Leadership and Monitoring Practices for the Inclusion of Students with Autism in Mainstream Primary Schools: A Mixed-Methods Study from Israel with International Perspectives

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Abstract

The inclusion of students with Autism Spectrum Disorder (ASD) in mainstream primary schools presents both promising opportunities and persistent challenges for educators and school leaders. This study investigates how principals and teachers in Israel promote effective inclusion through leadership strategies, monitoring mechanisms, and pedagogical practices, while situating the findings within international perspectives. A mixed-methods design was employed, combining semi-structured interviews with principals, teachers, and aides (qualitative component) and structured surveys measuring perceptions of inclusion efficacy and monitoring frequency (quantitative component). The sample included 10 principals, 30 teachers, and 10 aides from diverse primary schools across Israel. Findings revealed critical challenges—limited training, insufficient monitoring tools, and resource constraints—but also highlighted successful practices such as individualized education programs, structured social-emotional learning (SEL), and assistive technology integration. Comparative insights from Finland, Canada, and the United Kingdom emphasized the role of sustained professional development, systematic monitoring, and collaborative leadership in achieving effective inclusion. The study concludes that sustainable inclusion for students with autism depends on strengthening pedagogical leadership, embedding structured monitoring systems, and investing in ongoing professional learning. These findings contribute to a deeper understanding of inclusive education by linking leadership, monitoring, and teacher development to the broader goal of equity and participation for all learners.

Keywords: Inclusive Education; Autism Spectrum Disorder; School Leadership; Monitoring Tools; Teacher Training; Social-Emotional Learning; Mixed-Methods Study

I.   Introduction

Imagine a classroom in a mainstream primary school: children are drawing, practicing reading, engaging in group discussions, and presenting their work to peers. Among them sits a student on the autism spectrum—curious, creative, and uniquely skilled, yet requiring an adapted environment, deep understanding, and sustained

emotional support. Such a student may not always respond as expected in social situations and may struggle with sensory or emotional regulation. However, with appropriate support, their full potential can be realized. This raises critical questions: Is the classroom prepared to welcome them? Do teachers have the necessary knowledge and tools? Does the school climate nurture not only academic achievement but also social and emotional growth?

At the center of these questions stand principals and teachers. A contemporary school principal is not merely an administrator managing budgets and timetables, but a pedagogical leader responsible for driving meaningful educational processes. The role includes shaping vision, managing multidisciplinary teams, promoting inclusive policies, and cultivating a supportive organizational culture. In the case of students with autism, the principal's role becomes even more crucial: adapting structures and pedagogy, guiding teaching staff, promoting values of acceptance, and continuously monitoring inclusion processes while addressing emerging challenges.

Teachers, in turn, play a central role in implementing inclusion in the classroom. They are required to navigate the daily complexities of integrating a student with autism in a heterogeneous group, implement differentiated instruction, exercise pedagogical and social judgment, and ensure a sense of belonging. Teachers are expected not only to understand autism in general but also to recognize each student's unique profile—communication style, coping mechanisms, and emotional needs. Effective inclusion requires collaboration with aides, counselors, and psychologists, and the creation of professional learning communities within the school.

Inclusive education for students with autism is not a one-time action but an ongoing, multi-stage process requiring flexibility, planning, professional evaluation, and organizational learning. Monitoring tools used by principals are not merely technical, but reflect a broad sense of responsibility for ensuring continuity, adaptation, and growth for every student. Inclusion benefits not only the individual student—it fosters tolerance, reduces stigma, and strengthens empathy among all students, laying the foundation for a more equitable society.

In recent years, diagnoses of autism have increased globally, including in Israel, alongside policies mandating inclusion. Yet studies highlight persistent gaps between policy and practice, with schools facing resource shortages, inadequate training, and inconsistent implementation. Despite these challenges, schools adopting creative solutions and systematic monitoring mechanisms report encouraging results. This study explores how principals and teachers in Israel and internationally ensure effective inclusion of students with autism, with a focus on monitoring tools, pedagogical strategies, and leadership roles.

II. Literature Review

2.1 Inclusion of Students with Autism in Mainstream Education

The inclusion of students with Autism Spectrum Disorder (ASD) in mainstream classrooms has become a cornerstone of modern education. Inclusive education is not limited to physical placement; it entails personalized support that addresses emotional, cognitive, and social challenges. Successful inclusion fosters a sense of belonging and growth among all learners (Booth & Ainscow, 2002).

2.2 Challenges and Opportunities

Alongside the benefits—such as the development of social and communication skills—significant challenges persist. Teachers often struggle to balance diverse needs in large classes, face insufficient training, and lack systemic support. Without adapted teaching methods and consistent monitoring, inclusion may fail to meet students' needs. Research emphasizes the need for flexible approaches, targeted teacher training, and systemic investment to bridge these gaps (Weiss, 2012).

2.3 The Role of School Principals

Principals play a central role in advancing inclusion. Beyond administrative duties, they are expected to lead cultural change, implement inclusive policies, and provide instructional guidance. Effective principals support teachers in designing adapted learning environments and encourage innovation in inclusive practices (Tschannen-Moran & Hoy, 2001). Recent findings reinforce this connection between leadership and inclusive outcomes.

Dennehy, Cahill, and Moynihan (2024), in their study of Irish primary schools, found that principals leading autism classes viewed their leadership as pivotal in shaping inclusive culture and teacher collaboration. Their work underscores the notion that inclusive leadership extends beyond administrative tasks to encompass vision, empathy, and sustained professional guidance for teachers.

2.4 Professional Development

Professional training is a key condition for successful inclusion. Principals and teachers need ongoing development programs focused on autism, inclusive pedagogy, and monitoring tools. Studies show that staff who receive targeted training are more likely to implement innovative and sustainable practices (Lindsay, 2007).

2.5 Monitoring and Evaluation Tools

Monitoring is critical for tracking progress and ensuring accountability. Tools include classroom observations, progress reports, and structured review meetings. These practices enable school leaders to identify challenges early and tailor interventions to student needs. A principal's ability to apply structured monitoring frameworks reflects pedagogical leadership and a broad responsibility for inclusive education (Henderson & Millward, 2018). However, school-wide inclusiveness alone may not guarantee meaningful outcomes. **Šilc et al. (2024)**, examining Slovenian primary schools, reported only modest correlations between a school's inclusive culture and the actual academic and social inclusion of students with autism. Their findings highlight that monitoring practices must be systemic and data-driven, complementing school leadership with concrete evaluation tools to ensure sustainable progress.

2.6 Examples of Practices

Schools in Israel and worldwide employ diverse approaches to inclusion:

- Individualized support: assigning aides who provide academic and social guidance.

- Personalized learning plans: adapting tasks, materials, and timetables to student needs.

- Ongoing professional development: continuous in-service training for teachers and principals.

2.7 Social-Emotional Learning (SEL) as a Foundation

Recent research highlights the role of SEL in promoting inclusion. SEL equips students with skills in emotional regulation, empathy, and conflict resolution—particularly vital for students with autism. Participation in structured SEL activities has been associated with reduced anxiety and improved classroom engagement (Jones et al., 2020).

2.8 Assistive and Digital Technologies

Technological tools—such as AI-based applications, augmentative and alternative communication (AAC) systems, and video-based learning platforms—support communication and independence for students with autism. These innovations enhance learning and reduce barriers to participation in mainstream settings (Gillespie-Lynch et al., 2021).

In addition to technological innovations, recent literature highlights the importance of adopting strengths-based pedagogical frameworks. **White et al. (2023)** argue that inclusive education for autistic students is most effective when educators design learning environments that build on students' interests, competencies, and individual strengths. Such approaches complement assistive technologies by promoting autonomy and self-efficacy rather than focusing solely on deficits.

2.9 Peer Attitudes

The attitudes of non-autistic peers substantially influence the success of inclusion. When inclusion is accompanied by structured awareness programs, acceptance and positive attitudes increase. In contrast, the absence of educational mediation can lead to tensions and frustration. This underscores the need for system-wide policies that encourage empathy and tolerance (Nowell et al., 2022).

III.   Methodology

3.1 Research Design

This study adopted a mixed-methods approach, combining qualitative and quantitative techniques to capture the complexity of inclusion processes for students with ASD. Semi-structured interviews with principals, teachers, and aides were complemented by structured surveys to obtain both experiential and empirical data. This design is particularly suitable for complex educational contexts such as inclusive education (Creswell & Plano Clark, 2018).

3.2 International Comparative Context

Globally, the inclusion of students with autism in mainstream classrooms has gained increasing attention. Countries such as Finland, Australia, and Canada have developed holistic policies emphasizing teacher training, interdisciplinary collaboration, and systematic monitoring (Pellicano et al., 2022; Florian & Beaton, 2018). By contrast, Israel is in transition, with gaps in implementation and variability across schools (Ben-Yehuda & Zion, 2022). This comparative lens situates the Israeli findings within a broader international context.

3.3 Research Questions

The central research question was:

- What processes and monitoring tools do primary school principals employ to support the inclusion of students with autism in mainstream classrooms?

Sub-questions included:

      What challenges do principals, teachers, and aides encounter during inclusion?
      How does inclusion affect students with autism socially, emotionally, and academically?
      Which monitoring and evaluation methods are used to assess inclusion success?
1.   How are teachers and aides supported through professional development and ongoing guidance?

3.4 Sample

A purposive sample of 10 primary schools across Israel (center, north, south) was selected. Participants included:

- 10 school principals,

- 30 teachers of classes including students with autism,

- 10 permanent aides.

Selection criteria required at least one year of experience with inclusive education, active school leadership engagement in inclusion processes, and willingness to participate. The sample aimed to reflect the diversity of the Israeli school system and enable international comparison.

3.5 Data Collection Instruments

- Semi-structured interviews with principals, teachers, and aides focused on leadership roles, monitoring tools, support systems, and personal experiences. Examples of guiding questions included: "How do you track the progress of a student with autism?" and "What types of support do you receive for managing inclusion?"
- Quantitative surveys administered to teachers and aides examined perceived self-efficacy, inclusion success, and frequency of monitoring practices. The survey comprised 25 items rated on a 5-point Likert scale and was adapted from validated instruments (Chong et al., 2020; Humphrey & Symes, 2013).

3.6 Monitoring Practices Examined

The study examined several school-based monitoring practices, including:

- Monthly reports on students' academic and social progress,

- Regular team meetings involving principals, teachers, and aides to discuss challenges and successes,

- Classroom observations by principals with written documentation and recommendations.

3.7 Data Analysis

- Qualitative analysis: Interview transcripts were thematically analyzed to identify recurring themes, such as teacher emotional workload and leadership roles in providing support.

- Quantitative analysis: Survey data were processed using descriptive statistics and correlation analyses (e.g., relationships among staff training, monitoring frequency, and perceived inclusion success).

3.8 Ethical Considerations and Contribution

This study was conducted independently and followed the ethical standards of educational and social research. Participation was entirely voluntary, and all participants—principals, teachers, and aides—were informed about the aims of the research, their right to withdraw at any stage, and the confidentiality of their responses. No personal identifiers were collected, and all information was handled anonymously and stored securely.

The research contributes to the growing international body of knowledge on inclusive education by examining leadership, monitoring, and pedagogical strategies that support students with autism in mainstream schools. By situating Israeli practices within an international context, the study highlights transferable insights for policy and practice aimed at fostering equitable and sustainable inclusion.

IV. Results

4.1 Challenges in the Inclusion Process

The study identified substantial challenges in implementing inclusion of students with autism in mainstream classes, both in Israel and internationally:

- Professional training and support: In Israel, insufficient training for teachers and principals hindered effective inclusion. In contrast, systems in Canada and the UK emphasized sustained professional development and structured mentoring.

- Monitoring and evaluation: School-based monitoring in Israel was often inconsistent, especially in resource-constrained schools. In Finland, systematic assessment mechanisms ensured continuous tracking of student progress. These findings underscore the need to invest in structured monitoring systems to evaluate outcomes and improve inclusion processes.

4.2 Impact on Students with Autism

Students' experiences in mainstream classrooms were mixed:

- Social and emotional impact: Many students in Israel struggled socially, particularly when staff lacked adequate training and support. Similar international findings indicate that students required ongoing assistance to navigate social codes and develop peer relationships.

- Academic impact: Academically, students did not always receive individualized support—especially in large, crowded classes. In Finland, by contrast, personalized learning plans are routine practice.

4.3 Monitoring Mechanisms

In Israel, monitoring relied primarily on monthly reports by teachers and aides, with limited use of dynamic assessment tools. In the UK, by contrast, continuous assessment strategies involved multidisciplinary teams who tracked progress throughout the year. Schools employing frequent, structured monitoring reported higher satisfaction among staff and students.

4.4 Attitudes of Teachers and Principals

Attitudes toward inclusion among teachers and principals were mixed:

- Teachers: Many teachers in Israel reported feelings of overload and stress when managing inclusive classes that include students with autism and other special needs.

- Principals: Principals emphasized shortages of resources to support teachers in implementing inclusion.

By contrast, teachers in Canada and Scandinavia reported broader systemic support, including additional training hours and ongoing mentoring. This support strengthened their sense of efficacy and contributed to more successful implementation of inclusive practices.

V. Discussion

5.1 Summary and Interpretation

The findings show that inclusion of students with autism in mainstream classrooms is both promising and challenging. Individualized education plans, structured SEL programs, and assistive technologies yielded positive outcomes; however, gaps in teacher preparation and systematic monitoring limited sustainable progress. Inclusion cannot be achieved through isolated classroom practices alone; it requires strong pedagogical leadership and system-wide coordination.

Recent international studies further validate the patterns identified in the present research. **Dennehy, Cahill, and Moynihan (2024)** emphasize that school leadership is a decisive factor in shaping inclusive culture, echoing our finding that principals who provide ongoing professional guidance foster stronger collaboration and teacher confidence. Similarly, **Šilc et al. (2024)** demonstrate that inclusive school policies alone are insufficient unless supported by systematic monitoring and evaluation frameworks, reinforcing the need for data-driven tools as highlighted in this study. Complementing these structural and leadership dimensions, **White et al. (2023)** advocate for strengths-based pedagogical approaches that prioritize students' competencies and interests. Together, these studies converge with the current findings in underscoring that effective inclusion requires the alignment of leadership vision, structured monitoring, and pedagogical practices that recognize the individual strengths of learners with autism.

5.2 Implications for Leadership and Teacher Development

Principals must move beyond administrative management to act as instructional leaders who set the tone for inclusive culture. Teachers, in turn, need ongoing professional learning that develops pedagogical skills and social-emotional competencies for diverse classrooms. International comparisons emphasize that successful systems align policy mandates with adequate resources, teacher training, and accountability mechanisms.

5.3 Classroom Adaptations and Collaborative Work

Personalized adaptations—flexible assignments, differentiated instruction, and adapted materials—improve students' sense of belonging and academic engagement. Effective inclusion also depends on collaboration among teachers, aides, principals, and parents, ensuring continuity and consistent support across academic, social, and emotional domains.

5.4 Toward Structural Inclusion

Inclusive education for students with autism is not an optional program but a structural necessity grounded in equity and social justice. Aligning leadership, monitoring, and training positions schools to provide environments where students with autism can not only access mainstream classrooms but thrive within them.

VI. Conclusion & Recommendations

This study underscores that sustainable inclusion of students with autism in mainstream primary schools requires three interrelated pillars: strong pedagogical leadership, systematic monitoring, and continuous professional training. Without these, policy commitments risk remaining aspirational rather than operational.

Key recommendations include:

1. Establish structured professional development frameworks for teachers and school leaders focused on inclusive pedagogy and autism-specific strategies.

2. Embed systematic monitoring tools at both classroom and school levels to track student progress and inform instructional decision-making.

3. Promote collaborative leadership in which principals, teachers, aides, and specialists jointly develop and implement inclusion strategies.

4. Expand social-emotional learning and peer-awareness programs to reduce stigma and foster empathy across the school community.

5. Leverage assistive and digital technologies to support communication, independence, and personalized learning pathways.

In conclusion, effective inclusion is not only an educational practice but also a societal commitment. By aligning leadership, monitoring, and training, schools can ensure that students with autism not only access mainstream classrooms but also thrive within them, contributing to more equitable, tolerant, and future-ready education systems.

VII.   Practical Implications and Originality

This study provides new insights into how leadership, monitoring, and professional development interact to promote the inclusion of students with autism in mainstream primary schools. By integrating primary data from Israeli educators with comparative international perspectives, it bridges research and practice, offering actionable recommendations for policymakers, school leaders, and teacher educators. The mixed-methods design enhances the validity of the findings and identifies adaptable strategies for diverse educational systems. Overall, the research underscores inclusive education as both a pedagogical responsibility and a systemic commitment to equity and participation for all learners.

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