

ITEP in India: Issues and Opportunities Under NEP 2020

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Abstract: The National Education Policy (NEP) 2020 introduced the four-year Integrated Teacher Education Programme (ITEP), which aims to transform teacher education in India by using an experiential and interdisciplinary approach. With a focus on ITEP's implementation and potential to address systemic inefficiencies in teacher education, this paper sought to critically analyze the issues and opportunities related to its implementation in India. In order to find trends and insights, the methodology used entails a thorough analysis of current literature, policies, scholarly publications, government reports, and case studies.

Significant obstacles are highlighted by the findings, such as inadequate infrastructure, gaps in faculty training, policy misalignments, and restricted access to teacher education in underserved and rural areas. Despite these obstacles, the study finds ways to support experiential learning models, promote holistic education, and match teacher preparation programs with international standards. The study highlights ITEP's transformative potential in fostering equity, redefining teacher education for 21st-century demands, and bridging theoretical and practical knowledge.

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

I. INTRODUCTION

Teacher education is the cornerstone of any educational system since it affects the quality and effectiveness of classroom instruction, which in turn affects students' learning outcomes. Teacher education is crucial in India's vast and varied population. However, because of its emphasis on theoretical knowledge, lack of interdisciplinary integration, and lack of practical experience, the traditional approach to teacher education has drawn a lot of criticism (Singh & Mishra, 2023). According to Menon et al. (2017), Shrivastava (2019), and Sing et al. (2025), the system is fragmented and often fails to give teachers the skills they need to work in dynamic and diverse classroom environments. In response to these shortcomings, the National Education Policy (NEP) 2020 introduces a radical plan to reform teacher education, with the four-year Integrated Teacher Education Programme (ITEP) acting as a flagship program.

NEP 2020 emphasizes the importance of a diverse and immersive approach to teacher development. The ITEP is an undergraduate program that aims to integrate teaching with components of the sciences, liberal arts, and experiential learning. This curriculum seeks to foster the critical thinking,

creativity, and adaptability of aspiring teachers by creating a link between theoretical knowledge and practical application (Kapadia, 2023; Mandal & Mete, 2023).

India's diverse population and the country's rapid technological advancements make it necessary for educators to be creative and adaptable in the classroom (Kumar & Kumar, 2019). In order to bring India's teacher training system into line with international best practices, ITEP adoption is an essential first step. However, there are many difficulties in putting it into practice (Lenka & Singh, 2024). Research like that conducted by Tilak & Bandyopadhyay (2023) highlights significant challenges like inadequate infrastructure, inadequate faculty training, and a dearth of excellent teacher education institutions (TEIs) in rural and impoverished areas. Additionally, the program's implementation is complicated by basic policy inconsistencies and administrative flaws (Carrete-Marín et al., 2024; Sahu et al., 2020).

Despite these challenges, ITEP implementation offers opportunities for innovation and reform (Sing et al., 2025). The curriculum establishes a framework to address historical inequalities in access to high-quality teacher education while incorporating international best practices. For example, integrated, research-focused teacher education programs have been shown to improve educational outcomes in nations like Finland and Singapore (Naaz & Kumari, 2025; Pattanayak & Sharma, 2022). ITEP can make Indian teacher education a global standard by taking lessons from these systems. Furthermore, the emphasis on experiential learning and the use of technology in teacher preparation offer significant chances to modernize the field and improve the quality 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

In order to address systemic gaps in teacher education in India, the National Education Policy (NEP) 2020 introduced the four-year Integrated Teacher Education Programme (ITEP), a revolutionary initiative. However, there are a number of obstacles to its implementation that

call for careful consideration and calculated solutions. Lack of proper infrastructure in Teacher Education Institutions (TEIs) is one of the main issues. Many TEIs, especially those in rural areas, lack the state-of-the-art classrooms, labs, and digital resources required to offer multidisciplinary curricula, according to Sahu et al. (2020). Kapadia (2023) also emphasized that regional differences in the quality of teacher education are caused by institutions' inability to upgrade their facilities due to financial constraints. In a similar vein, Nial et al. (2023) noted that the lack of investment in rural TEIs exacerbates these disparities, making it challenging to implement ITEP consistently. Bhatt (2020) contended that the infrastructure gap is a significant obstacle to realizing the holistic vision of ITEP.

Another crucial issue is the readiness of the faculty. Many educators lack the necessary skills to effectively deliver integrated and interdisciplinary content, according to Verma & Shankar (2023).

According to Sing et al. (2025), this gap is made worse by the lack of regular professional development programs. According to Meenakshi (2023), focused capacity-building programs are necessary to close this gap and guarantee consistency in the caliber of instruction provided. Accessibility and equity present serious difficulties as well. According to Bhatt (2020), students from marginalized communities encounter obstacles like expensive enrollment fees and the scarcity of TEIs in rural areas that provide ITEP. This injustice limits the program's scope and maintains gaps in teacher preparation. In order to address these disparities and guarantee equitable access to high-quality teacher education, Naaz & Kumari (2025) emphasized the necessity of inclusive policies. According to Chakraborty (2022), financial aid and scholarship programs can significantly contribute to the promotion of inclusion.

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.

ITEP's potential to elevate India's teacher education system to international standards is increased when it is aligned with global standards. Finland's research-based teacher education system, which prioritizes interdisciplinary learning and lifelong professional development, was compared by Pattanayak & Sharma (2022). India's educators are more competitive abroad thanks to this global alignment. Tilak & Bandyopadhyay (2023) emphasized the role of technology in modernizing teacher training, arguing that digital tools and online resources can give rural communities access to high-quality education. According to Warsi (2023), incorporating

technology into ITEP curricula can also encourage creative teaching approaches.

Targeted strategies are necessary to overcome these obstacles and take advantage of the opportunities that ITEP presents. Menon (2017) suggested making large infrastructure investments to update TEIs and make them capable of supporting interdisciplinary education. In-depth faculty training programs, such as workshops and partnerships with foreign universities, can give teachers the tools they need to successfully implement integrated curricula (Mohanty, 2023). Scholarships and outreach programs are examples of equity-focused initiatives that can foster inclusivity and guarantee that students from underprivileged backgrounds have access to ITEP (Bhatt, 2020). In order to overcome administrative and systemic obstacles, Kapadia (2023) promoted simplified policy coordination involving centralized monitoring systems and stakeholder cooperation.

III. Issues IN APPLYING THE 4- A YEAR-INTEGRATED TEACHER Program for Education (ITEP) in India.

The National Education Policy (NEP) 2020's implementation of the four-year Integrated Teacher Education Programme (ITEP) is a daring attempt to revolutionize teacher education in India. Infrastructure, policy, equity, and systemic inefficiencies are just a few of the many obstacles the program must overcome.

Inadequate Infrastructure

One of the main issues is that Teacher Education Institutions (TEIs) lack adequate infrastructure. Many TEIs lack the state-of-the-art classrooms, labs, and digital resources required to provide multidisciplinary and experiential learning, especially in rural and semi-urban areas (Lenka & Singh, 2024; Sahu et al., 2020). According to Kapadia (2023), institutions find it difficult to obtain funds for infrastructure improvements, which makes the problem even worse. According to Nial et al. (2023), differences in infrastructure between urban and rural areas exacerbate disparities in access to high-quality teacher education, making it challenging to standardize the curriculum across institutions. The lack of technology-enabled classrooms restricts the use of digital resources in the curriculum, as noted by Warsi (2023).

Preparedness and Training of Faculty

Faculty readiness to deliver integrated and interdisciplinary curricula is critical to ITEP's success. According to Anand & Singh (2025), many teachers are not exposed to cutting-edge teaching techniques, which hinders their capacity to carry out the program successfully. According to Mandal & Mete (2023), this disparity is exacerbated by the lack of regular professional development programs. According to Patel & Panda (2024), in order to improve faculty members' teaching abilities, they should be exposed to international best practices during their training. According to Chakraborty (2022), faculty participation in training programs is discouraged by the absence of incentives, such as career advancement opportunities connected to professional development.

Accessibility and Equity

It is still very difficult to guarantee fair access to ITEP, especially for students from underrepresented groups. High enrollment costs and the scarcity of TEIs that offer ITEP are major obstacles for marginalized communities, according to Singh & Mishra (2023). According to Warsi (2023), the program's reach is further limited by these communities' lack of awareness, which exacerbates social and economic disparities. While acknowledging that current initiatives are still insufficient, Chakraborty (2022) proposed that specific financial aid programs, like scholarships and fee subsidies, can help reduce these obstacles.

Administrative Difficulties and Policy Misalignment

The implementation of ITEP is significantly hampered by bureaucratic inefficiencies and policy misalignments. One of the main problems, according to Kapadia (2023), is the lack of coordination between government agencies, accrediting bodies, and TEIs. According to Patel & Panda (2024), the absence of a standardized framework for ITEP implementation leads to confusion and slows institutional adoption.

Perception and Adaptation of Students

Concerns about the program's viability and practicality were frequently voiced by student-teachers. According to Meenakshi (2023), many potential participants are concerned about the program's length and wonder if it will be in line with industry demands and career opportunities. According to Warsi (2023), students' confidence in the program was further undermined by the lack of mentorship and guidance during internships. According to Hemmerich et al. (2015), enhancing opportunities for experiential learning and highlighting accomplished alumni can help allay these worries and boost engagement.

Technological Obstacles

Although ITEP places a strong emphasis on technology integration, many TEIs lack the digital infrastructure and technological know-how required to successfully incorporate technology-enabled learning. The digital divide between urban and rural institutions is a major problem, according to Tilak & Bandyopadhyay (2023), who noted that unequal access to technology sustains differences in teacher education. The program's efficacy is further limited by teachers' and students' frequent lack of proficiency with digital tools, as noted by Chakraborty (2022). According to Warsi (2023), creating digital literacy initiatives for teachers and students is crucial to removing these obstacles.

Financial Limitations

Both institutions and students are impacted by the cost of implementing ITEP. According to Kapadia (2023), TEIs are severely burdened by the expenses related to curriculum design, faculty training, infrastructure development, and administrative coordination. Students from economically disadvantaged backgrounds encounter additional financial obstacles, such as restricted access to scholarships or subsidies, according to Singh & Mishra (2023). To solve these financial issues, Patel & Panda (2024) argued for more public-private partnerships and government investment.

Standardization and Curriculum Design

It is difficult to create a curriculum that successfully combines pedagogy with the liberal arts and sciences. According to Chakraborty (2022), stakeholders are confused as a result of curriculum design's lack of uniformity and clarity. According to Warsi (2023), disparities in the curriculum's delivery have resulted from the lack of pilot projects to test it before full-scale implementation.

Opposition to Change

A number of stakeholders, including academics, students, and legislators, have opposed the implementation of ITEP. According to Menon et al. (2017), academic organizations that are hesitant to embrace new frameworks have opposed the phase-out of current programs, such as the B.El.Ed. According to Kapadia (2023), in order to overcome this resistance, effective communication and stakeholder engagement are necessary to foster consensus.

Regional Differences

Implementing ITEP is made more difficult by regional differences in the quantity and caliber of TEIs that offer it. According to Nial et al. (2023), institutions in rural areas face resource limitations, whereas those in urban areas are better prepared to implement the program. According to Warsi (2023), the program's objective of providing equal access to high-quality teacher education is compromised by these discrepancies.

Problems with Scalability

It is intrinsically difficult to implement ITEP on a large scale in various institutional and geographic contexts. Nial et al. (2023) claim that the program's uniform adoption is hampered by the differences in institutional capacity between urban, semi-urban, and rural TEIs. Many smaller institutions lack the administrative know-how to oversee the extensive curriculum, internships, and fieldwork components mandated by ITEP, according to Patel & Panda (2024).

Insufficient Stakeholder Coordination

The success of ITEP depends on efficient cooperation between governmental organizations, TEIs, accrediting bodies, and legislators. According to Kapadia (2023), delays and inefficiencies are frequently caused by the lack of a centralized system to supervise and coordinate the implementation process. According to Warsi (2023), misaligned objectives and a lack of communication among stakeholders lead to misunderstandings and impede program adoption.

Minimal Customization for Local Requirements

According to Chakraborty (2022), the current ITEP framework is not flexible enough to adjust to local contexts and regional needs. Teacher education programs must take into account local pedagogical needs due to India's diverse cultural and linguistic landscape, but the standardized curriculum falls short in this regard. A one-size-fits-all strategy might alienate institutions and communities with particular educational challenges, according to Naaz & Kumari (2025).

Deficits in Monitoring and Evaluation

To evaluate the success of ITEP, a strong monitoring and evaluation system is necessary. However, Singh & Mishra (2023) noted that a significant obstacle was the absence of systematic evaluation tools. Making data-driven decisions to improve the program becomes challenging in the absence of real-time feedback and outcome measurement.

Difficulties in Mentoring

Despite ITEP's emphasis on mentoring during fieldwork and internships, a major obstacle is the dearth of qualified mentors. According to Behera (2020), a lot of TEIs and schools lack qualified teachers who can give student-teachers the direction and assistance they need to successfully handle real-world teaching situations. In order to improve student-teacher development, Meenakshi (2023) emphasized the necessity of structured mentorship frameworks.

An excessive focus on theory

Despite its emphasis on experiential learning, some critics contend that ITEP still has a sizable theoretical component that could take away from hands-on training. According to Warsi (2023), this disparity may cause teachers to enter the workforce with inadequate classroom management abilities, which are essential for teaching in the real world (Mandal & Mete, 2023).

High Risk of Dropout

Because ITEP lasts for four years, there is a greater chance of student attrition because of social or financial limitations. According to Chakraborty (2022), students from low-income families are more likely to drop out, especially if financial aid and scholarships are inadequate.

Inadequate Alignment in Teacher Recruitment

Although ITEP is intended to generate highly qualified teachers, Sahu et al. (2020) noted that it is still not entirely in line with India's current frameworks for hiring and recruiting teachers. Enrollment in the program may be discouraged by the ambiguity surrounding the recruitment processes' prioritization of ITEP graduates.

Difficulties with Rural Connectivity

Rural TEIs have limited transportation options and poor internet access, among other connectivity problems. According to Mohanty (2023), these logistical obstacles impede student-teachers' participation in fieldwork or internships as well as the distribution of digital learning resources.

The way society views teaching as a career

Talented individuals are discouraged from pursuing careers in teacher education in India due to the profession's frequent lack of social recognition and support. According to Pattanayak & Sharma (2022), programs like ITEP may find it difficult to draw in top-notch students if societal attitudes regarding teaching are not addressed.

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

The National Education Policy (NEP) 2020 introduced the four-year Integrated Teacher Education Programme (ITEP), which provides a transformative framework to address systemic gaps in teacher education. ITEP offers many chances to improve the caliber and inclusivity of teacher education in India by combining interdisciplinary learning, hands-on training, and international best practices.

Closing the Theory-Practice Divide

ITEP's focus on experiential learning, which includes fieldwork and internships, ensures that prospective educators have the real-world skills needed to overcome challenges in the classroom. According to Behera (2020), this strategy promotes classroom preparedness by reducing the gap between theoretical comprehension and practical application. According to Meenakshi (2023), collaborations between schools and Teacher Education Institutions (TEIs) offer venues for pedagogical innovation and mentoring.

Encouraging Multidisciplinary Education

Critical thinking, creativity, and adaptability are fostered in educators through the integration of pedagogy with liberal arts and sciences (Mahanta, 2023). According to Kapadia (2023), this interdisciplinary approach fosters holistic development and equips teachers to handle a variety of classroom needs. According to Patel & Panda (2024), such a framework makes Indian educators more competitive abroad by aligning with global trends in teacher education (Lenka & Singh, 2024).

Improving Early Childhood Education

NEP 2020's objectives of enhancing early education outcomes are in line with ITEP's emphasis on foundational literacy, numeracy, and Early Childhood Care and Education (ECCE). According to Chakraborty (2022), giving early childhood educators specialized training can greatly improve foundational learning outcomes, lower dropout rates, and close learning gaps.

Enhancing Teacher Education Establishments (TEIs)

Increased resource mobilization for TEI upgrades, such as the addition of digital tools and cutting-edge facilities, has resulted from the implementation of ITEP. According to Bhatt (2020), these infrastructure upgrades strengthen the ecosystem for teacher education by helping pre-service and in-service teacher training programs. These improvements could raise the standard of instruction provided by TEIs, according to Nial et al. (2023).

Using Technology to Promote Inclusive Education

By incorporating technology into its curriculum, ITEP modernizes teacher preparation and increases access to high-quality education. Scalable and inclusive learning opportunities are made possible by digital tools and online platforms, especially in underserved areas, according to Verma & Shankar (2023). According to Warsi (2023), technology-driven solutions encourage creativity in teaching approaches and give teachers the tools they need to successfully use digital resources.

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.

Complying with International Standards

India's competitiveness in teacher education is increased when ITEP is aligned with international standards. The research-based teacher education system in Finland, which prioritizes interdisciplinary learning and lifelong professional development, was compared by Naaz & Kumari (2025). ITEP can establish India as a pioneer in teacher education reform by implementing comparable procedures. Global alignment also promotes cross-cultural knowledge exchange, which enhances the teaching profession, according to Chakraborty (2022).

Encouraging Ongoing Professional Development (CPD)

ITEP establishes the foundation for educators' professional development and lifetime learning. The program guarantees that teachers stay current with developments in pedagogy, technology, and content knowledge by coordinating its curriculum with CPD frameworks (Anand & Singh, 2025). According to Patel & Panda (2024), CPD opportunities integrated into ITEP promote creativity and flexibility in instructional strategies, cultivating a culture of excellence (Kulal et al., 2024).

Promoting Innovation in Curriculum Development

The interdisciplinary nature of ITEP encourages cooperation between educators, researchers, and legislators, opening doors for creative curriculum design. According to Chakraborty (2022), this cooperative approach improves the connection between academic research and classroom practices, resulting in more successful teaching methods. Furthermore, Naaz & Kumari (2025) emphasized that this kind of cooperation can propel systemic changes, improving education in India as a whole.

Resolving the Teacher Shortage

By creating highly qualified teachers who are equipped to handle the demands of a variety of classroom settings, ITEP's all-inclusive training model tackles the problem of teacher shortages. According to Singh & Mishra (2023), the program's focus on interdisciplinary training and experiential learning guarantees that graduates are prepared to close significant gaps in the teaching workforce.

Improving the Autonomy of Teachers

ITEP encourages more autonomy in teaching methods by providing teachers with a wide range of knowledge and useful skills. According to Patel & Panda (2024), this autonomy encourages teachers to be innovative in the classroom and adapt to each student's unique needs, which improves learning outcomes.

Enhancing Education in Rural Areas

By preparing teachers to handle the particular difficulties of rural classrooms, ITEP's emphasis on accessibility and inclusivity has the potential to improve rural education. According to Mohanty (2023), the program's focus on experiential learning and technology integration guarantees that teachers are equipped to operate in settings with limited resources.

Developing a Teaching Staff Focused on Research

A culture of inquiry and evidence-based practices among educators is fostered by ITEP's emphasis on incorporating research into teacher education. According to Naaz & Kumari (2025), this research-based approach improves educators' professional development and reflects global trends in teacher education.

Supporting the National Educational Goals

ITEP supports more general national educational objectives by being in line with NEP 2020's vision of inclusive and high-quality education. The program's emphasis on foundational literacy, numeracy, and ECCE supports India's efforts to attain universal education and enhance learning outcomes at all levels, according to Chakraborty (2022).

VI. CONCLUSION

The four-year Integrated Teacher Education Programme (ITEP) of the National Education Policy (NEP) 2020 presents a revolutionary opportunity to rethink teacher education in India. While its goals of promoting global competitiveness, equity, experiential training, and interdisciplinary learning are commendable, its success hinges on addressing critical problems such as insufficient infrastructure, faculty preparedness, policy misalignments, and systemic injustices. To close these gaps, substantial institutional capacity investments, targeted teacher professional development programs, and improved stakeholder coordination are required.

If such global best practices are carefully incorporated with initiatives to improve accessibility and lessen regional disparities, ITEP can become a model for innovation in India. By taking advantage of these opportunities and solving these issues, ITEP can develop a highly skilled and adaptable teaching workforce. Better classroom results as well as the broader goals of NEP 2020 would result from this. Ultimately, this shift will elevate the status of the teaching profession and establish India as a global leader in teacher education by building a future-ready educational system built on excellence and inclusivity.

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