader contextual conditions. Structural constraints, including limited infrastructure, high pupil-teacher ratios, and scarcity of specialised resources, play a significant role in shaping pedagogical practices. These conditions do not merely limit teachers' actions but actively configure the possibilities and boundaries of classroom intervention. However, the data suggests that these constraints do not entirely determine pedagogical practices. Instead, teachers demonstrate the capacity to reinterpret and negotiate these conditions, developing contextually situated strategies that allow them to respond to diversity. This reinforces the idea that inclusion should be understood not only as a policy goal but as a situated pedagogical process that emerges through everyday practice. In this sense, large classrooms can be seen simultaneously as a constraint and as a space of pedagogical possibility. While they present clear challenges in terms of individualised support and classroom management, they also create opportunities for collaborative learning, peer interaction, and shared responsibility for learning. This dual perspective is particularly relevant for the design of training interventions, which should not focus exclusively on reducing constraints but also on identifying and expanding the pedagogical possibilities that exist within these contexts.

Overall, the findings suggest that the challenges associated with large classes are not solely determined by class size but by the interaction between structural conditions, pedagogical practices, and professional agency. Inclusive education in such contexts depends on the capacity to mobilise flexible, context-sensitive strategies and to support teachers through collaborative and sustained professional development. The diagnostic findings are already informing subsequent phases of the project, including training programmes, collaborative professional learning spaces, and classroom-based experimentation.

This interpretation is consistent with research that emphasises the role of teacher agency in contexts of constraint, where educators actively construct situated responses to complex challenges rather than simply implementing externally defined models. At the same time, the findings point to the risk of these adaptive strategies remaining isolated or informal if they are not supported by structured professional development processes. The data also highlights the importance of considering inclusion as a relational and organisational process. Furthermore, the normalisation of large classes raises important questions regarding equity and educational quality, suggesting the need for a dual approach that combines pedagogical innovation with broader structural and policy-level considerations.

5. Conclusions

This study analysed the diagnostic phase of a training and research project focused on inclusive education in large primary classrooms in São Tomé and Príncipe. The findings reveal the coexistence of inclusive pedagogical orientations with significant contextual constraints, highlighting both the challenges and the adaptive strategies developed by educational agents.

The results underline the importance of pedagogical flexibility, relational dimensions of teaching, and collaborative professional development as key elements in promoting inclusion in resource-constrained contexts. They also demonstrate that teachers play an active role in constructing context-responsive practices, mobilising available resources and adapting pedagogical strategies to support student participation.

At the same time, the study highlights the need for structured and sustained professional development processes capable of supporting the consolidation and expansion of these practices. Training models that are practice-based, collaborative, and context-sensitive appear particularly relevant in this regard. From a broader perspective, the findings suggest that inclusive education in large classroom settings requires an integrated approach that combines pedagogical, organisational, and institutional dimensions.

Although exploratory in nature and based on a small purposive sample, the study provides relevant insights into inclusive practices in a Portuguese-speaking African context and contributes to the design of training and research initiatives grounded in local realities. Future research should extend this analysis by examining the implementation and impact of pedagogical strategies over time, particularly in relation to student participation, learning outcomes, and well-being.

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