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Inclusive Education in Practice: Preparedness of Pre-Service Teachers to Address Diverse Learning Needs

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Abstract

Inclusive education requires teachers to recognise learner diversity and adapt teaching, assessment, classroom interaction, and support accordingly. Although inclusive education has gained increasing attention in educational policy and teacher education, pre-service teachers may not always feel adequately prepared to translate its principles into effective classroom practice. This conceptual paper examines the preparedness of pre-service teachers to address diverse learning needs, focusing on the knowledge, attitudes, pedagogical skills, practical experiences, and collaborative competencies required for inclusive teaching. It argues that teacher preparedness extends beyond theoretical understanding to include the ability to identify learning barriers, differentiate instruction, adapt assessment, manage heterogeneous classrooms, use appropriate resources, and collaborate with families and other professionals. The paper examines challenges that may limit preparedness, including insufficient school-based exposure, limited authentic practice, resource constraints, and gaps between theoretical coursework and classroom realities. Drawing on literature on inclusive education and teacher preparation, the paper proposes the READY-IN Framework as a conceptual model integrating recognition of learner diversity, empathy and inclusive attitudes, adaptive pedagogy, differentiated assessment, continuous professional learning, inclusive classroom management, and networking and collaboration. The paper concludes that inclusive teacher preparation requires stronger integration of theory, practice, reflection, mentoring, and institutional support.

Keywords; Inclusive education; pre-service teachers; teacher preparedness; diverse learning needs; inclusive pedagogy; teacher education; differentiated instruction

INTRODUCTION

Inclusive education is grounded in the principle that all learners should have meaningful opportunities to participate and learn within education systems that recognise and respond to their diverse needs. Diversity may relate to disability, learning profile, language, culture, socioeconomic circumstances, or other individual characteristics. In India, the National Education Policy (NEP) 2020 emphasises equitable and inclusive education and calls for teachers and schools to develop inclusive learning environments.

The effectiveness of inclusive education depends substantially on what teachers are prepared to do in actual classrooms. Inclusive teaching requires more than awareness of diversity. Teachers need to identify barriers to learning, adapt instruction, differentiate learning activities, use appropriate assessment strategies, manage heterogeneous classrooms, and collaborate with relevant stakeholders. UNESCO similarly emphasises that inclusive education requires teachers to possess the values, knowledge, and attitudes necessary to teach all learners.

This places pre-service teacher education at a critical point in the development of inclusive practice. Teacher education programmes can establish conceptual foundations in inclusion, diversity, disability, equity, and pedagogy.

However, coursework alone may not adequately prepare future teachers for the complexity and uncertainty of real classrooms. School-based experiences, guided practice, mentoring, and structured reflection are therefore important for connecting theoretical understanding with professional decision-making.

Against this background, this conceptual paper examines the preparedness of pre-service teachers to address diverse learning needs, identifies major dimensions and challenges of inclusive teacher preparedness, and proposes the **READY-IN Framework** as a conceptual model for strengthening the connection between teacher education and inclusive classroom practice.

CONCEPTUALISING INCLUSIVE EDUCATION AND TEACHER PREPAREDNESS

Inclusive education extends beyond placing learners with different characteristics in a common classroom. It involves identifying and reducing barriers to **participation, learning, and achievement**, while adapting educational processes to accommodate learner diversity. This perspective recognises differences in ability, language, culture, socioeconomic circumstances, learning profiles, and prior educational experiences as part of classroom diversity.

Within this context, **teacher preparedness** refers to the knowledge, dispositions, skills, and practical capacity that enable pre-service teachers to respond appropriately to diverse learning needs. It is inherently multidimensional. **Conceptual preparedness** involves understanding inclusion, diversity, disability, equity, and the principles underlying inclusive education. **Attitudinal preparedness** concerns acceptance of learner differences, commitment to participation and equity, and willingness to adapt professional practice. **Pedagogical preparedness** encompasses differentiated instruction, flexible teaching strategies, adaptation of learning materials, and accessible learning experiences. **Assessment preparedness** involves using varied approaches to recognise learner progress and inform subsequent instruction.

Preparedness also has a critical **practice-based dimension**. Knowledge of inclusive principles does not automatically translate into effective classroom action. Pre-service teachers need opportunities to observe diverse classrooms, engage in guided practice, receive feedback, and reflect on professional decisions. Research on teacher preparation similarly indicates that increased knowledge does not necessarily remove concerns about inclusive practice. (Forlin & Chambers, 2011)

Accordingly, preparedness should not be reduced to the completion of an inclusive-education course. Effective preparation requires alignment among **knowledge, attitudes, pedagogical competence, practical experience, and professional collaboration**.

DIVERSE LEARNING NEEDS IN CONTEMPORARY CLASSROOMS

Inclusive classrooms bring together learners whose educational needs may differ considerably. Diversity may arise from disability and specific learning difficulties, but it also includes differences in language, culture, socioeconomic circumstances, prior learning, pace of learning, communication, and social and emotional needs. Recognising this range is important because inclusive practice cannot be reduced to a single set of strategies applicable to every learner.

Learners with **disabilities and specific learning needs** may require adaptations in instructional materials, communication, classroom organisation, assessment, or assistive technology. Pre-service teachers therefore need sufficient understanding of accessibility and pedagogical adaptation without assuming that all learners with a particular condition require identical support.

Linguistic and cultural diversity can also influence participation and learning. Differences in home language, cultural experience, and communication patterns may affect how learners engage with classroom content. Inclusive teachers need culturally responsive and linguistically sensitive approaches that value learners' backgrounds while maintaining meaningful access to curriculum.

Differences in **prior learning and pace** create another important dimension. Learners entering the same classroom may possess different levels of prerequisite knowledge, interests, and rates of progress. Differentiated instruction can provide varied pathways towards common learning goals rather than relying exclusively on uniform tasks.

Socioeconomic and contextual factors may further influence participation. Limited access to learning materials, digital resources, or supportive learning environments can affect engagement. Teachers cannot independently resolve structural inequalities, but they can identify barriers within their instructional context and use available resources to support participation.

These forms of diversity may intersect. Consequently, effective inclusive practice requires teachers to move

beyond category-based assumptions and consider the **individual learner within the classroom context**.

DIMENSIONS OF PRE-SERVICE TEACHER PREPAREDNESS

Preparedness for inclusive teaching is a multidimensional professional capacity. It involves not only understanding inclusion but also developing the dispositions, pedagogical skills, judgement, and collaborative abilities required to respond to learner diversity.

Knowledge and Conceptual Understanding

Pre-service teachers require a sound understanding of inclusive education, learner diversity, disability, learning barriers, accessibility, equity, and relevant educational provisions. This foundation helps them interpret learner needs appropriately and avoid deficit-oriented assumptions.

Inclusive Attitudes and Professional Dispositions

Teachers' beliefs about learner diversity influence expectations, interactions, and willingness to adapt practice. Teacher education should encourage critical reflection on stereotypes and assumptions while developing empathy, respect, equity, and commitment to learner participation. Research has repeatedly identified teacher attitudes and concerns as important dimensions of inclusive practice. (Avramidis & Norwich, 2002; de Boer et al., 2011)

Adaptive Pedagogy

Inclusive teaching requires flexibility in how learning is presented, supported, and extended. Pre-service teachers should develop competence in differentiation, scaffolding, flexible grouping, multimodal resources, and varied instructional approaches. Inclusive pedagogy emphasises extending learning opportunities without unnecessarily separating learners. (Florian & Black-Hawkins, 2011)

Responsive Assessment

Assessment should provide diverse learners with meaningful opportunities to demonstrate learning and should generate information that informs subsequent teaching. Pre-service teachers therefore need experience with formative assessment, varied modes of learner response, appropriate accommodations, and instructional adjustment.

Inclusive Classroom Management

An inclusive classroom requires structures that support participation, belonging, respectful interaction, and positive behaviour. Pre-service teachers need strategies for establishing routines, managing diverse group dynamics,

preventing exclusion, and responding constructively to behavioural and interpersonal challenges.

Practice-Based Learning and Reflection

School-based observation, supervised teaching, case analysis, microteaching, mentoring, and structured reflection can help pre-service teachers interpret complex classroom situations and evaluate their instructional decisions. Cycles of planning, practice, feedback, and revision are particularly valuable for developing professional judgement.

Collaboration and Professional Support

Inclusive practice is strengthened when teachers work with families, colleagues, special educators, counsellors, school leaders, and other professionals. Pre-service teachers therefore need communication, teamwork, consultation, and referral skills, together with an understanding of when additional expertise is required.

These dimensions collectively define preparedness as a capacity for informed, adaptive, and collaborative professional action.

CHALLENGES IN PREPARING PRE-SERVICE TEACHERS FOR INCLUSIVE PRACTICE

Developing readiness for inclusive teaching involves challenges at curricular, experiential, attitudinal, and institutional levels.

Theory–Practice Discontinuity

Inclusive education may be addressed through coursework without sufficient opportunities to apply its principles in authentic classroom situations. Pre-service teachers may therefore understand inclusive principles while remaining uncertain about making appropriate instructional decisions in complex settings.

Limited and Uneven Field Exposure

Limited exposure to diverse classrooms can restrict opportunities to observe varied learning profiles and inclusive teaching practices. Field experience is most valuable when it involves purposeful observation, supervised participation, mentoring, and reflection rather than placement alone.

Insufficient Practice-Oriented Competence

Knowing that instruction should be differentiated does not necessarily mean knowing how to differentiate it effectively. Pre-service teachers may require further preparation in adapting materials, designing accessible

activities, modifying assessment, and using assistive resources.

Resource and Institutional Constraints

Limited access to appropriate materials, assistive technology, specialist expertise, manageable class sizes, or institutional guidance may restrict the application of inclusive strategies. Teacher preparation should therefore address both ideal and resource-constrained classroom contexts.

Attitudinal and Confidence-Related Barriers

Beliefs about disability and learner diversity can influence teachers' expectations and willingness to adapt practice. Authentic interaction, reflective activities, mentoring, and opportunities to examine assumptions can contribute to more inclusive professional dispositions.

Weak School–Teacher Education Partnerships

Weak coordination between teacher education institutions and schools may result in limited mentoring, inconsistent expectations, and insufficient feedback. Stronger partnerships can support shared planning, supervised practice, collaborative problem-solving, and systematic reflection.

These challenges indicate that inclusive preparedness cannot be achieved simply by increasing theoretical content. It requires **deliberate integration of knowledge, professional dispositions, practice, reflection, mentoring, and institutional support**.

STRENGTHENING INCLUSIVE TEACHER EDUCATION

Strengthening pre-service teacher preparedness requires teacher education to move beyond the transmission of inclusive-education concepts towards the **integration of knowledge, practice, reflection, and professional support**.

Curricular integration is a first priority. Inclusion should not be treated solely as the responsibility of a specialised course. Concepts such as accessibility, differentiation, equity, learner diversity, and inclusive assessment can be embedded across pedagogy, curriculum, assessment, classroom management, and educational technology.

Practice-based preparation should accompany this foundation. Structured school experiences, classroom observation, case analysis, simulations, microteaching, and

supervised practice can expose pre-service teachers to authentic situations involving diverse learners. Feedback from teacher educators and school mentors can help them progressively refine their responses.

Collaborative preparation is equally important. Partnerships among teacher education institutions, schools, teacher educators, school mentors, special educators, families, and peers can provide broader perspectives on learner support. This aligns with the wider emphasis on collaborative and inclusive professional cultures within NEP 2020.

Finally, **reflective and continuous professional learning** should be embedded throughout teacher preparation. Portfolios, reflective journals, classroom-based assignments, and structured discussions can help pre-service teachers examine assumptions and evaluate instructional choices. Appropriate digital and assistive technologies should be incorporated as tools for accessibility and participation rather than as ends in themselves.

THE READY-IN FRAMEWORK FOR INCLUSIVE TEACHER PREPAREDNESS

The preceding analysis suggests that preparedness for inclusive teaching is a process of developing the capacity to **recognise learner diversity, respond appropriately, and continually adapt professional practice**. On this basis, this paper proposes the **READY-IN Framework** as a conceptual model for strengthening pre-service teachers' readiness for inclusive classroom practice.

Dimension	Core focus
R – Recognition of Learner Diversity	Identifying learners' strengths, needs, backgrounds, communication patterns, and learning profiles without reducing them to labels.
E – Empathy and Inclusive Attitudes	Respect, acceptance of difference, equitable expectations, and willingness to adapt practice.
A – Adaptive Pedagogy	Flexible teaching strategies, materials, interaction, scaffolding, and learning support.
D – Differentiated Assessment	Varied assessment approaches, identification of learning barriers, and instructional adjustment.
Y – Year-round Professional Learning	Continuous learning through mentoring, reflection, professional dialogue, and field experience.
I – Inclusive Classroom Management	Structured, participatory, respectful, and psychologically safe learning environments.

N – Networking and Collaboration	Collaboration with peers, families, teacher educators, special educators, counsellors, and other professionals.
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The seven dimensions are **interdependent rather than sequential**. Recognition informs pedagogical adaptation; inclusive attitudes shape classroom interactions; assessment provides evidence for instructional adjustment; professional learning strengthens competence; and collaboration expands the resources available for responding to complex needs.

The framework therefore conceptualises preparedness as an evolving professional capacity rather than a fixed outcome of teacher education. It is proposed as a conceptual model and requires empirical examination across diverse teacher education and school contexts.

Figure 1. READY-IN Framework for Pre-Service Teacher Preparedness for Inclusive Practice

Learner diversity and contextual barriers → READY-IN dimensions → informed teacher preparedness → adaptive and inclusive classroom practice → meaningful participation and learning.

DISCUSSION

The analysis indicates that pre-service teacher preparedness for inclusive education should be understood as a **multidimensional professional capacity**, rather than as knowledge of inclusive principles alone. Conceptual understanding provides the foundation, but its educational value depends on whether pre-service teachers can translate that understanding into appropriate classroom decisions.

A key concern is the **theory–practice discontinuity** within teacher preparation. Pre-service teachers may learn about differentiation, equity, accessibility, and learner diversity while having limited opportunities to apply these principles in complex classroom situations. Research has similarly shown that increased knowledge may not automatically resolve concerns about inclusive teaching. (Forlin & Chambers, 2011)

The READY-IN Framework brings these interconnected requirements into a single conceptual structure. It provides a lens for examining whether teacher preparation develops the capacities required to move from **recognising diversity to responding to diversity**. It may also support teacher educators in designing practice-based activities and developing future indicators of pre-service teacher readiness.

However, the framework should be regarded as a **conceptual proposition rather than a validated assessment model**. Its dimensions, relationships, and applicability require empirical examination across different teacher education programmes, institutional settings, and learner populations.

CONCLUSION

Inclusive education depends substantially on teachers' capacity to respond thoughtfully and effectively to learner diversity. This paper has argued that pre-service teacher preparedness is not adequately captured by theoretical knowledge of inclusion. It involves the integration of **understanding, inclusive dispositions, pedagogical adaptability, responsive assessment, classroom practice, reflection, and collaboration**.

The proposed **READY-IN Framework** offers a conceptual structure for understanding and strengthening these interconnected dimensions of preparedness. Its central premise is that teacher education should enable future teachers to move beyond recognising the principle of inclusion towards making informed, context-sensitive decisions that support learners' participation and learning.

For teacher education institutions, this implies greater alignment among coursework, school-based experience, mentoring, reflective practice, and professional collaboration. The framework is proposed as a basis for further inquiry rather than as a validated measurement model.

Strengthening inclusive education ultimately requires a shift from **knowing about inclusion to being prepared to enact it**.

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