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ITEP In India: Problems and Prospects Under NEP 2020

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Abstract: The 4-year Integrated Teacher Education Programme (ITEP), introduced under the National Education Policy (NEP) 2020, is designed to revolutionise teacher education in India through an interdisciplinary and experiential approach. This paper aimed to critically analyse the problems and prospects associated with the implementation of ITEP in India, focusing on its implementation and potential to address systemic inefficiencies in teacher education. The methodology employed involves an extensive review of existing literature, policies, academic journals, government reports and case studies to identify patterns and insights.

The findings highlight significant challenges, including infrastructural deficits, faculty training gaps, policy misalignments, and limited access to teacher education in rural and underserved areas. Despite these challenges, the study identifies opportunities to foster holistic education, strengthen experiential learning models, and align teacher preparation programs with global standards. The research underscores the transformative potential of ITEP in bridging theoretical and practical knowledge, promoting equity, and redefining teacher education for 21st-century needs.

Keywords: *Integrated Teacher Education Programme (ITEP); Undergraduate Programme; Teacher Training; National Education Policy (NEP) 2020.*

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I. INTRODUCTION

The fundamental basis of any educational system is teacher education, which influences the calibre and efficacy of instruction in the classroom and, in turn, the learning outcomes of students. In India's large and diversified population, teacher education plays a very important role. The conventional method of teacher education, however, has come under heavy fire for its emphasis on theoretical understanding, lack of interdisciplinary integration, and scant practical experience (Singh & Mishra, 2023). As a result, the system is fragmented and frequently fails to provide teachers with the skills they need to work in dynamic and diverse classroom environments (Menon et al., 2017; Shrivastava, 2019; Sing et al., 2025). A radical strategy to revamp teacher education is introduced in the National Education Policy (NEP) 2020 in recognition of these deficiencies, with the 4-year Integrated Teacher Education Programme (ITEP) serving as a flagship programme.

The necessity of an immersive and diverse approach to teacher development is emphasised in NEP 2020. As an undergraduate programme, the ITEP seeks to combine teaching with elements of experiential learning, sciences, and liberal arts. Through establishing a connection between theoretical knowledge and real-world execution, this curriculum aims to develop prospective educators' critical thinking, creativity, and flexibility (Kapadia, 2023; Mandal & Mete, 2023).

Rapid technology improvements and India’s diverse population necessitate the need for educators who can innovate and adjust to changing classroom situations (Kumar & Kumar, 2019). The adoption of ITEP is a crucial step in aligning India’s teacher training system with global best practices. However, its implementation is fraught with challenges (Lenka & Singh, 2024). Studies, such as those by Tilak & Bandyopadhyay (2023), draw attention to important obstacles, such as poor faculty training, a lack of adequate

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infrastructure, and a shortage of high-quality teacher education institutions (TEIs) in underprivileged and rural areas. Moreover, fundamental policy inconsistencies and administrative shortcomings complicate the program's implementation (Carrete-Marín et al., 2024; Sahu et al., 2020).

The implementation of ITEP presents chances for innovation and reform despite these obstacles (Sing et al., 2025). The curriculum adopts international best practices while establishing a framework to overcome historical disparities in access to high-quality teacher education. For instance, countries like Finland and Singapore have demonstrated the success of integrated, research-oriented teacher education programs in elevating educational outcomes (Naaz & Kumari, 2025; Pattanayak & Sharma, 2022). Through learning from these systems, ITEP can establish Indian teacher education as a standard for the world. Additionally, the focus on hands-on learning and the use of technology in teacher preparation presents substantial opportunities to modernise the field and raise the standard of instruction (Mohanty, 2023; UNESCO, 2020).

➢ *Objectives*

- To find out the problems related to the effective implementation of ITEP in India.
- To explore the prospects of ITEP to foster holistic teacher education in India.

II. METHODOLOGY

The methodology employed involves an extensive review of existing literature, policies, academic journals, government reports and case studies to identify patterns and insights.

III. LITERATURE REVIEWS

The 4-year Integrated Teacher Education Programme (ITEP), introduced under the National Education Policy (NEP) 2020, is a transformative initiative aimed at addressing systemic gaps in teacher education in India. However, its implementation is accompanied by a range of challenges that require careful analysis and strategic solutions. One of the primary challenges is the lack of adequate infrastructure in Teacher Education Institutions (TEIs). Sahu et al. (2020) emphasised that many TEIs, particularly in rural areas, lack modern classrooms, laboratories, and digital tools necessary for delivering multidisciplinary curricula. Kapadia (2023) further highlighted that financial constraints limit the ability of institutions to upgrade their facilities, creating discrepancies in the quality of teacher education across regions. Similarly, Bhatt (2020) argued that the infrastructural gap is a major barrier to achieving the holistic vision of ITEP. Nial et al. (2023) added that the lack of investment in rural TEIs exacerbates these disparities, making it difficult to implement ITEP uniformly.

Faculty preparedness is another critical issue. Verma & Shankar (2023) noted that many educators are not equipped to deliver integrated and interdisciplinary content effectively. The absence of regular professional development programs further exacerbates this gap, as highlighted by Sing et al. (2025). Meenakshi (2023) added that targeted capacity-building initiatives are essential to bridge this gap and ensure consistency in the quality of education delivered. Equity and accessibility also pose significant challenges. Bhatt (2020) pointed out that students from marginalised communities face barriers such as high enrollment costs and the limited availability of TEIs offering ITEP in rural areas. This inequity perpetuates disparities in teacher education and restricts the program's reach. Naaz & Kumari (2025) emphasised the need for inclusive policies to address these disparities and to ensure equitable access to quality teacher education. Chakraborty (2022) highlighted that promoting inclusion can be greatly aided by financial aid and scholarship programs.

Policy and administrative barriers further complicate the implementation of ITEP. Kapadia (2023) identified bureaucratic inefficiencies and an absence of collaboration among stakeholders as major obstacles. The phasing out of existing programs, such as the Bachelor of Elementary Education (B.El.Ed), has also faced resistance from academic groups, as noted by Shrivastava (2019). Despite these challenges, ITEP presents transformative opportunities for enhancing teacher education in India. The program's interdisciplinary approach integrates pedagogy with liberal arts and sciences, fostering critical thinking, creativity, and adaptability among future educators (Mahanta, 2023). This model addresses the longstanding gap between theoretical training and classroom application, as highlighted by Kapadia (2023). Behera (2020) underscored the importance of experiential learning opportunities, such as internships and fieldwork, which equip educators with practical skills and enhance their classroom readiness.

Aligning ITEP with global standards enhances its potential to raise India's teacher education system to international benchmarks. Pattanayak & Sharma (2022) drew parallels with Finland's research-based teacher education system, which emphasises interdisciplinary learning and lifelong professional development. Such global alignment also enhances the international competitiveness of India's educators. Tilak & Bandyopadhyay (2023) highlighted the role of technology in modernising teacher training, suggesting that online resources and digital tools can provide access to high-quality education in rural places. Warsi (2023) emphasised that integrating technology into ITEP curricula can also foster innovation in teaching methodologies.

To address these challenges and leverage the opportunities presented by ITEP, targeted strategies are essential. Menon (2017) proposed significant investments in infrastructure to modernise TEIS and enable them to support multidisciplinary education. Comprehensive faculty training programs, including workshops and collaborations with international institutions, can equip educators with the skills needed to deliver integrated curricula effectively (Mohanty, 2023). Equity-focused initiatives, such as scholarships and outreach programs, can promote inclusivity and ensure that students from disadvantaged backgrounds have access to ITEP (Bhatt, 2020). Kapadia (2023) advocated for

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streamlined policy coordination involving centralised monitoring systems and stakeholder collaboration to address administrative and systemic barriers.

IV. CHALLENGES IN IMPLEMENTING THE 4-YEAR INTEGRATED TEACHER EDUCATION PROGRAMME (ITEP) IN INDIA

The implementation of the 4-year Integrated Teacher Education Programme (ITEP) under the National Education Policy (NEP) 2020 is a bold initiative aimed at transforming teacher education in India. However, the program faces numerous challenges that span infrastructure, policy, equity, and systemic inefficiencies.

- *Infrastructural Deficiencies*

The absence of proper infrastructure in Teacher Education Institutions (TEIs) is a major problem. Many TEIs, particularly in rural and semi-urban areas, lack modern classrooms, laboratories, and digital tools necessary for delivering multidisciplinary and experiential learning (Lenka & Singh, 2024; Sahu et al., 2020). Kapadia (2023) highlighted that financial constraints further exacerbate this issue as institutions struggle to secure funding for infrastructural upgrades. Nial et al. (2023) emphasised that urban-rural disparities in infrastructure deepen inequities in access to quality teacher education, making it difficult to standardise the program across institutions. Warsi (2023) highlighted that the absence of technology-enabled classrooms limits the inclusion of digital resources in the curriculum.

- *Faculty Preparedness and Training*

The success of ITEP depends heavily on the preparedness of faculty to deliver integrated and interdisciplinary curricula. Anand & Singh (2025) noted that many educators lack exposure to innovative teaching methodologies, which limits their ability to implement the program effectively. Mandal & Mete (2023) argued that the absence of regular professional development programs further widens this gap. Patel & Panda (2024) suggested that faculty training must include exposure to global best practices to enhance their teaching capabilities. Chakraborty (2022) highlighted that the lack of incentives, such as career advancement opportunities linked to professional development, discourages faculty participation in training programs.

- *Equity and Accessibility*

Ensuring equitable access to ITEP remains a significant challenge, particularly for students from marginalised communities. Singh & Mishra (2023) observed that high enrollment fees and the limited availability of TEIs offering ITEP create significant barriers for marginalised communities. Warsi (2023) emphasised that the awareness gap about the program among these communities further restricts its reach, exacerbating social and economic disparities. Chakraborty (2022) suggested that targeted financial aid programs, such as scholarships and fee subsidies, can help alleviate these barriers, but noted that existing efforts remain insufficient.

- *Policy Misalignment and Administrative Challenges*

Policy misalignments and bureaucratic inefficiencies pose significant obstacles to the implementation of ITEP. Kapadia (2023) identified the lack of coordination among government bodies, accrediting agencies, and TEIs as a major issue. Patel & Panda (2024) argued that the lack of a standardised implementation framework for ITEP creates confusion and slows adoption among institutions.

- *Student Perception and Adaptation*

Student-teachers often expressed concerns regarding the practicality and feasibility of the 4-year program. Meenakshi (2023) revealed that many prospective participants are apprehensive about the extended duration of the program, questioning its alignment with career prospects and industry demands. Warsi (2023) added that the absence of mentorship and guidance during internships further diminished student confidence in the program. Hemmerich et al. (2015) suggested that strengthening experiential learning opportunities and showcasing successful alumni can help address these concerns and improve engagement.

- *Technological Barriers*

While ITEP emphasises technology integration, many TEIs lack the technological proficiency and digital infrastructure needed to successfully integrate technology-enabled learning. Tilak & Bandyopadhyay (2023) identified the digital divide between urban and rural institutions as a significant challenge, noting that unequal access to technology perpetuates disparities in teacher education. Chakraborty (2022) highlighted that teachers and students often lack the skills needed to use digital tools, further limiting the program's effectiveness. Warsi (2023) argued that developing digital literacy programs for both educators and students is essential to overcoming these barriers.

- *Financial Constraints*

The financial burden of implementing ITEP affects both institutions and students. Kapadia (2023) noted that the costs associated with infrastructure development, faculty training, curriculum design, and administrative coordination place significant strain on TEIs. Singh & Mishra (2023) emphasised that students from economically disadvantaged backgrounds face additional financial barriers, with limited access to scholarships or subsidies. Patel & Panda (2024) advocated for increased government investment and public-private partnerships to address these financial challenges.

- *Curriculum Design and Standardisation*

Designing a curriculum that effectively integrates pedagogy with liberal arts and sciences is a complex task. Chakraborty (2022) noted that the lack of clarity and standardisation in curriculum design has created confusion among stakeholders. Warsi (2023) added that the absence of pilot projects to test the curriculum before full-scale application has led to discrepancies in its delivery.

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➢ *Resistance to Change*

The introduction of ITEP has faced resistance from various stakeholders, including faculty, students, and policymakers. Menon et al. (2017) highlighted that the phasing out of existing programs, such as the B.El.Ed., has been met with opposition from academic groups who are reluctant to adopt new frameworks. Kapadia (2023) argued that addressing this resistance requires effective communication and stakeholder engagement to build consensus.

➢ *Regional Disparities*

Regional disparities in the availability and quality of TEIs offering ITEP further complicate its implementation. Nial et al. (2023) observed that institutions in urban areas are better equipped to adopt the program, while those in rural regions struggle with resource constraints. Warsi (2023) emphasised that these disparities undermine the program's goal of equitable access to quality teacher education.

➢ *Scalability Issues*

The large-scale implementation of ITEP across diverse geographical and institutional settings is inherently challenging. According to Nial et al. (2023), the disparity in institutional capacity among urban, semi-urban, and rural TEIs hampers the uniform adoption of the program. Patel & Panda (2024) noted that many smaller institutions lack the administrative expertise to manage the comprehensive curriculum, internships, and fieldwork components required by ITEP.

➢ *Lack of Coordination among Stakeholders*

Effective collaboration between government bodies, TEIs, accrediting agencies, and policymakers is crucial for ITEP's success. Kapadia (2023) pointed out that the absence of a centralised system to oversee and coordinate the implementation process often leads to delays and inefficiencies. Warsi (2023) added that misaligned goals and communication gaps between stakeholders create confusion and slow the adoption of the program.

➢ *Limited Customisation for Regional Needs*

The current ITEP framework lacks the flexibility to adapt to regional needs and local contexts, as noted by Chakraborty (2022). India's diverse cultural and linguistic landscape requires teacher education programs to address local pedagogical requirements, but the standardised curriculum does not adequately incorporate these elements. Naaz & Kumari (2025) suggested that a one-size-fits-all approach may alienate institutions and communities with unique educational challenges.

➢ *Monitoring and Evaluation Deficiencies*

A robust monitoring and evaluation mechanism is essential to assess the effectiveness of ITEP. However, Singh & Mishra (2023) identified the lack of systematic evaluation tools as a major challenge. Without real-time feedback and outcome measurement, it becomes difficult to make data-driven decisions to refine and improve the program.

➢ *Challenges in Providing Mentorship*

Although ITEP emphasises mentorship during internships and fieldwork, the lack of trained mentors poses a significant challenge. Behera (2020) highlighted that many TEIs and schools lack experienced educators who can provide the guidance and support student-teachers need to navigate practical teaching scenarios effectively. Meenakshi (2023) emphasised the need for structured mentorship frameworks to enhance student-teacher development.

➢ *Overemphasis on Theory*

Some critics argue that despite its focus on experiential learning, ITEP still includes a significant theoretical component that may detract from practical training. Warsi (2023) mentioned that this imbalance can result in educators entering the workforce with limited classroom management skills, which are critical for real-world teaching (Mandal & Mete, 2023).

➢ *High Dropout Risk*

Given the 4-year duration of ITEP, there is a heightened risk of student attrition due to economic or social constraints. Chakraborty (2022) noted that students from economically disadvantaged backgrounds are particularly vulnerable to dropping out, especially if financial aid and scholarships are insufficient.

➢ *Insufficient Teacher Recruitment Alignment*

ITEP is designed to produce highly skilled teachers, but Sahu et al. (2020) pointed out that it is not yet fully aligned with the existing teacher recruitment and employment frameworks in India. The lack of clarity regarding how ITEP graduates will be prioritised in recruitment processes creates uncertainty and may discourage enrollment in the program.

➢ *Rural Connectivity Challenges*

TEIs in rural areas face connectivity issues, including poor access to the internet and limited transportation facilities. Mohanty (2023) highlighted that these logistical challenges hinder both the dissemination of digital learning resources and the ability of student-teachers to participate in fieldwork or internships.

➢ *Societal Perception of Teaching as a Career*

In India, the teaching profession frequently faces a lack of social recognition and support, which deters talented people from choosing careers in teacher education. Pattanayak & Sharma (2022) argued that unless societal attitudes toward teaching are addressed, initiatives like ITEP may struggle to attract high-calibre students.

V. OPPORTUNITIES IN THE 4-YEAR INTEGRATED TEACHER EDUCATION PROGRAMME (ITEP) IN INDIA

The 4-year Integrated Teacher Education Programme (ITEP), introduced under the National Education Policy (NEP) 2020, offers a transformative framework to address systemic gaps in teacher education. By integrating interdisciplinary learning, experiential training, and global best practices, ITEP presents numerous opportunities to

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enhance the quality and inclusivity of teacher education in India.

➢ *Bridging the Gap between Theory and Practice*

ITEP's emphasis on experiential learning, including fieldwork and internships, guarantees that aspiring teachers have the practical skills necessary to handle obstacles in the classroom. Behera (2020) highlighted that this approach minimizes the disparity between theoretical understanding and practical application, fostering classroom readiness. Meenakshi (2023) added that partnerships between Teacher Education Institutions (TEIs) and schools provide platforms for mentorship and innovation in pedagogy.

➢ *Promoting Interdisciplinary Learning*

The integration of pedagogy with liberal arts and sciences fosters critical thinking, creativity, and adaptability among educators (Mahanta, 2023). Kapadia (2023) noted that this interdisciplinary approach prepares teachers to address diverse classroom needs and promotes holistic development. Patel & Panda (2024) emphasised that such a framework aligns with global trends in teacher education, making Indian educators more competitive internationally (Lenka & Singh, 2024).

➢ *Enhancing Early Childhood Education*

ITEP's focus on foundational literacy, numeracy, and Early Childhood Care and Education (ECCE) aligns with NEP 2020's goals of improving early education outcomes. Chakraborty (2022) highlighted that equipping teachers with specialised skills for early childhood education can significantly enhance learning outcomes at the foundational level, reducing dropout rates and bridging learning gaps.

➢ *Strengthening Teacher Education Institutions (TEIs)*

The implementation of ITEP has led to increased resource mobilisation for upgrading TEIs, including the incorporation of digital tools and state-of-the-art facilities. Bhatt (2020) noted that these infrastructural improvements benefit both pre-service and in-service teacher training programs, creating a robust ecosystem for teacher education. Nial et al. (2023) added that these upgradations could enhance the quality of education delivered by TEIs.

➢ *Leveraging Technology for Inclusive Education*

ITEP's integration of technology into its curriculum modernises teacher training and expands access to quality education. Verma & Shankar (2023) highlighted that digital tools and online platforms enable scalable and inclusive learning opportunities, particularly in underserved regions. Warsi (2023) argued that technology-driven solutions foster innovation in teaching methodologies, equipping educators with the skills to leverage digital resources effectively.

➢ *Promoting Equity and Inclusivity*

ITEP provides an opportunity to address long-standing inequities in access to quality teacher education. Chakraborty (2022) highlighted that targeted financial aid programs, such as scholarships and fee subsidies, can promote inclusivity and ensure that students from marginalised communities have access to the program. Naaz & Kumari (2025) added that fostering a diverse teaching workforce contributes to greater equity in education delivery, particularly in underserved communities.

➢ *Aligning with Global Standards*

Aligning ITEP with international benchmarks enhances India's global competitiveness in teacher education. Naaz & Kumari (2025) drew parallels with Finland's research-based teacher education system, which emphasises interdisciplinary learning and lifelong professional development. By adopting similar practices, ITEP can position India as a leader in teacher education reform. Chakraborty (2022) noted that global alignment also facilitates cross-cultural knowledge exchange, enriching the teaching profession.

➢ *Supporting Continuous Professional Development (CPD)*

ITEP lays the groundwork for lifelong learning and professional growth among educators. By aligning its curriculum with CPD frameworks, the program ensures that teachers remain up-to-date with advancements in pedagogy, technology, and content knowledge (Anand & Singh, 2025). Patel & Panda (2024) emphasised that CPD opportunities embedded in ITEP encourage innovation and adaptability in teaching practices, fostering a culture of excellence (Kulal et al., 2024).

➢ *Encouraging Innovation in Curriculum Design*

ITEP's interdisciplinary nature fosters collaboration among educators, researchers, and policymakers, creating opportunities for innovation in curriculum design. Chakraborty (2022) noted that this collaborative approach strengthens the link between academic research and classroom practices, leading to more effective educational strategies. Additionally, Naaz & Kumari (2025) highlighted that such collaboration can drive systemic reforms, raising the standard of education in India overall.

➢ *Addressing Teacher Shortages*

ITEP's comprehensive training model addresses the issue of teacher shortages by producing highly skilled educators who are prepared to meet the demands of diverse classroom environments. Singh & Mishra (2023) noted that the program's emphasis on experiential learning and interdisciplinary training ensures that graduates are well-equipped to fill critical gaps in the teaching workforce.

➢ *Enhancing Teacher Autonomy*

By equipping educators with a broad knowledge base and practical skills, ITEP fosters greater autonomy in teaching practices. Patel & Panda (2024) argued that this autonomy encourages educators to be creative in the classroom and adjust to the individual needs of each student, contributing to improved learning outcomes.

➢ *Strengthening Rural Education*

ITEP's focus on inclusivity and accessibility has the potential to strengthen rural education by training teachers who are equipped to address the unique challenges of rural classrooms. Mohanty (2023) highlighted that the program's emphasis on technology integration and experiential learning

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ensures that educators are prepared to work in resource-constrained environments.

➢ *Building a Research-Oriented Teaching Workforce*

ITEP's emphasis on integrating research into teacher education fosters a culture of inquiry and evidence-based practices among educators. Naaz & Kumari (2025) noted that this research-oriented approach parallels worldwide trends in teacher education and enhances the professional development of educators.

➢ *Contributing to National Educational Goals*

By aligning with NEP 2020's vision of inclusive and quality education, ITEP contributes to broader national educational goals. Chakraborty (2022) highlighted that the program's focus on foundational literacy, numeracy, and ECCE supports India's efforts to achieve universal education and improve learning outcomes across all levels.

VI. CONCLUSION

The implementation of the 4-year Integrated Teacher Education Programme (ITEP) under the National Education Policy (NEP) 2020 represents a transformative opportunity to redefine teacher education in India. While its goals of promoting interdisciplinary learning, experiential training, equity, and global competitiveness are commendable, its success hinges on addressing significant challenges such as infrastructure deficits, faculty preparedness, policy misalignments, and systemic inequities. Bridging these gaps will require substantial investments in institutional capacity, targeted professional development programs for educators, and improved coordination between stakeholders.

In India, the strategic integration of such global best practices, coupled with initiatives to improve accessibility and alleviate regional inequities, can establish ITEP as a benchmark for innovation. By taking advantage of its opportunities and tackling these issues, ITEP has the potential to develop a highly skilled and adaptable teaching workforce, contributing not only to improved classroom outcomes but also to achieving the broader goals of NEP 2020. This transformation will not only enhance the status of the teaching profession but also place India as a global leader in teacher education, ultimately shaping a future-ready education system rooted in inclusivity and excellence.

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