THE EDUCATION SYSTEM IN INDIA: CHALLENGES AND OPPORTUNITIES

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Abstract. As the world's most populous nation and one of its fastest-growing major economies, India relies heavily on its education system to convert its demographic dividend into sustainable socioeconomic development. Over the past seven decades, India has achieved near-universal elementary school enrollment and built the third-largest higher education network globally. However, rapid quantitative expansion has not been uniformly matched by qualitative improvement. Drawing on official government surveys, independent household assessments, and scholarly literature, this research article critically examines the structural architecture, persistent challenges, and emerging opportunities of the Indian education system. Key challenges include foundational learning deficits, chronic public underinvestment below the 6% of GDP benchmark, rural-urban and gender digital divides, and uneven governance across privatized higher education institutions. Simultaneously, transformative opportunities are emerging through the National Education Policy (NEP) 2020, rising female participation in higher education, rapid EdTech expansion, and strategic internationalization. The paper concludes with targeted policy recommendations to align access, equity, and academic excellence.

Keywords: Indian education system, National Education Policy (NEP) 2020, foundational literacy, higher education, digital divide, educational reform.

1. Introduction

Education is universally recognized as a foundational pillar of human capital formation, democratic participation, and long-term economic competitiveness. In India, the history of structured learning stretches back millennia to ancient residential centers of scholarship such as Taxila, Nalanda, and Vikramshila, which attracted students from across Asia (Sheikh, 2017). During the colonial period, British administrators introduced a standardized, English-medium educational model primarily designed to train clerical personnel for colonial governance. Following independence in 1947, India embarked on an ambitious nation-building project aimed at expanding mass literacy, scientific capacity, and institutional access across a vast and socioeconomically diverse population.

Today, India operates one of the largest and most complex education ecosystems in the world. It serves hundreds of millions of school-aged children and maintains the third-largest higher education system globally in terms of student enrollment, behind only China and the United States (Altbach, 2014; Sheikh, 2017). Since independence, the number of universities has expanded from merely 20 in 1950 to more than 1,160 today, while elementary school enrollment among children aged 6 to 14 has reached 98.1% in rural areas (ASER Centre, 2025;

Ministry of Education, 2024). Despite these notable quantitative gains, scholars and policymakers frequently highlight a sharp dichotomy within the system: while elite institutions such as the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) produce globally competitive graduates, the broader school and college network struggles with acute quality deficits, inequitable access, and weak alignment with labor-market needs (Altbach, 2014; Drèze & Sen, 2013).

The objective of this research article is to provide a balanced, evidence-based examination of the contemporary Indian education system. Specifically, it outlines the evolving structural framework introduced under the National Education Policy (NEP) 2020, analyzes four systemic challenges constraining educational outcomes, and evaluates the major strategic opportunities capable of transforming India into an equitable, knowledge-driven society.

2. Structural Overview of the Indian Education System

Historically, school education in India followed the 10+2 structure recommended by the Kothari Commission (1964–66) and institutionalized through the National Policy on Education (1986). Under this model, students completed ten years of general schooling followed by two years of specialized higher secondary education divided rigidly into science, commerce, and arts streams. Recognizing that this framework neglected early childhood care and discouraged interdisciplinary learning, the Government of India introduced the National Education Policy (NEP) 2020—the country's first comprehensive education overhaul in thirty-four years (Government of India, 2020).

NEP 2020 replaces the 10+2 model with a developmentally aligned 5+3+3+4 curricular and pedagogical structure covering ages 3 to 18. This comprises five years of the Foundational Stage (three years of pre-primary/Anganwadi education plus Grades 1–2), three years of the Preparatory Stage (Grades 3–5), three years of the Middle Stage (Grades 6–8), and four years of the Secondary Stage (Grades 9–12). The revised architecture formally integrates early childhood care into the school system, eliminates rigid separations between academic, vocational, and extracurricular domains, and shifts assessment away from rote memorization toward competency-based evaluation (Government of India, 2020).

At the tertiary level, governance is shared between central and state authorities under the Concurrent List of the Indian Constitution. According to the All India Survey on Higher Education (AISHE) 2021–22, India's higher education network encompasses 1,168 registered universities and university-level institutions, 45,473 colleges, and 12,002 stand-alone institutions, enrolling approximately 43.3 million (4.33 crore) students (Ministry of Education, 2024). Undergraduate programs account for 78.9% of total enrollment, led by Arts (34.2%), Science (14.8%), Commerce (13.3%), and Engineering and Technology (11.8%), while postgraduate programs represent 12.1%. Table 1 summarizes key empirical indicators across schooling, higher education, and public financing.

Table 1. Selected Key Indicators of the Indian Education System

Indicator	Latest Verified Value	Primary Source
Rural School Enrollment (Ages 6–14)	98.1% (66.8% in government schools)	ASER Centre (2025)
Class 3 Students Reading Class 2 Text (Rural)	27.1% (up from 20.5% in 2022)	ASER Centre (2025)
Class 5 Students Performing Division (Rural)	30.7%	ASER Centre (2025)
Secondary & Higher Secondary GER (2024–25)	79% (Secondary) / 58% (Higher Sec.)	PRS Legislative Research (2026)
Higher Education Total Enrollment (2021–22)	43.3 million (20.7 million female)	Ministry of Education (2024)
Higher Education GER & Gender Parity Index	28.4% GER | 1.01 GPI (Female: 28.5%)	Ministry of Education (2024)
Public Expenditure on Education (% of GDP)	~4.1% (Target benchmark: 6.0%)	PRS Legislative Research (2026)

Note: GER = Gross Enrolment Ratio; GPI = Gender Parity Index (ratio of female GER to male GER).

3. Major Structural and Systemic Challenges

3.1 Foundational Learning Deficits and Retention Gaps

One of the most pressing contradictions in Indian education is the gap between high enrollment and low actual learning outcomes—a phenomenon extensively documented by Drèze and Sen (2013), who observed that schooling expansion alone does not guarantee functional capability. Although the Annual Status of Education Report (ASER) 2024 documented an encouraging post-pandemic recovery in government primary schools, absolute proficiency remains critically low. In rural India, only 27.1% of Class 3 students and 48.8% of Class 5 students could read a Class 2-level text in 2024; in arithmetic, merely 33.7% of Class 3 students could perform basic subtraction and 30.7% of Class 5 students could solve a simple division problem (ASER Centre, 2025). Furthermore, 52.1% of rural government primary schools have fewer than 60 enrolled students, resulting in widespread multigrade classrooms where a single teacher instructs multiple grade levels simultaneously.

Weak foundational literacy and numeracy compound as students advance, contributing to steep dropout rates beyond the elementary level. While elementary enrollment is nearly universal, the Gross Enrolment Ratio drops sharply to 79% at the secondary level and 58% at the higher secondary level in 2024–25 (PRS Legislative Research, 2026). Without sustained remedial support, millions of adolescents exit formal education before acquiring skills needed for modern employment.

3.2 Public Underinvestment and Financial Constraints

Adequate public financing is essential to upgrade school infrastructure, recruit qualified teachers, and fund university research. Since the Kothari Commission of 1966—and most

recently in NEP 2020—Indian policy frameworks have consistently recommended raising combined central and state public expenditure on education to 6% of Gross Domestic Product (GDP). In practice, however, combined public spending has hovered around 4.1% of GDP, while education accounts for roughly 2.4% to 2.6% of total central budgetary expenditure (PRS Legislative Research, 2026). Even where funds are allocated, absorption bottlenecks persist: between 2017–18 and 2024–25, higher education institutions utilized an average of only 47% of funds earmarked for research and innovation. Chronic underfunding constrains laboratory modernization, library resources, and continuous faculty development, particularly in state public universities that educate the majority of first-generation learners.

3.3 Socioeconomic, Regional, and Digital Divides

Educational access and attainment in India remain deeply stratified by geography, gender, caste, and household income. Data from the Periodic Labour Force Survey (PLFS) 2023–24 illustrate persistent urban-rural and gender disparities in literacy: urban literacy stands at 92.9% for males and 84.9% for females, whereas rural literacy lags at 84.7% for males and 70.4% for females. Similar geographic imbalances appear in higher education, where Gross Enrolment Ratios vary widely across states and Union Territories—from 64.8% in Chandigarh to substantially lower figures in several economically lagging rural states (Ministry of Education, 2024). Scheduled Tribe students, despite notable recent gains, still record a higher education GER of 21.2% compared to the national average of 28.4%.

The rapid digitization of learning since the COVID-19 pandemic has introduced a new axis of inequality: the digital divide. According to ASER 2024, nearly 90% of rural adolescents aged 14 to 16 have access to a smartphone at home and 82.2% know how to operate one; however, significant gender disparities persist in personal ownership (36.2% of boys compared to 26.9% of girls). Moreover, device availability does not automatically translate into productive learning: only 57% of surveyed youth used smartphones for educational purposes, compared to 76% who used them for social media (ASER Centre, 2025). Bridging both hardware access and digital literacy is therefore vital to prevent technology from widening existing socioeconomic gaps.

3.4 Privatization, Governance, and Quality in Higher Education

Over the past three decades, India's higher education expansion has been driven largely by the private sector. According to AISHE 2021–22, 65.3% of all responding colleges are private unaided institutions, yet they account for only 44.6% of total college enrollment, whereas government colleges (21.5% of institutions) enroll 34.8% of students (Ministry of Education, 2024). Tilak (2010) warns that this rapid shift from education as a public good to a commercialized private commodity has often prioritized revenue generation over academic rigor, leading to underqualified faculty, inadequate infrastructure, and escalating out-of-pocket costs for families.

In addition, regulatory fragmentation across multiple overlapping agencies, outdated curricula, an overemphasis on high-stakes standardized examinations, and a pervasive private coaching culture stifle critical thinking and creativity (Altbach, 2014; Government of India, 2020). Consequently, despite producing a massive volume of graduates annually, Indian universities remain underrepresented in the upper tiers of global university rankings, and

employers frequently report a mismatch between university degrees and workplace readiness (Sheikh, 2017).

4. Emerging Opportunities and Strategic Reforms

4.1 Systemic Transformation Under NEP 2020

Despite formidable challenges, the Indian education sector stands at an inflection point defined by ambitious structural reforms. NEP 2020 establishes a comprehensive roadmap to transition from content-heavy rote learning to holistic, multidisciplinary, and skill-oriented education (Government of India, 2020). At the school level, the policy prioritizes universal Foundational Literacy and Numeracy (FLN) as an urgent national mission—an emphasis already reflected in the post-2022 learning gains observed in rural government schools (ASER Centre, 2025). At the tertiary level, NEP 2020 aims to raise the higher education GER to 50% by 2035 through flexible four-year undergraduate programs, multiple entry and exit options, the Academic Bank of Credits (ABC) for digital credit transfer, and the Automated Permanent Academic Account Registry (APAAR ID). Integrating vocational training from Grade 6 onward further promises to reduce the historic stigma attached to technical skills and align graduates with industry demand.

4.2 Demographic Dividend and Advancing Gender Parity

With one of the youngest populations globally, India possesses an exceptional demographic window to expand its domestic knowledge economy and supply skilled talent worldwide. Encouragingly, recent higher education trends indicate substantial progress toward gender and social inclusion. Female enrollment in higher education rose by 32% between 2014–15 and 2021–22, reaching 20.7 million students, while the national Gender Parity Index (GPI) reached 1.01, signifying that female GER (28.5%) has surpassed male GER for five consecutive years (Ministry of Education, 2024). Even more striking, female PhD enrollment doubled over the same period, and women now outnumber men in science stream enrollments across undergraduate, postgraduate, and doctoral levels. Similarly, enrollment among Scheduled Caste (+44%), Scheduled Tribe (+65.2%), and Other Backward Class (+45%) students has expanded rapidly since 2014–15. Sustaining these inclusion gains represents a powerful catalyst for equitable economic growth.

4.3 Digital Public Infrastructure and EdTech Innovation

India's rapid expansion of affordable mobile broadband and digital public infrastructure creates unprecedented opportunities to democratize quality instruction. Public digital platforms—such as DIKSHA for school teachers and SWAYAM for massive open online courses—enable students in remote districts to access lectures and multilingual resources curated by premier institutions. Simultaneously, India's private EdTech ecosystem is maturing from test-preparation apps toward AI-assisted personalized tutoring, upskilling, and hybrid learning models; its contribution to India's GDP is projected to rise from 0.1% in 2020 to 0.45% by 2029. When coupled with teacher training and targeted connectivity investments, technology can significantly alleviate faculty shortages and bridge geographic barriers.

4.4 Internationalization and Global Knowledge Partnerships

Historically, India has been primarily a sender of outbound international students rather than a global study destination. Recent regulatory reforms, however, are opening the higher education sector to international collaboration and foreign branch campuses. Frameworks such as the International Financial Services Centres Authority (IFSCA) Regulations (2022) and updated University Grants Commission (UGC) guidelines allow top-ranked foreign universities to establish campuses in India with greater curricular and operational autonomy. Alongside dual-degree programs, joint research grants, and the expansion of international school curricula, internationalization can foster healthy institutional competition, curb brain drain, and elevate domestic research standards to global benchmarks.

5. Conclusion and Policy Recommendations

The Indian education system embodies both immense promise and complex structural tensions. Over seven decades, India has built a massive educational infrastructure, achieved near-universal elementary enrollment, and made historic strides in gender parity within higher education. Nevertheless, converting this scale into genuine human capability requires confronting persistent deficits in foundational learning, chronic public underfunding, socioeconomic and digital disparities, and uneven institutional quality. The National Education Policy 2020 offers a coherent vision for modernization, yet its ultimate impact depends on sustained political commitment, center-state coordination, and rigorous ground-level execution.

Based on the evidence reviewed in this article, four policy priorities warrant immediate attention: (1) progressively increasing combined public expenditure on education toward the 6% of GDP benchmark while improving fund utilization in research and school infrastructure; (2) institutionalizing continuous, practice-oriented teacher training and targeted Foundational Literacy and Numeracy interventions in rural and multigrade primary schools; (3) closing the rural and gender digital divide through subsidized devices, school broadband connectivity, and structured digital-literacy curricula; and (4) strengthening independent accreditation, transparent governance, and industry-academia partnerships across public and private higher education institutions. If these reforms are implemented cohesively, India's education system can successfully empower its youth and anchor the nation's emergence as a vibrant, inclusive global knowledge leader.

References

1. Altbach, P. G. (2014). India's higher education challenges. Asia Pacific Education Review, 15(4), 503–510. https://doi.org/10.1007/s12564-014-9335-8
2. ASER Centre. (2025). Annual Status of Education Report (Rural) 2024. Pratham Education Foundation. https://asercentre.org/about-aser-2024/
3. Drèze, J., & Sen, A. (2013). An Uncertain Glory: India and Its Contradictions. Princeton University Press.
4. Government of India, Ministry of Education. (2020). National Education Policy 2020. Ministry of Human Resource Development. https://static.pib.gov.in/WriteReadData/userfiles/NEP_Final_English_0.pdf

5. Ministry of Education. (2024). All India Survey on Higher Education (AISHE) 2021–22. Department of Higher Education, Government of India.
6. PRS Legislative Research. (2026). Demand for Grants 2026–27 Analysis: Education. Institute for Policy Research Studies. https://prsindia.org/files/budget/budget_parliament/2026/DfG_Analysis_2026-27-Education.pdf
7. Sheikh, Y. A. (2017). Higher education in India: Challenges and opportunities. Journal of Education and Practice, 8(1), 39–42.
8. Tilak, J. B. G. (2010). Higher education in India: Emerging challenges and evolving strategies. In K. H. Mok (Ed.), The Search for New Governance of Higher Education in Asia (pp. 171–191). Palgrave Macmillan. https://doi.org/10.1057/9780230111554_11