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Exploring the Challenges and Prospects of ITEP under NEP-2020: Evidence from West Bengal

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Abstract

The 'Four-Year Integrated Teacher Education Programme (ITEP)', launched under the 'National Education Policy (NEP) 2020', seeks to transform the landscape of Teacher Education in India by embracing an interdisciplinary, practice-oriented, and experiential framework. This study is qualitative in nature, and a qualitative research design was followed. In this study, the researcher used a purposive sampling technique to choose the particular Jalpaiguri and Coochbehar districts, and the purposive sampling technique was used to choose the 8 samples for conducting the Semi-Structured interview schedule to gather qualitative and open-ended data from the respondents. The findings reveal multiple hurdles, such as infrastructural inadequacies, insufficient faculty preparedness, policy ambiguities, and unequal access in rural and marginalized regions, and highlight the transformative promise of ITEP in bridging the gap between theory and classroom practice, fostering equity and inclusivity, and redefining teacher education to meet the dynamic demands of the 21st century.

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Infrastructural Challenges

Teacher Education forms the cornerstone of any educational system, as it directly shapes the quality and effectiveness of classroom instruction and consequently determines student learning outcomes. In a country like India, with its vast and diverse population, the role of Teacher Education becomes all the more crucial. However, traditional approaches to teacher preparation have faced strong criticism for being overly theoretical, lacking interdisciplinary perspectives, and offering limited practical training (Singh & Mishra, 2023). This has resulted in a fragmented system that often leaves teachers inadequately equipped to address the needs of dynamic and heterogeneous classroom environments (Sing et al., 2025). To overcome these challenges, the National Education Policy (NEP) 2020 proposes a transformative reform in Teacher Education, with the introduction of the 'four-year Integrated Teacher Education Programme (ITEP)' as its flagship initiative. NEP 2020 underscores the need for an immersive and holistic approach to teacher preparation. The 'Integrated Teacher Education Programme (ITEP)', designed as an undergraduate course, integrates pedagogy with experiential learning, sciences, and liberal arts.

By bridging theoretical understanding with practical application, the programme aspires to nurture prospective teachers with critical thinking, creativity, and adaptability (Kapadia, 2023; Mandal & Mete, 2023).

The rapid pace of technological advancement, coupled with India's demographic diversity, highlights the pressing need for educators who can innovate and adapt to evolving classroom contexts. In this regard, the introduction of the 'Integrated Teacher Education Programme (ITEP)' marks a significant effort to align India's teacher preparation system with global best practices. Nevertheless, its rollout faces considerable hurdles (Lenka & Singh, 2024). Research by Tilak and Bandyopadhyay (2023) points to persistent challenges, including insufficient faculty training, inadequate infrastructure, and the limited availability of quality Teacher Education Institutions (TEIs) in marginalized and rural regions. Additionally, inconsistencies in policy design and administrative inefficiencies further complicate the programme's effective implementation (Carrete-Marín et al., 2024; Sahu et al., 2020). Despite these challenges, the implementation of ITEP also opens up significant opportunities for innovation and reform (Sing et al., 2025). The programme not only incorporates international best practices but also seeks to address long-standing inequalities in access to quality teacher education. Examples from countries such as Finland and Singapore illustrate how integrated, research-driven teacher preparation can lead to remarkable improvements in educational outcomes (Naaz & Kumari,

2025; Pattanayak & Sharma, 2022). By drawing lessons from these models, ITEP has the potential to position Indian teacher education as a global benchmark. Furthermore, its emphasis on experiential learning and the integration of technology in teacher preparation creates promising avenues for modernizing the sector and enhancing the overall quality of instruction (Mohanty, 2023; UNESCO, 2020).

Table 01: Comparing ITEP and B.Ed. Course based on NEP 2020

Aspect	I.T.E.P. (Integrated Teacher	B.Ed. (Bachelor of Education)
	Education Programme)	
Duration	4 Years (Integrated UG + Teacher	2 Years (After completion of
	Training)	UG/PG)
Entry Qualification	After 10+2 (Higher Secondary)	After Graduation
		(BA/B.Sc./B.Com. or
		Equivalent)
Nature of the Course	Integrated course combining	Professional course pursued
	Subject Studies + Teacher	after Subject Specialization
	Education	
Degree Awarded	Dual degree (e.g.,	Only B.Ed. Degree
	B.A./B.Sc./B.Com. + B.Ed.)	
Focus	Builds both Content Knowledge	Focuses mainly on Pedagogy
	and Pedagogy simultaneously	and Teaching skills
Target Group	Students who decide early (After	Students who choose teaching
	10+2) to enter the Teaching	after completing UG/PG
	profession	
Time Efficiency Saves 1 year (4 years instead of		Takes more time overall (UG +
	3+2 = 5 Years	B.Ed. = 5 Years)
Curriculum	Interdisciplinary, experiential,	Conventional, with a focus on
Approach	aligned with NEP 2020 vision	professional teacher training

Recognition	Recognized by NCTE and	Traditional and long-
	introduced under NEP 2020	established course recognized
		by NCTE
Career Outcome	Eligible for teaching at the school	Eligible for teaching at the
Career Outcome		
	level (primary to secondary) after	school level after 5 Years (UG +
	4 Years	B.Ed.)

Source: Government of India. (2020). *National Education Policy 2020*. Ministry of Education. (Self-prepared diagram comparing ITEP and B.Ed. course based on NEP 2020 provisions).

Literature Review of the Study: According to Sahu et al. (2020), many TEIs particularly those in rural areas struggle with the absence of modern classrooms, well-equipped laboratories, and digital resources essential for delivering a multidisciplinary curriculum. Kapadia (2023) further observed that financial limitations restrict institutions from upgrading their facilities, resulting in stark regional disparities in the quality of teacher preparation. Bhatt (2020) also argued that this infrastructural shortfall stands as a critical obstacle to realizing the holistic vision of ITEP. Echoing this concern, Nial et al. (2023) noted that the persistent underinvestment in rural TEIs deepens these inequalities, thereby impeding the uniform implementation of the programme across the country. Another pressing concern is faculty preparedness. Verma and Shankar (2023) observed that a considerable number of educators lack the necessary expertise to effectively deliver integrated and interdisciplinary curricula. This challenge is compounded by the absence of regular professional development initiatives, as noted by Sing et al. (2025). To address this, Meenakshi (2023) underscored the importance of structured capacity-building programmes aimed at enhancing faculty competence and ensuring uniform standards of instructional quality.

Equity and accessibility present additional challenges to the effective implementation of ITEP. Bhatt (2020) highlighted that students from marginalized backgrounds often encounter barriers such as high enrolment costs and the limited presence of TEIs offering ITEP in rural areas. These constraints perpetuate systemic inequities in teacher education and curtail the programme's reach. Naaz and Kumari (2025) stressed the need for inclusive policies to overcome these disparities and guarantee equitable access to quality teacher preparation. In this regard, Chakraborty (2022) argued that expanding financial aid and scholarship opportunities can play a pivotal role in advancing inclusion within the system. Policy and administrative

barriers also complicate the implementation of ITEP. Kapadia (2023) pointed to bureaucratic inefficiencies and the lack of coordination among key stakeholders as significant impediments. Furthermore, the gradual phasing out of existing programmes, such as the Bachelor of Elementary Education (B.El.Ed.), has been met with resistance from academic communities.

Nevertheless, ITEP offers transformative potential for strengthening teacher education in India. By integrating pedagogy with the liberal arts and sciences, the programme adopts an interdisciplinary framework designed to foster critical thinking, creativity, and adaptability among future educators (Mahanta, 2023). This approach directly addresses the persistent gap between theoretical instruction and classroom practice, as Kapadia (2023) observed. Behera (2020) further emphasized the significance of experiential learning components—such as internships and fieldwork, which not only provide practical teaching skills but also enhance overall classroom preparedness. Positioning ITEP in line with global standards strengthens its potential to elevate India's teacher education system to internationally recognized benchmarks. Pattanayak and Sharma (2022) compared this initiative to Finland's research-oriented teacher education model, which prioritizes interdisciplinary learning and continuous professional development. Such global alignment not only raises the quality of teacher preparation but also enhances the international competitiveness of Indian educators. In this context, Tilak and Bandyopadhyay (2023) underscored the transformative role of technology in modernizing teacher training, noting that digital tools and online resources can significantly expand access to quality education in rural regions. Similarly, Warsi (2023) argued that embedding technology within the ITEP curriculum has the potential to drive innovation in pedagogical practices and enrich teaching methodologies.

Effectively addressing the challenges while maximizing the opportunities of ITEP requires the adoption of targeted strategies. Mohanty (2023) emphasised the need for comprehensive faculty development initiatives such as workshops, continuous training, and collaborations with international institutions to strengthen educators' capacity to implement integrated curricula. Promoting inclusivity is equally critical; Bhatt (2020) highlighted that equity-focused measures, including scholarships and outreach programmes, can expand access to ITEP for students from disadvantaged backgrounds. To overcome policy and administrative hurdles, Kapadia (2023) further advocated for streamlined coordination, supported by centralized monitoring mechanisms and collaborative engagement among stakeholders.

Objectives of the Study: Based on different National and International studies, the researcher formulated different research objectives to carry out the study-

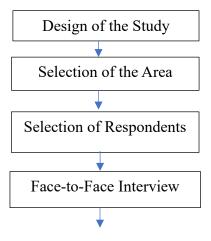
- 1. To critically analyze the challenges and limitations associated with the implementation of the 'Integrated Teacher Education Programme (ITEP) in West Bengal in the context of the provisions of the National Education Policy (NEP-2020)'.
- 2. To explore the potential opportunities and future possibilities of ITEP in strengthening teacher education and achieving the broader goals of NEP-2020 in India

Research Question of the Study: Based on different objectives, the researcher formulated different research questions to carry out the study-

- 1. What are the key challenges and limitations in implementing the 'Integrated Teacher Education Programme (ITEP) in West Bengal under the framework of NEP-2020'?
- 2. How can ITEP contribute to improving the quality of teacher education and align with the broader goals envisioned in NEP-2020?

Significance of the Study: The significance of this study lies in its attempt to critically analyze the challenges and prospects of ITEP, thereby offering insights that bridge the gap between policy intent and institutional practice. From a policy perspective, this study contributes to an understanding of how NEP-2020 envisions improving teacher quality and professional identity. Given the persistent critiques of outdated curricula, inadequate practicum experiences, and weak institutional capacity in teacher education, a systematic evaluation of ITEP becomes crucial. The findings of this research may provide feedback for policymakers to strengthen the framework, ensuring that ITEP becomes a sustainable model rather than a top-down reform. In terms of teacher professionalism, the study is significant because it examines how ITEP can nurture teachers who are not only competent in content and pedagogy but also reflective, socially responsive, and capable of addressing diverse classroom needs. Scholars argue that teacher identity and professional growth are central to educational reform. By mapping prospects and challenges, the research provides critical insights into how teacher education can align with global standards while remaining contextually relevant. At the institutional level, the study has practical relevance for Teacher Education Institutions (TEIs), many of which face infrastructural, administrative, and curricular constraints. Comparative insights into implementation will help TEIs identify best practices, innovate pedagogical strategies, and align with the vision of NEP-2020. Such institutional learning is essential for ensuring uniformity of standards without compromising contextual flexibility. Finally, the study carries societal significance. Teacher education has a direct bearing on the quality of school education, which in turn influences national development and social equity. By analyzing both challenges and prospects, this research contributes to envisioning how ITEP can advance the goals of inclusive and equitable education, as outlined in the Sustainable Development Goals. In sum, the significance of this study lies in its potential to connect policy vision with ground-level realities, offering actionable insights for policymakers, institutions, and practitioners. It provides a critical lens to evaluate whether ITEP can indeed emerge as a paradigm shift in teacher education or whether structural challenges may hinder its transformative promise.

Methodology of the Study: This study is qualitative in nature, and a qualitative research design was followed. In this study, the researcher used a purposive sampling technique to choose the particular Jalpaiguri and Coochbehar districts of West Bengal State, and the purposive sampling technique was used to choose the number of 8 samples for conducting the Semi-Structured interview schedule to gather qualitative and open-ended data from the respondents, explore their thoughts, feelings, and beliefs regarding the challenges and limitations in implementing the 'Integrated Teacher Education Programme (ITEP) in India under the framework of NEP-2020' and how can ITEP contribute to improving the quality of teacher education and align with the broader goals envisioned in NEP-2020. The study report contained information collected by the researchers using the interview questions from the questionnaire, and additional information obtained beyond the interview schedule was included in the study report. The interview was face-to-face and audio recorded with a textual transcription of the recording. The process of the study is presented below through a schematic design-



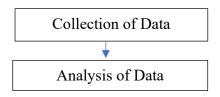


Figure 01: The study process

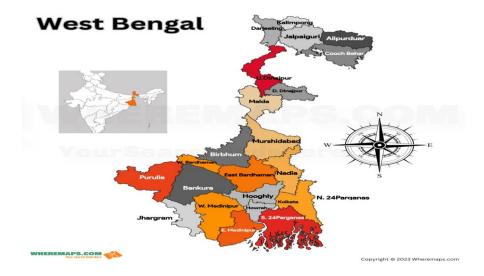


Figure 02: The map of Jalpaiguri and Coochbehar District.

Source: https://wheremaps.com/wp-content/uploads/2023/05/west-bengal-district-map-1024x1024.png Retrieved on 15.9.25 8.42 A.M.

Table 02: Sample of the Study

Sl	No	of	Designation of the Respondents
Respondents		ents	
1			Principal of a Teacher Education Institution (TEI) (Public B.Ed. College),
			Coochbehar, West Bengal, (Urban)
2			Practicum Coordinator, DIET-affiliated TEI, Coochbehar, West Bengal, Rural
			district
3			The University Education Dept. Official (Teacher Education Cell), Coochbehar,
			West Bengal, Urban/District level
4			Senior Faculty (Child Development & Pedagogy), Private TEI, Coochbehar, West
			Bengal, Urban

5	An Assistant Professor of a Private Teacher Education Institution, Jalpaiguri, West
	Bengal, Rural
6	Inspector of College, Jalpaiguri, West Bengal, District level.
7	The Governing Body President of a Private B.Ed. College, Jalpaiguri, West Bengal
8	District Inspector of School, Jalpaiguri, West Bengal, Semi-urban

Result and Discussion of the Study:

Research Question-1: What are the key challenges and limitations in implementing the 'Integrated Teacher Education Programme (ITEP) in India under the framework of NEP-2020'?

The introduction of the '4-year Integrated Teacher Education Programme (ITEP)' under the framework of the National Education Policy (NEP) 2020 represents a visionary and transformative step toward restructuring teacher education in India. While the programme holds immense promise for elevating the quality and relevance of teacher preparation, its implementation is confronted with multiple challenges, encompassing infrastructural limitations, policy-level ambiguities, issues of equity and accessibility, as well as deep-rooted systemic inefficiencies within the existing educational framework.

The rollout of ITEP has encountered resistance from multiple stakeholders, including faculty members, students, and policymakers. Kapadia (2023) emphasised that overcoming this resistance necessitates clear communication and active stakeholder engagement to foster consensus and support for the program.

In the language of the respondent, "We have formed a small ITEP committee last year, but the challenge is faculty readiness. Many of our lecturers trained in single-subject methods; moving to integrated modules means redesigning courses. We piloted one integrated module in semester two it worked conceptually, but schools for practicum refused extended block placements because of academic calendar clashes." (Principal of a Teacher Education Institution (Public B.Ed. College), West Bengal, Urban).

Although mentorship is a central component of ITEP internships and fieldwork, the shortage of adequately trained mentors remains a critical challenge. Behera (2020) observed that many TEIs and schools lack experienced educators capable of offering the guidance and support necessary for student-teachers to navigate practical teaching contexts effectively. Meenakshi

(2023) further underscored the importance of establishing structured mentorship frameworks to strengthen student-teacher professional development.

In the language of the respondent, "School partnerships are uneven. Nearby govt schools welcome our student-teachers for micro-teaching, but for extended internships only 2–3 schools cooperate. Transport and accommodation for interns is a serious cost for rural placements; some trainees simply can't afford it." (Practicum Coordinator, DIET-affiliated TEI, West Bengal, Rural district).

TEIs located in rural areas often struggle with connectivity challenges, including limited internet access and inadequate transportation infrastructure. Mohanty (2023) noted that these logistical constraints impede the delivery of digital learning resources and restrict student-teachers' participation in fieldwork and internship opportunities.

The large-scale rollout of ITEP across varied geographical and institutional contexts presents significant challenges. Nial et al. (2023) observed that disparities in institutional capacity between urban, semi-urban, and rural TEIs hinder the program's uniform implementation. Patel and Panda (2024) further highlighted that many smaller institutions lack the administrative expertise necessary to effectively manage the program's comprehensive curriculum, internships, and fieldwork components.

Designing a curriculum that seamlessly integrates pedagogy with the liberal arts and sciences remains a complex challenge. Chakraborty (2022) observed that insufficient clarity and standardization in curriculum development have generated uncertainty among stakeholders. Furthermore, Warsi (2023) pointed out that the lack of pilot initiatives to evaluate the curriculum prior to large-scale implementation has resulted in inconsistencies in its delivery. One of the major challenges in the successful implementation of the Integrated Teacher Education Programme (ITEP) lies in infrastructural deficiencies across Teacher Education Institutions (TEIs). A significant number of TEIs, particularly those located in rural and semiurban regions, continue to operate without adequate facilities such as modern classrooms, wellequipped laboratories, and digital learning tools that are essential for promoting multidisciplinary and experiential modes of teaching and learning (Lenka & Singh, 2024; Sahu et al., 2020). Kapadia (2023) observes that financial constraints further aggravate the problem, as many institutions face difficulties in mobilizing sufficient resources for infrastructural development. Moreover, Nial et al. (2023) point out that stark urban-rural disparities in institutional infrastructure widen the gap in access to quality teacher education, thereby creating obstacles in ensuring uniformity and standardization of the programme across the country. Adding to this concern, Warsi (2023) underscores that the lack of technology-enabled classrooms significantly restricts the integration of digital resources into the curriculum, limiting opportunities for innovation and holistic skill development among prospective teachers.

In the language of the respondent, "We have guidelines but limited funds for large-scale teacher upskilling. So we rely on cascade training, master trainers train district trainers who train TEI faculty. Cascade dilutes quality unless we monitor closely. We're piloting blended courses with open educational resources to reduce costs." (The University Education Dept. Official (Teacher Education Cell), West Bengal, Urban/District level).

The implementation of ITEP imposes considerable financial pressures on both institutions and students. Kapadia (2023) highlighted that expenses related to infrastructure development, faculty training, curriculum design, and administrative coordination create substantial strain on TEIs. Singh and Mishra (2023) further observed that students from economically disadvantaged groups encounter additional financial barriers, compounded by limited access to scholarships and subsidies. To mitigate these challenges, Patel and Panda (2024) recommended greater government investment along with strengthened public—private partnerships to ensure sustainable financial support for the program.

In the language of the respondent, "NEP's idea of multidisciplinary projects excites young faculty, but assessment is the real problem. Our exams and university regulations are still subject-focused. We don't have authority to change summative assessment formats; that has to come from affiliating university/NCTE guidelines." (Senior Faculty (Child Development & Pedagogy), Private TEI, West Bengal, Urban).

Ensuring equitable access to ITEP continues to be a major challenge, especially for students from marginalized backgrounds. According to Singh and Mishra (2023), high enrollment costs and the limited number of TEIs offering ITEP act as significant obstacles for these groups. Warsi (2023) further highlighted that the lack of awareness about the program within such communities restricts participation, thereby deepening existing social and economic inequalities. While Chakraborty (2022) proposed that targeted financial support measures such as scholarships and fee waivers could mitigate these challenges, current initiatives remain inadequate.

The effective implementation of the Integrated Teacher Education Programme (ITEP) is closely tied to the preparedness and professional competence of faculty members entrusted with delivering its integrated and interdisciplinary curriculum. Anand and Singh (2025)

observe that a large proportion of teacher educators still lack adequate exposure to innovative pedagogical approaches, thereby constraining their ability to translate the objectives of the programme into meaningful classroom practices. Mandal and Mete (2023) further argue that the absence of systematic and continuous professional development initiatives exacerbates this gap, leaving faculty underprepared to meet the evolving demands of teacher education. Patel and Panda (2024) emphasized that faculty training programmes must be enriched with insights from global best practices in order to strengthen teaching capacity and pedagogical innovation. Complementing this view, Chakraborty (2022) highlights that the lack of institutional incentives- such as structured career advancement opportunities tied to professional development- discourages educators from actively engaging in training programmes, thereby weakening the overall effectiveness of capacity-building efforts.

Geographical Disparities in the availability and quality of TEIs delivering ITEP pose additional challenges to its effective implementation. Nial et al. (2023) observed that urban institutions are comparatively better positioned to adopt the program, whereas rural counterparts face significant resource limitations. Warsi (2023) further stressed that such disparities hinder the program's objective of ensuring equitable access to high-quality teacher education.

Some critics contend that, despite ITEP's emphasis on experiential learning, the program retains a substantial theoretical component that may compromise practical training. Warsi (2023) noted that this imbalance can lead to educators entering the workforce with underdeveloped classroom management skills, which are essential for effective teaching (Mandal & Mete, 2023).

The success of ITEP largely depends on effective collaboration among government bodies, TEIs, accrediting agencies, and policymakers. Kapadia (2023) noted that the lack of a centralized mechanism to oversee and coordinate implementation frequently results in delays and inefficiencies. Warsi (2023) further observed that misaligned objectives and communication gaps among stakeholders contribute to confusion and hinder the timely adoption of the program.

The four-year duration of ITEP increases the risk of student attrition, particularly due to economic and social constraints. Chakraborty (2022) observed that students from economically disadvantaged backgrounds are especially vulnerable to dropping out, especially when financial aid and scholarship support are inadequate.

A strong monitoring and evaluation framework is critical for assessing the effectiveness of ITEP. Singh and Mishra (2023) highlighted that the absence of systematic evaluation tools

presents a significant challenge. Without real-time feedback and reliable outcome measurements, making data-driven decisions to refine and enhance the program becomes exceedingly difficult.

Student-teachers have frequently voiced concerns about the practicality and feasibility of the four-year program. Meenakshi (2023) noted that many prospective candidates remain apprehensive about its extended duration, raising doubts about its relevance to career opportunities and industry expectations. Warsi (2023) further observed that the lack of adequate mentorship and guidance during internships weakens student confidence in the program.

Policy misalignments and bureaucratic inefficiencies continue to hinder the effective implementation of ITEP. Kapadia (2023) pointed out that inadequate coordination among government authorities, accrediting agencies, and TEIs remains a critical challenge. Similarly, Patel and Panda (2024) observed that the absence of a standardized implementation framework generates uncertainty and delays institutional adoption of the program.

While ITEP aims to develop highly skilled teachers, Sahu et al. (2020) highlighted that the program is not yet fully integrated with India's existing teacher recruitment and employment frameworks. The ambiguity surrounding the prioritization of ITEP graduates in hiring processes generates uncertainty and may deter prospective candidates from enrolling in the program.

Chakraborty (2022) observed that the existing ITEP framework lacks the flexibility needed to accommodate regional requirements and local contexts. Given India's cultural and linguistic diversity, teacher education programs must align with local pedagogical needs; however, the standardized curriculum often fails to integrate these dimensions effectively. Naaz and Kumari (2025) further cautioned that a uniform, one-size-fits-all model risks alienating institutions and communities that face distinct educational challenges.

In India, the teaching profession often suffers from limited social recognition and support, discouraging talented individuals from pursuing careers in teacher education. Pattanayak and Sharma (2022) contended that without a shift in societal attitudes toward teaching, programs like ITEP may face challenges in attracting high-calibre candidates.

Although ITEP places strong emphasis on technology integration, many TEIs continue to face limitations in both digital infrastructure and technological proficiency, hindering effective implementation of technology-enabled learning. Tilak and Bandyopadhyay (2023) underscored the digital divide between urban and rural institutions as a critical barrier, pointing out that unequal access to technology reinforces disparities in teacher education. Similarly,

Chakraborty (2022) observed that both teachers and students often lack the necessary digital competencies, further constraining the program's impact. Warsi (2023) stressed that targeted digital literacy initiatives for educators and learners are vital to addressing these challenges and ensuring equitable integration of technology.

Research Question-2: How can ITEP contribute to improving the quality of teacher education and align with the broader goals envisioned in NEP-2020?

The four-year Integrated Teacher Education Programme (ITEP), launched as part of the National Education Policy (NEP) 2020, provides a transformative model for bridging systemic gaps in teacher education.

Through its emphasis on interdisciplinary learning, experiential pedagogy, and the incorporation of global best practices, ITEP opens significant avenues for improving both the quality and inclusivity of teacher education in India.

ITEP's holistic training approach helps mitigate teacher shortages by preparing well-qualified educators capable of handling diverse classroom needs. Singh & Mishra (2023) highlighted that the program's focus on experiential learning and interdisciplinary preparation equips graduates to effectively address critical gaps in the teaching workforce.

In the language of the respondent, "I like the ITEP emphasis on technology and experiential learning. But we need hands-on training with ed-tech tools; a one-day workshop isn't enough. Also, time allocation in an already packed semester is an implementation issue." (An Assistant Professor of a Private Teacher Education Institution, West Bengal, Rural).

ITEP prioritizes experiential learning through fieldwork and internships, ensuring that future teachers develop the practical skills required to address real classroom challenges. Behera (2020) noted that this model reduces the gap between theoretical knowledge and its practical application, thereby enhancing classroom preparedness. Furthermore, Meenakshi (2023) emphasized that collaborations between Teacher Education Institutions (TEIs) and schools create opportunities for mentorship and foster innovation in teaching practices.

By aligning with the vision of NEP 2020 for inclusive and high-quality education, ITEP plays a key role in advancing national educational objectives. Chakraborty (2022) emphasized that its focus on foundational literacy, numeracy, and Early Childhood Care and Education

strengthens India's pursuit of universal education while enhancing learning outcomes at every level.

In the language of the respondent, "Policy intent is clear; our job is quality assurance. The difficulty is reconciling legacy regulations with NEP flexibility. We are revising norms, but change is gradual because recognition rules involve many stakeholders." (Inspector of College, University level).

By embedding research into teacher education, ITEP nurtures a culture of inquiry and evidence-based practice among educators. Naaz & Kumari (2025) observed that this research-driven approach aligns with global trends in teacher education while also strengthening educators' professional growth.

The rollout of ITEP has accelerated resource mobilization to modernize TEIs, incorporating digital technologies and advanced infrastructure. Bhatt (2020) observed that such enhancements strengthen both pre-service and in-service teacher training, contributing to a more resilient teacher education ecosystem. Nial et al. (2023) further noted that these developments have the potential to significantly improve the overall quality of education provided by TEIs.

In the language of the respondent, "We are focusing on pilot TEIs to demonstrate models. Our strategy combines (a) curriculum revision, (b) faculty development, and (c) strengthening school-to-Teacher Education Institution partnerships. The political will exists, but the bottleneck is operational budgets and synchronized academic calendars across institutions." (The Governing Body President of a Private B.Ed. College, West Bengal).

ITEP's emphasis on foundational literacy, numeracy, and Early Childhood Care and Education (ECCE) is closely aligned with the objectives of NEP 2020 to strengthen early learning. Chakraborty (2022) observed that preparing teachers with specialized competencies in early childhood education can greatly improve foundational learning outcomes, helping to reduce dropout rates and narrow learning gaps.

ITEP's emphasis on inclusivity and accessibility holds promise for improving rural education by preparing teachers to tackle the distinct challenges of rural classrooms. Mohanty (2023)

noted that the program's focus on technology integration and experiential learning equips educators to effectively operate in resource-limited settings.

ITEP creates a pathway to overcome persistent inequities in access to quality teacher education. Chakraborty (2022) emphasized that initiatives like scholarships and fee subsidies can enhance inclusivity by enabling students from marginalized backgrounds to participate in the program. Naaz & Kumari (2025) further noted that building a diverse teaching workforce strengthens equity in educational delivery, especially within underserved communities.

Blending pedagogy with liberal arts and sciences cultivates critical thinking, creativity, and adaptability in educators (Mahanta, 2023). According to Kapadia (2023), this interdisciplinary model equips teachers to meet varied classroom needs while supporting holistic development. Patel & Panda (2024) further stressed that such an approach aligns with global standards in teacher education, enhancing the international competitiveness of Indian educators (Lenka & Singh, 2024).

Positioning ITEP in line with international benchmarks strengthens India's global standing in teacher education. Naaz & Kumari (2025) compared it to Finland's research-driven teacher education model, which prioritizes interdisciplinary learning and continuous professional growth. Embracing such practices can enable ITEP to establish India as a frontrunner in teacher education reform. Chakraborty (2022) further observed that global alignment encourages cross-cultural knowledge exchange, adding depth and diversity to the teaching profession.

By embedding technology into its curriculum, ITEP modernizes teacher education and broadens access to quality learning. Verma & Shankar (2023) emphasized that digital tools and online platforms create scalable and inclusive educational opportunities, especially in underserved areas. Warsi (2023) further argued that technology-enabled approaches encourage innovation in pedagogy, preparing teachers to use digital resources more effectively.

The interdisciplinary framework of ITEP encourages collaboration among educators, researchers, and policymakers, opening avenues for innovation in curriculum design. Chakraborty (2022) observed that this collaborative model bridges the gap between academic research and classroom practice, resulting in more impactful teaching strategies. Moreover,

Naaz & Kumari (2025) emphasized that such partnerships can catalyze systemic reforms, ultimately elevating the overall quality of education in India.

In the language of the respondent, "From the district side, we welcome integrated training it produces more classroom-ready teachers. However, scheduling especially during board exam months makes hosting block internships impossible. We suggested flexible internships (shorter, multiple visits) but formal guidelines are still awaited." (District Inspector of School, West Bengal, Semi-urban).

Through its blend of broad knowledge and practical training, ITEP empowers educators with greater autonomy in their teaching practices. Patel & Panda (2024) noted that such autonomy enables teachers to be more creative in the classroom and adapt to the unique needs of each learner, ultimately enhancing learning outcomes.

ITEP establishes a strong foundation for lifelong learning and continuous professional growth among teachers. By integrating its curriculum with CPD frameworks, the program ensures educators stay current with evolving pedagogy, technological innovations, and subject knowledge (Anand & Singh, 2025). Patel & Panda (2024) highlighted that embedding CPD opportunities within ITEP promotes adaptability and innovation in teaching, thereby nurturing a culture of excellence (Kulal et al., 2024).

Table 03: Mapping Challenges vs Solutions under ITEP

Existing Challenges	Proposed ITEP Solutions
Fragmented teacher	A single four-year integrated
preparation (separate degrees)	programme blending content +
	pedagogy
Poor quality of teacher training	Integration within
institutions	multidisciplinary universities
	with regulatory oversight (NCTE
	+ NEP)
Teacher shortage & late entry	Reduced duration ensures early
into the profession	entry into the workforce

Limited use of ICT in teacher	Strong emphasis on digital
training	pedagogy, blended learning, and
	ICT integration
Lack of research culture in	Embedding research projects,
teacher education	field immersion, and reflective
	practice from early years
Global mismatch in standards	Moves closer to international
of teacher education	models (e.g., Finland, Singapore)
	with emphasis on excellence

Source: Government of India. (2020). *National Education Policy 2020*. Ministry of Education. (Self-prepared diagram of Mapping Challenges vs Solutions in ITEP).

Limitations of the Study: Although the present study offers significant insights into the challenges and prospects of implementation of the Integrated Teacher Education Programme (ITEP) under NEP-2020 in West Bengal, certain limitations need to be acknowledged.

- The study is confined to a limited number of teacher education institutions (TEIs), purposively selected to represent both urban and rural contexts. This restricts the scope of generalizability, as the findings may not fully capture the diversity of experiences across all TEIs in the whole state; only the two districts, Jalpaiguri and Coochbehar, of West Bengal state were purposively chosen to conduct the study.
- The study relies heavily on self-reported data collected through interviews from a total of 8 samples. While such data provide valuable perspectives from stakeholders, they may also be subject to response bias, social desirability, or selective recall, which could influence the accuracy of the results.
- External factors such as state-level administrative delays, digital infrastructure disparities, and disruptions caused by broader socio-political or economic conditions could not be systematically controlled within the scope of this research.

Conclusion: The rollout of the 'Four-Year Integrated Teacher Education Programme (ITEP) under the National Education Policy (NEP) 2020' offers a transformative pathway to reimagine teacher education in India. Its objectives of fostering interdisciplinary learning, experiential training, equity, and global competitiveness are ambitious and forward-looking. However, the programme's success ultimately depends on overcoming persistent challenges, including infrastructural limitations, inadequate faculty preparedness, policy inconsistencies, and systemic inequities. Addressing these barriers will necessitate sustained investment in

institutional development, comprehensive professional training for educators, and stronger coordination among stakeholders to ensure effective and equitable implementation. In the Indian context, the strategic adoption of global best practices, alongside measures to enhance accessibility and reduce regional disparities, can position ITEP as a model of innovation in teacher education. By capitalizing on its opportunities while addressing inherent challenges, the programme has the potential to cultivate a highly skilled and adaptable teaching workforce. This will not only strengthen classroom outcomes but also advance the broader objectives of NEP 2020. Ultimately, such a transformation can elevate the stature of the teaching profession, establish India as a global leader in teacher education, and foster a future-ready education system grounded in inclusivity and excellence.

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