

Transitioning to Multidisciplinary Teacher Education Institutions (TEIs): Challenges and Roadmaps by 2030

Haribansh Prasad Singh

Assistant Professor

Department of Mathematics

Teachers' Training College Bhagalpur (Bihar)

Abstract

The transformation of Teacher Education Institutions (TEIs) into multidisciplinary institutions has become one of the most significant structural reforms proposed under the National Education Policy 2020. The policy envisions that by 2030, all standalone teacher education institutions in India will either evolve into multidisciplinary higher education institutions or become integrated units within universities. This transition is intended to improve teacher quality, promote interdisciplinary learning, strengthen research culture, and align teacher preparation with twenty-first-century educational needs. However, the transition process is complex and uneven across the country. Many TEIs continue to face infrastructural limitations, a shortage of qualified faculty, weak research ecosystems, financial constraints, regulatory uncertainty, and technological gaps. Rural and private institutions are particularly vulnerable due to limited institutional capacity and dependence on traditional models of teacher training.

This research article critically examines the concept, significance, implementation challenges, and roadmap for transitioning to multidisciplinary TEIs in India. The study explores policy frameworks, institutional realities, digital transformation, governance reforms, faculty preparedness, curriculum restructuring, and issues of equity and regional disparity. It also analyzes the role of Integrated Teacher Education Programmes (ITEP), research integration, and collaborative governance in enabling sustainable reform. Drawing upon recent policy reports, scholarly literature, and contemporary developments between 2020 and 2026, the paper argues that successful transformation requires more than structural merger or administrative compliance. It demands deep academic reorientation, investment in institutional capacity, professional development, and context-sensitive implementation strategies. The article concludes by proposing a phased roadmap toward 2030 based on institutional readiness, collaborative ecosystems, digital inclusion, and quality assurance mechanisms.

Keywords: Multidisciplinary Teacher Education, NEP 2020, Teacher Education Institutions, ITEP, Higher Education Reform

1. Introduction

Teacher education is central to the quality and future direction of any education system. Teachers shape not only academic outcomes but also social values, democratic participation, critical thinking, and national development. Recognizing the strategic importance of teachers, the National Education Policy 2020 introduced sweeping reforms intended to restructure teacher preparation in India. One of the most ambitious reforms proposed under the policy is the transition of Teacher Education Institutions (TEIs) into multidisciplinary institutions by 2030.

For decades, India's teacher education sector has been characterized by fragmentation, uneven quality, and overdependence on standalone Bachelor of Education (B.Ed.) colleges. Many of these institutions function with limited academic resources, weak research orientation, inadequate practicum support, and minimal interdisciplinary interaction. As a result, teacher education often became isolated from mainstream higher education and disconnected from emerging educational realities.

NEP 2020 seeks to address this structural weakness by integrating teacher education within multidisciplinary universities and colleges. According to the policy vision, teacher education should no longer exist as a narrow professional certification process. Instead, it should become intellectually rigorous, research-oriented, multidisciplinary, and professionally integrated.

This transition reflects broader global trends in higher education reform. Countries with strong teacher education systems, such as Finland and Singapore, emphasize interdisciplinary learning, research integration, and university-based teacher preparation. India's reform agenda attempts to move in a similar direction while addressing its own demographic, institutional, and socio-economic realities.

However, transforming thousands of TEIs across India by 2030 presents enormous challenges. Institutional readiness varies widely. Urban universities may possess adequate infrastructure and faculty diversity, while many rural and private colleges struggle with basic facilities. The transition also raises concerns about funding, governance, regulatory coordination, faculty recruitment, curriculum redesign, and equity.

This article critically examines the transition toward multidisciplinary TEIs in India by focusing on both opportunities and structural barriers. It argues that successful transformation requires a carefully phased roadmap that balances policy ambition with institutional realities.

2. Conceptual Understanding of Multidisciplinary Teacher Education

The idea of multidisciplinary education is rooted in the belief that complex social and educational problems cannot be understood through isolated disciplinary perspectives. Teaching requires simultaneous knowledge of psychology, sociology, philosophy, technology, language, assessment, inclusion, and subject pedagogy.

Traditional standalone TEIs often separate teacher preparation from broader academic inquiry. Pre-service teachers frequently received limited exposure to interdisciplinary research, innovation, or collaborative learning environments. NEP 2020 critiques this fragmentation and advocates integration within comprehensive higher education ecosystems.

Multidisciplinary TEIs are expected to provide:

- ❖ Integration of liberal arts and sciences
- ❖ Research-oriented teacher preparation
- ❖ Flexible curriculum pathways
- ❖ Exposure to technology and innovation
- ❖ Interdisciplinary faculty collaboration
- ❖ Holistic student development

The proposed transformation aligns with global educational discourse promoted by UNESCO and OECD, both of which emphasize interconnected knowledge systems and competency-based teacher preparation.

3. Historical Background of Teacher Education Institutions in India

India's teacher education system expanded rapidly after independence. Initially, teacher training institutes were established to address shortages of qualified teachers in primary and secondary education. Over time, B.Ed. Colleges proliferated, especially in the private sector.

While expansion increased access, quality concerns also intensified. Many institutions focused more on certification than professional competence. Several reports identified issues such as:

- ❖ Commercialization of teacher education
- ❖ Weak practicum experiences
- ❖ Inadequate faculty qualifications

- ❖ Limited research engagement
- ❖ Outdated curricula

The National Council for Teacher Education attempted to regulate standards, but enforcement remained inconsistent. By the late 2010s, teacher education faced a credibility crisis in many regions.

NEP 2020, therefore viewed multidisciplinary integration as essential for revitalizing teacher education.

4. NEP 2020 and the Vision of Multidisciplinary TEIs

The National Education Policy 2020 proposes that by 2030, all teacher education programmes should be conducted within multidisciplinary colleges and universities. The policy also introduces the four-year Integrated Teacher Education Programme (ITEP), designed to combine disciplinary depth with pedagogical preparation.

The rationale behind this vision includes:

- ❖ Improving academic quality
- ❖ Encouraging interdisciplinary thinking
- ❖ Enhancing teacher professionalism
- ❖ Promoting research and innovation
- ❖ Strengthening institutional accountability

Recent implementation developments indicate that the transition process has already begun through phased ITEP expansion across institutions.

The policy emphasizes that future teachers must possess not only pedagogical skills but also broad intellectual understanding and adaptability to changing educational environments.

5. Structural Challenges in Transitioning to Multidisciplinary TEIs

5.1 Institutional Fragmentation

One of the biggest challenges is the large number of standalone TEIs operating independently from universities. Many institutions lack the academic ecosystem required for multidisciplinary integration.

Recent studies highlight that institutional transition remains uneven due to governance and infrastructural constraints.

Standalone colleges often face difficulties in:

- ❖ Establishing interdisciplinary departments
- ❖ Recruiting diversified faculty
- ❖ Developing research infrastructure
- ❖ Meeting university-level accreditation standards

5.2 Financial Constraints

Transforming TEIs into multidisciplinary institutions requires significant investment in:

- ❖ Infrastructure modernization
- ❖ ICT-enabled classrooms
- ❖ Laboratories and libraries
- ❖ Faculty recruitment
- ❖ Research centers

Private TEIs, especially in rural and economically weaker regions, may struggle to mobilize sufficient resources. Scholars note that many institutions already operate with limited budgets and dependence on tuition revenue.

Without adequate financial support mechanisms, smaller institutions risk closure or marginalization.

5.3 Faculty Shortage and Interdisciplinary Expertise

- ❖ Multidisciplinary education requires faculty with expertise across disciplines and capacity for collaborative teaching. However, India faces a shortage of qualified teacher educators in areas such as:
- ❖ Educational technology
- ❖ Inclusive education
- ❖ Educational assessment
- ❖ Research methodology
- ❖ Digital pedagogy

Recent studies indicate that many TEIs lack adequately trained faculty members capable of implementing NEP-oriented reforms.

Faculty development therefore becomes central to successful transition.

6. Curriculum Restructuring and Academic Transformation

Transitioning to multidisciplinary TEIs requires substantial curriculum redesign.

Traditional B.Ed. Programmes often emphasized theoretical coursework disconnected from classroom realities. Under ITEP and NEP reforms, curricula must integrate:

- ❖ Subject specialization
- ❖ Pedagogical theory
- ❖ Field immersion
- ❖ Research projects
- ❖ Digital competence
- ❖ Inclusive education

Curriculum restructuring also requires alignment with competency-based learning models.

6.1 Integration of Liberal Arts and Teacher Education

A multidisciplinary model allows future teachers to engage with literature, philosophy, social sciences, environmental studies, and arts alongside pedagogy.

This broader exposure can help teachers:

- ❖ Develop critical thinking
- ❖ Understand diverse social realities,
- ❖ Improve communication skills
- ❖ Promote holistic education

Such integration represents a shift from narrow professional training toward intellectual and reflective teacher formation.

7. Digital Transformation and Technological Preparedness

Technology has become central to educational reform after the COVID-19 pandemic. Multidisciplinary TEIs must therefore integrate digital infrastructure and blended learning systems.

However, the digital divide remains a major obstacle. Many rural institutions lack:

- ❖ Reliable internet connectivity
- ❖ Smart classrooms

- ❖ Digital laboratories
- ❖ Faculty ICT training

Studies highlight that low ICT competence among teacher educators restricts innovation and technology integration.

7.1 AI and Future Teacher Education

Emerging technologies such as artificial intelligence, learning analytics, and virtual simulations are reshaping teacher preparation globally.

Future TEIs may use AI-supported systems for:

- ❖ Personalized learning pathways
- ❖ Teaching simulations
- ❖ Assessment feedback
- ❖ Academic analytics

Yet ethical concerns surrounding privacy, bias, and overdependence on automation require careful policy regulation.

8. Governance and Regulatory Challenges

Transitioning to multidisciplinary TEIs requires coordination among multiple bodies:

- ❖ National Council for Teacher Education
- ❖ University Grants Commission
- ❖ State governments
- ❖ Universities
- ❖ Accreditation agencies

Regulatory overlap and bureaucratic complexity can slow down reform implementation.

Some scholars argue that excessive centralization may undermine federal autonomy and contextual flexibility.

9. Rural–Urban Disparities and Equity Concerns

The transition toward multidisciplinary TEIs may unintentionally deepen inequality if resource-rich urban institutions adapt more quickly than rural colleges do.

The challenges in rural and tribal regions include:

- ❖ Poor infrastructure
- ❖ Faculty shortages
- ❖ Limited research culture
- ❖ Weak digital connectivity

If reforms are implemented without differentiated support, institutional exclusion may increase.

Therefore, equity-sensitive transition policies are essential.

10. Research Culture and Knowledge Production

One of the strongest arguments for multidisciplinary TEIs is the possibility of strengthening the educational research.

Historically, standalone colleges have focused primarily on teaching and certification. However, multidisciplinary universities can promote:

- ❖ Interdisciplinary research collaborations
- ❖ Evidence-based pedagogy

- ❖ Educational innovation
- ❖ Policy engagement

Research-oriented teacher education improves professional quality and institutional credibility.

11. International Perspectives and Comparative Insights

Countries with high-performing educational systems typically integrate teacher education within universities.

Finland

Teacher education is research-intensive and university-based.

Singapore

Teacher preparation combines academic rigor and continuous professional development.

Australia

Integrated programmes emphasize practicum, reflective practice, and interdisciplinary learning.

India's reform agenda reflects similar principles but must be adapted to its scale and diversity.

In addition to these countries, several other educational systems have moved toward multidisciplinary and competency-oriented teacher education models. In Canada and the Netherlands, teacher preparation programs increasingly combine educational theory with practical school-based research and collaborative learning experiences. These systems recognize that modern teachers must possess not only subject expertise but also the ability to address diverse classroom realities, technological change, and socioemotional learning needs. Internationally, there is a growing understanding that isolated teacher-training institutions are less effective in preparing teachers for complex educational environments.

Another important global trend is the emphasis on teacher autonomy and professional trust. Countries with strong teacher-education systems often provide greater academic freedom to institutions while maintaining rigorous quality standards. This balance between accountability and autonomy enables innovation and reflective practices. International experiences provide useful lessons for India, but direct policy transplantation may not be practical because of India's population size, regional diversity, socio-economic inequalities, and federal educational structure. Therefore, India's multidisciplinary transition must remain context-sensitive while learning from the best global practices

12. Emerging Implementation Trends in India

The implementation of multidisciplinary Teacher Education Institutions (TEIs) in India has gradually gained momentum after the introduction of the National Education Policy 2020. Although the transition process is still evolving, several universities, regulatory bodies, and state governments have initiated institutional reforms aligned with the multidisciplinary vision proposed under NEP 2020.

One of the most visible developments is the phased expansion of the Integrated Teacher Education Programme (ITEP) across selected higher education institutions. The National Council for Teacher Education (NCTE) has invited eligible multidisciplinary institutions and universities to adopt ITEP models, reflecting a gradual shift away from isolated B.Ed. colleges toward integrated academic ecosystems. Recent implementation rounds indicate increasing institutional participation, especially among central universities and large state universities.

Another emerging trend is the establishment of institutional task forces and NEP implementation committees within universities. These bodies are working on curriculum redesign, faculty orientation, academic restructuring, and interdisciplinary course integration. Universities are increasingly revising their teacher education curricula to include components such as research methodology, digital pedagogy, inclusive education, environmental education, and

experiential learning. In some states, universities have also started collaborating with schools and local communities to strengthen field engagement and practicum experiences.

Digital transformation has also become a major implementation trend. After the COVID-19 pandemic, TEIs accelerated the use of Learning Management Systems (LMS), blended learning methods, virtual classrooms, and online assessment tools. Institutions are increasingly recognizing that future teachers require digital competence alongside pedagogical knowledge. However, implementation remains uneven because rural institutions often face infrastructural and technological limitations.

Faculty development initiatives have simultaneously expanded across many institutions. Workshops, Faculty Development Programmes (FDPs), orientation sessions, and interdisciplinary training modules are being organized to familiarize teacher educators with competency-based education, multidisciplinary teaching methods, and NEP-oriented reforms. Despite these efforts, the shortage of adequately trained interdisciplinary faculty continues to be a major challenge, especially in smaller private colleges.

At the policy level, quality assurance and accreditation mechanisms are also gradually being aligned with multidisciplinary expectations. Regulatory discussions increasingly emphasize research culture, institutional collaboration, innovation, and holistic educational outcomes rather than merely procedural compliance. This indicates a broader shift from certification-oriented teacher education toward professional and research-oriented academic models.

However, implementation trends across India remain highly uneven. Metropolitan and well-funded institutions are adapting more rapidly due to stronger infrastructure, academic networks, and financial resources, whereas many rural and standalone TEIs continue to struggle with institutional readiness. Therefore, while the transition toward multidisciplinary TEIs has clearly begun, the pace and depth of reform vary significantly across regions and institutional categories.

13. Roadmap for Transitioning to Multidisciplinary TEIs by 2030

Phase I (2025–2026): Institutional Readiness Assessment

- ❖ Conduct infrastructure audits
- ❖ Assess faculty capacity
- ❖ Identify institutional gaps
- ❖ Develop strategic transition plans

Phase II (2026–2027): Academic and Infrastructure Upgradation

- ❖ Introduce multidisciplinary departments
- ❖ Modernize libraries and laboratories
- ❖ Develop digital learning systems
- ❖ Recruit interdisciplinary faculty

Phase III (2027–2028): Curriculum Integration and Faculty Development

- ❖ Implement ITEP-aligned curriculum
- ❖ Organize faculty training programmes
- ❖ Promote collaborative teaching models
- ❖ Strengthen practicum partnerships with schools

Phase IV (2028–2029): Research and Innovation Strengthening

- ❖ Establish research centers
- ❖ Encourage interdisciplinary projects
- ❖ Promote publication culture

- ❖ Build institutional collaborations

Phase V (2029–2030): Quality Assurance and Sustainability

- ❖ Conduct external quality reviews
- ❖ Strengthen accreditation mechanisms
- ❖ Ensure long-term financial sustainability
- ❖ Promote community engagement

14. Policy Recommendations

1. Increase public investment in teacher- education infrastructure.
2. Special transition grants should be created for rural TEIs.
3. Develop national faculty development programmes.
4. Promote digital inclusion and ICT training for the elderly.
5. Encouraging university-school partnerships.
6. Establish clear regulatory coordination mechanisms.
7. Strengthen multilingual and inclusive curriculum frameworks.
8. Phased and differentiated implementation models should be created.

15. Conclusion

The transition toward multidisciplinary Teacher Education Institutions represents one of the most transformative educational reforms in contemporary India. By integrating teacher education into broader academic ecosystems, the National Education Policy 2020 aims to improve teacher quality, research orientation, interdisciplinary learning, and professional credibility.

However, the transition process is far more complex than mere institutional restructuring. It involves deep changes in the curriculum, governance, faculty culture, research engagement, technological preparedness, and financial planning.

India's diversity makes it difficult to implement uniform policies. Resource-rich universities may adapt quickly, whereas smaller and rural TEIs may face severe challenges. Without sustained institutional support, reforms may widen inequality rather than reduce it.

Therefore, the roadmap toward 2030 must prioritize phased implementation, equity-sensitive funding, collaborative governance, and institutional capacity building. Successful transformation depends not only on policy vision but also on practical, inclusive, and context-sensitive execution.

If implemented thoughtfully, multidisciplinary TEIs can fundamentally reshape teacher education in India and contribute to building a more reflective, research-oriented, and future-ready system.

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