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BRIDGING HORIZONS

UAE–India Partnership and the Future of Education-Led Development

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Bridging Horizons: UAE-India Partnership and the Future of Education-Led Development
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Foreword

Education is not merely a tool of academic development, but a means to improve human capital development, economic growth, and social empowerment. India, as a nation, has made significant strides to make improvements in its educational and learning outcomes. The National Education Policy (NEP) 2020 stands at the heart of this transformation by setting forth a comprehensive reform vision across all levels of the education system.

Parallelly, India presents an extraordinary opportunity to develop global knowledge and skills base due to the presence of a young demographic dividend. Strategic investments in education and skilling are essential to translate this economic opportunity into tangible human capital and embed India in the global talent value chain.

The **Bridging Horizons: UAE-India Partnership and the Future of Education Led Development paper,** developed by UIBC-UC, explores how education serves as a catalyst for socio-economic development. It examines theoretical and policy perspectives, India's educational landscape, global high performing models of education and India's performance in a global perspective. The study also emphasizes on the concept of education as a statecraft and highlights the role of non-state actors, corporate social responsibility (CSR), philanthropy and cross-border partnerships in advancing educational outcomes in areas where public education interventions have been unable to resolve challenges through distinctive case studies. CSR and philanthropic investments, when strategically directed, can bridge gaps in infrastructure, teacher training, and educational programs, creating lasting value for communities.

The India-UAE partnership presents a promising platform to advance educational and human capital development. By strategically leveraging UAE investment, expertise and innovation models- India can establish cutting-edge educational infrastructure including integrated academic city clusters, inspired by UAE's successful model of educational hubs. These models provide lessons in integrating multiple institutions and innovation centres- fostering interdisciplinary learning and leveraging private sector participation. Moreover, knowledge exchange, joint skilling development, and collaborative CSR and philanthropic initiatives can further strengthen education quality, empower India's youth, and create replicable models for sustainable impact nationwide.

This report underscores the transformative potential of education, philanthropy, and cross-border collaboration. By aligning vision and targeting resources and expertise, India and the UAE can jointly advance human capital development, inclusive growth, and social empowerment- to create a knowledge economy for sustainable, long-term impact.

Faizal Kottikollon
Chairman, UIBC-UC

Executive Summary

Education stands at the nexus of India's development trajectory, offering both extraordinary opportunity and a sobering challenge. With over 600 million citizens under age 25 and a school system serving nearly 247 million students, India possesses unparalleled demographic potential. Yet this promise remains constrained by a persistent learning deficit that threatens long-term productivity.

India's education system is characterized by three patterns. Access has expanded at the elementary stage but drops off at the secondary and higher secondary levels. Learning outcomes remain constrained nationally and are uneven across states. Infrastructure gaps, especially in digital access, also vary widely, underscoring the need for targeted delivery solutions.

The National Education Policy (NEP) 2020 is India's comprehensive response to these challenges. It prioritizes foundational literacy and numeracy, modernizes curriculum and assessment, integrates non-state actors and vocational pathways, and introduces flexible higher-education structures.

The engagement of non-state actors represents a distinctive feature of India's educational ecosystem. Mandatory corporate social responsibility requirements have channeled USD 8.6 billion toward education over the past decade, while philanthropic foundations operate with multibillion dollar endowments. Yet geographic concentration of spending in a few states limits impact, pointing towards a need for strategic coordination and alignment with public goals.

International comparisons reveal instructive patterns. High-performing systems like Finland, South Korea, and Singapore demonstrate that excellence emerges not from any single model but from alignment between educational approaches and societal values. Finland's trust-based system, Korea's intensive and competitive approach, and Singapore's emphasis on strategic workforce planning and meritocracy illustrate different paths that share key success factors: teacher quality, focus on foundational skills, transparent assessment systems, sustained political commitment, and alignment between education and economic structure. For India, with its scale and diversity, the lesson is not wholesale adoption but selective adaptation of these proven principles.

International approaches also reveal challenges – particularly around equity, student wellbeing, and durability of results – that India must anticipate and manage.

The UAE offers two complementary reference points for partnership. In higher education, free-zone clusters and strategic attraction of elite providers (e.g., NYU, Sorbonne, INSEAD, and more recently IIT Delhi and IIM Ahmedabad) have accelerated capability building and positioned the UAE as a regional education hub. In Dubai's K-12 sector, the Knowledge and Human Development Authority regulates a largely private market through transparency, calibrated incentives, and structured collaboration. This approach is associated with marked improvements in a short timeframe and a very strong showing in the Programme for International Student Assessment (PISA).

Against this backdrop, India-UAE collaboration can move beyond traditional exchanges to focus on four practical avenues:

1. Create special education zones in underserved regions, drawing on the UAE's model of co-locating multiple institutions with streamlined regulations to accelerate capacity building.
2. Build two-way pathways that connect India's expanding working-age cohort to UAE skills shortages through mutual recognition of credentials and industry-aligned training.
3. Draw on Dubai's experience with multilingual classrooms, multiple curricula, and outcome-oriented regulation to inform Indian state strategies that combine accountability, support, and public transparency.
4. Use Dubai's Education 33 strategy style of specific targets and delivery metrics as a template for state-level compacts on affordable seats, retention at transition grades, and foundational learning milestone.

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Abbreviations

AIIMS	All India Institutes of Medical Sciences
ASDC	Adani Skill Development Centres
ASER	Annual Status of Education Report
CERC	Community Education Resource Centres
CMEC	Council of Ministers of Education, Canada
CSR	Corporate Social Responsibility
DAS	Dhirubhai Ambani Scholarhips
DIAC	Dubai International Academic City
DKP	Dubai Knowledge Park
FSF	Faizal and Shabana Foundation
FLN	Foundational Literacy and Numeracy
GCC	Gulf Cooperation Council
GGHSS	Government Girls Higher Secondary School
GVHSS	Government Vocational Higher Secondary School
ICT	Information and Communications Technology
IIM	Indian Institute of Management
IIT	Indian Institute of Technology
ITE	Integrated Approach to Technology in Education
ITI	Industrial Training Institute
J&K	Jammu & Kashmir
KHDA	Knowledge and Human Development Authority
LEP	Learning Enrichment Programme
LG	Lieutenant Governor
NAS	National Achievement Survey
NIELIT	National Institute for Electronics and Information Technology
NEP	National Education Policy
NER	Net Enrolment Rate
NGO	Non-governmental Organization
NIPUN Bharat	National Initiative for Proficiency in Reading with Understanding and Numeracy
NSDC	National Skill Development Corporation
NUS	National University of Singapore
NYU	New York University
OECD	Organisation for Economic Co-operation and Development
PCAP	Pan-Canadian Assessment Program
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PRISM	Promoting Regional Schools to International Standards through Multiple Interventions
RTE	Right to Education
SBB	Subject-Based Banding
SDG	Sustainable Development Goal
TALAASH	Technology-Aided Location and Accessibility for School Help
TCI	Theme-Centric Intervention
TEJAS	Training for Emirates Jobs and Skills
TIMSS	Trends in International Mathematics and Science Study
UT	Union Territory
UIBC-UC	UAE-India Business Council – UAE Chapter
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund

01

INTRODUCTION

Introduction

Education is widely recognized not just as a pathway for personal advancement, but as a foundational driver of socioeconomic development and national progress. Far from being a mere byproduct of economic growth, education is often deemed a necessary precondition for development. It builds the human capital that fuels innovation, productivity, and inclusive prosperity. Nations that invest in broad-based education lay the groundwork for stronger economies, healthier societies, and more stable, equitable communities.

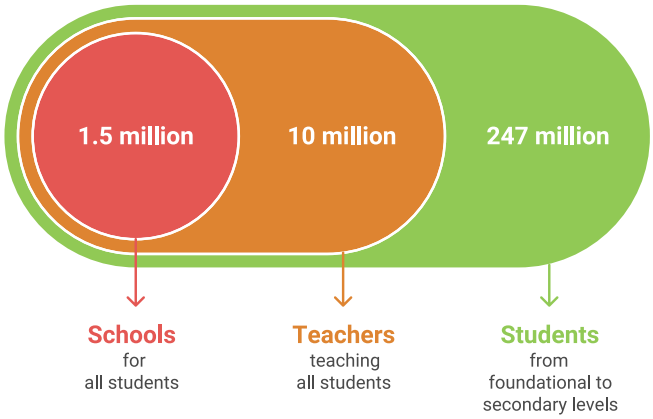
The idea that education yields both private and social returns is not new. For over half a century, economists have consistently found high rates of return on investment in education. Landmark analyses in the 1960s and 1970s demonstrated that, particularly in developing countries, investing in human capital often produced higher returns than investing in physical infrastructure. On average, each additional year of schooling boosts an individual's earnings by roughly 9-10 percent. These private gains are accompanied by broader social benefits in the form of higher productivity and faster economic growth.[1]

The centrality of education to socioeconomic development has intensified as three mega-trends reshape our world. Technological disruption is rewriting jobs and the skills they demand. Demo-graphic transitions are reshaping labour markets, creating both youth bulges in developing countries and ageing workforces in developed economies. And climate change is testing communities and demanding new capabilities in scientific literacy and adaptive problem-solving.

The capacity of education to cultivate human capital, foster inclusive growth and challenge harmful social norms positions it as the critical lever for navigating these transformations. Well-performing education systems serve as the foundation upon which countries build their economic prosperity, social cohesion and global competitiveness, and determine how well they adapt to a rapidly changing world.

Yet education systems remain among the most complex of social institutions, requiring coordinated efforts from diverse actors to function effectively. Governments, multilateral institutions, philanthropic foundations, civil society and the private sector all have important roles to play. Nowhere is this truer than in India, home to the world's largest youth population, with over 600 million under 25 years of age.[2] Its school system reflects this demographic enormity, with nearly 1.5 million schools, over 10 million teachers, and just under 247 million students from foundational to secondary levels.[3]

India School Education System (2024-25)



Source- UDISE+ Report 2024-2025, Ministry of Education, Government of India

With its massive youth and student population, India has a unique opportunity to develop a skilled work-force that can drive innovation, productivity, and growth. Yet, this potential can only be unlocked through quality education that reaches every child. And while India has made significant strides in access with near-universal primary enrolment, learning outcomes remain persistently inadequate.

India's education policy framework reflects a growing recognition of this challenge. At the centre of the reform efforts is the National Education Policy (NEP) 2020, which sets out an ambitious agenda for a system-wide transformation across all levels. It integrates a multi-stakeholder approach to educational delivery, outlining the roles that diverse partners can play, implicitly recognizing that mission-driven actors can pioneer pedagogical innovations, bridge last-mile delivery gaps, and demonstrate scalable models for systemic improvement.[4]

A UAE-India partnership in education could accelerate such innovation, leveraging the strengths of both countries to create models for education-led development. This paper examines how education drives development through an analysis of theoretical frameworks, India's performance in comparative perspective, the role of non-state actors, and lessons from the UAE's education innovations. A distinctive feature of this study is its attention to actors beyond the state. Philanthropic organizations, mission driven private entities, and cross-border partnerships increasingly play a pivotal role in addressing gaps that conventional public mechanisms have struggled to resolve. By synthesizing global evidence, national benchmarks, and regional case studies on economic research, policy frameworks and case studies, the paper identifies actionable pathways to accelerate education-led development.

02

EDUCATION AS A DRIVER OF DEVELOPMENT

Education plays pivotal role in building human capital, promoting inclusive growth, structural transformation and innovation. Besides this, education functions as a fundamental instrument of state-building and civic engagement. This section highlights India's commitment to advancing education through policies like NEP 2020, infrastructure development, technology-driven assessment, and cultural initiatives, alongside the use of education as soft power. Foundational literacy, numeracy, and skill alignment remain critical globally. State-wise variations in enrolment and learning levels have also been explored.

Education as a Driver of Development

Education underwrites both economic growth and social progress in multiple ways. It builds foundational skills that raise individual productivity and earnings, supports capabilities that speed technology adoption, innovation, and structural transformation, and strengthens civic participation, institutional competence, and social cohesion. These effects are nonlinear and compounding – strongest when basic literacy and numeracy are secured early, amplified by girls' education, and reinforced by continuous skilling over the life course.

At the macro level, education enriches human capital, deepens economic growth, and improves resilience to shocks. At the community level, it shapes social norms and expands mobility. At the individual level, it enhances opportunities and freedom.

Human Capital and Inclusive Growth

The conceptualization of education as human capital investment has deeper roots than commonly recognized. More than two centuries ago, Adam Smith identified "the acquired and useful abilities of all the inhabitants" as a form of capital "fixed and realized, as it were, in his person." He also recognized that the acquisition of useful abilities "though it costs a certain expense, repays that expense with a profit."[5] When human capital theory was formalized by economists in the mid-twentieth century, they were giving mathematical precision to Smith's observation that individuals' knowledge and skills constitute a form of capital as critical as physical infrastructure or financial resources.* This formalization reframed education from a consumption expense to a productive investment.

The mechanisms through which education drives economic growth operate at multiple levels. It enhances one's cognitive abilities, technical competencies, and problem-solving skills in ways that improve both wellbeing and productivity. The rate of return to education for individuals globally has been estimated at around 10 percent, with higher returns at the primary level, and in low and middle-income countries.[6] Beyond these private returns, education generates substantial spillover effects. Educated workers raise the productivity of their colleagues,[7] facilitate technology adoption,[8] and, at higher skill levels, enable innovation and drive growth – even in high-income countries.[9] Consistent with this, recent estimates attribute to education roughly 45% of global economic growth between 1980 and 2019, and about 60% of pretax income gains for the bottom quintile of earners.[10]

See, for instance, Gary S. Becker's 1962 Journal of Political Economy article, "Investment in Human Capital: A Theoretical Analysis".

For countries hoping to harness their demographic dividends, education serves as the essential bridge between population potential and economic realization. Conversely, when demographic expansion coincides with educational investment, the results can be transformative. The East Asian miracle economies demonstrated this definitively. South Korea increased average years of schooling from 4.6 to 12.8 years between 1960 and 2015,[11] alongside a 28-fold increase in its per capita income.[12]

A gender lens further reveals education's extraordinary multiplier effects on development. Educating girls, particularly to secondary and higher levels, is socially transformative. Women with secondary education can expect to make twice as much, and those with tertiary education almost thrice as much as women with no education. Universal secondary education for girls could also virtually eliminate child marriage and reduce the prevalence of early childbearing by up to 75 percent. The positive effects cascade intergenerationally, with evidence linking better education for girls to a nearly 22 percent fall in under-five mortality rates and a one-third reduction in stunting.[13] Research in fact suggests that a mother's educational status plays an increasingly important role in shaping her children's educational outcomes, while the father's educational influence has declined.[14] At the macro level, the economic cost of failing to educate girls has been estimated at USD 15 trillion to USD 30 trillion globally.[15]

Education as Statecraft

Beyond its economic and social impacts, education functions as a fundamental instrument of state-building and civic engagement. Modern nation-states have consistently recognized mass education as essential for creating capable citizens and forging national identity. From Meiji Japan's rapid educational expansion to support modernization[16] to Singapore's strategic use of bilingual education for multi-ethnic integration,[17] history demonstrates the use of education as a tool for nation building. As an instrument of external statecraft, education can also operate as soft power. Systems that attract international students cultivate global alumni networks, shape national reputation, and deepen long-run diplomatic and economic ties.

The relationship between education and state capacity operates through multiple channels. Bureaucratic effectiveness depends on skilled personnel who can design and implement complex policies. Democratic participation requires citizens capable of processing information, evaluating arguments, and making informed choices. And stronger education outcomes coincide globally with higher political stability, less intense internal conflicts, and lower levels of violent crimes.[18]

India's approach to education as statecraft reflects strong commitment amid the constraints of its large scale and diversity. The Constitution enshrines education as a fundamental right, with the Right to Education (RTE) Act of 2009 mandating free and compulsory education for every child between the ages of 6 and 14 years.[19] As early as the 1960s, the Education Commission recommended increasing the proportion of GNP allocated to education from 2.9 percent in 1966 to 6 percent by 1986,[20] a benchmark that was reiterated in the National Policies on Education of 1968[21] and 1986,[22] but still remains unmet. Public expenditure on education was 4.1 percent of India's GDP in 2022.[23] A structural impediment is that education sits on India's Concurrent List, splitting responsibility across the central and the state governments, and complicating coordination and financing. More than fifty years after its initial articulation, the expenditure target was reaffirmed in NEP 2020, which urges the Centre and States to work together to increase public investment in education to 6 percent of the GDP "at the earliest."[24]

Current expenditures on education, although short of the longstanding goal Indian policymakers have set for themselves, put India within the lower end of global benchmark of 4 to 6 percent of GDP endorsed by 160 countries in the 2015 Incheon Declaration.[25] Given education's strategic role as statecraft, higher investment is nevertheless warranted. Countries that sustain investment in universal education tend to realize stronger growth, more capable public institutions, and more engaged societies.

The Indian government's recent financing and policy efforts emphasize education as a deliberate instrument of statecraft – used to bind a diverse federation, expand opportunity, and align human capital with national strategy.

Hon'ble Education Minister of India, Shri Dharmendra Pradhan has articulated education as central to the Viksit Bharat (developed India) 2047 vision, positioning NEP 2020 as a key mechanism for national development.[26] This approach frames educational reform as essential for both economic competitiveness and self-reliance, connecting contemporary policy goals with India's historical traditions of learning. Guiding principles like Panch Sankalpa (five resolutions emphasizing next-generation, multidisciplinary, innovative, holistic and Bharatiya education in universities)[27] and announcements of projects exceeding INR 40 billion to commemorate five years of NEP[28] signal an approach that treats schools and universities as civic institutions that align pedagogy with nation-building.

Hon'ble Education Minister of India, Shri Dharmendra Pradhan emphasized 'Viksit Bharat' vision during the 'Akhil Bharatiya Shiksha Samagam 2025', organized on the occasion of the 5th anniversary of the National Education Policy (NEP) 2020.

Source: Press Information Bureau, Government of India

The implementation of this vision manifests through four interconnected strategies. First, institutional geography has been reconfigured to strengthen regional development. The expansion of Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), and All India Institutes of Medical Sciences (AIIMS) across previously underserved states distributes prestigious institutions across the country.[29]

Targeted infrastructure development to bridge gaps in education for tribal communities through Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DAJGUA) integrate historically marginalized populations into the national development narrative.[30] The PM Schools for Rising India (PM SHRI) scheme, announced by Prime Minister (PM) Shri Narendra Modi in 2022, designates 14,500 schools as NEP exemplars, creating a national network of demonstration sites.[31]

Second, governance is strengthened through technology and measurement standards. Digital platforms including Technology Augmented Reading Assessment (TARA), Swachh Evam Harit Vidyalaya Rating (SHVR) for hygiene and environmental responsibility, the ViBe AI-powered learning platform, and career guidance applications embed continuous assessment into everyday practice.[32] These tools create unified measurement systems that transcend state boundaries while generating comparable data for policy feedback across India's diverse educational landscape.

Third, cultural and linguistic initiatives position education as a vehicle for civilizational continuity alongside modernization. Initiatives like Bhasha Sagar, which enables learning Indian languages without English mediation, as well as the Centre of Indian Knowledge Systems' Encyclopaedic Dictionary of Sanskrit and its digital KoshaSHRI portal preserve and enable access to traditional knowledge, reinforcing the Bharatiya element emphasized in national education principles.[33]

Fourth, education also functions as soft power in India's global engagement. The government has signed agreements with universities from the UK, USA, Australia and Italy to establish branch campuses in India. Simultaneously, Indian institutions are expanding globally, with IIT Delhi establishing a campus in Abu Dhabi, IIT Madras in Tanzania, and IIM Ahmedabad in Dubai.[34] These initiatives represent a two-way internationalization strategy: positioning India as global education hub while projecting Indian academic excellence worldwide.

In a ceremonial event titled 'Mumbai Rising: Creating an International Education City' held in Mumbai in July 2025, Letters of Intent (LoIs) were issued to five globally reputed universities from the United Kingdom, Australia, the United States of America and Italy, in the presence of Hon'ble Education Minister Shri Dharmendra Pradhan.

Source: Press Information Bureau, Government of India

Economic Literature and Policy Frameworks

The global consensus on education's centrality to development has crystallized through decades of research and policy experience. UNESCO's Education for Sustainable Development framework positions education as the key for unlocking progress towards all seventeen Sustainable Development Goals (SDGs), not just SDG 4 on quality education.[35] The World Bank's Changing Wealth of Nations programme quantifies these linkages, estimating that human capital constituted 60 percent of countries' wealth in 2020.[36] The Bank's Human Capital Index, which uses a broader concept of human capital, found that a child born just before the advent of COVID-19 could expect to achieve just 56 percent of their potential productivity as future workers due to gaps in education and health outcomes.[37]

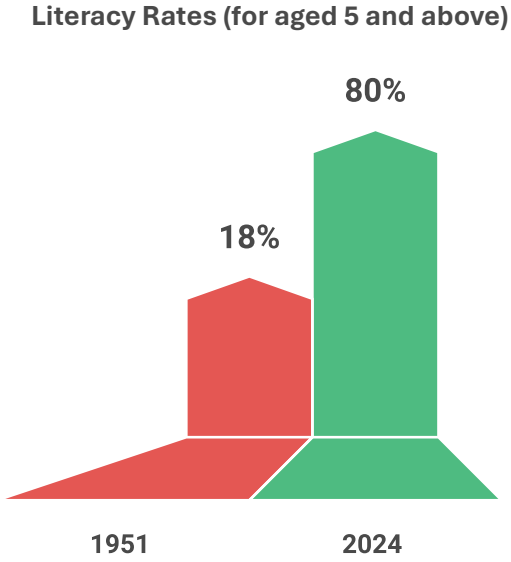
Research on economic crises has also consistently demonstrated education's protective effects against labour market shocks. During the 2008 financial crisis, unemployment rates in OECD countries rose nearly 4 percentage points for people without an upper secondary education, while it only rose 1.5 percentage points for those with a tertiary education.[38] The COVID-19 pandemic reinforced these patterns. Educated workers adapted more readily to remote work, while those with limited education faced disproportionate job losses.[39]

For developing countries, the foundational skills of basic literacy and numeracy emerge as particularly critical for economic adaptability. It has been estimated that 53 percent of all children in low and middle-income countries suffer from learning poverty, that is they are unable to read and understand a short age-appropriate text by age 10.[40] This foundational deficit cascades through education systems, limiting further learning and trapping individuals in low-productivity occupations. Countries that prioritize foundational learning, such as Vietnam, have students who outperform those in much wealthier systems on international assessments,[41] show that rapid progress is possible even with modest resources.

The evidence also highlights the importance of skills alignment with economic structure. Manufacturing-led growth requires different educational investments than service-led development. Countries that have managed structural transformation well, such as China, aligned education with changing economic needs by expanding technical and vocational education during industrialization and later prioritizing innovation-oriented higher education as they approached the technological frontier.[†]

India's Educational Landscape

India's educational achievements over eight decades of independence reflect both remarkable progress and persistent challenges. Literacy rates for its population aged five years and above have risen from 18 percent in 1951[42] to nearly 80 percent in 2024.[43] Primary enrolment is near-universal,[‡] and the gender gap enrolment in elementary education has effectively closed.[44] India is also known for producing more STEM graduates than any country except China.[45]



Source- Ministry of Statistics and Programme Implementation (MoSPI), Government of India

These achievements coexist with sobering realities, and a substantial gap between access and learning. An estimated 56 percent of India's children face learning poverty, defined by the World Bank as being unable to read and understand a short age-appropriate text by age 10. This is lower (better) by 3 percent and 5 percent points than the average for South Asia (SAR) and lower middle-income (LMC) countries respectively.[46]

[†] *For a discussion on the development of China's education system, see Emily Hannum's 2023 report for the US-China Economic and Security Review Commission, "Educational Development in China: Progress, Challenges, and Outlook."*

[‡]*International sources, including UNESCO-UIS, report near universal primary enrolment in India (as measured by the Total Net Enrolment Rate) in recent years. By contrast, India's administrative data (UDISE+) reports an adjusted net enrolment rate of 83.2 at the primary level (Classes 1 to 5) in 2024-25. UDISE+ enrolment rates use projected population denominators based on data that are nearly 15 years old (India's last census was in 2011). Officials note this can overstate the current primary-age cohort and, in turn, depress the rates. While the paper references international evidence of near-universal primary enrolment, subnational analyses using UDISE+ data should be read through this lens.*

Recognition of this crisis has catalyzed comprehensive policy reform, which is anchored by the **National Education Policy (NEP) of 2020.** NEP sets out a system-wide restructuring that prioritizes foundational literacy and numeracy (FLN) as an "indispensable prerequisite for all future schooling and lifelong learning" and acknowledges that without a solid base, later skilling efforts will falter. It has overhauled the structure of schooling from the old 10+2 system to a 5+3+3+4 system (covering ages 3 to 18), bringing early childhood education and care into the formal framework. This prioritization of foundational learning led to the launch of the **National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat)** in July 2021, which aims for all children to achieve FLN by the end of Grade 3 by 2026-2027. More generally, pedagogy has been redirected from rote towards competency-based, experiential learning with trimmed content focused on core concepts. To address skills gaps, the policy integrates vocational education across secondary schooling in a phased manner and introduces computational thinking and coding from the middle years.[47]

LiftEd showcased progress on the NIPUN Bharat Mission at the 'LiftEd: Making India NIPUN' event in New Delhi in February 2025, uniting 175 experts to advance foundational learning in India.

Source: LinkedIn. Peepul.

Case Study: Learning and Innovation in FLN to Transform Education (LiftEd)

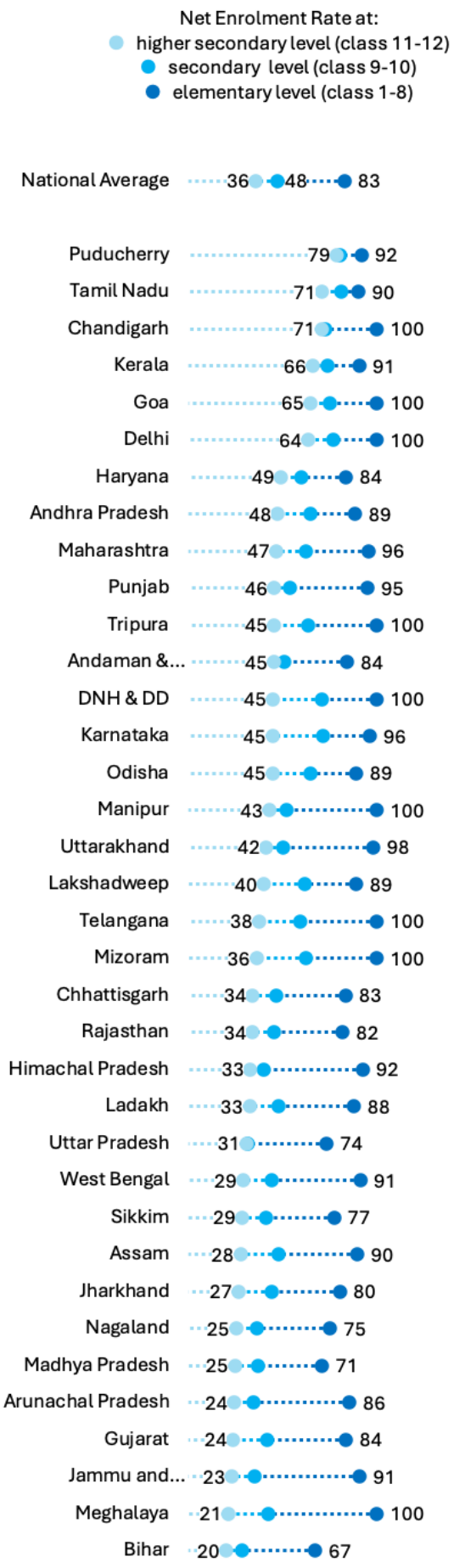
In line with the NIPUN Bharat Mission to improve Foundational Literacy and Numeracy (FLN), private sector entities and civil society leaders came together to launch LiftEd in January 2024. The initiative is anchored by a diverse coalition of partners including Reliance Foundation, Standard Chartered Bank, Michael & Susan Dell Foundation, UBS Optimus Foundation, USAID, and others, with the British Asian Trust as programme leader and Central Square Foundation and Dalberg Advisors as design and technical partners. Collectively, the initiative has raised up to **USD 20 million (INR 166 crore)** to improve India's FLN with a target of reaching 4 million children across 5 years.

The initiative employs a dual approach of on-ground and at home interventions to strengthen FLN. On-ground interventions involve LiftEd's education partners collaborating with state governments and school facilitators in five geographies (Himachal Pradesh, Haryana, Delhi NCR, Uttar Pradesh, and Bihar) to train officials, principals, and teachers- that improves FLN for students in Grades 1–3. Parallely, LiftEd has launched the EdTech Accelerator to develop EdTech solutions that improve FLN in low-income students. The focus is on developing high quality and contextually relevant solutions with innovative partners (Amira Learning, Chimple, Ei Mindspark, Pratham Education Foundation, Rocket Learning, Sesame Workshop, ThinkZone, and Top Parent), who receive mentorship, capacity building workshops and funding through the Accelerator.

IMPACT: In its first year of operations alone, LiftEd has almost reached its target. Currently, it has improved FLN levels for **3.3 million children across 15+ states**, as measured through assessments and 'Systemic Shift Indicators'. By training block and district officers, school principals, and teachers, LiftEd creates a ripple effect, ensuring that each trained individual can positively impact a higher number of students lives over time.

Sources: Reliance Foundation, January 24, 2024, "Private sector and civil society collaborate to transform education and support the Government of India's NIPUN Bharat Mission;" The Tribune, February 13, 2025, "LiftEd initiative helps 3.3 million children improve learning, supports NIPUN Bharat Mission."

Figure 1: Regional variations in school enrolments in India (2024-25)



Source: UDISE+ Report 2024-2025, Ministry of Education, Government of India.

In higher education, the NEP aims to lift gross enrolment ratio to 50 percent by 2035 through a flexible, quality-led strategy that consolidates, expands and improves existing institutions. Undergraduate degrees may follow a three- or four-year structure with exit options at the end of each year, and an "Academic Bank of Credits" framework enables credit accumulation and transfer across recognized institutions. Complementary reforms like the Draft National Policy for Skill Development and Entrepreneurship 2025 seek to align skilling with formal education through accreditation frameworks that support pathways to higher education.[48]

Despite these reforms, national results remain modest, and pronounced state-level disparities persist, limiting inclusive development. Elementary access has expanded, with administrative data indicating net enrolment rates (NERs) of over 90 in many states for classes 1 to 8. This picture however changes at transition points. National NER falls by 35 percentage points to 48 at the secondary level (classes 9 and 10), and by a further 12 points to 36 at higher secondary (classes 11 and 12).

Attrition is steepest in Meghalaya and Jammu & Kashmir, indicating binding constraints even where early access is near universal, whereas Tamil Nadu and Kerala – alongside the union territories (UTs) of Puducherry and Chandigarh – retain a far higher share of students at each stage (figure 1).[49]

These enrolment patterns mirror structural inequalities in school infrastructure. Physical and digital resources vary dramatically across the country. Administrative school-education data for 2024-2025 indicates that nearly all schools in Kerala are equipped with computers, while Meghalaya – where NER falls from 100 at the elementary level to 21 at higher secondary – has computers in fewer than a fifth of its schools. This divide reflects broader infrastructural gaps. In the states of Kerala and Tamil Nadu, nearly all schools report basic amenities (libraries, playgrounds, electricity) while in other states – particularly in the northeastern states of Meghalaya, Arunachal Pradesh and Manipur – many schools still lack essentials.[50]

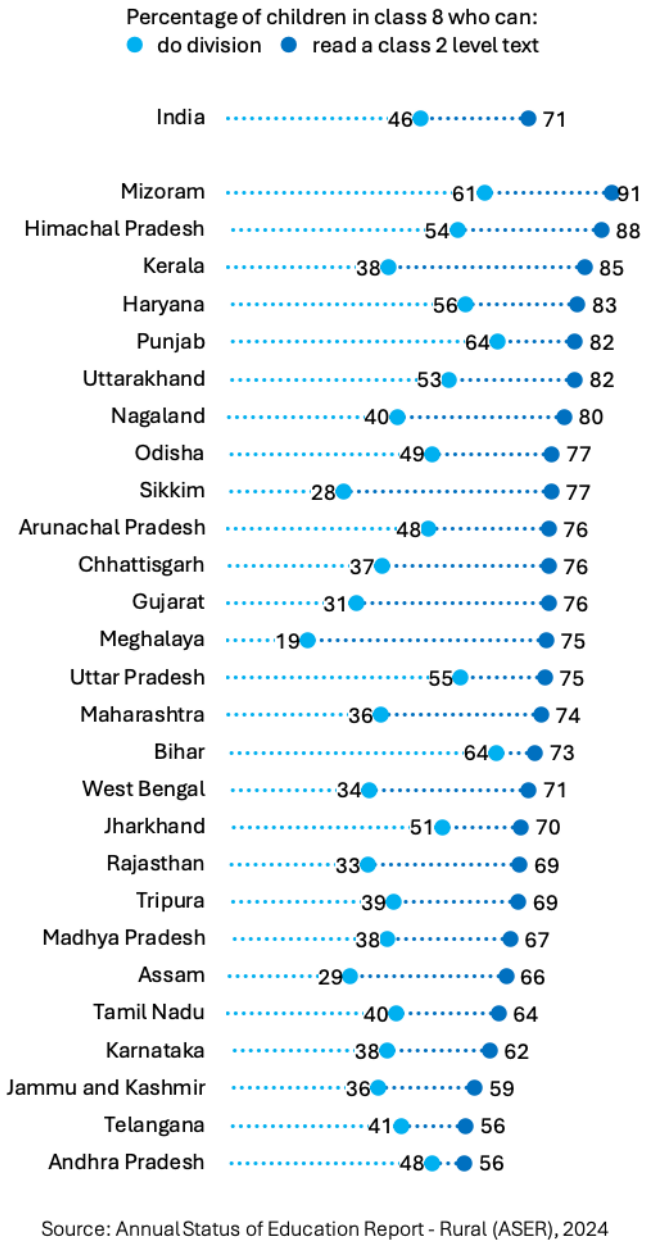
Access gains at the elementary level also do not translate uniformly into learning. Literacy rates reported in India's Periodic Labour Force Survey range from about 98 percent in top performers such as Mizoram to under 73 percent in Andhra Pradesh, illustrating wide variation in human capital across the population.[51] The Annual Status of Education Report (ASER) 2024, a national rural household survey, reinforces uneven learning for current students. Reading levels in rural class 8 remain low, and numeracy is weaker still in most states. Moreover, stronger reading is not a reliable predictor of arithmetic proficiency (figure 2). Andhra Pradesh shows the most balanced, if low, outcomes: 56 percent of class 8 students can read a class 2 text and 48 percent can solve a basic division problem. Meghalaya, on the other hand, combines relatively high reading (75 percent) with very weak numeracy (19 percent).[52]

These gaps and variations across states reflect long-standing differences in history, geography, socioeconomic structure, and the quality of governance. States that invested early and consistently in schooling tend to post stronger social indicators and maintain a lead, while financially backward states often face a cycle of low fiscal space, weaker services and lower learning. Yet income alone does not explain performance. It is difficult to draw a simple correlation between state domestic product and learning outcomes. Bihar and Uttar Pradesh, which have India's lowest per capita GDPs[53] and below-average elementary enrolment, outperform higher-income Andhra Pradesh on both basic numeracy and reading.

While the Hindi Belt states are not the worst performers in terms of learning outcomes for rural children, their low scores will have implications for India's demographic dividend, since the bulk of India's youth are in states like Uttar Pradesh, Bihar, Madhya Pradesh. Ongoing transitions in fertility rates across the country suggest a narrowing window for reaping educational dividends. Policymakers will therefore have to treat regional heterogeneity in education with nuanced and targeted approaches that are grounded in robust analysis.

The Aspirational Districts Programme, launched by NITI Aayog in 2018, which has identified 112 districts that could most gain from interventions across five socioeconomic themes (including education), is already being used in interventions across India. For example, Samagra Shiksha scheme which aims to prove quality and equity in education, focuses on blocks with gender gaps in education ("Educationally Backward Blocks"), districts with a high concentration of minority populations ("Special Focus Districts"), and Aspirational Districts, among others.[54] The NEP 2020 also recommended setting up "Special Education Zones" in regions with large populations of "educationally-disadvantaged" marginalized communities and groups.

Figure 2: Regional variations in learning levels of children in India (rural, 2024)



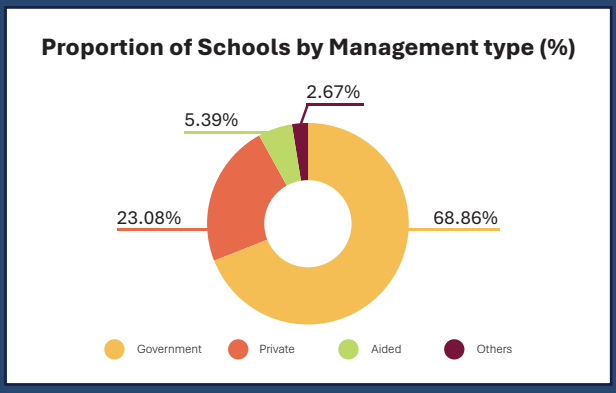
Source: Annual Status of Education Report - Rural (ASER), 2024

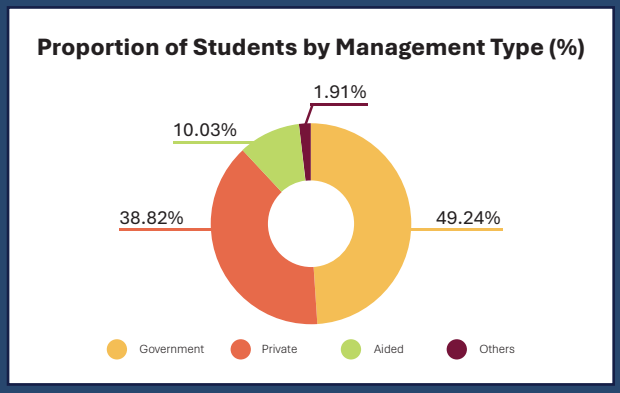
In summary, India's case underscores that education-led development is not automatic and requires effective policy execution across diverse local contexts.

Having made strides in formulating forward-looking policies, the focus should now shift to implementation: improving foundational infrastructure, teaching quality and learning outcomes, as well as harnessing technology for scale, and ensuring that every child is included in the education drive.

Box 1: Public vs Private Schooling in India

Government-run schools continue to form the backbone of India's schooling landscape- around 69% of schools are government-run, with private schools making up about 23%. Rural India remains heavily dependent on public schooling system- of the country's **nearly 1.5 million schools**, around **1.2 million are located in rural** areas and **0.3 million in urban regions.**





Moreover, the UDISE+ 2024-25 data highlights a disproportionate enrolment pattern in Indian school education- government schools constitute 69% of all institutions but enroll less than 50% of students, while private schools, representing around 23% of schools in India, attract nearly 39% of enrolments. This contrast underscores the persistent challenges in public-school quality, the preference among parents for private education and the urgent requirement to strengthen trust, teaching standards, and learning outcomes within the government education system.

While the public education system has made significant strides in providing basic infrastructure and amenities such as electricity, washrooms, drinking water in government schools, the access to digital and pedagogical resources i.e. functional computers, internet, integrated science labs etc.- depicts wide disparities. The following table showcases some of these disparities in access to educational infrastructure and technology:

Indicator	Government Schools (%)	Private Schools (%)
Schools with functional computer facility (for teaching)	52.7	72.5
Schools with internet facilities	58.6	77.1
Schools with integrated science lab facility	51.7	61.8
Schools with functional desktops/PCs	24.0	61.8

The private schools being better equipped, highlight a digital learning divide that limits students in government schools from engaging in tech-based learning. Moreover, this digital divide restricts their exposure to hands on learning and ICT based skills, which are necessary for cultivating a creative, innovative and problem-solving mindset amongst the children from an early age. Going forward, greater investment in technology and skill-oriented education is needed to support youth success and bridge this divide.

All in all, the urgent imperative is to strengthen India's public education system and address educational inequality. Deep rooted challenges persist across several areas- including infrastructure, teaching quality, pupil teacher ratios, inadequate teacher training, integration of tech and skill-based learning, weak monitoring mechanisms and uneven learning outcomes across the country. In a world, where strong public education systems consistently set global benchmarks, strengthening the public education system is not only critical for equitable access and holistic development of students, but also for ensuring that India has a skilled, future ready workforce.

True success will ultimately depend on closing the fundamental trust gap between public education and expectations, requiring not only improved infrastructure but also breakthrough development in teaching quality, digital learning opportunities and sustained learning outcomes at par with global benchmarks by overcoming regional disparities.

The following sections of the paper explore the high performing public education systems globally and provide insights for India to strengthen the public education system.

Source: UDISE+ Report 2024-25, Ministry of Education, Government of India (GoI), UDISE+ Dashboard, Ministry of Education,GoI; https://dashboard.udiseplus.gov.in/

03

EDUCATION GLOBAL LANDSCAPE

This section explores global education models to understand how countries build effective learning systems. It examines Finland's transformation from a stratified system to one of equity and excellence, South Korea's rapid literacy and knowledge-based development, Singapore's strategic use of human capital, and the UAE's strategic deployment of resources to enhance education quality. By comparing these diverse experiences, the section identifies common patterns, paradoxes- offering insights into what makes an education system successful, while stating that although specific practices can be adapted, nations must chart their own paths that align reforms with their own socioeconomic realities.

Education Global Landscape

Stepping back from India's experience, a global vantage point reveals sharp divergences in education outcomes and policy approaches across countries. In the most high-income countries, virtually all children achieve basic literacy by the end of primary education, whereas in many low- and middle-income countries a majority do not.

Global Models of High-Performing Systems

The experience from high-performing systems illustrates the effort that lasting improvement requires. A coherent set of choices about foundations, teaching, curriculum, support, transparency, and forward-looking intent all play in role in nurturing human capital and sustaining positive learning outcomes.

Finland

Finland's educational transformation from a mediocre, stratified system with ability groupings for students to an equitable and highly effective one within two generations offers perhaps the most studied model of systemic reform. Prior to reforms in the 1970s, Finland operated a parallel structure that divided students at age 11 or 12 into academic and vocational tracks, based on their domicile, socioeconomic background, or interests. The comprehensive school reform (peruskoulu) launched in 1972 unified these tracks and gradually extended equal educational opportunities across the country.[55]

The Finnish approach inverts conventional assumptions about educational achievement. Students begin formal schooling at age seven, face fewer standardized tests, have minimal homework, and enjoy frequent breaks during shorter school days. Yet Finnish students consistently rank among the world's top performers while reporting high levels of wellbeing and low educational stress.

One of the pillars of Finnish success is teacher quality. Entry into teacher education programmes is highly competitive (fewer than 10% of applicants are accepted) and all teachers in the peruskoulu system complete research-based master's degrees. Once qualified, teachers enjoy extraordinary professional autonomy, designing curricula and assessments aligned with national guidelines but adapted to local contexts.[56] This trust-based approach, combined with comprehensive social support that minimizes out-of-school disadvantage, creates conditions where virtually all students achieve basic competencies while many excel.

South Korea

South Korea's achievements follow a radically different trajectory from Finland's. Its rapid ascent to global educational leadership was marked by a focus on development of primary education following the Korean War, expansion of secondary education to support capital-intensive industries of the 1970s and 1980s, and a focus on tertiary education in the 1990s, laying the foundation for Korea's success as a knowledge-based economy.[57]

South Korea's success also reflects extraordinary societal commitment to education. Korean teachers undergo a selective entry system, and are awarded high salaries, professional autonomy and continuing training opportunities.[58] Supplementary education is a defining feature. Time use data indicate that high-school students study nearly eight hours on weekdays, about three of which are outside school,[59] though some sources suggest as much as sixteen hours every day, including time spent at private tutoring schools (hagwons).[60] Private education outlays are substantial, with spending on school-age students estimated at 29.2 trillion won (over USD 20 billion) in 2024.[61] The intensity of study is mirrored in outcomes. In PISA 2022, Korea ranked 4th (out of 80) in reading, 6th in mathematics, and 5th in science,[62] and among 25- to 34-year-olds it has the highest tertiary attainment rate in the OECD.[63]

Yet Korean success comes with significant costs. Adolescent suicide rates are on an upward trend in the country even as global rates decline,[64] and the proliferation of for-profit hagwons exacerbates inequality.[65] Seeking to maintain excellence while addressing wellbeing concerns, the Korean government has undertaken reforms since the mid-2000s such as curfews on the operation of hagwons after 10 PM (which has had mixed results)[66] as well as introducing "exam-free semesters."[67] Korea's experience shows that educational achievement through extreme competition and pressure, while possible, may ultimately prove unsustainable.

Singapore

Singapore's evolution provides a third model, combining elements of both Finnish and Korean approaches while adapting to unique circumstances. The city-state's strategic use of education for nation-building began with survival imperatives.

Lacking natural resources, Singapore recognized human capital as its only competitive advantage. The system's evolution through distinct phases – survival-driven (1965-1978), efficiency-driven (1978-1997), and ability-driven (1997 onwards) – points towards an adaptive capacity typically rare among education systems.[68]

Singapore's approach rests on tight institutional alignment and deliberate workforce planning. Skills forecasts coordinated across economic agencies allow the Ministry of Education and post-secondary institutions to steer capacity toward national priorities, while "milestone" courses for government officials create a shared understanding of goals. At delivery level, a partnership between the Ministry, the National Institute of Education, and schools ensures that policies are based on experiential research and backed by systematic capacity building.

This governance model is complemented by an unwavering societal commitment to meritocracy and accountability, and the system runs on performance management, rewards, and recognition across all levels – from ministry staff to students. Singapore also augments its domestic capacity by deliberately importing expertise. The National University of Singapore (NUS) and Nanyang Technological University, for instance, have research partnerships with leading universities around the world. For students, there is a strong focus on the development of strong mathematics, science and technical skills.[69] Ability groupings exist (formerly through "streaming"), though reforms such as subject-based banding (SBB) ensure quality options and progression opportunities across all streams.[70]

Box 2. The UAE's Educational Transformation

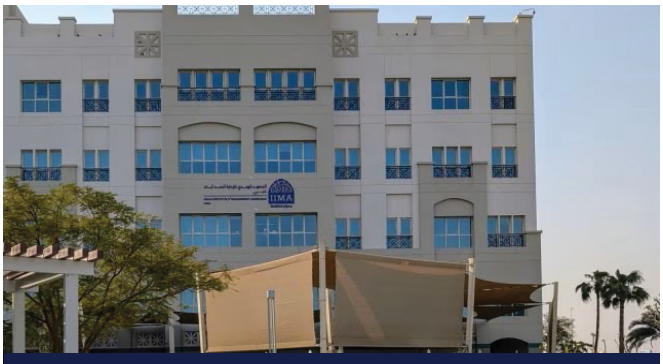
The United Arab Emirates presents a unique case of rapid educational modernization enabled by resource abundance and strategic vision. In 1975, adult literacy stood at 54 percent for men and 31 percent for women with limited formal education infrastructure. Today, literacy for both genders is close to 95%, and the country hosts 1,292 schools and 76 university branch campuses. Beyond access, the UAE has focused on quality enhancement and alignment with global standards. Since 2008, it has participated in international tests like PISA, Trends in International Mathematics and Science Study (TIMSS), and PIRLS to benchmark its performance. These efforts have paid off and UAE now ranks first in the Arab world on many of these tests. This transformation, compressed into five decades, offers insights particularly relevant for nations seeking accelerated human capital development.

The UAE's approach demonstrates how strategic resource deployment can overcome traditional development constraints. Much like Singapore, it has supplemented home-grown capacity with leading global institutions. NYU Abu Dhabi, established in 2010, has an acceptance rate of just 5 percent. The Sorbonne Abu Dhabi delivers French degrees in the Gulf, INSEAD's Abu Dhabi campus extends elite business education beyond Western markets, and the newly opened IIT Delhi and IIM Ahmedabad campuses bring the best of Indian engineering and management education to the UAE. These initiatives position the country as a regional education hub while rapidly upgrading its domestic human capital.

Sources: Ministry of Foreign Affairs of the UAE, Studying in the UAE; Ministry of Education of the UAE, Open Data - GE Public Schools and GE Private Schools and List of licensed Institutions in UAE; U.ae (National Portal of the UAE Government), Raising the standard of education; NYU Office of Institutional Research & Data Integrity, NYU Abu Dhabi by the Numbers.

Sorbonne University, Abu Dhabi

Source: Sorbonne University Abu Dhabi



IIM Ahmedabad, Dubai

Source: The Indian Express

Patterns and Paradoxes

These diverse experiences reveal several patterns crucial for understanding educational development. First, **cultural coherence** around **education's value** appears more important than specific pedagogical approaches. Finland's trust-based model and Korea's competition-driven system both succeed because they align with broader societal values and expectations. Second, **teacher quality** emerges as the single most important variable across all high-performing systems, though pathways to achieving quality vary dramatically. Third, **equity and excellence** prove mutually reinforcing rather than conflicting. Systems that successfully educate all students also produce the highest achievers.

The paradoxes are equally instructive. Resource abundance may correlate weakly with outcomes if basic thresholds are met. Cultural emphasis on education can become pathological, affecting student well-being. Most significantly, all successful systems are experimenting with fundamental restructuring, as industrial-era education structures falling in the digital age.

These global experiences converge on the fact that educational transformation requires not just policy reform but societal transformation. Finland's success rests on broader Nordic social democracy, Korea's on Confucian cultural foundations, Singapore's on unique city-state governance, and the UAE's on thoughtful deployment of its resource abundance. This context-dependence suggests that while specific practices can be adapted, wholesale model transfer may not succeed. Nations must chart their own paths that align educational reform with broader socioeconomic realities. India's educational journey must be understood not through simple benchmarking against these models but through careful analysis of how global lessons intersect with national realities.

04

INDIA IN A COMPARATIVE GLOBAL LANDSCAPE

This section explores India's vast and diverse education system, its challenges, and reforms such as NEP 2020. It benchmarks India against global leaders like Finland and South Korea, as well as emerging economy peers like Vietnam and Indonesia, highlighting lessons on equity, teacher quality, and systemic design. It also examines Dubai's private education model, India's demographic dividend, and skill initiatives like Skill India Mission. Moreover, cross-national insights on digital transformation, early interventions, and education-industry alignment- highlighting pathways to strengthen India's education system for the future have also been explored.

India in a Comparative Global Landscape

India's educational outcomes must be understood within the context of extraordinary scale and diversity. The system educates students across 1.5 million schools, representing an undertaking unmatched globally. Within this complexity, performance indicators reveal both significant progress in access and persistent challenges in quality and equity.

UNESCO data shows that India cut the share of out-of-school children as follows.[71]

India's Progress in Reducing Out-of-School Children

Education Level	Primary	Lower Secondary	Upper Secondary
Students out of school in 2000	33%	44%	63%
Students out of school in 2023	4%	11%	39%

Source: UNESCO Data

Although this marks significant progress, dropout patterns at higher levels require continued attention.

On learning outcomes, ASER 2024 reports large gaps in foundational skills. Among Class 8 students, 29 percent cannot read a Class 2 level text and 54 percent cannot solve a basic division problem. For Class 5, the figures are 51 percent and 69 percent, respectively. The problem is most acute in government schools, which enrol about 67 percent of surveyed children aged 6-14 but face severe resource and infrastructure constraints. More than 31 percent of surveyed schools lack a playground, 22 percent lack drinking water, and nearly 73 percent have no computer access for children. [72]

Teacher absenteeism also remains a persistent problem, with estimates suggesting average teacher absence in rural areas across India at almost 24 percent in 2010. The fiscal cost of this has been calculated at over USD 1.5 billion annually.[73]

Moreover, the disconnect between outcomes in access and learning manifests in the twin problems of the educated unemployed and persistent skill shortages.

Benchmarking against Leaders and Peers

When benchmarked against high-performing systems, India's challenges and the scope for advancement are more apparent.

Finnish schoolteachers, all holding master's degrees and recruited through carefully designed and highly competitive systems, teach 677 hours annually in primary schools,[74] compared to Indian teachers' mandated 800 hours,[75] yet achieve dramatically superior outcomes. Finland's exceptional outcomes must, of course, be contextualized along its much smaller population of 5.6 million (less than half the population of Mumbai) and its per capita income exceeding USD 50,000, nevertheless they reveal valuable insights about quality and trust in education.

India has moved in a favourable direction by introducing **Teacher Eligibility Tests** and **granting greater classroom autonomy under NEP 2020.** That said, caution is also warranted. South Africa's experiment with classroom autonomy in the 1990s and 2000s, when it adopted a curriculum approach that set goals but left implementation up to teachers, was unsuccessful. Research indicates this was because it was a poor fit for the capacity of the teachers and the resources at their disposal.[76] Autonomy may therefore raise quality only when matched by comprehensive reform on teacher quality and support.

South Korea's educational transformation offers relevant lessons, having achieved rapid progress from conditions similar to India's historical position. Its intensive strategy, which combined high public investment in the 1980s (peaking around 6.3% of GDP) with substantial private spending, demonstrates a pathway to excellence. India's approach differs in intensity but shares strategic elements: rising investment and growing social recognition of education's value, reflected in initiatives such as NIPUN Bharat, and strong parental aspirations for graduation in rural areas.[77]

The comparative lesson is less about replicating Korea's scale of spending and more about policy coherence over time, while calibrating for India's scale and diversity and avoiding the equity and well-being trade-offs seen in Korea's model.

Among emerging economy peers, **Vietnam's** achievements can offer valuable insights. In the 2022 PISA, students in Vietnam scored close to the OECD average in mathematics, and its extraordinary performance relative to its developing economy peers in previous rounds has been well-documented.[78] Researchers have noted a variety of explanations: diligence and discipline at the level of students, high parental expectations, a centralized, disciplined and performance-oriented environment for teachers, and investments in preschool education and infrastructure that is disproportionately high compared to its per capita income level.[79]

Indonesia, on the other hand faces challenges of scale and diversity not too dissimilar from India's and offers cautionary parallels. The Indonesian education system is the fourth largest in the world (behind China, India and the US) and accommodates the needs of a geographically dispersed and socioeconomically diverse population.[80] Its proportion of out-of-school children at the primary, and lower and upper secondary levels are not too dissimilar from India's,[81] but it also struggles with quality. In the 2022 PISA, its shares of low performers in reading (75%) and mathematics (82%) were amongst the highest in participating economies.[82] It has been suggested that a focus on teacher quality, measurable indicators for services standards, and a focus on early childhood education could mitigate some concerns.[83]

Box 3. Transparency and Incentives in Dubai's Private Education Model

Dubai's K-12 education sector is unique, with 0.39 million students enrolled in 227 private schools across seventeen different curricula in the academic year 2024-25. The government's approach, led by the Knowledge and Human Development Authority (KHDA), is to regulate this largely private market through the levers of accountability, incentives, competition and collaboration, all while focusing on student outcomes.

The model's anchor is transparency. Since launching the Dubai Schools Inspection Bureau (DSIB), KHDA has made school quality information public via detailed reports and an app. Schools are rated on a six-tier scale from Outstanding to Very Weak, creating a common language around quality that parents and media readily understand. KHDA also leverages international assessments, such as PISA, PIRLS, and TIMSS, to cross-check inspection judgments and guide system-wide improvements.

Incentives formalize accountability. KHDA uses inspections and follow-up visits not just for compliance, but to support improvement. Each school's allowed tuition fee increases are linked to its rating (adjusted by an Education Cost Index), creating a financial incentive for schools to improve or maintain quality. These policies have coincided with steady gains in quality. The share of students in schools rated good or higher rose from about 30 percent in 2008-2009 to 81 percent in 2023-2024.

Reputation fuels healthy competition. The private school sector in Dubai acts as a series of parallel markets separated by curriculum – UK, US, Indian, Ministry of Education, IB, and other niche offerings. Switching schools is not always straightforward. Curriculum continuity, capacity caps at top-rated schools, and affordability constrain choices, and parents may additionally consider factors like language, culture, and location in addition to academic quality when choosing schools. As a result, competitive pressures can be uneven. Transparency of school ratings, and the resulting reputational effects are one way in which KHDA implicitly encourages healthy competition. While the regulator avoided shutting down schools in the past, recent announcements note that schools have been closed for falling short of quality benchmarks and highlight student welfare.

Collaboration drives improvements. Alongside market pressures, Dubai has fostered a culture of collaboration among schools as a way to lift quality across the board. KHDA has introduced initiatives such as What Works (sharing of best practices), Living Arabic (promoting Arabic language), Lighthouse (networking between principals) and Abundance (knowledge-sharing from the top-rated schools). The focus on local solutions enables context-specific improvements and effectively harnesses the richness and diversity in Dubai's school systems to drive system-wide benefits.

This approach has delivered notable success. Students from Dubai's private schools now rank among the top performers in international benchmarks. In PISA 2022, they placed 9th worldwide in mathematics, 13th in reading, and 14th in science. These outcomes reaffirm Dubai's education model as a world-class example of driving quality in a highly diverse and predominantly private schooling system.

Sources: KHDA. 2025. Dubai private school landscape 2024-25. World Bank/Thacker, S. & Cuadra, E. 2014. The Road Traveled: Dubai's Journey towards Improving Private Education; World Bank/Thacker, S. with Abdo, A. S. 2019. Collaboration Road: Dubai's Journey towards Improved School Quality; KHDA News. 2024. KHDA Director General outlines strategic blueprint for Dubai's education sector during 'Meet the CEO' session at Dubai Media Office; KHDA News. 2024. 81% of Dubai students attend private schools rated Good or better; KHDA. School Fees Framework; KHDA. 2025. PISA 2022 Dubai Report

India's Demographic Dividend and Global Positioning

India's demographics create urgency for education-led development. Over 600 million people are under 25, and the working-age population is set to grow by roughly 10 million annually to 2030,[84] positioning India as a major global skills supplier. The potential is evident in specific domains. Nearly 10 million students were enrolled in university STEM programmes in 2021-2022.[85]

> India has emerged as the world's largest provider of ICT services with exports as follows, and this opportunity is amplified as high-income countries face deepening skill shortages.
>
> **USD 178 billion**
> in ICT exports in 2024.[86]
>
> Germany hopes to attract from abroad **400,000** skilled workers annually from abroad,[87] Japan estimates a shortfall of nearly **a million** foreign workers in **2040**,[88] and Italy aims to hire **10,000** nurses from India.[89]

India's English proficiency and established diaspora networks position it advantageously to address these gaps through both migration and remote service delivery. Recent mobility agreements such as the 2024 India-Australia Mobility Arrangement for Talented Early-professionals Scheme (MATES) and the 2022 German-Indian Migration and Mobility Agreement formalize these complementarities.

Yet the window to harness India's demographic dividend is narrowing. Fertility has fallen below the replacement level of 2.1 children per woman,[90] and the working-age share is projected to peak in 2034.[91] Without rapid gains in education and skills, the dividend will erode, turning potential into liability.

Experience from parts of Latin America warns of a "middle-income trap" awaiting countries that fail to upgrade workforce capabilities.[92]

In response to this challenge, skill development initiatives have become a national priority. The flagship Skill India Mission, launched by Hon'ble PM Narendra Modi in 2015, represents the government's attempt to align India's workforce capabilities with both domestic needs and global opportunities. The mission was designed as an umbrella initiative to provide market-relevant vocational training and skill certification, with an ambitious target to train 400 million people.[93]

Hon'ble Prime Minister Shri Narendra Modi launched the Skill India Mission, on the occasion of the World Youth Skills Day, in New Delhi in July 2015.

Source: Prokerala

> **"The Skill India initiative has benefited countless people, empowering them with new skills and creating opportunities. In the coming times as well, we will keep focusing on equipping our Yuva Shakti with new skills, in line with global best practices, so that we can realise our dream of a Viksit Bharat."**
>
> **Shri Narendra Modi, Hon'ble Prime Minister of India on completion of ten years of Skill India Mission in July 2025**[94]

This is done through multiple flagship programs. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) provides short-term skill training and certification to youth nationwide, including in rural areas. Over 16 million candidates have been trained under PMKVY since its inception, with over 2.5 million trained under the PMKVY 4.0 phase as of July 2025.[95] The National Apprenticeship Promotion Scheme has engaged over 4 million apprentices, while the Craftsman Training Scheme through Industrial Training Institutes (ITIs) has enrolled over 9.2 million candidates.[96]

The mission has evolved to address the demands of the future economy, expanding into cutting-edge sectors including AI/ML, Robotics, Drone Technology, and Mechatronics. Training now covers over 750 job roles spanning traditional sectors to emerging domains, with specific alignment to Industry 4.0 requirements. Thirty-six Sector Skill Councils, led by industry leaders, have been established to identify skill development needs and determine competency standards across sectors.[97]

Ultimately, skill development is the critical link between India's demographic potential and workforce productivity. While global labour shortages have eased somewhat, they remain substantial,[98] creating opportunity to transform India's youth bulge into global talent.

At the same time, the rapid evolution of technology, particularly in AI, robotics and the green transition, is fundamentally altering the nature of work itself, necessitating adaptive skill development programmes that keep pace with emerging roles across sectors. Whether India's demographic window delivers sustained dividends, both at home and abroad, will depend on successfully pairing foundational education with market-relevant higher education, vocational training and credentials that carry cross-border recognition.

Mr. FAIZAL KOTTIKOLLON
Chairman of KEF Holdings
Chairman of UIBC-UC
Founder FSF

India's young demographic presents an extraordinary opportunity to build a global knowledge and skills base. By investing in education, particularly in STEM, healthcare, technology, and vocational training, India can strengthen its talent base and create a structured pipeline for domestic and international employment. Education is not merely a tool for academic progress, but a catalyst for human capital development, social mobility, and economic resilience.

Structural Strengths and Gaps

India's educational system exhibits distinct structural strengths often overlooked in deficit-focused analyses. Its Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) rank among global elite institutions, with exceptionally low acceptance rates and alumni leading major international corporations. India's space programme, pharmaceutical industry, and IT services also demonstrate local capacity for world-class knowledge production.

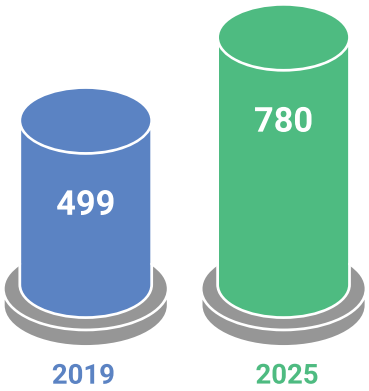
The EdTech revolution in India shows capacity for educational innovation. India's edtech startups have interventions in adaptive learning (e.g. Mindspark), curriculum-based programmes (e.g. Tata Play Classroom), and learning apps (e.g. Unacademy) that have shown promise in improving engagement and learning gains. India's policy stance is to treat technology "for the purposes of improving teaching-learning and evaluation processes, supporting teacher preparation and professional development, enhancing educational access, and streamlining educational planning, management, and administration." At the same time, it is explicit about risks of the digital divide, the need to train teachers for online teaching and assessment, and the limitations of online learning unless blended with experiential activity.

Private provision of schooling remains contested but is now a significant feature of the Indian education system. Spanning elite schools to low-fee schools serving low-income communities, the private sector accounts for as much as 39 percent of enrolment in 2024-2025.[99] Research on private schools in India finds learning levels that are comparable or, in some cases, modestly higher than those of nearby public schools, often in a substantially more cost-effective way.[100,101] At the same time, growth in private provision can raise concerns about affordability, amplify stratification,[102] and fuel a coaching marketplace. NEP 2020 tries to keep the upside while curbing the downside with its emphasis on a "light but tight" regulatory approach. It is careful to specify that regulation should not discourage public-spirited or philanthropic schools, which it recognizes can play a significant beneficial role.

Systemic gaps can sometimes overwhelm these strengths. The rapid growth of education access in India has meant that quality assurance mechanisms require strengthening across levels.

India, for instance, has successfully expanded medical schools[103] from:

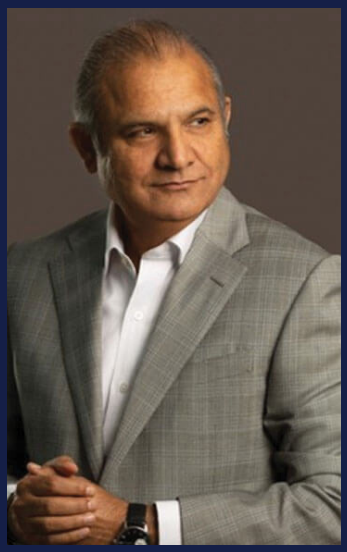
Number of Medical Schools in India (2019-2025)



Source: Ministry of Education, Government of India

While the expansion has been significant, it has brought challenges including faculty shortages, infrastructural limitations, and the need for enhanced quality control mechanisms.[104] Such systemic concerns risk affecting graduate preparedness and carry long-term consequences for critical workforce and human-capital development.

India has also suffered from gaps in equity. Access and attainment vary by geography, gender, caste, and income. Survey data from 2023-24 show that among those aged 15 and above, 46 percent of men have completed secondary or higher education, compared to 36 percent of women. Literacy rates can also vary across social groups, from 73 percent for scheduled tribes, 77 percent for scheduled castes and 81 percent for other backward classes to 88 percent for other groups.[105] Administrative data indicate that the historic gender gaps in enrolment have largely closed, but disparities persist for other populations. In 2024-2025, for instance, the share of religious minority groups' enrolment in total enrolment fell from 21.5 percent at the primary level to 19.2 percent at the upper primary, 18.4 percent at the secondary, and 16.7 percent at the higher secondary levels.[106]



Mr. TARIQ CHAUHAN
Co-founder and Vice Chairman- EFS Facilities Services Group
Board Member - UIBC-UC

From EFS Facilities Services Group's experience as a large integrated facilities management company operating across Middle East, Africa, South Asia, Europe and Turkey, India represents one of the most significant sources of skilled and semi-skilled talent.

However, EFS has consistently observed several critical skill gaps that impact workforce readiness and mobility. A key issue is the inadequate commitment of education institutes and uneven quality of education resulting from the privatization of educational institutions. While capacity has increased, many institutions are not aligned with industry standards or the evolving requirements of the services sector. Curricula in technical and vocational fields are often outdated, with limited practical exposure and weak linkages to real workplace environments.

There is also an evident underinvestment in learning and development infrastructure, both at the institutional and enterprise level. This has led to persistent shortages of "workplace ready" talent. Vocational training remains under-prioritized, which has contributed to a widening gap between the demand for field-based jobs in industries like facilities management and the supply of qualified candidates. This challenge is compounded by a strong cultural preference among many young people for office or desk-based roles, resulting in limited interest in hands-on, technical professions. EFS has also identified low levels of digital fluency as a major barrier to effective deployment. In an increasingly technology-enabled FM sector, many candidates lack familiarity with Computer Aided Facility Management (CAFM) systems, IoT interfaces, smart building technologies, and data recording tools. Additionally, deficits in communication skills, customer handling, and language proficiency, particularly English, hinder smooth integration into the service environment in the UAE

Cross-National Insights for India

Investing Early: Universal Access and Equity from the Start

Finland and Estonia, invest heavily in children before they ever enter formal schooling. Universal access to high-quality early childhood services (often free or heavily subsidized) is a cornerstone. This ensures that by the time students reach primary school, gaps arising from poverty or family background are narrowed.

Teacher Quality and Professional Prestige

A focus on teacher quality is also an important feature of successful systems. Finland has highly selective teacher education programmes, and teaching is a very well-regarded profession in Finnish society.[107]

In Canada similarly, teaching is generally thought of as a high-status and well-paid job, and provinces focus on recruiting and retaining strong teachers.[108]

Digital Readiness and Technological Integration

Successful countries have also embraced digital resources for both learning and administration. Estonia, in particular, had an early start with its Tiger Leap (Tiigrihüpe) project in the 1990s that provides all schools with computers and internet access. It has successfully built upon this programme, and has a current focus on building skills in three areas: design and technology, engineering sciences, and information and communication technologies.

Aligning Education with Industry and Skill Needs

As far as employability later in life goes, education-industry linkages in **Asian economies** offer models for addressing India's skill misalignment.

Singapore has developed one of the world's most systematic approaches to aligning education with industrial policy and economic development needs. Its Manpower Ministry collaborates closely with economic development agencies to assess current skill shortages and forecast future labor market requirements, which are then integrated into both pre-service training programs and ongoing professional development initiatives. These workforce projections serve as the foundation for strategic planning across educational institutions, especially universities, polytechnics, and technical training centers.[109] **China** provides another example, having ranked first globally in technical and vocational education and training in UNDP's Global Knowledge Index 2024.[110] Its Vocational Educational Law, revised in 2022, mandates that vocational education feature guidance from industry organizations and cooperation between schools and businesses, and provides financial, fiscal and land incentives for industry-education integration enterprises.[111]

Other countries in the region are implementing similar education-industry alignment strategies in response to the Fourth Industrial Revolution. The **Philippines** has introduced K-12 reforms emphasizing ICT-based learning and strong community-industry partnerships, while Malaysia's "Redesigning Higher Education" strategy includes innovative programs mixing university and in-house industry training.[112]

Taiwan's industrial clusters co-locate with technical institutions, creating innovation ecosystems. South Korea's Meister high schools, modeled on German apprenticeships but adapted to Korean context, achieve employment rates of 74 percent,[113] compared to 42 percent for graduates from India's Industrial Training Institutes.[114]

Governance and Coherence

An often-cited explanation for India's implementation gaps across educational initiatives is constitutional concurrency. Responsibility for education is divided between the Union and the states. Evidence from across the world nevertheless shows that decentralization can coexist with high performance when coordination is robust.

Canada vests schooling authority in provinces but aligns key functions through the Council of Ministers of Education, Canada (CMEC) and pan-Canadian monitoring (PCAP). Yet Canadian 15-year-olds scored well above the OECD average in all three PISA 2022 domains.

Switzerland, with extensive cantonal control, and **Australia,** which operates a state-led system but harmonizes the national curriculum, offer other favourable examples. While none of these systems is a like-for-like match with India's, they show that decentralization can coexist with strong learning outcomes.

All in all, for India, the global evidence from these countries underscores that as India refines its educational policies- governance coherence, early interventions, teacher empowerment, digital readiness, and strong linkages between education and industry- are the key areas that can lead us to the next stage of educational transformation and success.

05

THE ROLE OF PHILANTHROPY AND MISSION-DRIVEN PRIVATE ACTORS

This section explores the growing importance of non-state actors, philanthropy and mission-driven private actors in addressing systemic gaps, particularly where public education faces challenges of capacity, reach, or innovation in India. It examines the transformative impact of CSR regulations on education and highlights prominent philanthropic foundations and their contributions. The section also illustrates distinctive case studies through which CSR and philanthropy are shaping education and skill development outcomes.

The Role of Philanthropy and Mission-Driven Private Actors

Education systems worldwide are increasingly recognizing that achieving universal quality education requires mobilizing diverse actors beyond government alone. In India, while national and state governments bear the constitutional and financial responsibility for providing education, the role of philanthropy and mission-driven private actors has become increasingly important in fulfilling systemic gaps, particularly in areas where the public sector faces challenges of capacity, reach, or innovation. While questions around equity, quality assurance, and accountability remain important considerations, experience from both India and abroad suggests that the quality of governance, rather than ownership structure per se, determines whether non-state actors enhance or undermine educational outcomes. As Dubai's experience with private-sector-led schooling and India's own experience with private education and NGOs such as Pratham (which coordinates the ASER surveys) demonstrate, non-state actors can deliver meaningful educational outcomes if incentivized and regulated effectively.

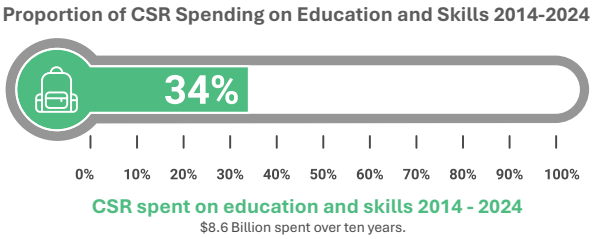
Philanthropic initiatives and social enterprises are stepping in to work across areas such as foundational literacy and numeracy (FLN), infrastructure upgradation, teacher training and empowerment, community-based schooling models and digital inclusion. Through strategic interventions, non-state actors are addressing pertinent gaps and making education delivery more equitable and scalable.

Philanthropic Engagement in India

Engagement of non-state actors in Indian education systems represents one of the world's largest experiments in private contribution to public good.

Corporate Social Responsibility

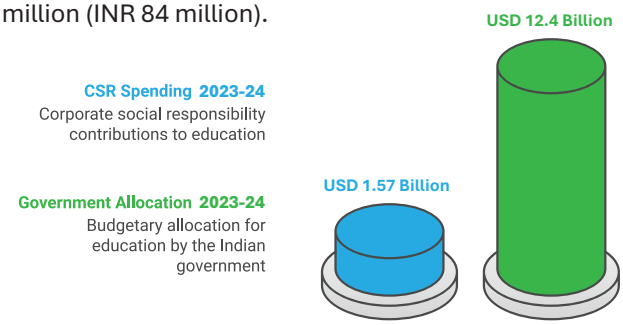
Mandatory **corporate social responsibility** (CSR) requirements, established by India's Companies Act 2013, requires companies of a certain size to spend at least 2 percent of average net profits from previous three years in pursuit of CSR goals.[115] This development has channeled extraordinary resources towards social development in India. Since the implementation of the Act in 2013, firms have spent over INR 2.2 trillion[116] on CSR (just under USD 25 billion). Education and skill development initiatives have consistently received the largest share (approximately 34 percent of total spending) translating to INR 76,072 crores (USD 8.6 billion) over the ten-year period between 2014-2015 and 2023-2024.[116]



Source- National CSR Portal, Ministry of Corporate Affairs, Government of India

This regulatory innovation, unique globally in mandating corporate philanthropy, has fundamentally altered India's education financing landscape. In 2023-2024 alone, CSR spending on education and skills totaled USD 1.57 billion (INR 139 billion),[117] about 12 percent of the Indian government's USD 12.4 billion (INR 1.1 trillion) budgetary allocation to education that year.[118] Strategic deployment of these funds can support innovation, strengthen last-mile delivery, and address service gaps. In practice, however, CSR spending on education is concentrated in a few states.

In 2023-2024, these were Maharashtra - USD 315.7 million (INR 28 billion), Gujarat - USD 157.8 million (INR 14 billion), Karnataka - USD 135.3 million (INR 12 billion), Delhi - USD 135.3 million (INR 12 billion), and Tamil Nadu - USD 101.4 million (INR 9 billion).[119] By contrast, Bihar, which has the lowest net enrolment rate at the secondary level, received USD 9.47 million (INR 840 million), and Meghalaya, which has the lowest share of students with basic mathematics skills in class 8, received USD 0.947 million (INR 84 million).



Source: National CSR Portal, Ministry of Corporate Affairs & Union Budget 2023-24, Government of India

The biggest sources of CSR funds in education were Tata Consultancy Services, Reliance Industries, and HDFC Bank who each contributed over USD56.39 million (INR 5 billion) in 2023-2024 to support a diverse array of interventions ranging from infrastructural upgrades to digital literacy programmes.[120]

Philanthropic Foundations

Philanthropic foundations in India also operate at scale. Some of the most prominent philanthropies working on education include the Azim Premji Foundation, with an endowment valued at USD 29 billion in 2023,[121] Tata Trusts, and Reliance Foundation. These are complemented by international philanthropic engagement from organizations like the Michael & Susan Dell Foundation, the Gates foundation (which while primarily health-focused supports educational initiatives), and the Ford Foundation among others. These international foundations bring not just capital but global expertise and networks, facilitating knowledge transfer and innovation adoption.

Non-Profit Organizations

Non-profit organizations are third category mission-driven non-state actors that play a large role in supporting the drive towards universal high-quality education. Pratham, as previously noted, established the ASER Centre and has been instrumental in collecting and disseminating critical data on learning outcomes in the country, filling a benchmarking gap that existed for a long time. Moreover, its flagship Read India program, for instance, has demonstrated measurable improvements in FLN outcomes through low-cost, scalable methods such as the "Teaching at the Right Level" (TaRL) approach.[122] Teach for India, which recruits Indian graduates and young professionals to serve as teachers in low-income schools for a two-year period, is another prominent example.

Case Studies of Transformative Philanthropy in School Education and Skill Development

While macro-level data on CSR and philanthropy highlights the scale of resources being directed to education, the transformative potential is best understood through specific on ground interventions. The following case studies provide a closer look at the distinct models of philanthropic and corporate-led CSR engagement in India's education and skill development sector, showcasing how philanthropy can complement state efforts and address deep rooted challenges. Ranging from gender-focused community programs and large-scale scholarship schemes to district-wide systemic reforms, they highlight the diverse pathways through which philanthropy is shaping educational and skill development outcomes.

Case Study: Titan Kanya Initiative

Launched in 2013 by Titan Company in Uttar Pradesh, Uttarakhand, Tamil Nadu and West Bengal, the Titan Kanya initiative focuses on the holistic development of underprivileged girls. The primary aim is to create an ecosystem that promotes education, skill development, life skills training, and community engagement, encouraging girls to reach their full potential.

The initiative follows a two-model approach in partnership with Project Nanhi Kali and IIMPACT. The remedial education approach ensures underprivileged girls enrolled in government school complete their formal schooling by improving attendance regularity and supporting learning continuity through academic support centres. Whereas the mainstreaming approach focuses on providing quality primary education up to Grade 5 for out-of-school girls (aged 6-14) through community-based learning centres, after which they are mainstreamed into formal education. In 2014, Titan expanded the initiative through Kanya Sampoorna in Tamil Nadu and Karnataka, which has enabled over 100,000 girls to lead more productive lives by increasing access to quality healthcare, education and livelihood.

IMPACT: The initiative has transformed the lives of over **74,000 girls and women** across some of India's most underserved districts in FY 2024-25. The program operates through **400+ learning centers** and provides comprehensive educational support including remedial classes, STEM education, life skills training, and technology-enabled personalized learning.

Sources: Titan Company, https://www.titancompany.in/sites/default/files/2023-08/Titan-Kanya-Program-IIMPACT.pdf ;
CSR Journal, https://thecsrjournal.in/corporate-social-responsibility-csr-news-this-mothers-day-titan-company-pays-a-tribute-to-moms-with-the-aage-badhegi-campaign;
Tata Group, https://www.tata.com/newsroom/community/titan-kanya-giving-them-wings;
The CSR Universe, https://thecsruniverse.com/articles/titan-company-pays-tribute-to-moms-with-aage-badhegi-campaign

Titan Kanyas going to School.

Source: The Titan Company

Titan Kanya is taking education to girls in remote Indian regions where schools are hard to reach due to severe climatic conditions or tough terrain.

Source: Tata Group

Case Study: Dhirubhai Ambani and Reliance Foundation Scholarships

Reliance Industries has been supporting the higher education of Indian students since 1996 through the Dhirubhai Ambani Scholarhips (DAS). In 2022, Reliance Foundation expanded this commitment by announcing an additional **50,000 scholarships** over 10 years, under the Reliance Foundation Scholarships targeted towards both undergraduate and postgraduate students.

The scholarships are designed to nurture excellence and empower youth by providing holistic support and financial grants enabling students to unlock their full potential and contribute towards the socio-economic growth of India. The funds provided cover tuition fees as well as expenses related to transport, accommodation, books, stationery, and various other allowances. Beyond financial aid, the Foundation also offers mentorship, access to industry leaders, career guidance, workshops, seminars and events focused on skills for professional and leadership development.

IMPACT: Between 1996-2024, over **28,000 scholarships** have been awarded by DAS and Reliance Foundation. These initiatives aim to reduce the financial burdens faced by scholars and their families enabling them to pursue higher education and relocate to larger towns and cities without incurring heavy debts. The scholarships have also created a **multiplier effect** at the household, organization and societal level. Over 70% of the DAS recipients reported improved academic performance, aspirations and motivation. More than 80% were able to contribute to household incomes, and 25% supported the education of their siblings. At the organizational level, 17% contributed to new service development, 11% developed new innovative products and 36% improved organizational processes and functions.

Sources: Reliance Foundation, https://reliancefoundation.org/documents/35704/0/Reliance+Foundation+UG+Scholarships+2024-25+results+ announcement+Media+Release+28Dec24.pdf/d754ff4c-3862-38a1-a63f-47bac3a2a0f8?t=1735371712255; CSR Box, https://csrbox.org/Impact/description/Article_full_Behind-every-scholarship-awarded-lies-a-story-of-hope,-ambition-and-potential_160; Reliance Foundation, https://reliancefoundation.org/das-impact-study

Reliance Foundation encouraged the youth to follow their dreams to pursue higher education, and the Dhirubhai Ambani Scholarship Alumni meet in 2018 was conducted for the recipients of the Dhirubhai Ambani Scholarship.

Source: Reliance Foundation

Case Study: Eastern Uttar Pradesh Education Initiative

Launched in 2016 by Tata Trusts, the Eastern UP Education initiative seeks to create a learning environment in deprived areas and improve lives of 63,000 children, adolescents and women through quality education and life skills. It is being implemented across 5 districts in Uttar Pradesh- Bahraich, Jaunpur, Banaraus, Pratapgarh and Varanasi. The initiative follows a life cycle approach, addressing the educational needs of individuals between the ages of 3-45. To enhance their standard of living, it focuses on strengthening the existing education system through professional development of teachers, establishing Integrated Approach to Technology in Education (ITE) centres and libraries in schools, life skill education, skill development and women's literacy programmes. It also implements interventions on early childhood education, school learning improvement, madrasa improvement, and adolescent education with the goal of creating a conducive learning environment.

The programmes are delivered in partnership with organizations such as Aga Khan Foundation (Bahraich), Gram Vikas Sewa Sansthan (Pratapgarh), Jan Mitra Nyas (Banaras), Lokmitra (Raebareli), Azad Shiksha Kendra (Jaunpur), and Trust Community Livelihood (Bahraich).

IMPACT: Since 2016, the initiative has reached more than **58,000 children, adolescents and women** across these districts. It has established **48 early childhood development centres and 60 Anganwadi centres** under the Integrated Child Development Scheme, reaching more than **7,786 children (aged 3-5).** Around **10,158 out of school children** have been mainstreamed into formal schools. Additionally, the women's literacy centers reached over **3,660 women learners** in remote villages, while teacher improvement programmes enhanced the capabilities of over **600 teachers.** Going forward, Tata Trusts plans to expand interventions in aspirational districts of Eastern UP by working in government schools and anganwadis in 1,000 to 1,500 villages, by working closely with the Education Department.

Sources: Tata Trusts, https://www.tatatrusts.org/our-stories/article/adding-fun-to-the-learning-mix;
Tata Trusts, https://www.tatatrusts.org/our-work/education/deepening-learning/eastern-up-education-initiative

Read aloud sessions in classrooms.

Source: Tata Trusts

Donning the masks made by them at the summer camp.

Source: Tata Trusts

Children engaged in fun-filled activities at the summer camp.

Source: Tata Trusts

Case Study: Tata Steel's 1000 Schools Programme

The 1000 schools programme was launched in 2015, to create a scalable model for the Universalization of Elementary Education within the Right to Education (RTE) Framework. The initiative addresses three critical aspects within school education: Access, Learning, and Governance. It endeavors to ensure that all children attend school, are learning at age-appropriate levels, and on course towards completing secondary education. To eradicate issues of learning deficit, the programme introduced teacher training and Learning Enrichment Programme (LEP) pedagogy. To enhance learning outcomes, the programme created effective classroom learning environments, established Community Education Resource Centres (CERC), and strengthened the role of school management committees, parent teacher associations, youth groups, self-help groups, and gram panchayats. These local stakeholders were empowered to contribute towards improving school performance and ensuring access to quality education.

Focused primarily in rural and tribal areas where quality education is restricted, the programme was first implemented in Odisha in 2015 and later expanded to Jharkhand in 2016 with Aspire Foundation (Odisha) and Hans Foundation (Jharkhand) as implementation partners. In 2018, it received the Innovation Practices Award by the UN Global Compact Network India and the Odisha Government CSR Award 2018 for most impactful CSR project.

IMPACT: In Odisha, the initiative now operates across six blocks in three districts (Jajpur, Keonjhar, and Sundargarh), while in Jharkhand, it covers two blocks in the West Singhbhum district. By 2025, the initiative has expanded to **6,500 schools** in Eastern India, showing measurable improvement in learning levels at the upper primary and secondary levels. To date, the programme has positively impacted over **200,000 children aged 6-16 and 6,000 pre-primary children.** Remarkably, of the 14,335 out of school children identified, 99% have been integrated into formal education. Beyond classrooms, 32 CERCs have also been established and equipped with online and offline resources. 564 School Management committees prepared School Development Plans aligned with the RTE Framework and 454 have been ratified by Panchayats.

Sources: Business India, https://businessindia.co/csr/education/tata-steels-school-programme-has-reached-200000-children; University of Turku, https://www.utu.fi/en/news/news/teacher-training-improves-educational-opportunities-for-children-in-india; Tata Sustainability, https://www.tatasustainability.com/SocialAndHumanCapital/ThousandSchoolsProgramme; CSR Box, https://csrbox.org/India_CSR_Project_Tata-Steel-Ltd-Education-Initiatives-_10902; TATA Chemicals, https://www.tatachemicals.com/tata/sites/default/files/2025-02/Impact-Assessment-Report-2024-25.pdf; Tata Sustainability, https://www.tatasustainability.com/SocialAndHumanCapital/CSR

Tata Steel's *1000 Schools Project* encourages students to build sustainable future

PBD BUREAU

BHUBANESWAR/JODA, AUG 6

THE '1000 Schools Project' promoted by Tata Steel to improve the quality of education in Odisha has been moving from strength to strength since its inception two years ago. The initiative has widened its scope in line with Tata Steel's Sustainability Commitment towards the UN's Sustainable Development Goals (SDGs).

Under the initiative, Tata Steel has started a plantation drive which will be conducted across all 153 schools in Joda Block, with the students being supported by school authorities and the community at large. As of today, approximately 5,000 saplings of 35 different indigenous plants have already been planted across 91 schools. This has been made possible due to the efforts of 1,619 students and 976 members of the community.

The '1000 Schools Project', aimed at improving the quality of education in government schools as well as strengthening the school governance system, is currently running in six blocks namely Joda, Harichandanpur, Danagadi, Sukinda, Koida and Kutra under Keonjhar, Jajpur and Sundergarh districts of Odisha.

Joda has consistently faced problems of school dropouts stemming from issues of child labour. With the inception of the '1000 Schools Project', a comprehensive approach towards improving elementary education system has now been initiated. Initiatives such as summer camps to address learning gap, working towards strengthening governance against child labour and increasing access to the schooling system have benefited the children. The project has created not just a wave of revolution towards improving education but also prepared these children to become responsible citizens.

Tata Steel's 1000 school project encourages students to build sustainable future.

Source: Tata Steel

Case Study: Adani Skill Development Centre

Launched in 2016, the Adani Foundation's Adani Skill Development Centres (ASDC) aim to empower youth by equipping them with employable skills, encourage entrepreneurship, and create a platform for underprivileged, marginalized and weaker sections of society to fortify and transform their lives through skill development while also bridging industry skill gaps. The centres offer over 70 courses and training modules in sectors such as logistics, tourism, hospitality, and manufacturing with the National Skill Development Corporation (NSDC) as the training partner. In addition to training, ASDC also provides placement guidance. Moreover, ASDC was the first initiative to establish a skill centre in the metaverse enabling global interaction and collaborations.

Its flagship programme, **Adani Saksham,** launched in alignment with the Skill India Mission, delivers simulation-based training both online and offline. By integrating augmented and virtual reality, Adani Saksham offers technology-enabled training in courses such as simulator-based crane operations, welding, drone piloting, nursing assistant, domestic wiring, fire safety and 3D printing.

IMPACT: By 2024, Adani Saksham has trained over **150,000 lakh youth** across the country in more than 40+ ASDCs in 15 states, with trainees generating revenue of nearly USD146.6 million (INR 1,300 crore) through entrepreneurship and employment by 2024. Recognized for its innovation and impact, ASDC has received the **Best Practice in Digital Transformation Award by CII-Tata Communications Centre for Digital Transformation in 2023** and the **Special Jury Recognition Award** at the Indian Chamber of Commerce Social Impact Awards in 2019.

Sources: Adani Saksham, https://adanisaksham.com/ ;
Adani Foundation (Twitter, May 2024), https://x.com/AdaniFoundation/status/1791083196366401933 ;
Business Dunia, https://businessdunia.in/adani-skill-development-centre-completes-8-years-of-operations/;
Media Brief, https://mediabrief.com/asdc-awarded-for-saksham-initiative-as-best-practice-in-digital-transformation/ ;
Skill Reporter, https://www.skillreporter.com/csr/adani-skill-development-centre-receives-the-icc-social-impact-award/ ;
Kaushalya University, https://kaushalyaskilluniversity.ac.in/adani.php

Glimpses from various events, special projects, activities and skill training sessions.

Source: Adani Saksham

Case Study: DP World's Kal ki Kaksha and Skill Developments Initiatives

Recognizing that access to quality education and employable skills are crucial for inclusive growth, DP World has launched initiatives such as Kal ki Kaksha and Skill Development for Sustainable Livelihood Programs.
Launched in 2017-18, 'Kal ki Kaksha' is a digital education program in association with Pratham Infotech Foundation that targets primary and middle school students in government and low-income private schools. The program ensures **gender equity,** with girls participating in equal ratio to boys, engages **women trainers** as role models to inspire and build confidence in young learners and promotes **collaborative learning** through digital classrooms and interactive methods.

With respect to skill development, DP World has been organizing various programs to prepare youth with employable skills and help them overcome the economic impact of Covid-19. In partnership with leading organizations, the initiatives include training Bedside Assistants with the Blind People's Association, Solar Technicians with Neesa Skill Development, courses in garment making and fashion designing as well as a Diploma in Computer Applications with the Arunodhaya Centre for Street and Working Children, and logistics and warehousing training with TeamLease Education Foundation.

IMPACT: The Kal ki Kaksha program has reached **8,000+** students from 40 schools across four states – Maharashtra (Nhava Sheva), Gujarat (Mundra), Tamil Nadu (Chennai) and Kerala (Kochi) since its launch. On the other hand, the skill development programs aim to develop workplace ready professionals through hands-on learning, focus on enrolling young women and disadvantaged communities, and provide post-training employment and entrepreneurship support.

Sources: DP World, https://www.dpworld.com/india/sustainability/education

DP World's Kal Ki Kaksha ensured that students develop essential digital skills early on.

Source: DP World India

10 students from Pratham InfoTech Foundation met Mr. Omar Sharif Al Marzooqi (Senior VP, DP World) and the DP World team at Mundra on January 2025 as part of DP World's Kal Ki Kaksha.

Source: Pratham Infotech Foundation Post, Facebook

Case Study: The Nadakkavu Model – Transforming Government Schools through the PRISM Project

Government schools in India have long struggled with inadequate infrastructure and educational standards, often leaving students without an environment conducive to learning. To address this, the **Faizal and Shabana Foundation (FSF)**, founded in 2007 by Mr. Faizal Kottikollon, Chairman of UIBC-UC and Chairman of Kef Holdings, and Mrs. Shabana Faizal, partnered with local leadership in Kozhikode, Kerala to pioneer a model of school transformation that could be scaled and replicated.

Genesis of the PRISM Project: The roots of the **Promoting Regional Schools to International Standards through Multiple Interventions (PRISM)** project trace back to 2008, when Mr. A. Pradeep Kumar, then MLA of Kozhikode North, drawing on a study by IIM Kozhikode students, launched the PRISM project at the Government Vocational Higher Secondary School for Girls (GVHSS) Nadakkavu, Kozhikode, Kerala. In 2012, FSF stepped in to support and scale the initiative, developing world class infrastructure, sports and dining facilities transforming it from a local pilot into the **Nadakkavu Model**, a replicable framework for quality education reform.

The Nadakkavu model focused on nine diverse areas of intervention: Building and physical infrastructure, Students' personality development, Creativity and innovation, Library and laboratories, Learning aids, Teacher quality enhancement, Stakeholder involvement, School environment and ambience, School performance measurement and control system.

FSF Role: FSF fulfilled an initial investment of USD1.80 million (INR 160 million), followed by a planned investment of USD1.13 million (INR 100 million) in the following years, enabling wide-ranging interventions in infrastructure, teacher training, and student development. In collaboration with IIM Kozhikode, the Foundation introduced capacity-building programs for teachers and parents focused on self-awareness, motivation, lifelong learning, and positive attitudinal shifts. It also promoted community participation by creating jobs for women in school kitchens and opening school spaces for public use. To ensure transparency and results, FSF worked closely with the PRISM School Development Committee and independent assessments such as ASER Reports.

IMPACT: The transformation witnessed has been remarkable. GVHSS witnessed a **100% growth in student enrollments** and a **400% improvement in academic results.** In addition, a survey showed that **47% of the ex-students of Nadakkavu school between** 2011-2020 **went on to pursue higher education** after their graduation.

Building on the successful implementation of the Nadakkavu model, FSF replicated this framework for quality enhancement of government schools. Nadakkavu school has been ranked among the **top 3 best Government Day schools** in India for the past five years. Till date, the model has been scaled and implemented in **977 schools** touching **over 2 million students** across Kerala under the state's General Education Protection Mission.

Moreover, KEF Holdings received the **Gulf Sustainability and CSR Award in 2017** for the Best Learning and Education Programme through FSF. The model has also been expanded nationally in Jammu & Kashmir and Tamil Nadu as well as internationally to four schools across Uganda and Kenya.

Further, the PRISM Project not only made individual level impact on students and teachers, but it also had a system level impact. Students reported increased holistic development in extracurricular, and personality aspects alongside academics. However, the most noteworthy change was the perceptions of government schools and the creation of a replicable model of public private partnerships.

Sources: Sahasranamam, S. & Mitra, S. 2019. "Faizal & Shabana Foundation: a venture philanthropic approach to education." Emerald Emerging Market Case Studies. https://doi.org/10.1108/EEMCS-04-2018-0052; Sahasranamam, S. & Kurien, C. P. 2022 "Corporate Foundation Supported Government School Redevelopment in India: An Impact Evaluation Report" University of Strathclyde, Glasgow. https://doi.org/10.17868/strath.00080982;
FSF Annual Report 2024; Arab News, https://www.arabnews.com/node/1056281/session_trace/aggregate, Faizal and Shabana Foundation, https://www.faizalshabana.org/

FSF founders Mr Faizal and Mrs Shabana at the Nadakkavu School.

Source: Vartha Bharti

THE NEW INDIAN EXPRESS | KERALA

02 KOZHIKODE TUESDAY 30.09.2025

Five schools from state feature in national education world rankings

Govt VHSS for Girls, Nadakkavu, retains second rank in 'State Govt Day Schools' category

EXPRESS NEWS SERVICE @TPuram

FIVE SCHOOLS from Kerala featured in the top 10 under various categories of the 19th edition of the EducationWorld India School Rankings (EWISR) released on Monday. Government VHSS for Girls, Nadakkavu, Kozhikode, retained its all-India second rank in the 'State Government Day Schools' classification.

Kendriya Vidyalaya, Pattom, Thiruvananthapuram was ranked ninth in the country among 'Central Government Day Schools'. In the previous ranking, the school had bagged the seventh spot. Navy Children School, Kochi (ranked 12), Kendriya Vidyalaya No 2, Naval Base, Kochi (18) and Army Public School, Pangode, Thiruvananthapuram (29) were the other schools from the state that made the category.

Jawahar Navodaya Vidyalaya, Chennithala, Alappuzha bagged the eighth spot in the 'Central Government Boarding Schools' group. Last year, the school was ranked sixth. Pallikoodam, in Kottayam, was ranked fourth in the 'Co-ed Day-cum-Boarding Schools' group. The school came third in the last two years. The other 'Co-ed Day-cum-Boarding Schools' in Kerala that figured in the rankings are The Choice School, Kochi (17), Montfort School, Chinnakanal (36), and Delhi Public School Kollam and Kuriakose Elias English Medium School, Kottayam (37). Sadhbhavana World School, Kozhikode was ranked sixth among 'International Day-cum-Boarding Schools'.

The school improved its ranking from ninth last year. The other schools in the category from the state that figured in the rankings were: The White School International, Kozhikode (12), Trivandrum International School (19), and Dawn International School, Kochi (30).

As per the EWISR city rankings, the top 'Co-ed Day Schools' were Navajeevan Bethany Vidyalaya (Thiruvananthapuram); Viswajyothi Public School, Angamaly (Ernakulam), Lord's Academy (Thrissur), and Face International School, Kalarikandy (Kozhikode).

EWISR 2025-26 was conducted by EducationWorld magazine in association with AZ Research Partners Pvt Ltd. EWISR rates and ranks 4,500 schools from 518 cities and towns across India on 15 parameters of educational excellence.

CLASS APART

Category	School	2025-26 ranking	2024-25 ranking
State Govt Day Schools	GVHSS for Girls, Nadakkavu	2	2
Central Govt Day Schools	KV, Pattom	9	7
Govt Boarding Schools	JNV, Chennithala	8	6
Day-cum-Boarding Schools	Pallikoodam, Kottayam	4	3
Int'l Day-cum-Boarding Schools	Sadhbhavana World School, Kozhikode	6	9

COVERING OVER 4,500 SCHOOLS

EWISR rates and ranks 4,500 schools from 518 cities and towns across India on 15 parameters of educational excellence

GVHSS, Nadakkavu has been ranked 2nd in India by EducationWorld India School Rankings 2025.

Source: The New Indian Express

The Government Vocational Higher Secondary School for Girls (GVHSS) Nadakkavu, Kozhikode, Kerala.

Source: Faizal and Shabana Foundation

Before	After

Walkway

Before	After
	
Classroom	
	
Canteen	
	
Front Gate	

Jammu & Kashmir: A Regional Focused Lens

Jammu & Kashmir (J&K) presents a distinctive case within India's education landscape, where geographic isolation, security concerns and governance transitions have shaped both constraints and opportunities for education-led development. Extended school closures – in 2016, during COVID-19 and political reorganization, and briefly again in 2025 – created deficits that go beyond lost instructional days.

Despite these pressures, J&K shows notable strengths. Literacy rates are slightly above the national average, the net enrolment ratio (NER) at the elementary level exceeds the national average, and gender gaps in NER are not observed across schooling levels. The transition to UT status in 2019 brought direct central administration and increased federal investment, though implementation remains complex and context dependent.

Concerns persist at transition points. While elementary level NER is high (91 for classes 1-8), it drops steeply at secondary stages, reaching 23 at higher secondary (classes 11 & 12).[123] The share of Muslim enrolment in total enrolment also declines with grade level, from 69.4 percent at elementary to 63.2 percent at higher secondary level.[124] Dropout patterns are concentrated in hard-to-reach mountainous areas and urban slums. Groups most affected include nomadic and migratory communities, low-income households and families in traditional occupations.[125] Teacher deployment challenges persist as well, stemming more from maldistribution than absolute scarcity. Over 10 percent of schools operate with a single teacher, and around 18.4 percent have sub-optimal pupil-teacher ratios, despite territory-wide averages appearing adequate.[126]

The digital divide is a critical constraint. Digital classroom initiatives exist, but inconsistent electricity and internet access limit effectiveness. During 2019-2021, when political transition and pandemic closures overlapped, J&K experienced some of the longest disruptions in India, with many unable to access online learning. Internet disruptions have been minimized in more recent years.

Governance and policy innovation paving the way for educational transformation. Over recent years, the leadership in J&K has sought to address these disparities and disruptions to transform the educational landscape through focused governance, innovation, policies and investment.

Since taking charge, Shri Manoj Sinha, the Hon'ble Lieutenant Governor (LG) of J&K, has spearheaded comprehensive educational initiatives in the region's education sector, aiming to make J&K an "Oasis of Talent".[127] The initiatives span across areas focusing on improving access, inclusivity, infrastructure development, youth empowerment, aligning education with modern skill needs and innovative technological educational programs.

Most importantly, Mr. Sinha's role has been instrumental in the implementation of National Education Policy (NEP) 2020 across J&K by focussing on key aspects such as-holistic and multidisciplinary education, flexibility[128] and integration of regional languages in curricula.[129] To strengthen infrastructure, in 2022, the LG launched 119 civil projects including 84 school buildings. Sports infrastructure has also been expanded in over 100 schools to ensure holistic learning. He has also championed technology-driven programs, including the roll out of NIELIT (National Institute for Electronics and Information Technology) courses for classes 6 to12 and the "TALAASH" App (Technology-Aided Location and Accessibility for School Help), for mainstreaming of 93,508 identified out-of-school children. Remarkably, these interventions and efforts contributed to a 14.5% increase in student enrolment in the year 2022.[130]

Moreover, under Mr. Sinha's leadership and visionary guidance of Hon'ble PM Shri Narendra Modi, over the past 8-10 years, J&K has also witnessed the upsurge of premier educational institutions such as IIT, NIFT, Central University and AIIMS.[131] The NEP 2020 has also been fully implemented in all government degree colleges until March 2025, with curriculum reforms emphasizing interdisciplinary, "future-ready" learning.[132]

Shri Manoj Sinha inaugurates administrative block at the Central University of Kashmir in August 2025.

Source: News of Kashmir

Besides this, most recently, it has been announced in September 2025 that 500 Atal Tinkering Labs will be launched in J&K under Frontier Region Programme, with an investment of USD 11.27 million (INR 100 crores), to promote innovation and give school students exposure to cutting-edge tools in robotics, 3D printing, and artificial intelligence, enabling them to innovate at a young age.[133]

Shri Manoj Sinha launched mentorship programme and TALAASH App in 2022 in J&K.

Source: The Economic Times Government

Hon'ble CM of J&K, Shri Omar Abdullah, addressed the One Day Educational Stakeholders Conclave on NEP-2020 in Srinagar.

Source: News of Kashmir

Complementing the above, the commitment to education in J&K has also been showcased under the leadership of Shri Omar Abdullah, Hon'ble Chief Minister of J&K. Comprehensive efforts have been undertaken to transform the region's education sector, focusing on both higher education and government schools. The initiatives have been aimed at modernizing curricula, enhancing research, promoting digitization, and attracting private sector investment. Simultaneously, transforming public schools by improving infrastructure, providing digital tools, and introducing diverse subjects such as Urdu, Hindi, Kashmiri, Dogri, and Punjabi to make schools more attractive to parents have been prioritized. Moreover, Mr. Abdullah has promoted technology-enabled learning through initiatives like the Hybrid Learning Centre linking 12 schools and launched 19 educational infrastructure projects worth USD 4.69 million (INR 39.1 crore)[134] in August 2025. Emphasizing creativity, innovation, and AI knowledge, his administration

implemented NEP 2020 reforms and flagship programs such as "J&K K-12: One Campus, One Future", aimed at upgrading 40 schools into fully integrated K-12 campuses with smart classrooms, vocational labs, modern sports facilities, and improved sanitation, backed by USD 20.28 million (INR 180 crore) in funding in Budget 2025.[135]

The above developments also reflect the core belief of the central government to transform the education sector in J&K, as stated by the Hon'ble Union Minster of Education during an event in Srinagar in August 2025:

> As said by Shri Dharmendra Pradhan, Hon'ble Union Minister of Education,
>
> **"The resolution of the Kashmir problem does not lie in guns or lathis, but in pens"**[136]

On the other hand, alongside government efforts, philanthropic engagement through community anchored solutions and cross-border partnerships, has provided additional momentum to advancing the educational landscape of J&K- helping to strengthen initiatives, improve access, and foster innovation across schools and colleges along with public efforts.

International organizations have found traction through community-embedded approaches since the mid-2010s, including teacher training and psychosocial support for trauma-informed education. UNICEF, with support from the IKEA Foundation, established Child-Friendly Spaces across roughly 200 locations in seven districts and transformed over 250 government-run schools into Child-Friendly Schools between 2016 and 2019.[137] These initiatives provide safe environments that combine play, psychosocial support and informal learning during unrest.

In parallel, NGO-government partnerships have piloted targeted learning innovations. For example, Pi Jam Foundation, founded in 2017 and working with UNICEF India and Samagra Shiksha, designed a localized "Let's Code" curriculum delivered through the UT's digital infrastructure – an approach recognized as a best practice at the United Nations Transforming Education Summit 2022.[138]

Further, the DREAM School project, spearheaded by Mr. Faizal Kottikollon, Chairman of the UAE India Business Council–UAE Chapter (UIBC–UC) and KEF Holdings, with the kind support of Shri Manoj Sinha, Hon'ble LG of J&K, presents a notable example of cross-border partnerships to build a quality education ecosystem in the region of J&K.

Taken together, these efforts show how philanthropy combined with the conscious efforts of the government can provide rapid, community-anchored services in emergencies and co-develop innovations with public systems at scale.

Mr. FAIZAL KOTTIKOLLON
Chairman of KEF Holdings
Chairman of UIBC-UC
Founder of FSF

"Government resources alone cannot meet the scale of India's educational challenge. Philanthropy and CSR, when pursued with purpose, can bridge systemic gaps- whether through better infrastructure, teacher development, or community engagement. The impact is especially profound in girls' education- an educated girl strengthens household literacy, improves health outcomes, and empowers entire communities. Initiatives like the Nadakkavu Model and the DREAM School Project demonstrate how schools can serve as hubs for girls' empowerment, addressing gender disparities, and cultivating future leaders. In regions like Jammu & Kashmir, schools designed for girls become instruments of both education and social transformation."

Case Study: Faizal and Shabana Foundation's DREAM School Project, Kothi Bagh, Srinagar

Following the establishment of UIBC-UC in 2023, Mr. Faizal Kottikollon led a high-level delegation visit to Srinagar for the organization's first major project, the groundbreaking ceremony for Emaar's Mall of Srinagar. During the same visit, he committed to strengthening the education ecosystem in Srinagar through the DREAM School Project at Kothi Bagh, Srinagar.

The DREAM Project, launched in 2023 by the Faizal and Shabana Foundation (FSF) in collaboration with the Directorate of School Education Kashmir brings the successful **Nadakkavu model** of holistic education from Kerala to Jammu & Kashmir (J&K). The project is being implemented at the **Government Girls Higher Secondary School (GGHSS), Kothi Bagh, Srinagar,** serving as a model for public school education in the region.

Through this collaborative project, the Foundation seeks to identify educational gaps, ensure holistic child development, advance learning processes, promote community involvement, and develop infrastructure. The key focus of the project is on cultivating students' intellectual, emotional and artistic capabilities while simultaneously refurbishing the infrastructure of the school through digital classrooms, libraries, IT labs and other state of the art facilities. Additionally, the model facilitates community engagement through initiatives such as the North-South Dialogue and Theme-Centric Intervention (TCI) workshops, which aim at bridging socio-educational divides, impart knowledge on teaching methodologies, relationship building, self-realization, training, and capacity building for school staff and government employees.

Ground-breaking Ceremony: On 10th July 2024, the groundbreaking of a new Middle School block at GGHSS Kothi Bagh took place. The event was attended by FSF founders Mr. Faizal Kottikollon, Mrs. Shabana Faizal, Mr. Zach Faizal, and guests from Kerala and Kashmir, alongside government dignitaries, school leadership, teachers, and students. The ceremony marked a symbolic step toward transforming infrastructure in line with the DREAM vision.

IMPACT: The DREAM Project has begun reshaping public education in J&K by positioning **GGHSS Kothi Bagh, a girls' school in Srinagar,** as a model for transformation. Between 2023-2024, **90 officials/officers from GGHSS Kothi Bagh, 19 officers from the Kashmir division and 22 individuals from Kerala** received training as part of the project, underscoring the project's role in fostering collaboration and professional growth. Further, in 2023, **55 teachers** of GGHSS and Kashmir division were equipped with new skills to strengthen classroom delivery and learning outcomes.

The DREAM Project stands as beacon of **public-school education transformation in J&K.** By combining **infrastructure renewal, capacity-building programs,** and a **community-driven model,** the initiative not only sets a benchmark for schools in the region but also creates a replicable framework for broader educational reform.

Sources: Faizal and Shabana Foundation, https://faizalshabana.org/index.php/project details/?id=934 ; FSF Annual Report 2024

Mr. Faizal Kottikollon, Chairman (UIBC-UC) and Maj. Gen. Sharafuddin Sharaf, Vice Chairman (UIBC-UC) with Hon'ble LG of J&K Shri Manoj Sinha during ground-breaking ceremony of Emaar's Mall of Srinagar in J&K in year 2023.

Source: Twitter, The Office of LG, J&K

The DREAM Project positioning GGHSS Kothi Bagh, Srinagar, as a model for transforming public education.

Source: Faizal and Shabana Foundation

Glimpses from the groundbreaking event in July 2024.

Source: Faizal and Shabana Foundation

Planned (render) site development for the Government Girls' Higher Secondary School Project, Kothibagh, Srinagar, J&K

Source: Faizal and Shabana Foundation

06

UAE–INDIA COLLABORATION IN EDUCATION, SKILLS DEVELOPMENT, AND HUMAN CAPITAL

This section examines the UAE's higher education model. It explores the expanding India–UAE partnership, including premier Indian institutions establishing campuses in UAE. The section further highlights the key implications for India-UAE partnership offering valuable lessons in cluster-based development and creating new avenues for bilateral collaboration in education and skills.

UAE–India Collaboration in Education, Skills Development, and Human Capital

The UAE's Higher Education Model

The UAE's bid to become a regional higher-education hub is best understood as a strategy of collaboration and adaptation. Rather than relying solely on gradual domestic capacity-building, authorities have invited leading foreign institutions to operate locally under supportive regulatory frameworks and with targeted public investment. The approach, which mixes free-zone regulation, high quality assurance standards, and selective state financing, tests conventional assumptions about the pace and sequencing of educational development.

Dubai International Academic City (DIAC) and Dubai Knowledge Park (DKP) jointly host 30,000 students from over 170 countries, enrolled across 800 programmes in 30 academic institutions. DIAC operates as an education free zone where international institutions can establish and operate campuses. The geographic concentration of multiple universities creates academic synergies typically associated with university towns and knowledge spillovers that usually accompany industry clusters. Amongst the many international university campuses hosted by Dubai, are India's Amity University, BITS Pilani, the Institute of Management Technology, the Manipal Academy of Higher Education, and the recently inaugurated IIM Ahmedabad campus by H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, together with Shri Dharmendra Pradhan, Hon'ble Minister of Education, Government of India.[139,140]

Source: Press Information Bureau,Government of India

"The inauguration of IIM Ahmedabad Dubai campus, by H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, is one more step towards globalisation of India's education. A new milestone in India-UAE knowledge collaboration, Dubai has provided a perfect launchpad to the ethos of 'Indian in spirit, global in outlook' by hosting IIM Ahmedabad international campus."

-Shri Dharmendra Pradhan
Hon'ble Minister of Education,
Government of India[140]

Abu Dhabi's approach differs strategically from Dubai's cluster-driven model. The emirate focuses on attracting elite institutions backed by substantial government investment, best illustrated by its fully funded construction of NYU's Abu Dhabi campus.[141] Other institutes include the Sorbonne Abu Dhabi, which fosters a Francophone academic space in the Gulf and advances cultural diplomacy, as well as INSEAD's campus, which targets executive education. The recently opened IIT Delhi campus in Abu Dhabi marks a new phase in education collaboration, representing a significant step in strengthening UAE-India partnerships in the area.

The higher education sector contributes significantly to the UAE economy through multiple channels. Direct spending by international students creates multiplier effects across housing, retail, hospitality, and transportation. By 2033, Dubai aims for international students to account for half of all university enrolments. It is also expected to contribute USD 1.5 billion (AED 5.6 billion) to Dubai's GDP.[142]

Furthermore, the development of education clusters alongside business zones creates synergies between academia and industry. Dubai Internet City, Dubai Media City, and Abu Dhabi's Masdar City benefit from proximity to educational institutions, facilitating talent recruitment and research collaboration.

Implications for India-UAE Partnership

The complementary strengths of India and the UAE create distinct opportunities for ambitious, education-led collaboration. India brings scale, a demographic dividend and deep capacity in STEM education, while the UAE offers capital, infrastructure excellence and proven models for education hubs. Together, these assets enable partnerships that go beyond traditional exchange.

Cross-border philanthropy as a catalyst.

Beyond government and institutional linkages, philanthropy can serve as a high-impact enabler for strengthening India-UAE collaboration across the educational landscape. UAE based entrepreneurs and foundations, as demonstrated earlier through distinctive case studies in the earlier section can unlock scalable models of educational reforms through targeted social investments, particularly in underserved areas, thereby bridging systemic gaps in coordination with state governments. Embedding philanthropy within the wider India–UAE cooperation framework can foster a culture of shared responsibility and innovation, aligning private social development initiatives with measurable public outcomes and impact.

Diaspora networks.

The 4.3 million-strong Indian diaspora in the UAE, around 35 percent of whom are professionally qualified personnel, businesspersons, and white-collar workers,[143] represents an underutilized asset for education and skills collaboration. Conglomerates such as Lulu Group, KEF Holdings, and Aster DM Healthcare illustrate the depth of entrepreneurial success achieved in the country. Many of these business leaders embody a distinctive give-back ethos, channeling resources and networks into education, skilling, and social development programmes. This commitment manifests in initiatives like Project TEJAS (Training for Emirates Jobs and Skills), launched in 2021 through partnerships between NSDC International and leading UAE employers including EFS Facilities Services. The project aims to train, certify, and place 100,000 Indian workers across the GCC by 2027.[144] Such diaspora-led initiatives bridge skill gaps while creating structured pathways for workforce mobility, addressing both India's expanding working-age population and the UAE's demand for skilled professionals. The India-UAE partnership can systematically scale these diaspora-driven models, leveraging dual market understanding that formal government-to-government mechanisms may struggle to replicate.

Cluster models and regulation.

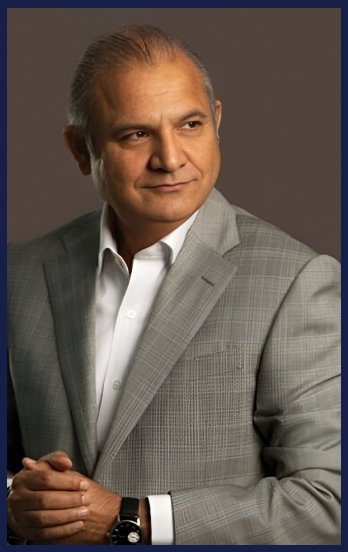
The UAE’s experience in building knowledge clusters offers a workable template for India. Dubai International Academic City shows how the co-location of institutions can generate academic synergies and knowledge spillovers, which are useful for India’s proposed Special Education Zones. The UAE’s regulatory framework for international providers aligns with NEP 2020’s “light but tight” vision for quality-focused governance. India could adapt a free-zone model to create hubs in states with high graduate out-migration, stemming brain drain while generating local multipliers.

Talent pipelines and mobility.

For the UAE, a partnership with India supports strategic needs as its knowledge economy expands. The IIT Delhi and IIM Ahmedabad campuses in the UAE create pipelines for two-way talent circulation. Skills complementarities are clear. India’s working-age population is projected to rise by about 10 million annually to 2030, while Gulf labour markets report shortages in healthcare, technology and engineering. A joint framework for mutual recognition of credentials and industry-aligned training programmes would address bottlenecks at both ends.

K-12 lessons and system design.

Dubai's schooling experience offers practical insights for multilingual classrooms, quality assurance across multiple curricula, constructive engagement with the private sector, and transparent benchmarking. Its emphasis on local problem-solving through collaborative initiatives that bring educators together across schools can yield context-appropriate solutions that wholesale import of international models rarely delivers.



Mr. TARIQ CHAUHAN
Co-founder and Vice Chairman- EFS Facilities Services Group
Board Member - UIBC-UC

"EFS considers India the 'skills capital of the world' and sees significant opportunities to advance skills development, including by establishing a skills-validation institute. By collaborating with the National Skill Development Corporation (NSDC), EFS ensures that trainees receive globally recognised certifications that enhance their employability not only in the UAE but also in other international markets. This approach directly advances India's strategy of increasing overseas workforce participation through skill mobility.

Moreover, the India–UAE skills corridor is undergoing a fundamental shift. It is moving away from ad-hoc hiring practices toward a more structured, employer-led model of workforce development. Under this model, training programs are increasingly being co-designed with employers like EFS to ensure alignment with international job standards and operational requirements.

By deploying technically competent and digitally literate workers trained to meet UAE standards, EFS enhances operational performance and service quality in critical infrastructure and service sectors. Its investment in language, cultural orientation, and customer-centric training directly supports the UAE's ambition to position itself as a global service hub with strong labour-market governance and ethical recruitment practices. In both countries, EFS's emphasis on digital learning, lifelong upskilling, and international certification creates a robust bridge between education and employment. This not only strengthens the India–UAE economic corridor but also sets a replicable model for other labour-mobility partnerships focused on education-led development and sustainable workforce transformation."

07

SYNTHESIS AND RECOMMENDATIONS

India’s education transformation depends on effective governance, addressing foundational learning gaps, and measurable learning outcomes. International lessons highlight the need to prioritize foundational literacy, invest in teacher quality, use transparent assessments, and foster accountable partnerships/collaborations. This section outlines the key areas of reform that India can focus on to advance education led development.

Synthesis and Recommendations

The analysis reveals several critical insights about education-led development in India. That financial resources alone do not determine outcomes has been well-established in global literature. Even within India, Bihar and Uttar Pradesh outperform states like Andhra Pradesh on some metrics despite lower per capita incomes. Consequently, simply expanding access has not resulted in learning. Foundational learning gaps require urgent attention to ensure demographic dividends are realized. Implementation quality, monitoring and evaluation systems, and local governance determine whether policies translate into outcomes across states.

International experience also reveals critical lessons about adaptation and implementation. Countries such as Australia, Canada and Switzerland demonstrate that decentralized education systems can deliver strong, equitable outcomes when underpinned by coordination mechanisms, shared standards, and reliable data flows across jurisdictions.

Beyond governance, successful systems consistently prioritize certain fundamentals over others. Vietnam achieves results comparable to far wealthier nations by concentrating resources on early childhood education and maintaining disciplined, performance-oriented teacher management. Estonia's rapid rise to become Europe's top PISA performer illustrates how targeted investments in digital infrastructure and teacher autonomy can accelerate progress even in resource-constrained environments.

Equally important are the cautionary lessons. Korea's academic excellence has come at documented costs to student wellbeing, while Finland's recent decline despite sustained investment signals that no model remains optimal indefinitely without adjustment.

The common thread across these examples is not the adoption of specific programs but rather the cultivation of systemic capabilities: reliable measurement of learning outcomes, rapid feedback loops between assessment and instruction, and sufficient state capacity to act on data.

Non-state actors, if properly channeled, can play a key role. India's CSR framework generates substantial resources for education, while philanthropic foundations and NGOs provide critical data and innovation. However, geographic concentration and weak coordination limit impact, particularly in the most disadvantaged regions.

The evidence assembled in this paper points to a small set of high-leverage levers that recur across contexts.

- Start with the basics early. Strong foundational literacy and numeracy in early grades deliver outsized returns in economic growth, equity, and institutional effectiveness.
- Invest in teachers. Quality education depends on whether teachers receive proper training, ongoing support, and clear standards that align with what students need to learn.
- Measure to improve, not to punish. Education systems that use transparent assessments to guide teaching produce better results than those that rely on high-stakes testing alone.
- Make governance work in federal systems. Clear roles, shared benchmarks, and reliable data enable coordination across states without weakening state autonomy.
- Direct resources strategically. Funding should prioritize early grades, underserved regions, and interventions with proven track records.
- Partner purposefully. Private actors and international collaborations can accelerate progress when governed with clear standards and aligned with public goals.

Policy Choices for India

Based on these findings, India may consider focusing reform efforts in the following areas.

Reorient the system toward learning outcomes rather than inputs.

Policy frameworks, budget allocations, and accountability mechanisms should prioritize measurable improvements in foundational literacy and numeracy. This requires shifting from compliance-based monitoring of infrastructure and enrollment to regular assessment of what children actually know and can do.

Harness non-state capacity through strategic partnerships.

Move beyond viewing private actors as either saviors or threats. Develop regulatory frameworks that channel philanthropic resources toward underserved areas, enable innovation while ensuring quality, and create accountabilities for all providers regardless of ownership.

Prioritize foundational learning with measurable targets.

Every child achieving basic literacy and numeracy by Grade 3 should be the highest education priority. Set clear, time-bound targets with regular public reporting. As the NEP already notes, other reforms – vocational training, higher education expansion, digital initiatives – will fail without strong foundations.

Channel investments towards systematic teacher development and accountability.

Rather than viewing teachers as implementers of centralized curricula, develop professional capacity that enables classroom autonomy. This includes selective recruitment, continuous professional development, and performance management that balances support with accountability. Address systemic issues like absenteeism through both incentives and technology-enabled monitoring.

Establish transparent, regular learning assessments at all levels.

Create systems that generate information on learning outcomes, making performance visible to communities, administrators, and policymakers. International experience shows that transparency drives improvement more effectively than top-down mandates. Reconsider participation in global assessments to benchmark internationally.

Design differentiated strategies for diverse contexts.

Recognize that uniform national approaches cannot address the gap between states or within social groups. Enable states to develop contextually appropriate interventions while maintaining common learning standards. Federal coordination should focus on outcomes while allowing implementation flexibility.

Align education planning with economic transformation.

Strengthen connections between education institutions and industry needs without reducing education to narrow vocational training. This includes modernizing curricula, creating pathways between academic and vocational streams, and developing skills for jobs that don't yet exist.

These recommendations recognize that educational transformation is fundamentally about governance, implementation, and societal commitment rather than resources alone. India has the policies, the resources, and the demographic opportunity. What remains is execution.

Acknowledgement

The development of **Bridging Horizons: UAE–India Partnerships and the Future of Education-Led Development** has been an enriching exercise, aimed at exploring India's education ecosystem and demographic potential, global lessons from well-performing education systems, the growing role of non-state actors and philanthropy in advancing educational outcomes in India and avenues for synergy between India and the UAE in advancing education-led growth.

We express our deepest appreciation to the founding members of UIBC–UC for their visionary leadership, guidance, and unwavering commitment to advancing UIBC–UC's mission and research initiatives.

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This whitepaper reflects deep analysis and lays the groundwork for meaningful dialogue and action in the future, by identifying collaborative opportunities across India and the UAE that can shape education-led development globally.

References

[1] Patrinos, H.A. 2023. "50 years after landmark study, returns to education remain strong." *Education for Global Development* (blog), May 3, 2023. https://blogs.worldbank.org/en/education/50-years-after-landmark-study-returns-education-remain-strong.

[2] United Nations, Department of Economic and Social Affairs, Population Division. 2024. *World Population Prospects 2024, Online Edition*. https://population.un.org/wpp/assets/Excel%20Files/2_Indicators%20(Probabilistic)/EXCEL_FILES/2_Population/UN_PPP2024_Output_PopulationByAge_BothSexes.xlsx.

[3] Ministry of Education, Government of India. 2025. *Report on Unified District Information System for Education Plus (UDISE+) 2024-2025*. https://dsel.education.gov.in/sites/default/files/statistics/report_in_PDF/ext2425.pdf.

[4] Government of India. 2020. *National Education Policy*. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf.

[5] Smith, A. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Book II, Chapter 1.

[6] Psacharopoulos, G. & Patrinos, H. A. 2004. "Returns to Investment in Education: A Further Update." *Education Economics*, 12(2): 111-135. https://doi.org/10.1080/0964529042000239140.

[7] Moretti, E. 2004. "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions." *American Economic Review*, 94(3): 656-690. http://www.jstor.org/stable/3592947.

[8] Benhabib, J. & Spiegel, M. M. 2005. "Human Capital and Technology Diffusion." In P. Aghion & S. N. Durlauf (Eds.), *Handbook of Economic Growth* (Volume 1A, pp. 935-966). Elsevier. https://doi.org/10.1016/S1574-0684(05)01013-0.

[9] Vandenbussche, J., Aghion, P. & Meghir, C. 2006. "Growth, Distance to Frontier and Composition of Human Capital." *Journal of Economic Growth*, 11(2): 97-127. https://doi.org/10.1007/s10887-006-9002-y.

[10] Gethin, A. 2025. "Distributional Growth Accounting: Education and the Reduction of Global Poverty, 1980–2019." *The Quarterly Journal of Economics*. https://doi.org/10.1093/qje/qjaf033.

[11] Barro, R. J., Lee, J. W. & Lee, H. 2021. Barro-Lee Estimates of Educational Attainment for the Population Aged 15-64 from 1950 to 2015. https://github.com/barrolee/BarroLeeDataSet/blob/master/BLData/BL_v3_MF1564.xls.

[12] World Bank. "GDP per capita (constant LCU) - Korea, Rep." *World Development Indicators*. Accessed September 7, 2025. https://data.worldbank.org/indicator/NY.GDP.PCAP.KN?end=2015&locations=KR.

[13] Montenegro, C., Wodon, Q., Nguyen, H. & Onagoruwa, A. 2018. "Missed Opportunities: The High Cost of Not Educating Girls." *The Cost of Not Educating Girls Notes Series*. World Bank. http://hdl.handle.net/10986/29956.

[14] Hu, Y. & Qian, Y. 2023. Gender, education expansion and intergenerational educational mobility around the world. *Nature Human Behaviour*, 7, 583-595. https://doi.org/10.1038/s41562-023-01545-5.

[15] See note 13.

[16] Ministry of Education, Culture, Sports, Science and Technology of Japan. 1980. *Japan's Modern Educational System*. https://www.mext.go.jp/b_menu/hakusho/html/others/detail/1317220.htm.

[17] Wong, R. H. K. 1974. "Educational innovation in Singapore." *Experiments and innovations in education: Asian series*, No. 9. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000011387.

[18] Institute for Economics & Peace and the Global Partnership for Education. 2024. *Key Findings from Analyses on the Relationship Between Education and Peace*. https://www.globalpartnership.org/content/key-findings-analyses-relationship-between-education-and-peace.

[19] *The Right of Children to Free and Compulsory Education Act, 2009* (Act No. 35 of 2009). The Gazette of India, Extraordinary Part II, Section 1. Ministry of Law and Justice (Legislative Department), Government of India. https://www.indiacode.nic.in/bitstream/123456789/19014/1/the_right_of_children_to_free_and_compulsory_education_act_2009.pdf.

[20] Government of India. 1966. *Report of the Education Commission (1964-66): Education and National Development*. https://ia801307.us.archive.org/16/items/ReportOfTheEducationCommission1964-66D.S.KothariReport/48.Jp-ReportOfTheEducationCommission1964-66d.s.kothari.pdf.

[21] Government of India. 1968. *National Policy on Education*. https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE-1968.pdf.

[22] Government of India. 1986. *National Policy on Education*. https://ncert.nic.in/pdf/nep/Policy_1986_eng.pdf.

[23] UNESCO Institute for Statistics (UIS). https://databrowser.uis.unesco.org/view#indicatorPaths=UIS-SDG4Monitoring%3A0%3AXGDP.FSGOV&geoUnits=IND&view=line. Accessed September 7, 2025.

[24] See note 4.

[25] UNESCO. 2016. *Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4*. https://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en_2.pdf.

[26] News on Air. July 29, 2025. "NEP 2020 route to achieve Viksit Bharat 2047, says Education Minister Dharmendra Pradhan." https://www.newsonair.gov.in/nep-2020-route-to-achieve-viksit-bharat-2047-say-edu-min-dharmendra-pradhan/.

[27] Press Information Bureau, Government of India. July 10, 2025. "Panch Sankalpa of NEP 2020 to be the guiding principle for HEIs: Dharmendra Pradhan." https://www.pib.gov.in/PressReleasePage.aspx?PRID=2143690.

[28] Press Information Bureau, Government of India. July 29, 2025. "Shri Dharmendra Pradhan inaugurates Akhil Bharatiya Shiksha Samagam 2025 in New Delhi to commemorate 5 years of NEP 2020." https://www.pib.gov.in/pressreleasepage.aspx?PRID=2149668.

[29] Press Information Bureau, Government of India. June 3, 2025. "Empowering India's Amrit-Peedhi." *Explainer 02/Series on 11 Years of Government*. https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154537&ModuleId=3.

[30] See note 28.

[31] Press Information Bureau, Government of India. September 5, 2025. "Prime Minister Shri Narendra Modi announces a new initiative - PM SHRI Schools on the occasion of Teachers' Day." https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1856883.

[32] See note 28.

[33] See note 28.

[34] Press Information Bureau, Government of India. June 14, 2025. "Under the Visionary Leadership of the Prime Minister, India is making Premium Global Education Available at an Affordable Cost: Shri Dharmendra Pradhan." https://www.pib.gov.in/PressReleasePage.aspx?PRID=2136357.

[35] UNESCO. 2024. "What you need to know about education for sustainable development." Accessed September 7, 2025. https://www.unesco.org/en/sustainable-development/education/need-know.

[36] World Bank. 2024. *The Changing Wealth of Nations 2024: Revisiting the Measurement of Comprehensive Wealth*. https://documents1.worldbank.org/curated/en/099100824155021548/pdf/P178446-7dfe6e92-9cf0-4d24-ad25-20b1320904c2.pdf.

[37] World Bank. 2021. *The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19*. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1552-2.

[38] OECD. 2013. *Education at a Glance 2013: OECD Indicators*. https://doi.org/10.1787/eag-2013-en.

[39] Adams-Prassl, A., Boneva, T., Golin, M. & Rauh, C. 2020. "Inequality in the impact of the coronavirus shock: Evidence from real time surveys." *Journal of Public Economics*, 189. https://doi.org/10.1016/j.jpubeco.2020.104245.

[40] World Bank. 2019. *Ending learning poverty: What will it take?* http://hdl.handle.net/10986/32553.

https://documents1.worldbank.org/curated/en/395151571251399043/pdf/Ending-Learning-Poverty-What-Will-It-Take.pdf

[41] Bodewig, C. 2013. "What explains Vietnam's stunning performance in PISA 2012?" *East Asia & Pacific on the Rise* (blog), December 11, 2013. https://blogs.worldbank.org/en/eastasiapacific/what-explains-vietnam-s-stunning-performance-pisa-2012.

[42] Ministry of Statistics and Programme Implementation, Government of India. *Women and Men in India 2015*. Chapter 3. https://www.mospi.gov.in/sites/default/files/reports_and_publication/statistical_publication/social_statistics/Chapter_3.pdf.

[43] Ministry of Statistics and Programme Implementation, Government of India. 2024. *Periodic Labour Force Survey, July 2023 - June 2024: Annual Report*. https://www.mospi.gov.in/sites/default/files/publication_reports/AnnualReport_PLFS2023-24L2.pdf.

[44] UNESCO Institute for Statistics (UIS). https://databrowser.uis.unesco.org/view#indicatorPaths=UIS-EducationOPRI%3A0%3ANERT.1.CP%2CUIS-EducationOPRI%3A0%3ANERT.1.M.CP%2CUIS-EducationOPRI%3A0%3ANERT.1.F.CP&geoUnits=IND&view=line. Accessed September 7, 2025.

[45] Buchholz, K. 2023. "Which countries' students are getting most involved in STEM?" World Economic Forum, March 20, 2023. https://www.weforum.org/stories/2023/03/which-countries-students-are-getting-most-involved-in-stem/.

[46] World Bank. 2024. India Learning Poverty Brief. http://documents.worldbank.org/curated/en/099090524113131044.

[47] See note 4.

[48] Ministry of Skill Development and Entrepreneurship, Government of India. 2025. (Draft) *National Policy for Skill Development and Entrepreneurship*. https://static.mygov.in/static/s3fs-public/mygov_175016304715408685 5.pdf.

[49] See note 3.

[50] See note 3.

[51] See note 43.

[52] ASER Centre. 2025. Annual Status of Education Report (Rural) 2024 - Provisional. https://asercentre.org/wp-content/uploads/2022/12/ASER_2024_Final-Report_13_2_24.pdf.

[53] Reserve Bank of India, 2024. *Handbook of Statistics on Indian States 2023-24*. https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=22089.

[54] Ministry of Education, Government of India. 2022. *Samagra Shiksha – An Integrated Scheme for School Education: Framework for Implementation*. https://samagra.education.gov.in/docs/ss_implementation.pdf.

[55] Sahlberg, P. 2021. *Finnish Lessons 3.0: What Can the World Learn from Educational Change in Finland?* Third edition. New York: Teachers College Press, Columbia.

[56] Ibid.

[57] Jones, R. S. 2013. *Education Reform in Korea*. OECD Economics Department Working Papers No. 1067. https://dx.doi.org/10.1787/5k43nxs1t9vh-en.

[58] OECD. 2014. *Lessons from PISA for Korea: Strong Performers and Successful Reformers in Education*. http://dx.doi.org/10.1787/9789264190672-en.

[59] Statistics Korea. 2025. *2024 년 생활시간조사 결과* [Results of the 2024 Time Use Survey]. https://kostat.go.kr/boardDownload.es?bid=220&list_no=437764&seq=9.

[60] Tai, C. November 15, 2018. "Why South Koreans are trapped in a lifetime of study", *South China Morning Post*. https://www.scmp.com/week-asia/society/article/2173414/schools-never-out-why-south-koreans-are-trapped-lifetime-study.

[61] Statistics Korea. 2025. *Private Education Expenditures Survey of Elementary, Middle and High School Students in 2024*. https://kostat.go.kr/boardDownload.es?bid=11758&list_no=436035&seq=1.

[62] OECD. n.d. *Education GPS - Korea - Student performance (PISA 2022)*. https://gpseducation.oecd.org/CountryProfile?primaryCountry=KOR&treshold=10&topic=PI.

[63] OECD. n. d. Adults' educational attainment distribution, by age group and gender.

[64] Lee, Y. 2023. *Suicide Trends and Responses in Korea*. Statistics Korea. https://sri.kostat.go.kr/boardDownload.es?bid=12046&list_no=432657&seq=1.

[65] See note 57.

[66] Choi, H. & Choi, Á. 2016. "Regulating private tutoring consumption in Korea: Lessons from another failure." *International Journal of Educational Development*, 49. https://doi.org/10.1016/j.ijedudev.2016.03.002.

https://www.semanticscholar.org/paper/Regulating-private-tutoring-consumption-in-Korea%3A-Choi-Choi/811f1d764f7ada6cc6a623c35169f24a518b2ea5

[67] OECD. n. d. *Korea: The Free Learning Semester Programme*. https://www.oecd.org//content/dam/oecd/en/about/projects/edu/career-readiness/Korea-The-Free-Learning-Semester-Programme.pdf.

[68] Goh, C. B. & S. Gopinathan. 2008. *The development of education in Singapore since 1965*. World Bank. http://hdl.handle.net/10986/6432.

[69] See note 58.

[70] Ministry of Education, Government of Singapore. 2023. "What is Full SBB?" Accessed September 10, 2025. https://www.moe.gov.sg/microsites/psle-fsbb/full-subject-based-banding/about-full-sbb.html.

[71] UNESCO Institute for Statistics (UIS). https://databrowser.uis.unesco.org/view#indicatorPaths=UIS-SDG4Monitoring%3A0%3AROFST.MOD.2%2CUIS-SDG4Monitoring%3A0%3AROFST.MOD.3%2CUIS-SDG4Monitoring%3A0%3AROFST.MOD.1&geoUnits=IND&view=line. Accessed September 11, 2025.

[72] ASER Centre. 2025. Annual Status of Education Report (Rural) 2024 - Provisional. https://asercentre.org/wp-content/uploads/2022/12/ASER_2024_Final-Report_13_2_24.pdf

[73] Muralidharan, K, Das, J., Holla, A. & Mohpal, A. 2016. *The Fiscal Cost of Weak Governance : Evidence from Teacher Absence in India*. Policy Research Working Paper 7579. World Bank Group. http://documents.worldbank.org/curated/en/622691468197066950.

[74] Sahlberg, P. 2021. Finnish Lessons 3.0: What Can the World Learn from Educational Change in Finland? Third edition. New York: Teachers College Press, Columbia University.

[75] See note 19.

[76] World Bank. 2018. *World Development Report 2018: Learning to Realize Education's Promise*. http://hdl.handle.net/10986/28340.

[77] Transforming Rural India Foundation & Sambodhi Research and Communications. 2024. *State Of School Education In Rural India*. https://www.trif.in/wp-content/uploads/2024/05/State-of-elementary-education-in-Rural-India-1.pdf.

[78] Asadullah, M. N., Perera, L. D. & Xiao, S. 2020. *Vietnam's Extraordinary Performance in the PISA Assessment: A Cultural Explanation of an Education Paradox*. IZA Discussion Paper No. 13066. https://docs.iza.org/dp13066.pdf.

[79] Parandekar, S. D. & Sedmik, E. 2016. *Unraveling a secret : Vietnam's outstanding performance on the PISA test*. Policy Research Working Paper 7630. World Bank Group. http://documents.worldbank.org/curated/en/258431468196137980.

[80] OECD/Asian Development Bank. 2015. *Education in Indonesia: Rising to the Challenge*. http://dx.doi.org/10.1787/9789264230750-e

[81] UNESCO Institute for Statistics (UIS). https://databrowser.uis.unesco.org/view#indicatorPaths=UIS-SDG4Monitoring%3A0%3AROFST.MOD.2%2CUIS-SDG4Monitoring%3A0%3AROFST.MOD.3%2CUIS-SDG4Monitoring%3A0%3AROFST.MOD.1&geoUnits=IND%2CIDN&view=line. Accessed September 11, 2025.

[82] OECD. 2023. *PISA 2022 Results: Factsheets – Indonesia*. https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/11/pisa-2022-results-volume-i-and-ii-country-notes_2fca04b9/indonesia_0e09c072/c2e1ae0e-en.pdf.

[83] World Bank. 2018. *East Asia and Pacific Regional Brief - Programme for International Student Assessment (PISA) 2018*. http://documents.worldbank.org/curated/en/876861593415668827.

[84] See note 2.

[85] Ministry of Education, Government of India. January 25, 2024. "Ministry of Education releases All India Survey on Higher Education (AISHE) 2021-2022." https://www.education.gov.in/sites/upload_files/mhrd/files/PIB1999713.pdf.

[86] International Monetary Fund. 2024. *Balance of Payments and International Investment Position Statistics (BOP/IIP)*. https://data.imf.org/en/Data%20Explorer?datasetUrn=IMF.STA%3ABOP(21.0.0)&timeseriesName=IND.CD_T.SI.USD.A. Accessed September 11, 2025.

[87] Reuters. January 21, 2022. "Germany wants to attract 400,000 skilled workers from abroad each year." https://www.reuters.com/world/europe/germany-wants-attract-400000-skilled-workers-abroad-each-year-2022-01-21/.

[88] Reuters, July 4, 2024. "Japan faces shortage of almost a million foreign workers in 2040, think tank says." https://www.reuters.com/markets/asia/japan-faces-shortage-almost-million-foreign-workers-2040-think-tank-says-2024-07-04/.

[89] ANSA. October 30, 2024. "Schillaci: 'L'obiettivo è assumere 10mila infermieri dall'India' [Schillaci: 'The goal is to hire 10,000 nurses from India']." https://www.ansa.it//canale_saluteebenessere/notizie/sanita/2024/10/30/schillaci-lobiettivo-e-assumere-10mila-infermieri-dallindia_4e194524-1151-49d8-84f7-80b8f833959e.html.

[90] United Nations, Department of Economic and Social Affairs, Population Division. 2024. *World Population Prospects 2024, Online Edition*. https://population.un.org/wpp/assets/Excel%20Files/1_Indicator%20(Standard)/EXCEL_FILES/1_General/WPP2024_GEN_F01_DEMOGRAPHIC_INDICATORS_COMPACT.xlsx

[91] See note 2.

[92] Melguizo, Á. et al. 2017. *No sympathy for the devil! Policy priorities to overcome the middle-income trap in Latin America*. OECD Development Centre Working Paper No. 340. https://doi.org/10.1787/26b78724-en.

[93] India Brand Equity Foundation. n.d. "Skill India." https://ibef.org/government-schemes/skill-india. Accessed October 7, 2025.

[94] DD News. (2025, July 16). *Millions benefitted, focus will remain on youth: PM Modi on 10 years of Skill India*. https://ddnews.gov.in/en/millions-benefitted-focus-will-remain-on-youth-pm-modi-on-10-years-of-skill-india/

[95] Press Information Bureau, Government of India. July 14, 2025. "A Decade of Building Skills & Empowering Dreams: 10 years of Pradhan Mantri Kaushal Vikas Yojana." https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154880&ModuleId=3.

[96] Press Information Bureau, Government of India. August 4, 2025. "Progress Made Under PMKVY." https://www.pib.gov.in/PressReleasePage.aspx?PRID=2152196.

[97] Ibid.

[98] ILO. 2025. *World Employment and Social Outlook: Trends 2025*. https://www.ilo.org/sites/default/files/2025-01/WESO25_Trends_EN_WEB5.pdf.

[99] See note 3.

[100] Kingdon, G. G. 2017. *The Private Schooling Phenomenon in India: A Review*. IZA Discussion Paper No. 10612. https://docs.iza.org/dp10612.pdf.

[101] Muralidharan, K. & Sundararaman, V. 2015. "The Aggregate Effect of School Choice: Evidence from a Two-Stage Experiment in India." *The Quarterly Journal of Economics*, 130(3). https://doi.org/10.1093/qje/qjv013.

[102] Gruijters, R. J., Alcott, B. & Rose, P. 2021. "Do Private Schools Improve Learning Outcomes? Evidence from Within-Household Comparisons in East Africa and South Asia." *Comparative Education Review*, 65(4). https://doi.org/10.1086/716448.

[103] Ministry of Education, Government of India. February 10, 2025. "Measuring the Pulse of Indian Education." https://www.education.gov.in/sites/upload_files/mhrd/files/PIB2101363.pdf.

[104] Parliament of India, Rajya Sabha. 2024. *Report No. 157 of the Parliamentary Standing Committee on Health and Family Welfare on Quality of Medical Education in India*. https://sansad.in/getFile/rsnew/Committee_site/Committee_File/ReportFile/14/187/157_2024_2_19.pdf.

[105] Ministry of Statistics and Programme Implementation, Government of India. 2024. "Periodic Labour Force Survey (PLFS) Annual Report 2023–24." https://www.mospi.gov.in/sites/default/files/publication_reports/AnnualReport_PLFS2023-24L2.pdf

[106] See note 3.

[107] National Center on Education and the Economy. n.d. *Top-Performing Countries: Finland*. https://ncee.org/finland/. Accessed September 12, 2025.

[108] National Center on Education and the Economy. n.d. *Top-Performing Countries: Canada*. https://ncee.org/canada/. Accessed September 12, 2025.

[109] Stewart, V. 2016. "Singapore: Innovation in Technical Education." *Asia Society*. https://asiasociety.org/global-cities-education-network/singapore-innovation-technical-education.

[110] UNDP & Mohammed bin Rashid Al Maktoum Knowledge Foundation (MBRF). 2024. *Global Knowledge Index 2024*. https://knowledge4all.com/admin/2024/Methodology/GKI_Report_en.pdf.

[111] *Vocational Education Law of the People's Republic of China*, Revised on April 20, 2022. The National People's Congress of the People's Republic of China. http://en.npc.gov.cn.cdurl.cn/2022-04/20/c_909970.htm.

[112] Kattan, R. B. 2017. "Education in East Asia and the Fourth Industrial Revolution." *Education for Global Development* (blog), December 6, 2017. https://blogs.worldbank.org/en/education/education-east-asia-fourth-industrial-revolution.

[113] Ministry of Education, Republic of Korea. October 31, 2023. "Employment Opportunities for Vocational School Graduates on the Rise." https://www.moe.go.kr/boardCnts/fileDown.do?m=0201&s=english&fileSeq=72e79063d81e622db7cba76fae71bc14.

[114] Ministry of Skill Development and Entrepreneurship, Government of India. 2024. *Tracer Study to Assess Employment Outcomes of ITI Pass Outs from Skills Strengthening for Industrial Value Enhancement (STRIVE) Project*. https://dgt.gov.in/sites/default/files/National%20Tracer%20Study%20-%20STRIVE.pdf.

[115] *Companies Act, 2013* (No. 18 of 2013). The Gazette of India, Extraordinary Part II, Section 1. Ministry of Law and Justice (Legislative Department), Government of India. https://nclt.gov.in/sites/default/files/Act%26rules/the_companies_act_2013_0.pdf.

[116] National CSR Portal, Ministry of Corporate Affairs, Government of India. n.d. *MIS Reports – Development Sector Wise*. https://www.mca.gov.in/content/csr/global/master/home/ExploreCsrData/mis-reports/development-sector-wise.html . Accessed September 12, 2025.

[117] Ibid.

[118] Government of India. 2023. *Union Budget 2023-24: Budget at a Glance – Expenditure*. https://www.indiabudget.gov.in/budget2023-24/doc/Budget_at_Glance/bag6.xls.

[119] National CSR Portal, Ministry of Corporate Affairs, Government of India. n. d. *CSR Spent: Development Sector-Wise > Education, Differently Abled, livelihood*. https://www.mca.gov.in/content/csr/global/master/home/home/csr-spent--development-sector-wise.html?=eQhDNzycTO4ipXSCXBXHkkT7gpzsi%2BbLnVXzHAEGVxWpRi3A%2BnY87llPHYKrit2m=dUTMrg%2BAwmwl%2Fb%2BdXAW8w%3D%3D. Accessed September 12, 2025.

[120] Ibid.

[121] Azim Premji Foundation – History and Timeline. https://azimpremjifoundation.org/who-we-are/history-and-timeline/. Accessed September 19, 2025.

[122] Pratham Foundation- Teaching at the Right Level. https://www.pratham.org/about/teaching-at-the-right-level/. Accessed September 20,2025

[123] Ministry of Education, Government of India. 2025. *Report on Unified District Information System for Education Plus (UDISE+) 2024-2025*. https://dsel.education.gov.in/sites/default/files/statistics/report_in_PDF/ext2425.pdf.

[124] Ibid.

[125]National Institute of Educational Planning andAdministration/Itoo, N. A., Mainstreaming Out of School Children: School Leadership Initiatives. https://ncsl.niepa.ac.in/schoolleadershipacademy/pdf/jammu&kashmir/modules/2022-2023/jk22m11.pdf

[126]Department of School Education, Government of India, Minutes of the meeting of Project ApprovalBoard for the UT of J&K under Sa magra Shiksha Scheme for FY 2024-25. https://dsel.education.gov.in/sites/default/files/pab/JK_PAB_Minutes_2024_25.pdf

[127] The Times of India. September 21, 2020. "My dream to make J&K an oasis of talent: LG Manoj Sinha" https://timesofindia.indiatimes.com/education/news/my-dream-to-make-jk-an-oasis-of-talent-lg-manoj-sinha/articleshow/78239395.cms

[128] Business Standard. Dec 16, 2024. "J&K LG Manoj Sinha urges students to eliminate complacency for growth"

https://www.business-standard.com/india-news/j-k-lg-manoj-sinha-urges-students-to-eliminate-complacency-for-growth-124121600766_1.html

[129] News on Air. March 15, 2025. "J&K Implements NEP-2020 in All Government Degree Colleges"

https://www.newsonair.gov.in/jk-implements-nep-2020-in-all-government-degree-colleges/

[130] Financial Express. November 11, 2022, "Effective interventions increased enrolment drive in J&K, says Manoj Sinha"

https://www.financialexpress.com/jobs-career/education-effective-interventions-increased-enrolment-drive-in-jampk-says-manoj-sinha-2805834/

[131] Daily Excelsior. August 21, 2025. "Premier educational institutions set up in J&K in past 10 years: Sinha". dailyexcelsior.com/premier-educational-institutions-set-up-in-jk-in-past-10-years-sinha/

[132] News on Air. March 15, 2025. "J&K Implements NEP-2020 in All Government Degree Colleges". https://www.newsonair.gov.in/jk-implements-nep-2020-in-all-government-degree-colleges/

[133] Press Information Bureau. Government of India. Sep 25, 2025.LG Sinha lauds Student-led innovation moment

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2171490

[134] Kashmir Ahead, 2025, *Omar Abdullah leads NEP-2020 push at Srinagar Education Conclave*

[135] Kashmir News Service, 2025, *Omar Abdullah Govt committed to transforming education in J&K: Tanvir Sadiq - Inaugurates state-of-the-art auditorium at Green Valley Educational Institute (GVEI), Illahibagh*

[136] Business Standard. August 2, 2025. "Resolution of Kashmir Problem Lies in Pens, Not Guns: Dharmendra Pradhan." https://www.business-standard.com/india-news/resolution-of-kashmir-problem-lies-in-pens-not-guns-dharmendra-pradhan-125080200826_1.html

[137] UNICEF India. March 23, 2019. "Connecting the dots to give children a safe, stimulating environment". Connecting the dots to give children a safe, stimulating environment | UNICEF India; Child Friendly Space: Where fearless hearts thrive and young spirits soar | UNICEF India

[138] UNESCO. "United Nations Transforming Education Summit 2022, Collection of Best Practices". AT1GP353.pdf

[139] Dubai Knowledge Park. 2024. *Dubai's education power hubs: Information Kit*. https://dkp.ae/information-kit.

[140] Government of Dubai Media Office. September 12, 2025. “Hamdan bin Mohammed opens first international campus of Indian Institute of Management Ahmedabad.” https://www.mediaoffice.ae/en/news/2025/september/12-09/hamdan-bin-mohammed-opens-first-international-campus-of-indian-institute-of-management-ahmedabad.

[141] Dorph, M. S. 2019. *NYU’s Global Strategy: Financial Overview*. https://www.nyu.edu/content/dam/nyu/provost/documents/faculty-global-network/Global_Network_Finance_2019.pdf.

[142] Emirates News Agency – WAM. June 27, 2025. “Hamdan bin Mohammed approves new policies to boost education, environmental standards in Dubai.” https://www.wam.ae/en/article/15n18gi-hamdan-bin-mohammed-approves-new-policies-boost.

[143] The Embassy of India, Abu Dhabi. June 12, 2025. “Indian Community in UAE.” https://www.indembassyuae.gov.in/indian-com-in-uae.php. Accessed October 7, 2025.

[144] NSDC India. 2022. “Skilling India’s youth for overseas workforce demand: Project TEJAS launched.” https://nsdcindia.org/tejas.

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