



National educational policy in India 2020: A transformative vision

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Abstract

The implementation of the transformative National Education Policy 2020 in India signifies a major shift after 34 years. This narrative review explores comprehensive reforms across the educational spectrum, from early childhood to higher education and faculty development. It examines structural and curriculum changes intended to enhance the quality and accessibility of education, emphasizing multidisciplinary approaches, and increased public investment. The findings show that while the policy is prepared to strengthen the Indian educational landscape by addressing critical challenges such as outdated curricula, poor teacher training, and low gross enrolment ratios, its implementation faces significant hurdles. These include securing adequate government funding and overhauling governance structures. Successfully tackling these challenges is crucial for India to harness its demographic dividend and transform into a global knowledge leader. Given the extensive challenges, it will be interesting to see how the NEP is implemented and its effects in the coming years.

Keywords: Narrative review, national education policy 2020, challenges, higher education

Introduction

Education has far-reaching influence over any country's growth trajectory since it develops capable workforces for national development and cultivates progressive ideas and thought leadership that spurs innovation across grassroots to industrial levels (World Bank, 2018). India is home to one of the most comprehensive education systems globally, one that underpins its global knowledge services dominance today, with over 1.5 million schools and more than 50,000 higher education institutions as per government data (MHRD, 2020), catering to over 250 million enrolled students. However, for decades key issues have plagued the sector – poor accessibility to affordable quality training (ASER, 2022), outdated curricula unable to develop skills aligned to modern jobs (OECD, 2019), underinvestment in research (UNESCO, 2021), vast gaps in rural penetration versus cities, private versus public education quality (Geeta & Rani, 2015) ^[16], shortages of qualified faculty (UGC, 2020), poor governance, and regulatory structures, among others. These have severely impaired both school systems and higher education, which manage dismal Gross Enrolment Ratios (GER) of 26.3%, reflecting how only about a quarter of the eligible populace pursues college education in India (AISHE, 2020).

Recognizing reforms have been long overdue to uplift education standards to be globally competitive and thereby transforming the state of national human capital, the Government of India released a new education policy framework in 2020, with a of 34 years lapse given that preceding National Education Policy of 1986 was established under Rajiv Gandhi's premiership. Bearing the imprint of extensive consultations with over 2.5 lakh village councils, 6600 education experts (MHRD, 2020), detailed state-level inputs, etc., the National Education Policy 2020 intends to rejuvenate India's teaching-learning ecosystem spanning early childhood schooling to college infrastructure expansions to teacher training overhauls (UGC, 2020) with an ambitious implementation horizon of the next couple of decades (NITI Aayog, 2022).

This paper closely examines India's sweeping education policy reforms of 2020 across contexts of associated priorities, objectives, as well as regional challenges given the country's vast diversity, strengths like existing technology infrastructures that can enable innovative education delivery even hinterlands (World Bank, 2020), the scope for public-private partnerships across schools, vocational training, and research investments along with overall impact potential for India to reorient its human capital towards a global knowledge services major rather than talent supplier to the world.

In consideration of these discussions, this paper aims to explore the NEP 2020, its implications on education landscapes in India, and its transformative potential as a vehicle for positioning India as a global leader in knowledge creation and dissemination.

Key changes in the national education policy

The National Education Policy 2020 brings about revolutionary changes across key aspects of the Indian education system encompassing schools, higher education institutions, and faculty development.

1. School education

The schooling level focuses on lowering the content burden currently enforced through rote textbook learning without comprehending concepts while promoting holistic student progress across languages, arts, sciences, and mathematics interlinked through experiential discovery and analysis. Even early childhood care through the initial three years of primary school, including aspects like nutrition, foundational literacy and numeracy, motor skills, etc., come under the policy's ambit. Let us examine pivotal changes:

Curriculum Reforms

The former education model included 10 years of primary education and two years of secondary schooling has been restructured into a 5+3+3+4 system with age brackets ranging from 3-8, 8-11, 11-14 and 14-18 respectively

(MHRD, 2020). The first five years would cover early childhood care and exposing children to foundational literacy and numeracy. The following three years would see subject introductions beyond languages, mathematics, and environmental studies like arts, crafts, and sports. There is no separation between curricular areas covering sciences, humanities, and arts, and choices are flexible (MHRD, 2020). Even technical vocational exposure can start as early as six years old within the formal school curriculum design. The overall focus is on conceiving learning in a more interconnected, holistic framework across knowledge areas, tapping into analytical abilities, critical thinking faculties, scientific temperament, etc., rather than just textbook content absorption. Teaching pedagogies are expected to enable self-discovery, discussion-based analyses, creative expression through arts and languages, group collaborations, etc., with multi-disciplinary linkages wherever feasible (Sharma, 2021) ^[45]. Even school assessments by grade 10 via standardized State Assessment for Continuous and Comprehensive Evaluation (SASCE) would evaluate core concepts, higher-order skills, analytical thinking, and creative problem identification abilities rather than rote learning capacities alone (Qualifications and Assessments Authority, 2022).

Early Childhood Education

In a pioneering move highlighting cognitive development during a child's formative years, the school education policy incorporates formal early childhood care and education spanning ages 3-6 years as integral to the school curriculum structure itself. This can hugely shape emotional, motor, and linguistic skills, making young children school-ready (Sharma, 2020) ^[44].

Greater attention is being paid to tracking and improving young kids' foundational literacy and numeracy skills through age-appropriate learning activities. Holistic progress spanning socio-emotional development, building thinking, and cognitive abilities, and developing gross and fine motor skills puts the spotlight on reading children for further education pursuits.

Assessments Reforms

The assessment methodology is witnessing an overhaul beyond grades 10 and 12 board examinations through newly conceived SASCEs to promote competency-based learning evaluation from early school years through standardized assessments (NCHMCT, 2019). These would combine automated assessment tech leveraging AI together with human orientation for testing core concepts, analytical abilities, critical perspectives related to real-world context application, and more profound learning undertakings through analysis of multi-disciplinary scenarios – rather than just testing rote textbook content memorization skills alone which has been the practice so far.

2. Higher education

Higher education within India still grapples with twin issues of poor-quality teaching coupled with exceptionally low Gross Enrollment Ratios, which hamper talents who may have cleared secondary education but cannot pursue college due to unaffordability or accessibility gaps (UGC, 2020). Attaining global stature across education also critically hinges upon research and innovation thriving across universities, which necessitates closer academia-industry

alliances for graduating world-class inventors, thinkers, and job creators, expanding knowledge frontiers (Rathi, 2019) ^[42].

Multidisciplinary Approach Across Arts and Sciences

To dissolve hardened silos and foster holistic education integrating insights from cross-disciplinary influencers, large multidisciplinary Higher Education Institutions (HEIs) are being promoted that assimilate diverse streams spanning sciences, social sciences, arts, humanities, languages, etc. within one umbrella (MHRD, 2020).

Further collaborative formations are being encouraged between universities, autonomous colleges, and affiliated institutions, giving rise to vibrant HEI clusters concentrated into geographical zones that mutually benefit through shared faculty, infrastructure arrangements, seamless credit transfers, optimized academic offerings distribution without duplicity, etc. (UGC, 2021).

Flexible Degree Courses, Enhanced Employability Orientation

Students can expect more modular course architectures facilitating multiple entry or exit points where feasible, especially at the undergraduate level. This means learners can terminate at certificate or diploma junctures with some credentialing focusing on obtaining specific skill sets for employment (CSIR, 2020). This can promote increased participation even among those only interested in proximate employment rather than entire degree courses, which usually span 3-4 years. Academic Bank of Credits is also being established for flexible transfers and degree accumulation across multiple disciplines, even from different universities (AICTE, 2019).

Internships have been integrated within undergraduate courses to ensure industry orientation and real-world understanding beyond theoretical campuses. HEIs are advised to consult skills in demand from innovators, entrepreneurs, and professionals across disciplines while designing curricula to nurture application-focused graduates.

Boosting Quality Research Output and Innovation

This policy strongly advocates a strategic push towards invigorating quality research across HEIs through several measures - setting up competitive peer-reviewed funding allocation via the National Research Foundation to spark curiosity-driven work with commercialization possibilities (DST, 2022) Industry linkages find emotion for channeling research directions better attuned to commercial, societal, ecological, and national priorities so that innovations engineered have higher technology absorption locally. Goal-based research milestones would be instituted to feature India among the top ten global nations in critical research output parameters.

3. Teacher education

Teachers and faculty form the most vital levers for the education machinery since they directly shape millions of students' skills, attitudes, and knowledge every academic year. Hence, the continuous development of teaching capacities across schools and colleges encompassing the latest curricular content, digital orientation, problem discovery approaches, and real-world scenario assimilation capabilities assumes immense significance (NCSL, 2021).

Integrated Teacher Education Programs

Previous complexities around teacher certifications varying extensively from year-long certificate programs to 2-year diplomas to full-fledged post-graduate degrees are being streamlined under the policy (NCTE, 2020). Standardized 4-year integrated teacher preparation programs would be initiated for all school stages that would holistically blend theory knowledge, practicum modules, and school internships while awarding bachelor's in education degree certifications, thereby enhancing merit.

Continuous Professional Development

Beyond foundational qualifications, regular upskilling opportunities have been mandated through continuous professional development modules, which attribute scores contributing towards performance management and subsequent career progression trajectories. The training landscape has been exponentially expanded through digital platforms like DIKSHA (NIOS, 2021).

Meritocratic Teacher Recruitment and Promotions

Attracting and retaining talented educators significantly beyond metro cities will determine student quality percolation. Hence, the policy stresses robust, impartial teacher recruitment based on proven competencies and disposition toward teaching (MHRD, 2020). Private investment can expand need-based scholarships for meritorious B.Ed. Applicants.

Even career growth trajectories are now linked to scores secured across various performance measurement parameters via multi-source feedback spanning self-evaluation, student surveys, teaching quality observations, external subject assessments, etc. conducted every five years for promotion suitability.

Benefits of the NEP 2020

1. Increased public investment in education

The National Education Policy 2020 aims to significantly increase public spending on education from 10% currently to 20% of total government expenditure by 2030. According to the latest budget data, India invested only 2.8% of its GDP in education in 2021, lower than the 4.6% average for lower-middle-income countries categorised by the World Bank (World Bank, 2022).

As the economic theory exhibits that education is correlated to a country's economic growth and productivity, opponents propose that simply expanding public funding does not necessarily lead to a better output for schooling. This is because the occurrences of mismanagement, corruption, and inefficiency might impede the effective utilisation of funds, generating apprehension about the efficiency of this method (Brooks, 2023) ^[8].

However, historical evidence shows that periods of rapid economic development across Asian countries like Singapore and South Korea coincided with heightened investments in education programs. This highlights the increased investments enabling better infrastructure, facilities, teaching quality, and lower tuition costs - all of which enhance access and affordability of education (Johnes, 1993).

The NEP target, if met, can bring an additional yearly investment of over ₹3 lakh crore as per budget maths. This 65% bump in education spending from 10% to 20% can benefit 1.5 million schools and over 50,000 higher

education institutions grappling with teacher shortages, infrastructure, resources, and quality issues (MHRD, 2020). While increasing public spending on education is laudable, an alternate policy could be to encourage more excellent private investment and public-private partnerships (PPPs) in the education sector. Economic theory suggests that a competitive market with multiple providers can improve efficiency, innovation, and resource allocation. The government could achieve better outcomes by incentivizing private players and leveraging their expertise through PPPs while optimising its limited fiscal resources. However, the limitations related to quality supervision, equity, and government intervention should be diligently examined to ensure the sustainability and effectiveness of such partnerships.

2. Focus on early childhood education

The National Education Policy focuses on significantly expanding access to quality early childhood education (ECCE) for children in the 3-6 age bracket. ECCE refers to educational programs catering to children under 6. It includes key developments in cognition, socio-emotional skills, and physical health.

As per economic theory, investment in early childhood development is highly cost-effective compared to interventions later in life (Heckman, 2010) ^[19]. Early childhood marks vital brain development phases, and long-term benefits accrue over time. Longitudinal studies by Nobel laureate James Heckman indicate that at-scale ECCE can deliver over 7% per year ROI to society - higher than returns on the stock market or infrastructure projects (Heckman, 2011) ^[20].

As of the last National Family Health Survey (NFHS-5), only around 48% of children (69 million) had access to any form of ECCE in India before entering primary school (UNICEF, 2019). The rest miss out on these crucial initial years of learning. The NEP aims to set up ECCE courses across 2.5 lakhs Anganwadi and primary schools with an ambitious aim to make 1-year ECCE available to all children by 2030 (MHRD, 2020). This would benefit over 65 million children based on estimated population figures. It can help bridge the skill gap before formal schooling, which hampers further academic performance.

Critics suggest that while early childhood education is crucial, an alternate policy could prioritise investment in primary and secondary education, which is the foundation for higher education and skill development. They highlight the significance of ensuring access to quality primary and secondary education for all children, as a solid basic education system significantly impacts productivity and long-term economic growth. (OECD, 2021)

Though expanded public investment in education and prioritizing early childhood education are the critical aspects of NEP 2020, policymakers should mindfully cater to substitute methods and address potential obstacles to ensure the effectiveness and durability of their initiatives in enhancing the education outcomes for all children in India.

3. Boosting vocational education

The NEP 2020 sets a highly ambitious target to rapidly expand vocational education programs to over 15 million annual enrolments across schools and higher education (MHRD, 2020). This will ensure over 50 million youth have specialized job-ready skills by 2025. NSSO survey data

shows only around 4-6% of Indian youth had enrolled in any formal vocational skilling program as of 2018 (Mehrotra *et al.*, 2014) ^[31].

Economic theory establishes a strong industry-skills linkage for employability and productivity. Evidence shows that over 80% of employers in India struggle to find an adequately skilled workforce, pointing to a huge supply-demand mismatch (AICTE, 2020). Key sectors facing severe shortages include information technology, banking, textiles, automotive, and logistics.

The substantial vocational education push, as per NEP, aims to bridge this gap by equipping young graduates with specialized skills per industry requirements (World Bank, 2017), and an alternative policy could supplement this objective. It brings skills into the academic mainstream by establishing vocational courses across 10,000+ colleges and 50,000+ schools by 2030. Over the next decade, it could benefit millions of students looking for jobs after school or college education by making them job-ready (Govinda, 2020) ^[17].

By emphasising enhancing the collaboration of the industry-academia segment and supporting on-the-job training programs, the government can handle the lack of practical experience and industry-relevant skills.

4. Investments in teacher training

The National Education Policy observes poor teacher training and a shortfall in qualified educators across schools and higher education institutions as a key issue pulling back quality. It lays down aims to ramp up investments and infrastructure to ensure the continuous professional development of over 1.5 crore teachers and educators (Darling-Hammond *et al.*, 2009) ^[11].

As per economic theory, education quality has a cyclical link with teacher quality. Better-trained teachers who actively upgrade domain knowledge and academic skills are best suited to improve overall teaching standards as per curriculum reforms. This translates to enhanced student performance, learning outcomes, and long-term productivity gains for the nation. Studies show a strong correlation between teacher training and student grade improvements.

As per government data from 2021, only 1.5% of nearly 14 lakh faculty across higher education possess any sort of formal pedagogical training, pointing to a major supply gap the NEP investments intend to bridge over the next decade (UGC, 2021). The aim is to bridge the shortage of qualified teachers through enhanced pay-outs, career progression as well as training infrastructure to enhance the quality of educators (MHRD, 2020).

While teacher training is essential, an alternate policy could be to introduce performance-based incentives and accountability measures for educators. Economic theory proposes that incentives can stimulate improved productivity and performance. By associating teacher remuneration and career advancement with student achievements and continuous professional growth, the government could motivate educators to enhance their teaching quality, potentially resulting in improved learning outcomes and long-term productivity gains. (Recognize, 2023)

Challenges of the NEP 2020

1. Securing adequate government funding

The NEP makes several progressive provisions across education levels, but vastly enhanced public spending holds the key to its vision. Total implementation costs could amount to over ₹100 lakh crore over the next 10 years as per estimates (MHRD, 2020). Generating these funds consistently will be a fiscal challenge (Kalyani, 2020) ^[25].

Economic theory suggests that budget constraints apply to governments too. Despite its long-term benefits, education often takes a back seat to more politically pressing subsidies, loan waivers, or populist schemes promising quick voter returns (Bhaumik & Dimova, 2019) ^[5]. Unless strong political will persists, rising fiscal concerns can throttle enhanced funding promises to the NEP.

Data shows India has already missed the spending targets outlined in prior policies dating back to 1968 (MHRD, 2020). Unless education sees consistent priority in budget outlays over the next decade spanning multiple governments, the fund crunch can severely limit the transformative scale envisaged under the NEP 2020 (Joshi & Sardana, 2020) ^[24].

Instead of relying solely on government funding, an alternate policy could be to explore innovative financing mechanisms, such as education bonds, tax incentives for private investors, and income-contingent loan programs. (Bloomenthal, 2022) ^[6].

Economic theory suggests that diversifying funding sources and leveraging market forces can lead to more efficient resource allocation. By tapping into alternative financing channels, the government could potentially reduce the fiscal burden while ensuring a sustainable flow of funds for educational initiatives.

2. Overhauling governance & regulation

Effective execution of the NEP requires overhauling overlapping governance across central and state agencies like UGC, AICTE, and NCTE, as well as outdated regulations. However, reforming contentious structures poses administrative challenges.

Economic models show regulatory capture often hinders the overhaul of bureaucracies by groups benefiting from the status quo. Further, transitions to disrupt existing setups also witness inertia. For NEP, the scale of intended transformation across 60+ regulators and 20+ central ministries is unprecedented and can face internal resistance. Many past education reforms got stuck due to a lack of coordination between national and state-level bodies responsible for on-ground execution (Sarangapani & Winch, 2010) ^[43]. Hence, enabling the swift transition to the envisaged governance framework will be pivotal.

Rather than undertaking a complete overhaul of governance and regulation, an alternate policy could be to focus on streamlining existing structures and promoting transparency and accountability. Economic theory suggests that well-designed incentives and monitoring mechanisms can mitigate regulatory capture and inertia. By introducing performance-based metrics, enhancing stakeholder participation, and fostering coordination between central and state agencies, the government could potentially improve the effectiveness of existing governance frameworks.

3. Mitigation disruption for students & teachers

The NEP brings sweeping curricular changes like the 5+3+3+4 model (MHRD, 2020), credit-based courses, multi-disciplinary education, and an uni-regulator system (MHRD, 2020). This poses transitory challenges for students and teachers accustomed to old structures.

Economic models highlight that when market equilibrium gets disrupted, participants face difficulty adjusting despite potential long-term gains. Similarly, students and educators transitioning through NEP's transformational phase can face multi-year confusion affecting quality before reforms stabilize (Kundu, 2021) ^[31].

Hence, methodical change management across India's 90,000 colleges and 15 lakh schools will be essential to mitigate short-term disruptions even as the curriculum moves towards modern global benchmarks. Extensive re-training programs for teachers will also prove critical (MHRD, 2020).

Instead of implementing sweeping curricular changes simultaneously, an alternate policy could be to adopt a phased approach, allowing for gradual adaptation and adjustment. Economic theory suggests that incremental change can reduce the risks and costs associated with disruption. By introducing reforms in a staggered manner and providing adequate support and training resources, the government could potentially minimize the transitional challenges faced by students and teachers, ensuring a smoother transition towards the envisaged educational system.

4. Ensuring strong institutional autonomy

The NEP pitches radical autonomy in course structures, formats, fees, and processes for universities based on transparent accreditation systems (MHRD, 2020). However, the ground realities of external interference pose difficulties. Public choice theory suggests that delaying control requires entities to cede authority willingly – which bureaucratic systems resist. Executing the NEP's vision requires education institutions to gain unprecedented flexibility free from governmental or bureaucratic pressures to shape their trajectories (MHRD, 2020).

Ensuring a smooth transition will need tackling political patronage and bureaucracy incentives seeking to maintain influence and control traditionally exercised over universities and colleges (Khaund, 2021) ^[27]. Non-compliance can defeat NEP's aim to unshackle institutions towards competitive excellence (Joshi & Sardana, 2020) ^[24]. While institutional autonomy is desirable, an alternate policy could be to establish robust governance mechanisms and accountability frameworks to prevent potential misuse of autonomy. Economic theory suggests that autonomy without proper checks and balances can lead to inefficiencies and rent-seeking behaviour. By implementing transparent accreditation systems, performance-based funding mechanisms, and external audit processes, the government could potentially foster a culture of academic excellence while maintaining oversight and ensuring judicious use of resources.

Conclusion

In conclusion, the National Education Policy 2020 constitutes remarkable systemic reforms that acknowledge gaps impeding access, quality, and equity in India's teaching-learning apparatus thus far and indicate solutions

aligned to 21st-century needs of holistic knowledge creation, employable workforce development, and research innovation advancement. Considerable policy directions have been outlined through the policy across schools, higher education, faculty ecosystems, and skills training for human capital transformation over the next few decades. Foremost agendas like early childhood care incorporation, bringing lakhs of toddlers under pre-primary pedagogic coverage, propagating multidisciplinary education cluster formations between colleges promoting resource optimization, boosting R&D investments for local innovation thriving, and continuous teacher training integration with promotions have an immense capacity for reshaping generations.

Undoubtedly, seamless coordination across multiple hierarchical agencies, allaying resentments from disadvantaged communities through increased representation, evaluating regional challenges around digital readiness or rural accessibility considering Indian diversity, and rationalizing budget splitting for judicious financing remain crucial nuts to crack. But the blueprint created foregrounds immense promise, and should progressive political commitment sustain, India is undoubtedly on the cusp of metamorphosing as a global talent epicentre, if not a supplier in the coming years - with home-grown education excellence fuelling 'Made in India' knowledge leadership feats globally across erudition, research, and entrepreneurship pillars in the 21st century.

Additionally, acknowledging the obstacles and challenges delineated in the NEP 2020, including the necessity to secure sufficient governmental funding, revamp governance and regulatory frameworks, alleviate disruptions for both students and educators, and uphold robust institutional autonomy, is imperative for a thorough grasp of the ramifications of the policy. These obstacles highlight the intricacies of implementing structural adjustments and underscore the imperative for steadfast commitment, creative tactics, and cooperation with stakeholders to accomplish the goals outlined in NEP 2020. By directly confronting these challenges and harnessing India's varied talent pool and entrepreneurial ethos, the NEP 2020 can ignite revolutionary transformation and establish India as a global frontrunner in education and innovation in the 21st century.

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