BRIDGING THE GAP: INTEGRATING INCLUSIVE EDUCATION INTO PRE-SERVICE TEACHER TRAINING IN PAKISTAN

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Abstract
Inclusive education is fundamental to achieving equitable learning environments, yet Pakistan's teacher training programs remain misaligned with its international obligations under the Sustainable Development Goals (SDGs) and the UN Convention on the Rights of Persons with Disabilities (UNCRPD). This study investigates the extent of inclusive education integration in pre-service teacher training programs across the Rawalpindi Division and Islamabad Capital Territory. Using a convergent parallel mixed-methods design, data was collected from 500 students and 50 faculty members. Quantitative data were analyzed using SPSS (descriptive and inferential statistics), while qualitative data were thematised to explore contextual insights. The study identifies persistent barriers— insufficient curriculum focus, lack of practical exposure, limited resources, and societal biases. Despite positive attitudes toward inclusion, both students and faculty reported inadequate preparation for addressing learner diversity. Grounded in the Diffusion of Innovation Theory, the research concludes that comprehensive reform is urgently needed. Recommendations include curriculum redesign, experiential learning partnerships, cultural sensitivity training, assistive technologies, policy enforcement, and community engagement. The paper offers a practical framework for policymakers and institutions to strengthen teacher readiness and promote rights-based education.

INTRODUCTION

Inclusive education represents both a moral imperative and a legal obligation for Pakistan. Despite international commitments, notably the Sustainable Development Goals (SDG 4: Quality Education) and the UNCRPD, systemic gaps persist in aligning teacher preparation with the realities of diverse classrooms. This paper addresses the critical disjuncture between policy aspirations and practical implementation in Pakistan's pre-service teacher training programs. The central problem is that while teachers are expected to create inclusive classrooms, they often lack the competencies, exposure, and institutional support necessary to do so. As a result, children with disabilities and diverse learning needs remain marginalized. This study provides empirical evidence and policy-oriented recommendations to strengthen teacher education in Pakistan.

2.   Literature Review

The literature on inclusive education spans global perspectives, regional case studies, and local experiences in Pakistan. This section

provides an in-depth review of seminal works, theoretical contributions, and empirical studies that frame the current research. The discussion highlights gaps in teacher preparedness, curriculum design, and systemic support for inclusive education. The review is organized into four sub-sections: (1) Theoretical Foundations, (2) Global Perspectives, (3) Regional Experiences, and (4) Pakistani Context. Each subsection synthesizes findings, compares trends, and identifies knowledge gaps.

2.1 Theoretical Foundations of Inclusive Education

Inclusive education has been anchored in human rights discourse, with the Salamanca Statement (UNESCO, 1994) and the Incheon Declaration (UNESCO, 2015) establishing education for all as a global mandate. Central to the theoretical underpinnings is Rogers' (2003) Diffusion of Innovation Theory, which explains how new ideas and practices spread within social systems. The theory identifies categories of adopters—innovators, early adopters, early majority, late majority, and laggards—offering a framework to analyze resistance and acceptance of inclusive pedagogy among educators (Sharma et al., 2012).

Avramidis and Norwich (2002) provided one of the earliest comprehensive reviews of teachers' attitudes toward inclusion, noting a strong link between training, exposure, and positive dispositions. More recent contributions, such as Florian and Black-Hawkins (2011), advanced the concept of 'inclusive pedagogy,' which advocates for teaching strategies that accommodate diversity without segregating learners. These theoretical foundations emphasize both attitudinal change and structural reform.

2.2 Global Perspectives on Inclusive Teacher Training

Globally, inclusive education practices vary considerably. In Finland, inclusion is embedded throughout teacher education, with compulsory modules and practical placements in diverse classrooms (Halinen & Järvinen, 2008). Research from South Africa highlights the challenges of transitioning from apartheid-era segregation to inclusive systems, stressing the importance of community-based approaches and teacher training (Engelbrecht, 2006). In the United States, inclusive education has been shaped by legislation such as the Individuals with Disabilities Education Act (IDEA), which mandates accommodations and support services for learners with special needs (Friend & Bursuck, 2014).

Comparative studies reveal that teacher preparedness is a consistent determinant of success. Forlin (2010) demonstrated that pre-service teachers equipped with exposure to inclusive classrooms display higher efficacy and adaptability. Meanwhile, Loreman, Deppeler, and Harvey (2010) emphasized the necessity of embedding inclusive practices into curriculum design, warning against tokenistic or superficial approaches.

2.3 Regional Experiences: South Asia and Developing Contexts

In South Asia, inclusive education faces unique challenges tied to socio-economic inequalities and cultural attitudes. India, for instance, has introduced inclusive education policies under the Right to Education Act (2009), but implementation remains inconsistent. Singal (2010) observed that while teachers express support for inclusion, lack of training and overcrowded classrooms limit effective practice. Similarly, Nepal and Bangladesh grapple with resource shortages and insufficient professional development (Sharma & Das, 2015).

Studies across the Global South indicate that policy frameworks often outpace implementation capacity. Engel brecht and Green (2018) note that in many developing contexts, inclusive education policies exist on paper but lack the institutional support, funding, and training necessary to translate into practice. These insights are directly relevant to Pakistan, where systemic constraints mirror those of its regional counterparts.

2.4 Inclusive Education in Pakistan: Empirical Evidence and Policy Gaps

In Pakistan, inclusive education has gained prominence in policy documents such as the National Education Policy (2009, 2017) and the Persons with Disabilities Act (2020). However, empirical studies reveal persistent gaps between policy aspirations and ground realities. Miles and Singal (2010) emphasized that inclusive education in Pakistan remains underdeveloped due to lack of trained teachers and limited resources. Similarly, Ahsan and Burnip (2007) found that teachers frequently express willingness to implement inclusive strategies, but lack the pedagogical knowledge and institutional backing to do so.

Local research highlights systemic challenges. Farooq (2012) demonstrated that teacher-training curricula rarely include comprehensive modules on inclusive pedagogy. Another study by Anwer, Batool, and Anjum (2021) indicated that faculty members themselves often lack exposure to inclusive practices, perpetuating a cycle of under-preparedness. Societal stigma compounds these issues, with parents and communities frequently resisting the integration of children with disabilities into mainstream classrooms.

Nonetheless, there are promising signs of innovation. Partnerships between NGOs and schools in urban areas have piloted inclusive models that provide teacher training, assistive technologies, and parental engagement. These initiatives, though limited in scale, demonstrate the potential for diffusion of inclusive practices when institutional and community support align.

2.5 Gaps in Literature

The reviewed literature underscores several critical gaps. First, while global studies offer extensive insights into inclusive education, there is a dearth of context-specific research from Pakistan that combines both quantitative and qualitative data. Second, most existing Pakistani studies are small-scale and lack generalizability. Third, the integration of Diffusion of Innovation Theory into inclusive education

research remains underutilized, particularly in developing contexts. Addressing these gaps provides a strong rationale for the present study.

3. Methodology and Data Analysis

This study employed a Convergent Parallel Mixed-Methods design to capture both breadth and depth. This section presents a comprehensive analysis of the data collected from 500 pre-service teachers and 50 faculty members across Rawalpindi Division and Islamabad Capital Territory. A convergent parallel mixed-methods design was employed: quantitative data were analyzed through descriptive and inferential statistics using IBM SPSS, while qualitative data were subjected to thematic coding. The findings are presented in four subsections i.e. Descriptive Statistics, Inferential Statistics, Qualitative Findings and Triangulated Insights.

3.1 Descriptive Statistics

➤ **Demographic Profile.** Among the 500 pre-service teachers, 60% were female and 40% male. The majority fell within the 18–22 age group (64%), while the remainder were aged 23–28 (36%). Faculty respondents (n=50) comprised lecturers (60%), assistant professors (30%), and professors (10%), representing a wide range of academic experience.

➤ **Preparedness and Attitudes**

• Mean **self-reported preparedness score = 2.8** on a 5-point Likert scale (moderate).

• **68%** reported **positive attitudes** toward inclusive education.

• Only **35% felt confident** they could implement inclusive practices effectively.

• **72% of faculty** expressed the view that inclusive education is "important but underemphasized in teacher training curricula."

3.2 Inferential Statistics

➤ **Correlation Analysis.** Pearson's correlation coefficients revealed significant positive relationships:

• **Preparedness ↔ Prior Exposure**: $r = 0.48$, $p < 0.01$

• **Preparedness ↔ Institutional Support**: $r = 0.42$, $p < 0.05$

- **Preparedness ↔ Curriculum Modules**: r = 0.39, p < 0.05

This indicates that teachers who had prior exposure to inclusive classrooms, studied curriculum modules on inclusion, or felt supported by their institutions were significantly more prepared.

➢ Regression Analysis**.** A multiple regression analysis was conducted with preparedness as the dependent variable.

- **Model R² = 0.47, p < 0.001** → the predictors together explain **47% of variance** in preparedness.

Prior exposure is the strongest predictor, followed by **institutional support**.

➢ ANOVA Results. An ANOVA revealed significant institutional differences:

- **F(2, 497) = 5.62, p < 0.01**

- Private universities scored significantly higher on preparedness (M = 3.2) compared to public universities (M = 2.6).

This highlights inequality between institutions, linked to resource availability and curricular emphasis.

3.3 Qualitative Findings

Semi-structured interviews provided rich insights. Four themes emerged:

➢ **Theme 1: Curriculum Gaps.**

Curriculum integration was seen as superficial.

- Faculty quote: "We mention inclusion in lectures, but there is no structured training or real exposure."

- Student quote: "During our practicum, we never visited a school with inclusive practices."

➢ **Theme 2: Resource Deficiencies.** Participants emphasized shortages of assistive tools, trained staff, and infrastructure.

- "Even if I want to teach inclusively, I don't have materials, nor is there support staff."

➢ **Theme 3: Attitudinal Barriers.** Social stigma remained a major obstacle.

- "Parents sometimes resist inclusion, fearing their child will 'fall behind' if placed with students with disabilities."

➢ **Theme 4: Prospects for Reform.** Despite challenges, optimism prevailed.

- "If universities worked with NGOs, we could gain real experience."

- "Dedicated modules would make us confident to teach inclusively."

3.4 Triangulated Insights.
Triangulation revealed a **convergent narrative**:

- **Quantitative data** → Prior exposure, institutional support, and curriculum modules strongly predict preparedness.

- **Qualitative data** → These same areas (exposure, curriculum, resources) were highlighted as gaps.

- **Synthesis** → While **attitudes are broadly positive**, teacher training remains inadequate, and systemic support is limited.

This dual perspective underscores that **inclusive education is not rejected in principle,** but **constrained by structural, curricular, and cultural barriers**. Without reforms, inclusion risks remaining aspirational rather than actionable.

4. Findings.
The findings of this study reveal a persistent gap between **policy commitments** and **practical implementation** of inclusive education in Pakistan's pre-service teacher training programs. While participants expressed positive attitudes, actual preparedness remained moderate to low. This paradox mirrors trends in other developing contexts, where inclusion is widely endorsed in principle but weakly enacted in practice (Engelbrecht & Green, 2018; Singal, 2010).

4.1 Linking Findings to Global Practices
In advanced systems such as **Finland**, inclusive education is embedded across curricula, supported by mandatory practicum placements in diverse classrooms (Halinen & Järvinen, 2008). Similarly, **South Africa** institutionalized inclusive principles within national curriculum reforms after apartheid, supported by teacher capacity building (Engelbrecht, 2006). In contrast, Pakistan's training programs

emphasize theoretical coverage with little experiential learning.

The gap reflects both **resource limitations** and **institutional inertia**. While international examples demonstrate, systemic reforms yield measurable success, Pakistan's current trajectory risks reinforcing exclusion.

4.2 Application of Diffusion of Innovation Theory

Rogers' (2003) **Diffusion of Innovation Theory** provides a useful lens for interpreting resistance.

- **Innovators**: A small group of committed faculty members and NGOs are piloting inclusive initiatives.
- **Early Adopters**: Some private universities integrate inclusion modules, though inconsistently.
- **Early Majority & Late Majority**: Public institutions represent cautious adopters, constrained by rigid curricula and resource scarcity.
- **Laggards**: Entrenched administrators and societal attitudes remain resistant to change.

This theoretical framing suggests that without **institutional incentives and community engagement**, diffusion will stall. Scaling inclusion requires shifting from isolated pilots to systemic adoption.

4.3 Structural and Cultural Barriers

The study highlights barriers that go beyond curriculum gaps:

- **Structural**: Lack of assistive technology, overcrowded classrooms, insufficient faculty expertise.
- **Cultural**: Deep-rooted stigma, parental resistance, misconceptions about disability.

These findings align with Avramidis and Norwich (2002), who emphasized the interdependence of structural and attitudinal readiness.

4.4 Contribution to Literature

This study adds to the limited body of Pakistani scholarship by:

- Employing a **mixed-methods approach** with a large sample, enhancing generalizability.

- Integrating **Diffusion of Innovation Theory** to explain variability in adoption.
- Providing **triangulated evidence** linking exposure, institutional support, and preparedness.

5. Recommendations

The evidence calls for **multi-level reforms**. Recommendations are grouped under curriculum, training, resources, policy, and community engagement.

5.1 Curriculum Reform

- Embed inclusive pedagogy as a **core component** across all B.Ed./BS Education programs.
- Introduce **dedicated modules** on inclusive strategies, assistive technology, and classroom diversity.
- Align curricula with **UNCRPD** and **SDG 4.5** commitments.

5.2 Experiential Learning

- Partner with inclusive schools and NGOs to provide field placements.
- Mandate practicum experiences in diverse classrooms.
- Use case-based learning to build practical problem-solving skills.

5.3 Faculty Development

- Implement continuous professional development (CPD) for teacher educators on inclusion.
- Incentivize faculty research on inclusive education.
- Facilitate international collaborations with universities in Finland, South Africa, and India for knowledge sharing.

5.4 Resource Allocation

- Provide assistive technologies (Braille tools, screen readers, sign language interpreters).
- Establish resource centres within teacher education institutions.
- Recruit support staff (special educators, psychologists).

5.5 Policy and Governance

- Enforce Persons with Disabilities Act (2020) with monitoring and accountability.
- Introduce performance indicators for universities to track inclusive readiness.
- Allocate dedicated funding streams for inclusive education in federal and provincial budgets.

5.6 Community Engagement

- Launch awareness campaigns to counter stigma.
- Engage parents and local communities in inclusive initiatives.
- Promote role models of successful inclusion to reshape perceptions.

6. Conclusion

Inclusive education is both a **constitutional mandate** and a **moral obligation** for Pakistan. This study demonstrates that while attitudes are positive, preparedness remains inadequate due to curriculum gaps, limited exposure, and systemic constraints. Through the lens of Diffusion of Innovation Theory, the analysis underscores that isolated initiatives will not suffice—systemic transformation is required.

The recommendations outlined provide a **policy-ready roadmap** for aligning teacher training with Pakistan's commitments under the **SDGs** and **UNCRPD**. Investing in inclusive teacher education is not merely a pedagogical reform but a step toward **educational equity and social justice.**

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