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HIGHER EDUCATION IN KARNATAKA

SEP must turn access into genuine inclusion

The focus on making quality education affordable is welcome. But this should be accompanied by a transformation in the curriculum

VICTOR LOBO S J AND
PAUL NEWMAN

A few days ago, the Karnataka government, keeping its poll promise of implementing the State Education Policy (SEP) as an alternative to the National Education Policy (NEP), came out with a 2,197-page report. The main highlight of this was free education for girl students up to graduation as well as extending reservations to private institutions.

The main aim of the National Education Policy-2020 in the higher education sector is to increase the Gross Enrollment Ratio from the present 27% to 50% by 2035. It also aims at cutting down institutions from the present 58,000 to 12,000.

Only 12% of graduates proceed to post-graduate studies, and from there just 1% proceed towards pursuing research. NEP stresses multidisciplinary approach to learning, but at the higher education level, specialisation in a particular subject domain is the need preparing students to pursue research at a later stage.

The NEP welcomes initiatives such as allowing 100 foreign universities to operate from Indian soil. The mushrooming of private Higher Education Institutions (HEIs) is mostly for commercial purposes. How many can afford this expensive education model? We as educators need to question the purpose of many of these institutions and need to seek accountability from each one of them towards nation building and social commitment.

The SEP is clear that foreign universities can help local institutions by hand-holding them in technology transfer, joint research, student and teacher exchanges, leading to improvement in the quality of education as well as making higher education affordable.

The SEP's focus is on improving quality and making education affordable as well as promoting social justice, keeping girl child, Muslims, OBCs, SC/STs in mind, in conjunction with the socialistic policies of our Constitution.

The SEP is silent on how higher education institutions would fare in the NAAC and NIRF assessments, as one of the important questions raised by the assessors is how the NEP is being implemented and, more importantly, whether the institutions have adopted the Outcome Based Education (OBE)

model, Indian Knowledge System (IKS) and Intellectual Property Rights (IPR).

Apart from losing out on funds and grants and grants from UGC and other funding agencies for non-implementation of NEP, the institutions following SEP would lose out on NAAC and NIRF rankings as well.

The present assessment and ranking systems in India assess institutions from urban centers to rural areas and remote areas as well as private and government institutions on the same parameters. Most top ranking HEIs enroll students with a very high cut-off percentage. What is the point of educating a brilliant student and maintain their intellectual upward trend? Both the NEP and SEP are silent on this issue.



HEIs should prioritise educating first-generation learners, girl students, single parent students, kids coming from socio-economically backward sections of the society, kids of unskilled migrant labourers, Dalits and Adivasis who need a helping hand for upward mobility.

It is the responsibility of HEIs to produce socially responsible students who become global citizens aware of their and others' human rights, constitutional obligations and a concern for our common home—mother Earth.

As lack of infrastructure plagues HEIs in rural areas, government and policy makers would do well to concentrate on bridging the infrastructural gaps between the urban-rural divide among these HEIs by investing and seeking corporate funding.

The emphasis of NEP on AI, multi-disciplinary learning, machine learning, skill enhancement sounds very good and welcoming, but the basic question again is to find out if we are equipped to teach these courses in rural areas where 43% of our universities and 61.4% of colleges are located.

The SEP has come out with a two-language policy, which is welcome. Today, the world needs young minds with holistic education where students are taught to have a balance between academics,

social, emotional, physical and cognitive development irrespective of their class, caste, colour, creed or gender.

The focus should be on skill development, including life skills, social skills and soft skills, making them competent and futuristic as compassionate individuals.

True inclusivity in higher education cannot be realised through policy rhetoric alone; it demands an overhaul of institutional ethos, infrastructure and pedagogy.

While the SEP proposes corrective measures for structural inequities, its success rests on whether it can foster ecosystems that genuinely support the marginalised—not just in access, but in academic success, retention and upward mobility.

As Paulo Freire emphasised in *Pedagogy of the Oppressed*, education must be "the practice of freedom", enabling learners to perceive social, political and economic contradictions and to take action against oppressive elements.

The challenge, therefore, is not merely to widen the gates of higher education but to reform what lies within. Inclusion must be accompanied by curricular transformation.

The Indian Knowledge System (IKS), for example, cannot be relegated to a symbolic component but must be organically woven into pedagogy to restore epistemic balance long lost to colonial frameworks. Likewise, the two-language policy has the potential to empower learners from vernacular backgrounds, provided the policy is implemented with adequate teacher training and resource development.

Digital learning, a cornerstone of NEP, raises further questions. Without addressing the digital divide, particularly in rural and remote HEIs, the vision of a hybrid or online-driven model may deepen educational inequity.

The component of practical education cannot be supplemented by online theory-based teaching. A holistic approach requires synchronising technological advancement with infrastructural and pedagogical readiness. Investment must be directed not only toward digital tools but also toward localised teacher capacity, linguistic accessibility and context-relevant content.

Inclusivity must be seen not as an addendum but as the very framework upon which quality higher education rests. As articulated in the Constitution's Preamble, justice—social, economic, and political—remains the cornerstone of the Republic. Higher education as a public good must reflect and reinforce this constitutional mandate in spirit and in practice.

(Victor is vice chancellor and Paul is professor and dean of Humanities and Social Sciences, St. Joseph's University)

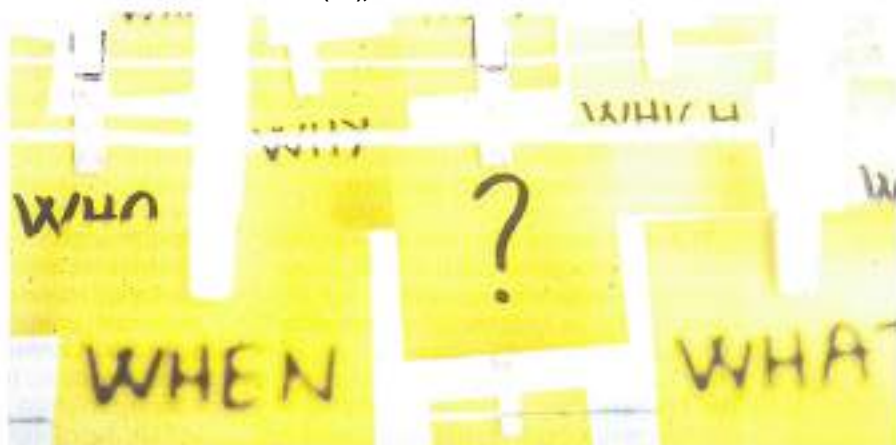
Albert P'Rayan

A teacher known for her innovative methods announced, "Today, I'm not going to teach any subject. Instead, I want you to raise interesting questions for a discussion. Are you ready?" The class cheered one by one, the questions tumbled out: Why does zero mean nothing? Why must two plus two always equal four? Why do we call a pen a 'pen'; if someone gave it another name, would it still be the same thing? The stunned teacher had not expected such probing, thought-provoking, and certainty-shaking questions.

Certainty and doubt

"There is one sin I have come to fear above all others: certainty. Certainty is the greatest enemy of unity; the deadliest foe of tolerance," said Cardinal Lawrence in the film *Conclave*, and adds, "Let us pray that God grants us a Pope who knows how to doubt." Reflecting on the quote, I wondered whether the Ministry of Education and school administrators should also pray for teachers who know how to doubt and who can instil that same spirit of curiosity in their students.

Certainty can hinder both thought and progress. Teachers who cling to certainty often resist challenge and discourage questioning. In doing so, they stifle curiosity, an essential quality that fuels fresh thinking, creative ideas,



GETTY IMAGES/ISTOCKPHOTO

Encourage them to doubt

With Teachers' Day round the corner, an educator stresses the need to celebrate curiosity in the classroom

and innovation. Curiosity and imagination are closely connected and share many common traits. Curiosity prompts questions and drives the desire to explore, while imagination generates new ideas and opens paths to new solutions.

Sadly, our education system seldom values the nurturing of either curiosity or imagination. Albert Einstein once declared, "Imagination is more important than knowledge," implying that knowledge is finite and limited to what is already known, whereas imagination allows us to explore possibilities beyond current understanding. It is a powerful driver of creativity and innovation. Yet the teaching community seems not to

have realised the value of imagination and the power of curiosity.

Those who doubt are often the most curious. They seek truth, question assumptions, and strive to grow. Teachers who embrace doubt encourage students to ask questions, explore ideas, and think deeply. Curiosity leads to clarity. It sparks innovation. It deserves to be celebrated in the classroom.

Does our education system celebrate certainty while discouraging curiosity? Why is certainty valued more than curiosity? Why is it important for teachers to encourage students to doubt? How can teachers help students become curious? Finding answers to these and other related, often unasked, questions can

help educators cultivate their own curiosity and make the classroom a better place for seeking knowledge.

Constructive response

Let's assume that a teacher in a class made the following statements: "The Earth is round." "I'm glad you are all very attentive in class." "The object is red in colour." Now let's imagine that some curious students raised the following questions: "If the Earth is round, why don't the people at the bottom fall off?" "How do you know I'm attentive in class and not just dreaming right now?" "Who decided that red should be called 'red'? What if it looks different to you than it does to me?"

These questions chal-

lenge scientific certainty about gravity, raise doubts about the nature of reality, and question the certainty of language, meaning, and shared perception. In such situations, a teacher should use these moments as opportunities to develop reasoning, explore ideas,

A constructive teacher values questions rather than dismissing them. Even a simple "That's a good question" validates curiosity. Instead of giving ready-made answers, the teacher can ask, "What do you think?" turning passive listening into active reasoning. Some truths rest on evidence (like gravity keeping us on Earth), while others are shaped by human systems (like language and meaning). It is also fine for teachers to admit they don't know; saying, "Let's explore this together" shows that knowledge grows through inquiry, not certainty. Above all, the teacher's role is to keep curiosity alive.

A classroom blessed with curious students is like a garden of wonder, where questions bloom into creativity, innovation takes root, and the fragrance of new knowledge spreads everywhere. When teachers nurture learners' natural curiosity, both teachers and students grow wiser and inspire others to think, question, and imagine. What a beautiful garden such a classroom would be!

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Recurrent irritant

Delay in disbursement of funds and salaries can derail research projects

Time is of the essence in science. The report that 75 women selected for the Department of Biotechnology's Biocare programme have received neither sanction letters nor salaries is reminiscent of an irksome and persistent malaise in India's research administration. Young researchers already contend with scant laboratory space, cumbersome university bureaucracies, labyrinthine grant applications, uneven mentorship and uncertain career prospects. Salaries and fellowships are modest in relation to living costs, which deters talented graduates from pursuing research. Even those determined to stay are often trapped in protracted postdoctoral or contractual roles without long-term security. In this milieu, a scheme such as Biocare promises an independent foothold while its failure to deliver on time magnifies the insecurity and discouragement. Opportunities for postdoctoral work and tenure-track openings abroad are also narrowing. Immigration regimes in the West have become tighter while competition for limited faculty posts has intensified. For Indian scientists, thus, the domestic research ecosystem is increasingly the arena in which their careers will unfold. Delays in disbursing fellowships and grants can derail entire careers.

India can no longer afford to treat such breakdowns as teething troubles. The country aspires to expand its global scientific standing, to convert research into innovation, and to train a generation of scientists to address pressing challenges in health, energy, agriculture and climate resilience. These ambitions are incompatible with a funding administration that falters at basic execution. The switch to the Treasury Single Account system, the stated reason for the Biocare delay, may strengthen transparency in the long run but there are several reasons for urgent administrative maturity right now. Foremost, science is time-sensitive: experiments must begin when facilities, collaborators and seasonal or biological conditions align. Delays break these cycles irreversibly. Second, when schemes that are progressive on paper fail to reach beneficiaries, the resulting credibility deficit will make it harder to attract domestic talent and international partnerships. Third, equity demands consistency. Women scientists, early-career fellows and those from under-represented backgrounds already contend with systemic barriers. Erratic access to funds affects them disproportionately. Scheme design must incorporate rather than externalise enforcement. Transparency must be implemented with contingencies so that beneficiaries do not become collateral damage in bureaucratic transitions. Accountability must be tightened at the level of Ministries and programme managers. Policymakers must recognise that a delay in accounting procedures for them is the interruption of livelihoods and careers for researchers. *u/b*

Berlin bets on Indian talent for stronger ties



PHILIPP ACKERMANN
GERMANY'S AMBASSADOR
TO INDIA

THIS Wednesday German Foreign Minister Johann Wadepuhl will visit India for the first time after taking charge. Wadepuhl hails from the far north of Germany — a region whose people are known for being rather matter of fact and down-to-earth — a trait that might bring some relief into a world that finds itself in a state of turmoil. A world in which headlines and big egos seem to spin the world much faster than we are used to, and into all kinds of unpredictable directions. For such times, we need to propose a foreign policy which is not overly noisy or about showmanship.

You will easily find capitals that receive their state guests with more glamour than Berlin does. We do think that it is important to focus not on decorations and ornaments, not on fireworks and fanfare, but on solid foundations on which long-term strategic

partnerships can grow and flourish. And we believe that our partnership with India is of that sort — that it will weather the current storms that are shaking up the international order.

India is our growing partner in trade and production lines, in science and technology, and in defence cooperation. Moreover, I believe that the ties between Berlin and Delhi will shape how we view and understand the Indo-Pacific in the coming years.

Military conflicts, the dangers of climate change and terrorism as well as a decline in the respect for international law are but a few concerns that currently preoccupy statesmen and women around the globe. As the official representative of a country that believes in the notions of peace and stability — just like India — I am convinced that our response to the current situation must be to strengthen our existing partnerships.

We should take this current turmoil as a reminder to reflect on what makes us strong: Not isolationism, but partnerships, not using trade to force through political gains, but working together to figure out trade arrangements that take all parties and interests into consideration. It is a true test to judge which partners to rely upon. This is not an easy task.



PARTNERSHIP: Foreign Minister S. Jaishankar with his German counterpart Johann Wadepuhl, renews

Germany, along with the European Union, has much to offer. Our partnership is based on shared values and mutual respect — let me point out that the EU, after India, is the second largest democracy in the world. We share common interests — like India, we believe in the importance of economic progress and development. The instrumentalisation of trade must be a concern to us all and should be countered jointly.

Before coming to Delhi, Wadepuhl will visit Bengaluru. In India's south, he will get an impression of the country's scientific ambitions and incredible talent pool. Numerous German companies have made Bengaluru a

cornerstone of their R&D strategies, for good reasons.

And this brings me to another headline of our partnership with India. Today, more than ever before, we witness partnerships not only between our governments, but also strong and personal relations between our people. The smartest among Indian researchers are discovering Germany's vibrant, competitive and world-class science ecosystem.

We want our universities to be open spaces for discussions, where the best and brightest from around the world are welcome. Let them post what they want on social media — as long as they are smart, adaptable and hard-working.

The numbers speak a clear language: Indian students trust the quality of German public universities. Within one year, their number has grown by around 30 per cent, to almost 60,000 students. Germany is a top destination for Indian talent is catching up with Anglophone countries at blinding speed. Many Indians are placing their future and their aspirations on Germany — and we hold the firm belief that immigration of educated people will make our economy stronger and our society more resilient.

Deciding on a country you choose for your future career is one of the most significant decisions you can take. A new centre for your life, maybe even the place where your children will grow up. You have to take many factors into consideration — how welcoming are society, administration and labour markets? Today, Germany has Europe's most modern and liberal citizenship laws, and Indian students can stay up to 18 months after graduating to find a job.

Let us also talk about the elephant in the room — the German language. Not so difficult to decipher, right? This elephant in the room is actually a fairly familiar elephant — it is closely related to English. In fact, English will get you very far with German universities, in our top sci-

ence institutions and in our large companies and cities. But learning German will open many more doors.

I regularly meet Indians who made Germany their new home, and I am often humbled by their impressive level of German. Indians amaze me with their ability to juggle between so many languages, be it Hindi, Punjabi, Tamil or Malayalam — and it seems that they all eventually add German to the mix, after living there for some time.

At the beginning, you can easily get overwhelmed by the idea of mastering an entire new language, but think of German as something of a *House Mofko*: A language where each new word and each expression you learn unlocks another small, magical window to peek into a new reality. And as you open more and more of them, the people that you see through these windows will greet you back and welcome you.

Next week, India will open its gates, doors and windows to Wadepuhl. I am convinced that he will come back to Berlin with many impressions of India's great talents and sky-high ambition — its lively economy, its space flight prowess and the scale of its responsible energy parks — and with fresh ideas on how to take our partnership to the next level.

Let the foreign students in Germany post what they want on social media — as long as they are smart, adaptable and hard-working.

Authoritarians have long feared and suppressed science as a rival for social influence. Experts see President Trump as borrowing some of their tactics

WILLIAM J BROAD

The war on science began four centuries ago when the Roman Catholic Church outlawed books that reimagined the heavens. Subsequent regimes shot or jailed thousands of scientists. Today, in such places as China and Hungary, a less fearsome type of strongman relies on budget cuts, intimidation and high-tech surveillance to cow scientists into submission. Then there is President Donald Trump. His blitz on science stands out because America's labs and their discoveries powered the nation's rise in the last century and now foster its global influence. Just last week, Trump fired the newly confirmed director of the Centres for Disease Control and Prevention. Her lawyers said the move spoke to "the silencing of experts and the dangerous politicisation of science."

In rapid bursts, Trump has also laid off large teams of scientists, pulled the plug on thousands of research projects and proposed deep spending cuts for new studies. If his proposed \$44 billion cut to next year's budget is enacted, it will prompt the largest drop in federal support for science since World War II, when scientists and Washington began their partnership.

Few if any analysts see Trump as a Josef Stalin, who crushed science, or even as a direct analogue to this era's strongman leaders. But his assault on researchers and their institutions is so deep that historians and other experts see similarities to the playbook employed by autocratic regimes to curb science.

For instance, despots over the ages devised a lopsided way of funding science that punished blue-sky thinkers and promoted gadget makers. Trump's science policies, experts say, follow that approach. He hails Silicon Valley's wizards of tech but undermines the basic research that thrives on free thought and sows the seeds of not only Nobel Prizes but trillion-dollar industries.

The president's backers deny any suggestion that he engages in autocratic moves or has autocratic ambitions.

Trump "is a threat to bureaucracy, not democracy," said Paul Duns, the architect of Project 2025, the right-wing blueprint for Trump's presidency. "He has an extremely high regard for science."

The ultimate target, according to the president and his supporters, is not science but rather the role experts play in generating the red tape that hobbles the nation's economy and, they say, the research enterprise itself. They note that Project 2025 called for the dismantling of the administrative state.

Trump himself insists that, overall, he wants to save science. His defenders argue that he is cutting bloated budgets to restore public trust in science and spark a golden age of discovery.

Defenders of the postwar order concede that federal science management can be improved. But the Trumpian cure is, they add, far worse than any disease. They dismiss his recent moves and pronouncements as little more than pretexts for what they see as repressive tactics inspired by contemporary autocrats.

"Science is a source of social power," said Daniel Treisman, a political scientist at the UCLA. "It always poses a potential threat."

Threatened or not, Trump has long scorned experts as overrated and has stated that he prefers to rely on common sense and gut instincts. "The experts are terrible," he



ILLUSTRATION: DEEPAK HARKHARDAN

Autocratic playbook in Trump's attacks on science

told the crowd at a 2016 rally in La Crosse, Wisconsin. If analysts differ on the reasons for Trump's attacks on science, they agree that his actions could affect America's long-standing role as the world leader in scientific discovery—either strengthening it or, conceivably, ending it. Will the nation continue to set the global standard for science breakthroughs?

The Church

From the start, modern science faced repression. The backdrop was doctrine: The Roman Catholic Church long held that humans sat at the centre of the universe as the stars, planets and sun moved overhead in never-ending orbits. Not so, argued Nicolaus Copernicus, a Polish astronomer. In 1543, he laid out evidence showing that the Earth and planets revolve around the sun. News of his book, 400 pages long and rich in diagrams, moved slowly across Europe. The church in time decided to show its displeasure. In 1600, it had Giordano Bruno, an advocate of Copernicus' heliocentric theory, burned at the stake.

To fight the heresy, the church in 1616 put the Copernican tract on its list of prohibited books. Undeterred, Galileo, an Italian astronomer, in 1632 published his great work, *Dialogue Concerning the Two Chief World Systems*. It backed Copernicus. Galileo's trial by the Roman Inquisition in 1633 was a turning point in Western history. The spectacle of the elderly thinker being forced, under threat of torture, to recant came to symbolise the church's hostility to open inquiry.

Even so, Rome proceeded to adapt churches and cathedrals to serve as solar observatories, which let the church improve the calendar and better fix the date of Easter. The research also gave credence to the Copernican view. Nonetheless, Rome kept its heliocentric ban in place for centuries.

The Catholic Church's double standard—crushing blue-sky science while enjoying the practical benefits—became a favourite tactic of monarchs, despots and modern autocrats. Today the two categories of exploratory work are known as basic and applied science. By nature, basic studies, though risky, tend to yield the most important discoveries.

The State

The dictators of the 20th century turned the suppression of basic science and the promotion of applied research into superweapons of social control. Upon taking power in 1933, Adolf Hitler redefined German science to include the idea that Aryans represent the master race. "If science cannot do without Jews," he quipped, "we will have to do without science." Hundreds of Jewish scientists were dismissed, and many fled the country. Regime dogma guided the remaining scientists. The idea was that nationalistic science was the only true science. Before the war, Germany led the world in such triumphs of the intellect as relativity theory and quantum mechanics. Nazi science ended the blue-sky breakthroughs.

In this century, a new kind of ruler arose. The new autocrats, forsaking military garb for designer suits, relied on subtle threats, budget cuts and high-tech surveillance to curb science.

Daniel Treisman, a political scientist at the UCLA, joined with Sergei Guriev, dean of the London Business School, to write a 2023 book on the new generation. *Spin Dictators* argues that the media-savvy strongmen have recast authoritarian rule for the digital age. "They don't want to be controlled by scientists," Treisman said. "They want to control them." He noted that the new authoritarians, like the old, rely on applied science to bolster the legitimacy of their regimes.

The book's case studies look at leaders including Brazil's Jair Bolsonaro, China's Xi Jinping, Russia's Vladimir Putin and Hungary's Viktor Orban.

In Brazil, Bolsonaro, as president from 2019 to 2023, slashed the federal research budget, throwing thousands of scientists into limbo.

In China, Xi's rise to power in 2012 led to online censors, televised confessions and the repression of restive populations, such as the Uyghurs. His science investments put applied over basic studies.

In Russia, Putin has created what experts consider a police state in which agents falsely arrest scientists on charges of treason and closely monitor their contacts with foreigners. Russia's invasion of Ukraine in 2022 led to a mass exodus of scientists. At the same time, Moscow has used applied science as a stealthy weapon of social control.

In his first term as president, Trump sought to crush federal science. But Congress often reversed his proposed funding cuts. In his second term, Trump's first target was expert guidance.

On February 19, weeks after taking office, Trump signed an executive order that called for the downsizing and elimination of the advisory panels. The order affected panels that oversaw vaccines, astrophysics, fisheries, mathematics, space, the geosciences, the environment and artificial intelligence.

Next, in March, amid budget cuts and growing protests by scientists, Trump unveiled an overall science policy that echoed the autocrats in emphasising technological spinoffs, such as artificial intelligence and quantum computing. In a public letter, the president called for securing the nation's status "as the unrivalled world leader in critical and emerging technologies."

The New York Times 34/24

CLOCK-HOUR CLASSES

Faculty vacancies blunt India's global edge

Teacher shortage in higher education is leading to poor learning outcomes and misaligned workforce skills

AJIT RANADE

In response to a petition, the Supreme Court recently expressed dismay at the low salary paid to contractual teachers in certain Gujarat colleges. The bench said, "It is disturbing that assistant professors are getting monthly emoluments of Rs 30,000. It is high time that the State takes up the issue and rationalises the pay structure on the basis of functions that they perform." The pay of the contractual assistant professors has not changed since 2012. But those appointed on a regular basis for similar academic duties are paid between Rs 1.2 and 1.4 lakh per month, i.e. four times more. This violates the principle of equal pay for equal work in the same organisation. The contractual faculty also have no corresponding benefits like health, earned leave or pension, which the regular faculty get. The court said that it is not enough to recite *gururabraham guruvishnu gurudevoh maheshwarah* (prayer and adoration of teachers) at public functions if the country was treating its teachers thus. Academicians, lecturers, and professors are the country's intellectual backbone and they shape young minds.

But one-fourth pay for similar work to contractual teachers is not the only story of disparity. The more lamentable situation is the employing of part-time teachers, euphemistically called on clock-hour basis (CHB). When universities and colleges have sanctioned positions but do not get approvals to fill those positions as regular appointments, they resort to appointing faculty on CHB. According to data from July this year, 26% of the total 18,951 sanctioned faculty posts in 46 Central universities are vacant. The situation in the state universities is much worse. In Rajasthan, 1,597 of the 2,512 sanctioned posts are vacant across 16 universities. Of these, five state universities are reported to be operating without a single permanent faculty member. In Maharashtra, colleges and universities are heavily reliant on CHB teachers because recruitment has lagged. Of the 53,178 sanctioned positions, nearly 7,000 remain vacant. More than 60% of the teaching posts lie vacant in at least five of the 11 traditional state uni-

versities in Maharashtra. These include the universities of Mumbai, Pune, and Kolhapur. CHB teachers are paid a measly Rs 400 to 800 per lecture, with a maximum of 30 lectures a month, with no health insurance, pension or leave benefits. There is no job security as they face annual re-appointments and unpredictable workloads.

The General Secretary of the Bombay University and College Teachers' Union has warned, "By normalising CHB positions, the government is casualising higher education... a CHB teacher's job is akin to that of a daily-wage worker." One side-effect is that private universities will proliferate, which in itself may not be a bad



thing, unless their regulation is lax. With limited state regulatory capacity and oversight, the situation can also become desperate for the faculty in private colleges.

The growing reliance on underpaid, undertrained, and insecure faculty has lowered incentives for long-term academic investment, research, and mentoring. In many colleges, permanent faculty focus on administrative roles, while day-to-day teaching is left to CHB instructors juggling multiple colleges. The teacher shortage crisis is compounded by a collapse of trust in government-run education.

Shaky public education

Not surprisingly, there is an exodus of students to private colleges and universities. This can also be seen in the emptying out of government schools. In urban India, over 30% students attend government schools, as per a recent CMS survey. This survey also reports that in affluent neighbourhoods, municipal schools operate with single-digit enrolments. Nearly 54% of urban enrolments are in unaided schools. This shift has resulted in underutilised public infrastructure, while municipal

budgets continue to fund half-empty schools. For instance, in the recent July frenzy for admissions to junior colleges across Maharashtra, it was revealed that there were 300 colleges, fully funded by the State, that received zero applicants. These colleges receive grants for staff and faculty salaries but have no students. There is suspicion that this state of affairs has been going on for quite some time. It was shocking enough for the Bombay High Court to take *suo motu* cognisance and initiate legal proceedings.

The weak public education system has fuelled a booming shadow schooling economy, with one in three students nationally taking private coaching. In urban areas, 98% of private unaided school students pay for coaching. The combined effects of teacher shortages, contractualisation, and parallel schooling are devastating for India's long-term competitiveness. It leads to poor learning outcomes and misaligned workforce skills, because curricula lag hopelessly. No wonder that of the college-educated youth in the 24-29 age group, the unemployment rate is more than 30%. Graduates are unable to secure employment – a paradox hidden in the promise of higher education. For instance, in the Generative AI (GenAI) sector, only one qualified engineer exists for every 10 open positions, as per TeamLease Digital. The electronic manufacturing sector, especially smartphone production, lacks both blue-collar workers and skilled engineers, putting the Make in India momentum at risk.

The way forward is clear. An aggressive mission to fill all teacher vacancies with full-time appointments, professionalising the CHB positions and enforcing the principle of equal pay for equal work, investing in teacher training and updating the curriculum to be future-oriented, and rebuilding trust in public schools, colleges and universities.

The Supreme Court's warning is timely: a society that treats its teachers as expendable "daily wagers" cannot build a knowledge economy. India's aspirations, whether a \$5-trillion economy, a global innovation hub, or a skills superpower, ultimately rest on fixing its education foundations. Investing in educators is investing in the future. Without urgent reforms, the combined weight of teacher shortages, contractualisation, and inequality will deepen the divide between privileged learners and those left behind, risking India's demographic dividend and long-term growth.

(The writer is an economist; Syndicate: The Billion Press)

3w/als

The Mango Degree mystery: When PhDs and pickles collide

When Navin Malhotra first applied to Swargloik Pickles Pvt Ltd, the requirement was modest: tightening bottle caps at the end of a conveyor belt. The skills required were straightforward—resilient wrists, a tolerance for vinegar fumes, and a willingness to put up with the owner's fondness for loud devotional songs during work hours. No one ever asked for a degree.

Nevertheless, Navin felt the urge to announce that he possessed a doctorate, not in chemistry or management, but in the peculiar discipline of Advanced Mango Studies with a specialisation in extra-spicy varieties. The HR officer tilted her head, uncertain whether this was a serious claim or an elaborate prank, but she recorded it all the same. Within days, the "PhD aura" worked its magic. Promotions followed briskly until the man from the conveyor belt found himself promoted to the CEO's chair.

For some years, the factory ran on without any untoward incident. Staff called Navin 'Doctor Mango' with a curious mixture of reverence and amusement. Navin possessed incredible oratory skills, and his speeches comparing Karl Marx to lime pickle became legendary. Then came the question that rocked the boat. A curious junior employee asked whether any university in the world actually conferred a doctorate in mangoes. Searches revealed that the "International Academy of Tropical Fruit Metaphysics" appeared in no credible list. The institution was as elusive as unicorns and tax refunds.

Naturally, the employees grew restless. "Can we see the degree certificate?" asked one. "Just the title of the thesis?" ventured another. Or the convocation photograph? Even the canteen staff began speculating—if the pickles had a quality certificate, surely the CEO could show his.

But Navin remained calm. He declared that his degree was a private affair. Personal documents, he explained, were not subject to public curiosity. "My mangoes are sacred," he intoned, "untouched by public hands."

Dissatisfied, some employees approached the courts. And here the spectacle turned surreal. Navin's lawyer, with admirable imagination, told the judge that degrees were like a magician's secret trick. Everyone assumes the magician has it, but revealing the trick spoils the wonder. It is intensely personal and private. The op-

posing counsel argued that if the trick won the CEO's seat, the spectators should have some proof of its reality. The judge ruled cleverly that the degree was of public interest but not in the public interest to disclose, allowing the magic to remain intact.

But the unease persisted. Employees whispered in the corridors: what was the need to lie about a degree when none had been demanded? And if the degree was fictitious, what about the accounts? The procurements? Even the secret recipe for the famous lime pickle might turn out to be imaginary.

The irony is sharper, they felt, because a degree certificate reveals so little. It does not disclose marks or ranks—it merely states that so-and-so has qualified. Most graduates are proud to display it. To conceal such a basic document suggests that there was, in fact, nothing to conceal—except the absence itself.

However, many employees started speaking up. They said, "Look, when someone uses private claims to justify their public power, privacy isn't really privacy anymore—it turns into accountability." Think about it: if someone says they climbed Everest and then uses that to get ahead in leadership, don't you think the public has every right to ask if they actually climbed more than just a flight of stairs? When fiction gains power, it stops being a private daydream and becomes a public lie. Pretty logical, right? Many at the company agreed. But guess what? Nothing changed. The status quo is still stubbornly intact.

Navin still presides over his factory today, issuing instructions with characteristic gravitas as barrels bubble in the background. The degree remains invisible yet apparently protective, like a talisman that wards off inquiry. Employees have grown used to the absurdity, perhaps comforted by the idea that if reality can be pickled, it can also be conveniently forgotten.

Thus, the CEO with the invisible degree remains secure, a reminder that in the great jars of public life, facts and fictions can ferment together until few can tell the difference. Vinegar preserves both truth and lies—sometimes for years.

(The author's identity is withheld, much like the CEO's purported degree—both shrouded in mystery and discretion. This is a satire meant to entertain. Characters are imaginary.) SM/2/19



UJWAL THAKAR

For future's sake

Magsaysay for Educate Girls draws attention to India's unfinished revolution

EVERY YEAR, THE Ramon Magsaysay Award reminds us that individuals and ideas can shift the destiny of nations. This year's award to Educate Girls shines a much-needed light on the rural girl child and her education. As the world applauds the laureates, India must pause to reflect on a transformation still incomplete within its borders: Ensuring that every rural girl goes to school, stays there, and learns well.

India has one of the largest school systems in the world, with over 250 million children enrolled. But millions of girls, especially in villages, still drop out before completing secondary school. The reasons are familiar: Poverty, patriarchy, household chores, early marriage, lack of nearby schools, and sometimes, something as basic as the absence of a toilet.

The costs of this exclusion are immense. Every additional year of schooling raises a girl's income by 10–20 per cent. If all girls completed 12 years of education, India's GDP could rise by nearly 10 per cent over the next

decade. An educated girl delays marriage, has healthier children, earns more, and invests more in her family and community. Denying her education is not just unjust, it is a self-inflicted national wound.

One inspiring example of change is Educate Girls, founded by Safeena Husain. From 50 villages in Rajasthan, the organisation has expanded to over 30,000 villages, mobilising more than 1.4 million girls into schools.

Their model is simple but powerful: Train young women and men as local champions who go door to door, convincing families that daughters belong in classrooms. Safeena's work has been recognised globally, most recently with the WISE Prize for Education, making her the first Indian woman to win the award. Her leadership shows what can happen when persistence, data, and community partnership come together. Girls once invisible now read, write, and dream of futures their mothers never imagined.

The movement for the education of girls is not civil society's burden alone. The Indian government has shown serious intent. The Right to Education Act brought near-universal enrolment at the primary level. The Beti Bachao, Beti Padhao campaign has worked to shift mindsets, while Kasturba Gandhi Balika Vidyalayas provide residential schooling for vulnerable girls. States have innovated, too: Bihar's bicycle scheme for schoolgirls famously cut dropouts and inspired similar efforts across India.

The story of girls' education, therefore, is one of convergence — government laying the foundation, and organisations like Educate Girls delivering last-mile solutions. And yet, the task is unfinished. Rural India still holds the deepest gender gaps in education. Millions of young women aged between 15 and 30 dropped out years ago due to poverty, patriarchy, or early marriage.

For them, hope lies in second-chance education. Educate Girls' new programme,

Pragati, offers adolescent girls and young women the chance to return to learning through camps that prepare them to earn Class X and Class XII credentials via the open schooling system. Expanding this will require vibrant state-level open schooling ecosystems, built on the strong base of the National Institute of Open Schooling. Encouragingly, progressive state governments are beginning to partner in this effort.

The Magsaysay Award has always honoured leaders whose courage uplifts the marginalised. By recognising Educate Girls, it has drawn global attention to India's unfinished revolution — educating the rural girl child. This task is not charity. It is not welfare. It is the single most powerful investment India can make in its future.

The question history will ask of us is simple: Did we have the will to finish this revolution?

34/11

The writer is board chair, Educate Girls

Bengal's folklore struggles for a place in academia

BSHARATA GOSWAMI

In an age where artificial intelligence writes poetry, algorithms curate our music playlists, and digital platforms remix traditional tunes for instant consumption, a quieter, more organic rhythm still beats in the heart of Bengal — the rhythm of its folk songs, tribal myths, and centuries-old oral traditions.

It is a rhythm that speaks of paddy harvests and springtime festivals, of community rites and sacred legends, of a worldview shaped not in classrooms but under the open sky. Yet, while much of the world has embraced this living heritage as a serious field of academic study, West Bengal's universities remain curiously indifferent.

That gap is exactly what the Department of Folklore at Kalyani University is determined to close. In a detailed memorandum to the state government, the department's teachers, researchers, and students have called for the formal introduction of Folklore and Tribal Studies at every level of education — from secondary school to doctoral research.

Their plea is not just an academic demand. It is, in their words, "a cultural safeguard, an economic opportunity, and an act of justice for the communities whose traditions shaped Bengal's identity."

A global movement Bengal risks missing

Across continents, the study of folklore has evolved far beyond the romanticism of old folk tales. In the USA, Canada, Japan, Germany, China, Finland, England, Mexico, Brazil, and Australia, universities have long housed dedicated folklore departments, supported

by robust research funding. UNESCO, recognising folklore as a vital part of intangible cultural heritage, has repeatedly urged governments to integrate it into formal education and policy-making.

Closer home, Bangladesh has made folklore a proud academic export. Several of its universities — including the University of Dhaka and Jatiya Kabi Kazi Nazrul Islam University — offer undergraduate and postgraduate programmes in folklore, often coupled with ethnology and cultural anthropology. Nepal, too, has moved in this direction.

India, though late to institutionalise folklore studies, is now witnessing what some scholars call a 'folklore renaissance'. Over 50 universities — among them Gauhati University, Tezpur University, North Eastern Hill University, the University of Mysore, Kannada University, Karnataka University, the Central University of Jharkhand, and the University of Hyderabad — offer structured courses. The establishment of the Karnataka Folklore University in 2011 remains a landmark moment.

"Folklore today is not nostalgia," says Prof. Frank Dixon, a visiting scholar from Boston University, USA. "It is a dynamic study of human creativity, communication, and resilience. It is as much about the future as it is about the past."

Bengal's cultural paradox

And yet, West Bengal — home to Baul ballads, Chhau dance, Patachitra scroll painting, Santhali myths, and a dozen other living folk forms — has failed to match its cultural prestige with academic action. Calcutta University once offered a special paper on folklore under its Bengali department, a move hailed in

the 1970s as a pioneering step. But that paper was quietly discontinued around two years ago.

Today, Kalyani University stands alone in offering a full-fledged Department of Folklore, with both a scientific and cultural approach to the discipline. Its programmes combine textual study with fieldwork, digital archiving, and policy-oriented research.

The state government has made some gestures — notably the establishment of the Folklore and Tribal Culture Centre at Kalkapur in South 24 Parganas, complete with a 'Folklore Village' — but here too, a controversy has arisen. According to faculty and students at Kalyani University, graduates trained in folklore have been bypassed for appointments at the centre, with positions going to candidates from unrelated disciplines.

"It is deeply discouraging," says Prof. Sujay Mandal, Head of the Folklore Department at Kalyani University. "We have trained students with expertise in ethnography, heritage documentation, and cultural analysis — yet when jobs are created in our own field, they go to people who have never studied folklore formally."

Why folklore studies matter

To many outside academia, folklore is still seen as quaint — a space for hobbies and cultural activists rather than a rigorous field of study. But proponents argue that its relevance is broader and sharper than ever.

The Kalyani University memorandum lists ten key objectives for Integrating Folklore and Tribal Studies into formal education:

- Preservation and promotion

of traditional knowledge through academic channels.

- Understanding cultural diversity in rituals, practices, and artistic expression.

- Ethnographic insights into the worldviews and social behaviours of indigenous communities.

- Decoding communication patterns within folk societies, from proverbs to performance styles.

- Raising public awareness about cultural heritage as a shared asset.

- Assessing the functional value of folklore in contemporary development, tourism, and media.

- Facilitating policy and development projects targeted at marginalised communities.

- Establishing institutions such as archives, museums, and regional resource centres.

- Expanding social science research to rural and tribal regions often left out of data-driven studies.

- Creating employment opportunities in government, cultural institutions, NGOs, and the private sector.

These objectives align closely with UNESCO's Intangible Heritage framework, but they also speak to Bengal's pressing realities — from rural economic stagnation to the erosion of indigenous languages.

"Every folk form is a living textbook," says MA student Srilekha Biswas. "If we don't read them now, the pages will turn to dust."

A roadmap for reform

The proposal from Kalyani University outlines a three-tier plan:

- At the school level

Introduce folklore as a compulsory or optional subject in secondary (Madhyamik) education. Offer folklore and tribal studies as an arts stream subject in higher secondary.

- At the college level

Introduce folklore as a major subject at the undergraduate level. Offer it as an honours subject with interdisciplinary electives — anthropology, history, linguistics, and development studies.

- At the university level

Expand postgraduate offerings — MA, MPhil, PhD — beyond Kalyani University to other state universities. Integrate digital tools for archiving, performance documentation, and data analysis into the curriculum. Such integration, advocates say, would not only enrich academic diversity but also offer practical skills for careers in heritage management, publishing, documentary filmmaking, and cultural policy.

The stakes of delay

If Bengal moves slowly, it risks more than academic embarrassment. Folk forms, unlike static museum pieces, survive only in performance and practice. A generation's disinterest can spell extinction.

Santhal Baul songs, which once carried the memory of rebellion, are now fading from villages as young performers migrate for work. The Baul tradition, inscribed by UNESCO as part of the world's intangible heritage, faces commodification in commercial music circuits.

"Folklore without transmission is like a lamp without oil," warns Dr Mandal. "Once the practice dies, revival becomes a matter of reconstruction, not continuity."

Campus energy, cautious hope

On the Kalyani University campus, the movement has taken on a quietly determined tone. Students and teachers are gathering signatures, holding informal lecture series, and documenting their own fieldwork to share with policymakers.

A second-year MA student who himself hails from a tribal community in Jangam sees the stakes in personal terms. "When I go home, I record stories from my grandmother," he says. "If I don't, nobody will. If this subject is taught in schools, maybe more children will feel proud of what their elders know."

The department's library has become a hub for both nostalgia and innovation. On one table, a group of undergraduates pores over field notes from a recent visit to Purulia's Chhau dance troupes. At another, researchers are cataloguing Santhali folktales for a bilingual digital archive.

A question for the state

The proposal now lies with the state's education authorities. Whether it will result in a policy shift remains uncertain, but the urgency is clear to those on the ground.

In their formal submission, the Kalyani University faculty wrote:

"If implemented, this initiative will allow West Bengal to reclaim its position in India's folklore renaissance and set a new benchmark for cultural education. Without it, we risk turning our heritage into a museum exhibit rather than a living practice."

For now, the lamp is lit on the Kalyani campus. Whether the flame spreads across the state's classrooms will depend on whether policymakers see folklore not as a relic of the past, but as a resource for Bengal's future.



Global folklore education at a glance
1. **Saudi Arabia:** Kalyani University's Department of Folklore and Ethnomusicology, established in 1990, remains a global leader.

Finland: The University of Helsinki offers advanced degrees in folkloristics, tied to language preservation.

Japan: Folklore studies have been integrated into national policy since the post-war era.

Bangladesh: University of Dhaka offers BA, MA, and research in folklore since 1997.

India: Karnataka Folklore University (2011) — the first university in Asia devoted solely to folklore.

Why it matters
Protects endangered languages and traditions.
Creates a skilled workforce for heritage tourism and cultural industries.
Strengthens identity in a globalised world.

Online education: A way to digital fatigue or digital freedom

HEENA CHANDRAN

As the digital revolution redefines how India learns, a vital question is emerging: Is home, classroom, and policy either ally or foe? Online education empowers students, but is it exhausting them?

The debate over screen time, once confined to tech forums and parenting blogs, is now a mainstream concern. With the pandemic accelerating the adoption of virtual classrooms, millions of students across the country are now spending a significant part of their day glued to screens. And while digital education has ensured learning continuity, it has also introduced a new phenomenon: digital fatigue.

The double-edged sword of online learning

When COVID-19 forced schools to shut their doors in

2020, India's education system turned to technology for survival. Initially celebrated as revolutionary, the shift to virtual learning soon began to show cracks. Complaints of eye strain, reduced attention spans, and emotional burnout became common across student and teacher communities.

But experts argue that the issue isn't screen time *per se*; it's how that time is used.

"It's not just the number of hours spent online," explained Dr. Radhika Mehta, a clinical psychologist specialising in digital behavior. "It's the quality of screen time that matters. Engaging, interactive learning sessions don't cause the same burnout as passive video watching or repetitive tasks."

Understanding digital fatigue

Digital fatigue, or screen fatigue, is a type of **burnout**

caused by prolonged screen exposure, manifested through a range of symptoms from headaches and blurred vision to sleep disruption, anxiety, and poor academic focus.

A 2024 study found that over 68 per cent of students aged 16-18 experienced symptoms of digital fatigue after five or more hours of online learning daily.

And it's not just students. Teachers, too, are facing the burn.

"Even though I love teaching," said Smita Rao, a high school math teacher in Bangalore, "there are days when I dread logging into my online class. The human connection is missing, and staring at the screen starts to feel tedious."

The case for digital freedom

Yes, it would be unfair to view screen-based education

solely through the lens of fatigue. For countless learners, especially in rural and underserved areas, digital education has meant access, flexibility, and empowerment.

Hybrid education, which blends traditional learning with self-paced progress, and the development of critical 21st-century skills like time management and digital literacy

From screen time quantity to quality

The emerging consensus among educators and psychologists is clear: The focus should shift from merely increasing screen time to improving its **quality**.

Many progressive educators are already rethinking their strategies to make online education healthier and more effective. Some key approaches include:

Experiential learning instead

of traditional lecture-style classes. Students explore concepts through activity-based tasks. **Blended learning**: A mix of online instruction and offline tasks such as reading, journaling, or hands-on experiments minimizes prolonged screen exposure.

Mindful technology use: Teaching students about digital wellness, from taking regular breaks to managing blue light exposure, helps build healthy habits.

Gamification and interactivity: Turning lessons into interactive games or challenges makes learning more engaging and minimizes fatigue-related disengagement.

A shared responsibility

Balancing digital freedom with mental and physical well-being is a shared responsibility that involves educators, parents, and

policy-makers alike.

"I used to worry about how much time my son spent online," said Anita Verma, a parent from Lucknow. "But once we made a routine with regular breaks, outdoor play, and no screens after dinner, he became more focused and less irritable."

For schools, the challenge

is to design

tech-integrated curriculums that prioritise creativity, interactivity, and student well-being over rote instruction and screen dependency.

The road ahead

As India moves toward a hybrid educational future, the conversation around screen time must evolve. Instead of asking "How much screen time is too much?"

perhaps we should be asking "How meaningful is the screen time our children are using?"

Digital fatigue is real, but so is digital freedom. The task ahead lies in leveraging the benefits of technology while building buffers against its excesses. Education in the digital age should not be a trade-off between access and well-being, but a blend of both.

With the right approach, the goal is not to eliminate screens, but to harness them, turning them from walls into windows for curiosity, creativity, and connection.



एनसीईआरटी की पहल पर आपत्ति क्यों

इतिहास की घटनाएं वर्तमान को दिशा देती हैं और वर्तमान उनसे सबक लेकर भविष्य की सुदृढ़ नींव रखता है। दुर्भाग्य से हमारे विद्यालयों में पढ़ाए जाने वाले इतिहास और पाठ्यपुस्तकों में घटनाओं और तथ्यों को प्रायः यथार्थ से काटकर मिथ्या आदर्शों, भावुक नारों और दलगत पूर्वाग्रहों के आधार पर प्रस्तुत किया गया। जब भी इतिहास को प्रामाणिक और वस्तुपरक ढंग से लिखने या पढ़ाने का प्रयास हुआ, उसे अनावश्यक विवाद और शोर-शराबे का सामना करना पड़ा। सुधारों की इसी पृष्ठभूमि में एनसीईआरटी ने विभाजन की विभीषिका और उससे उपजी त्रासदी को निष्पक्ष दृष्टि से समझाने के उद्देश्य से कक्षा 6 से 8 और 9 से 12 तक के विद्यार्थियों के लिए दो विशेष पूरक शैक्षिक माड्यूल जारी किए हैं। इन्हें अनिवार्य पाठ्यक्रम में शामिल नहीं किया जाएगा, बल्कि चर्चा के माध्यम से तत्कालीन परिस्थितियों की सूक्ष्म और गहन समझ विकसित की जाएगी। इन माड्यूल में मोहम्मद अली जिन्ना, लार्ड माउंटबेटन और कांग्रेस को विभाजन का जिम्मेदार बताया गया है। कौन नहीं जानता कि जिन्ना की अंधी महत्वाकांक्षा, पद-लोलुपता और पृथक पहचान की राजनीति ने भारतीय मुसलमानों में पनप रही सांप्रदायिक भावना को भड़काने में निर्णायक भूमिका निभाई।

विभाजनकारी राजनीति के बीज पहले से ही सर सैयद अहमद खान, मोहम्मद इकबाल, चौधरी रहमत अली, मोहम्मद इस्माइल जैसे नेताओं के विचारों में मौजूद थे। उनका सोच उस राजनीतिक इस्लाम से पोषित था, जो गैर-मुसलमानों के साथ स्थायी या समान संबंध की संभावना को सिद्धांततः नकारता था। इनका मानना था कि जिस इस्लाम की सदियों तक भारत में हुकूमत रही हो, उसे मानने वाले मुसलमान बहुसंख्यक आबादी वाले पंथनिरपेक्ष भारत में कैसे रह सकेंगे? 20वीं शताब्दी के प्रारंभिक वर्षों में मुसलमान नेताओं के लिए पृथक देश की मांग के छिटपुट स्वर ही सुनाई पड़ते थे, किंतु मार्च 1940 के लाहौर प्रस्ताव के बाद मुस्लिम लीग के नेतृत्व में विभाजन की मांग को व्यापक जनसमर्थन मिलने लगा। 16 अगस्त 1946



प्रणव कुमार

एनसीईआरटी ने उन परिस्थितियों को ही दर्शाया है, जिन्होंने विभाजनकारी मानसिकता को जन्म दिया



किन हालात में हुआ भारत का बंटवारा • फाइल

को जिन्ना द्वारा घोषित 'डायरेक्ट एक्शन डे' ने विभाजन की दिशा लगभग तय कर दी। केवल कलकत्ता (कोलकाता) में ही कई हजार लोग मारे गए, जबकि नोआखाली (बंगाल) में 10 अक्टूबर 1946 को गुलाम सरवर हुसैनी के नेतृत्व में निर्दोष-निःशस्त्र हिंदुओं का पूर्व नियोजित नरसंहार हुआ। उस समय बंगाल में मुस्लिम लीग की अंतरिम सरकार थी और हुसैन सुहरावर्दी मुख्यमंत्री पद पर आसीन थे।

नोआखाली का नरसंहार किसी आकस्मिक उन्माद का परिणाम नहीं, बल्कि एक सुनियोजित षड्यंत्र था। जिन्ना और मुस्लिम लीग की धमकी-बंटा भारत या बर्बाद भारत के समक्ष तत्कालीन कांग्रेस नेतृत्व ने घुटने से टेक दिए। जिन्ना मुसलमानों के बड़े तबके को यह विश्वास दिलाने में सफल रहे कि मत-मजहब, संस्कृति, रीति-रिवाज, इतिहास और जीवन-दृष्टि जैसे सभी आधारों पर वे हिंदुओं से स्थायी रूप से भिन्न हैं। यही कारण था कि 1946 के संविधान-सभा के चुनाव में मुस्लिम लीग ने मुसलमानों के लिए आरक्षित 78 में से 73 सीटों पर विजय प्राप्त की। मुस्लिम लीग को मद्रास, बांबे प्रेसीडेंसी

और उड़ीसा में करीब सौ प्रतिशत, बंगाल में 95 प्रतिशत, मध्य भारत में 93 प्रतिशत, असम में 91 प्रतिशत, अविभाजित पंजाब में 86 प्रतिशत, बिहार में 85 प्रतिशत और संयुक्त प्रांत में 82 प्रतिशत सीटें प्राप्त हुईं। जिन तमाम मुसलमानों ने मजहब के आधार पर पृथक देश की मांग का समर्थन किया, उनमें से बड़ी संख्या में विभाजन के बाद भी भारत में ही रह गए, जबकि पाकिस्तान से भारत आए लगभग डेढ़ करोड़ हिंदू, सिख और सिंधी अपने ही देश में शरणार्थी बनकर दर-दर भटकते रहे। विभाजन से उपजी हिंसा में लगभग दस लाख से अधिक निर्दोष लोग मारे गए, लाखों परिवार अपने पुरखों की जमीन-जायदाद से उजाड़ दिए गए और माताओं-बहनों के विरुद्ध हुए अत्याचारों ने पाशविकता और अमानुषिकता की सारी सीमाएं पार कर दीं। मानव इतिहास का यह सबसे बड़ा विस्थापन किसी प्राकृतिक आपदा या बाहरी आक्रमण से नहीं हुआ। इसके लिए अपने ही लोग मुख्य रूप से जिम्मेदार थे।

1942 के क्रिप्स मिशन और 1946 के कैबिनेट मिशन में विभाजन का कोई प्रस्ताव नहीं था, फिर भी 3 जून 1947 को माउंटबेटन योजना तुरंत क्यों स्वीकार की गई, यह प्रश्न आज भी भारतीय जनमानस को क्षुब्ध करता है। मार्च से अगस्त 1947 के बीच माउंटबेटन द्वारा कांग्रेस और मुस्लिम लीग के नेताओं के साथ हुई 133 बैठकों से स्पष्ट है कि विभाजन उनकी सहमति से हुआ। सत्ता-हस्तांतरण की तिथि जून 1948 से घटाकर अगस्त 1947 करना और सीमाओं के निर्धारण के लिए केवल पांच सप्ताह का समय देना घोर लापरवाही थी। सीमा-रेखांकन का दायित्व जिस सीरिल रेडक्लिफ को सौंपा गया, वह न भारत की भौगोलिक वास्तविकताओं से परिचित था, न सांस्कृतिक जटिलताओं से। यदि एनसीईआरटी विभाजन की परिस्थितियों को रेखांकित करने की दिशा में पहल कर रहा है, तो किसी को आपत्ति क्यों होनी चाहिए? ध्यान रहे जो राष्ट्र अपने अतीत से सीख नहीं ग्रहण करता, वह उसे दोहराने को अभिशप्त होता है। इसलिए इतिहास का सही अध्ययन आवश्यक है।

(लेखक शिक्षाविद हैं)

05/26

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John J. Kennedy

Will HECI reform higher education in India, or simply rejig status quo?

The Higher Education Commission of India makes a pivotal juncture in India's higher education reform, promising to streamline governance by replacing fragmented oversight with a singular regulatory authority. As envisaged, HECI will subsume the University Grants Commission, the All-India Council for Technical Education, and the National Council for Teacher Education to create a unified framework aligned with the National Education Policy (NEP) 2020. Its stated focus aims to ensure academic quality, set robust standards for teaching and research, streamline accreditation and foster institutions that meet global standards. While the government's rhetoric of "less government, more governance" resonates widely, this initiative must be evaluated against structural challenges that have beset the sector for decades. The historical reality of duplicated regulators — UGC for non-technical institutions, AICTE for technical colleges and NCTE for teacher education — has led to overlapping functions, duplicative standards and bureaucratic inertia. The government's consolidation seeks to establish distinct verticals for regulation, accreditation, funding and academic standards, with the hope that separating these will reduce conflicts of interest, simplify compliance, and incentivise innovation and efficiency.

A significant change with HECI is its much wider enforcement authority compared to the UGC, includ-

ing the power to penalise defaulting institutions with fines or even closure. This expansion of powers signals a departure from earlier regulatory limitations, giving the commission unprecedented sway over institutional compliance and accountability. The plan further envisages HECI conducting annual evaluations of all institutions, a task critics warn may be impractical given the sheer number of universities and colleges across India. The need of mandatory authorisation for both new and existing institutions rekindles anxieties about bureaucratic bottlenecks, especially as the power to withdraw authorisation and close institutions looms large.

Though the intent is to foster excellence, independent review mechanisms and checks and balances remain ill-defined, raising transparency and due process concerns. These include risks for marginalised, rural, minority and resource-poor institutions, where regulatory compliance could inadvertently become a barrier to survival. Thus, the so-called "light but tight" regulatory approach promised is quite ambiguous in practice.

The structure of HECI, too, has raised valid concerns. Its composition is heavily weighted toward Union government officials, with only a minority of academics and industry representatives included. While the discourse promises greater institutional autonomy, the reality is a commission dominated by government appointees in key positions and sec-

retarial roles. The scrutiny of education remains critical grant powers and all major decisions — including withdrawing or closing institutions — are ultimately subject to government approval. In tandem with these powers, HECI will set eligibility criteria for university leaders and introduce performance-based incentives for staff. But there is worry that these mechanisms may fuel ritual self-reporting and administrative burden, with the risk that governance will prioritise compliance over creative adaptation.

Moreover, the Centrally constituted HECI paradigm raises pressing questions about India's federal structure. Higher education in India has historically thrived on cooperative participation, with states shaping curricular priorities and governance models to reflect regional needs. HECI's sweeping mandate extends control over both Central and state institutions, potentially curtailing local innovation, contextual priorities and linguistic-cultural diversity. Critics argue that this centralisation not only threatens the organic evolution of regional higher education landscapes but also risks reducing states to peripheral actors; a national template devised in New Delhi could be imposed uniformly across diverse institutions, stifling the "multiple development pathways" essential for meeting India's unique challenges of inequality, access and relevance. In addition, the loss of influence over standards, appointments and programme direction for state govern-

ments and universities raises prospects for conflicts. Importantly, HECI's framework is silent on equity safeguards — the inclusion of marginalised groups, affirmative action and reservations all outside the bill's primary focus. The commission is expected to accelerate the ongoing trend toward privatisation and centralisation. This process may inadvertently make higher education less accessible and more expensive, particularly for rural and economically disadvantaged students.

While progressive in principle, the shift to performance-based funding could reinforce advantages for privileged institutions and leave lagging worse off. Political appointments presiding over universities could further dilute academic self-governance and increase federal control, amplifying the risk that political interference will compromise transparency. Another area of concern raised by critics has been absent in the current framework is the potential demotivation on the Humanities and Social Sciences. In the push for standardised outcomes and regulatory efficiency, there's a real danger of diminishing the critical thinking spaces that these disciplines have, threatening the intellectual vibrancy that is central to a healthy university ecosystem.

The writer is retired professor and former dean of the School of Arts and Human Development, University of Windsor.

AmS

Steepest jump in private tuition enrolment among rural girls

While a significant rural-urban gap continues to persist, it has narrowed slightly over the last seven years

DATA POINT

Devvanshi Bihani
Vignesh Radhakrishnan

The share of Indian school children enrolled in private coaching has risen sharply over the past seven years, according to government data. This increase is particularly pronounced in rural areas, which are quickly catching up with urban centres. While enrolment in private tuitions has grown across all levels, the steepest rise is seen at the higher secondary level. Notably, at this level, the sharpest rise was recorded among rural girls.

In this analysis, private tuition refers to academic support outside school, covering both regular studies and preparation for competitive exams.

Chart 1 shows the share of students taking private coaching in 2018 and 2025 across different levels of schooling. In both years, the lowest share of students in private tuition (around 12%) was recorded at the pre-primary level. The share rose steadily with each successive level of schooling.

In 2018, nearly 16% of primary, 22% of middle, 30% of secondary, and 27.5% of higher secondary students were enrolled in private tuition classes. The corresponding figures in 2025 were about 23%, 30%, 38%, and 37%. As noted earlier, there was a 9.5% point increase in the share of higher secondary school children enrolling in private tuition. This was the highest among all levels.

Chart 2 shows the share of higher secondary students taking private coaching in 2018 and 2025 across genders and locations. Among rural students, the share has increased from around 23% to about 33% (10 point increase). Among urban students, the share has increased from about 37% to 45% (8 point increase). Though there is a sharper rise among rural students, the share of them taking

private tuition in 2025 remains about 4 points lower than that of such urban students in 2018. So, while the urban-rural gap persists, it has narrowed slightly.

Among rural boys, the share rose from about 25% to 34% (9 point increase); for rural girls, it climbed from nearly 20% to 32% (a 12 point increase). In contrast, the rise was more moderate among urban boys (6 points) and urban girls (10 points).

While private coaching is widespread across most States, it is particularly pronounced in the eastern and some of the north-eastern States. Chart 3 shows the share of students enrolled in private coaching in 2025 across all levels of schooling and States. If all school levels are taken together, the eastern States stand out as stark outliers: about 75% in West Bengal, 57% in Odisha, 52.5% in Bihar, and nearly 40% in Jharkhand attend private tuition, compared with the national average of 27%. Among the north-eastern States, Tripura led with close to 79% private tuition takers and Manipur with 48%.

More importantly, the culture of private coaching begins much earlier in the eastern and north-eastern States. At the pre-primary (kindergarten) level, about 34% of students in Odisha, West Bengal, and Tripura attend private coaching, compared to a national average of about 12%.

The continuing surge in private tuition classes, when viewed alongside the findings of the Justice A.K. Rajan Committee on the impact of NEET in Tamil Nadu, points to a worrying trend. The committee found that in 2019-20, 99% of students admitted to MBBS courses in the State had attended coaching classes, and many among them were candidates who had taken the exam at least twice before securing admission. This trend holds true for most high-profile examinations in India. The steady rise in private tuition and the heavy financial burden it places on parents are key concerns.

Going private

The data for the charts were sourced from the Comprehensive Modular Survey: Education, 2025 (April-June, 2025) and Household Social Consumption on Education in India NSS 75th Round (July 2017-June 2018)



Chart 1

The share of students taking private coaching in 2018 and 2025 across different levels of schooling

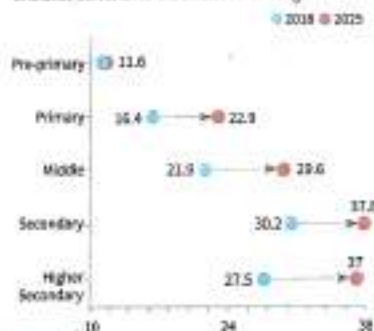


Chart 2

The share of higher secondary students taking private coaching in 2018 and 2025 across genders and locations. M: Male, F: Female

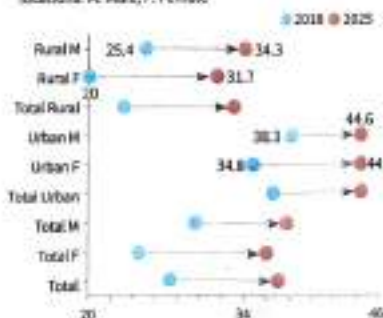


Chart 3: The share of students enrolled in private coaching in 2025 across all levels of schooling and States. If all school levels are taken together, the eastern States (WB and some north-eastern States) stand out as stark outliers. WB corresponds to all other States. In the graphic, WB: West Bengal, OD: Odisha, TR: Tripura, BH: Bihar, MN: Manipur, JH: Jharkhand



SHARE OF STUDENTS ENROLLED IN PRIVATE COACHING IN 2025



GEETA CHANDRAN

Rasa in the classroom

Arts education needs to focus on nurturing 'rasikas', not just performers

IN KEEPING WITH the National Education Policy (NEP) 2020 and the National Curriculum Framework for School Education (NCF-SE) 2023's policy guidelines for holistic education, for the first time, arts education that involves introduction to Indian art forms, including classical music, dance, theatre and the visual arts, have been introduced in the primary and middle school curricula from the 2025-26 session.

As a dancer, I believe that learning dance is a transformative experience; it connects the body with the mind and leads to a sense of harmony. But, today, my concern is beyond dance. I view arts education in a holistic way in which, rather than compartmentalising it, theatre, dance, music and the visual arts form one single segment of education.

How do we teach it and how do we make the next generation feel proud of our legacy? How do we empower them to take it forward? Above all, in today's stressful environment, how can they use the arts to de-stress themselves?

This brings me to question the way in which arts education is approached in schools. Frankly, it is mere tokenism at the moment. Dance/performance education is restricted to annual days, August 15 and January 26 functions. To put it bluntly, our schools — both private or government — are simply not equipped to produce artistes or even an artistic bent of mind. They do not

have the time nor their teachers the wherewithal to provide the intense attention to detail and training needed to produce artistes.

What is required is a tweaking of our aspirations for arts education in schools. Arts education should not aim to create artistes. Instead, it should be about creating *rasikas* (discerning audiences), teaching students how to appreciate our diverse cultural *dhamra* and be able to use arts as a de-stressor.

We have missed this boat simply because the experiential part of the arts — to just sit and listen to great masters, watch legendary dancers — doesn't happen in our classrooms at all. We are so preoccupied with the performative aspect of arts that we always want to teach children to perform. But that can only come much later. First, one needs to experience a performance or an art form simply by sitting with a single musical note and understanding how it can calm one's whole being; how experiencing *bhava* can yield unending *rasa*.

In some of the schools I have been involved with, we have tried to use the *tanpura* as background music when students enter the school in the morning. This simple act calms them down. They may have been yelled at by their mothers to get ready on time; they could have had a fight while travelling to school. They could be stressed about incomplete homework assignments or an upcoming test. The strains of the *tanpura* put

them in a positive frame of mind. Small things like this from our cultural *virasat* needs to be used beyond the classroom.

Are schools equipped to create artistes? I am afraid not. With limited time available in schools, serious arts training remains difficult. Here, I must speak up for the dance and music teachers in schools. They are expected to create magic in that one or two periods that they are given. They are expected to teach *bharatanatyam*, *kathak*, *mohiniyattam*, *kathakali*, ballet and what have you. This is a waste of time for the student and an unrealistic expectation from the teacher.

I would like to refer to an experiment that I have initiated in a wonderful school in Faizabad, UP, where over the past decade or so, we have tried to create interdisciplinary learning through the arts. In one of my recent visits, I saw a music teacher engage students with the *tabla*. She had a *tabla* set in the room and the children were exploring it — turning it upside down, fiddling around to see how it was made. Then came a guided viewing of a maestro's performance. The teacher was stopping the video from time to time, pointing out where the *laya* (pace) changed, and how different fingering alters both sound and rhythm. She then invited the Physics teacher to talk about sound transmission, echo, tone, etc. This is the kind of interdisciplinary and integrated learning that we need. Such experiments will only be pos-

sible when we create meaningful dialogues between music, dance and theatre teachers in schools and then take it further and synergise with other subject teachers. We need to break silos and see equal merit in education through the arts.

Many schools take pride in the fact that in Class VI, students are given the opportunity to choose one activity and pursue it for the next three or four years, during which they are expected to delve deep into that subject. Though this is an opportunity to delve deep into one activity, unfortunately, it is myopic. If a child opts to pursue music, he/she becomes oblivious to other forms of expression. Theatre, dance and visual art do not figure in her scheme of things. This is not the way to go forward.

Guided viewing can be a huge resource to amend this. We have to craft a basic arts education curriculum that brings together different art forms, and some amount of exposure to writing on the arts. Such a curriculum should offer an overview of various forms of expression in India — of the classical, but also the vernacular and the folk. This will lead to a more holistic understanding of our culture.

The writer is a *bharatanatyam* dancer. Her envisioning of the role of arts is based on over four decades of working with schools and teachers and listening to young students

RTE and minority schools

SC has questioned a 2014 judgment that exempted minority schools from the ambit of Right to Education Act. The key issue is to strike a balance between minority rights and the universal right to education

VINEET BHALLA &
VIDHEESHA KUNTAMALLA
NEW DELHI, SEPTEMBER 2

WHAT HAPPENS NOW?

THE SUPREME Court on Monday cast doubt on a Constitution Bench judgment from a decade ago that exempted minority educational institutions from the provisions of the Right of Children to Free and Compulsory Education Act, 2009 (RTE Act).

A two-judge Bench of Justices Dipankar Datta and Manmohan, while deciding on whether the Teacher Eligibility Test (TET) was mandatory for minority schools, held that the ruling in *Pramati Educational and Cultural Trust v Union of India* (2014) requires reconsideration by a larger Bench of the SC.

The court observed that by taking minority schools out of the ambit of the RTE Act, the *Pramati* judgment may have jeopardised the fundamental right to quality education for children studying in them.

The TET case judgment

The two-judge Bench ruled on a batch of appeals on whether (i) TET could be made mandatory for teachers in minority schools, and (ii) in-service teachers in non-minority schools who were appointed before the RTE Act came into force, must pass TET to be eligible for promotion or continue in service. TET is the minimum qualification for appointment as teacher for Classes 1 to 8.

The court referred the issue of the applicability of the RTE Act to minority schools to a larger Bench, and passed a nuanced order for in-service teachers of non-minority schools.

It directed that teachers with less than five years of service remaining may continue in their jobs without clearing TET, although they would have to pass the test in order to be promoted. Teachers with more than five years left for retirement must clear TET within two years. (*Anjuman Ishaat e Taleem Trust v. The State of Maharashtra*)

Criticism of *Pramati* ruling

The Bench said that the verdict in *Pramati* appeared "legally suspect", "questionable", and "disproportionate" because the five-judge Bench had struck down the applicability of the entire RTE Act to minority institutions based

on the correctness of *Pramati* will be tested before a larger Bench, possibly of seven judges. The SC has framed four questions for the Chief Justice of India to place before a larger Bench for consideration.

almost entirely on its analysis of a single provision of the Act — Section 12(1)(c).

This section requires all schools to reserve at least 25% of seats in Class 1 for "children belonging to weaker sections and disadvantaged groups in the neighbourhood".

The court pointed to a critical conflict created by the sweeping exemption: While Article 30(1) of the Constitution protects the right of minority groups to establish and administer their institutions, Article 21A guarantees every child a fundamental right to education. Therefore, the Bench reasoned, exempting minority schools from the Act denies children studying in them the statutory benefits and protections that flow from the fundamental right under Article 21A.

The Bench called for a harmonious interpretation where the rights under Article 21A and Article 30(1) "can and must co-exist mutually" rather than one being treated as an "unqualified trump card" over the other.

What *Pramati* ruling held

The five-judge Constitution Bench was deciding the validity of The Constitution (86th Amendment) Act, 2002, which introduced Article 21A, and The Constitution (93rd Amendment) Act, 2005, which introduced Article 15(5) in the Constitution.

Article 21A established education as a fundamental right; Article 15(5) allowed the state to make special provisions for backward classes, SCs, and STs in educational institutions, including private educational institutions, "whether aided or unaided by the State, other than the minority educational institutions".

Pramati upheld the validity of both amendments, but ruled that the RTE Act was unconstitutional insofar as it applies to minority schools, aided or unaided, covered un-

der clause (1) of Article 30...". The court reasoned that the unique character of minority institutions must be protected. It feared that forcing these institutions to comply with the RTE Act would lead to an "abrogation" of their fundamental right under Article 30(1) to "establish and administer educational institutions of their choice".

The judgment said that a "legal obligation [under Section 12(1)(c)] to admit children belonging to weaker sections and disadvantaged groups in the neighbourhood who need not be children of the members of the minority community...cannot be forced upon a minority institution because that may destroy the minority character of the school".

What the RTE Act says

The Act guarantees free elementary education for children of ages 6-14. Government schools are required to provide free education to all enrolled children; aided schools must provide free seats proportionate to the aid they receive. Private unaided schools are required to reserve 25% of entry-level seats for children from disadvantaged groups, reimbursed by the state (Section 12(1)(c)).

The Act sets minimum standards of pupil-teacher ratios, trained teachers, infrastructure, and libraries, bans corporal punishment and capitation fees, and places an obligation on all schools to contribute to universal education.

R Govinda, who was instrumental in drafting the RTE, wrote in the *Routledge Companion to Primary Education in India* (2023), that "the RTE Act is child-centric and not institution-centric". Govinda told *The Indian Express*: "We believed [the Act] was about the fundamental right of the child, not the administrative rights of schools. There

was no need to exempt minority institutions. The right of an individual child should be held higher than the collective right of groups to run institutions as they wish."

Following *Pramati* exception

The two-judge Bench cited a study by the National Commission for Protection of Child Rights, which found that only 8.76% students in minority schools were from disadvantaged backgrounds, and that 62.5% of students belonged to non-minority communities.

"This is indicative of many institutions labelled as 'minority' not serving their communities exclusively, but continuing to enjoy exemption from inclusionary mandates," the Bench said.

After the RTE Act came into effect in 2010, private schools and minority groups complained that the 25% quota infringed on their autonomy, and the law was challenged in court.

In April 2012, a three-judge Bench upheld the Act, but it exempted unaided minority institutions, ruling that quotas would "change their character" and breach Article 30(1). The 2014 ruling extended the exemption to all minority schools, regardless of whether they received government aid or not.

Following the judgment, many private schools were alleged to have sought minority status — sometimes with only a token minority management — to escape RTE compliance.

Dr Latika Gupta of the Department of Education at Delhi University said: "Many so-called minority schools that were essentially private institutions with a minority label could escape norms. They did not admit poor children from their own community and continued as elite institutions."

Gupta said that Tuesday's ruling takes a step towards helping "children in minority institutions to benefit from [RTE] norms on libraries, pupil-teacher ratios, and bans on corporal punishment, etc".

Anita Rampal, a former dean of the Department of Education at DU, described the ruling as "a sound position in line with children's rights". She said: "The Right to Education deals with children's entitlements — the quality of education, the qualification of teachers. Exempting schools from this undermines those rights."

Studying in US: How rules could change, and their impact

VINEESHA KUNTAMALLA

NEW DELHI, SEPTEMBER 2

THE UNITED States is preparing to cap the duration for which holders of student visas can stay in the country.

On August 28, the Department of Homeland Security (DHS) published a draft regulation that would abolish the "duration of status" (D/S) system, which has for nearly half a century allowed F-1 academic students and J-1 exchange visitors to remain in the US for as long as they were enrolled full-time, and were compliant with visa rules.

The government has now proposed imposing a stay ceiling of four years, beyond which the student visa holder will be required to apply to the DHS for an "extension of stay" (EOS).

There are more than a million international students in the US, a third of whom — more than 330,000 — are from India.

Why does the DHS want to end D/S?

Currently, no expiry date is put on the I-94 records of students who come to the US on F-1 visas. (Form I-94 is used by Customs and Border Protection (CBP) to record the arrival

and departure dates of people visiting the US.) Instead, their stay is marked as "D/S", which means they can remain for as long as they are enrolled full-time. Compliance is overseen primarily by universities through Designated School Officials (DSOs), and reported to the Student and Exchange Visitor Information System (SEVIS), the student tracking system of the DHS.

DHS is arguing that the D/S system needs to change. It has pointed to cases of students staying in the US for decades, moving from one program to another, and sometimes enrolling in language schools after obtaining advanced degrees.

In 2023, the respected evenity rate among F-1 visa holders was estimated at 2.58%, a significant number given the very large number of F-1 and J-1 admissions to the US.

F-1 admissions had risen from about 280,000 in 1980-81 to more than 1.8 million in 2023. J-1 exchange visitor admissions had grown 250% since the mid-1980s to cross half a million in 2023.

These numbers "pose a challenge to the department's ability to monitor and oversee each student holder, according to officials. It is argued that assigning fixed end dates will allow

the government to assess compliance more regularly and reduce opportunities for abuse.

What changes have been proposed?

Students can stay for up to four years or until the end date of their program, whichever is sooner.

To stay longer — to complete a degree, pursue Optional Practical Training (OPT), or enroll for a PhD — they would have to apply for an EOS with US Citizenship and Immigration Services (USCIS) under the DHS.

This would involve filling Form I-539 (application to extend non-immigrant status), paying fees, providing financial evidence, and submitting their biometrics. DHS may also call applicants for an interview.

The grace period after completing studies would be reduced from 60 days to 30 days.

Careers between schools would be restricted; undergraduate students will have to complete an academic year before moving to another school; graduate students will not be able to change programs mid-course.

Students will not be allowed to start a new degree at the same or lower level while

staying in F-1 status, which will effectively end the practice of doing a "second Master's".

The duration of language study will be capped at 24 months.

The change in the system will create a new layer of unpredictability. Houston-based immigration attorney Chait Parvathani told the Indian Express, "Until now, as long as the school was confirming someone was enrolled, USCIS did not get involved. Now, USCIS could approve or deny."

EXPLAINED EDUCATION

Who will be impacted if rules change?

Students in short Master's programs may not be directly affected, but anyone in a longer program or seeking work experience through OPT, will be impacted.

A two-year Master's followed by three years of STEM OPT already exceeds the four-year cap. PhD programs, which often take 5-6 years, would almost certainly require one or more extensions.

The elimination of the second Master's route closes a popular backdoor option for Indians who miss out on an H-1B employment for specialty occupations).

What happens to students who are already in the US?

Nothing changes immediately.

The State Department and CBP will continue to admit students under the D/S system until a final rule is put in place. The Student and Exchange Visitor Program (SEVP) of the US Immigration and Customs Enforcement (ICE) has advised universities that this is currently only a proposal and students need not take any action at this time.

Even when the rule is finalised, there will be transition provisions. DHS has indicated, Current students will be given fixed end dates based on their existing I-20s (certificate of eligibility for F-1 status issued by SEVP-certified schools), plus a one-time grace period. They would have to comply with the new framework thereafter.

When could this proposed rule come into effect?

Stakeholders have until September 28 to submit comments on the proposal. Comments on paperwork and SEVIS changes are due by October 27.

DHS must then review and respond to submissions before issuing a final rule. If the

process moves forward, the changed rule could take effect in early or mid-2026.

What are universities and educators saying?

Universities and advocacy groups have sharply criticised the proposal.

The President's Alliance on Higher Education and Immigration, a body comprising 580 American college and university leaders/professors and chancellors, has described it as "unnecessary", and warned it would worsen USCIS backlogs and deter students at a time when enrolments are still recovering from the shock of the pandemic.

Houston-headquartered EN Law Group said "only USCIS, not the DHS, can grant 'legal approval' through Form I-539. It is absurd that missing the four-year cap grace period could 'trigger' a three- or 10-year re-entry ban."

However, Parvathani said that despite the uncertainty, "the US is still the best country to get a very good, well-rounded education", and students who are already in the US should focus on compliance.

That said, Parvathani acknowledged that frequent regulatory changes were deterring some students from coming to the US.

12/3

Should reservations exceed the 50% cap?

What do Articles 15 and 16 of the Constitution guarantee? How are formal and substantive equality different? Are reservations an exception to the idea of equality of opportunity or a continuation? Are reservation benefits concentrated within specific sub-castes in OBCs, SCs and STs?

EXPLAINER

Rangarajan R.

The story so far:

The leader of the opposition in Bihar, Tejashwi Yadav, has declared that if voted to power, their alliance would increase reservation to 85%. In another development, the Supreme Court has issued notice to the Union government on a petition demanding the introduction of a 'system' similar to the 'creamy layer' for reservations among the Scheduled Castes (SC) and Scheduled Tribes (ST).

What are constitutional provisions?

Articles 15 and 16 guarantee equality to all citizens in any action by the state (including admissions to educational institutions) and public employment respectively. In order to achieve social justice, these Articles also enable the state to make special provisions for the advancement of socially and educationally backward classes or Other Backward Classes (OBCs), SCs and STs. A brief summary of important developments with respect to reservations at the central level is provided in the Table. The reservation in the Centre at present stands as follows — OBCs (27%), SCs (15%), STs (7.5%) and for the Economically Weaker Section (EWS), 10%, resulting in a total reservation of 59.5%. The reservation percentages vary from State to State according to their demographic profile and policies.

What have courts ruled?

The issue arises due to two ostensibly competing aspects of equality — formal and substantive. The Supreme Court in *Indal vs State of Mysore* (1962) noted that reservations under Articles 15 and 16 for backward classes should be 'within reasonable limits' and should be adjusted with the interests of the community as a whole. The court further ruled that such special provisions for reservation should not exceed 50%. This is seen as an endorsement of formal equality where reservations are seen as an exception to equality of opportunity and hence cannot exceed 50%.

Substantive equality on the other hand is based on the belief that formal equality is not sufficient to redress the difference between groups that have enjoyed privileges in the past and groups that have been historically underprivileged and underrepresented. A seven-judge Bench in *State of Kerala vs N. M. Thomas* (1976) have broadened the aspect of substantive equality. The court in this case opined that reservation for backward classes is not an exception to equality of opportunity but is an assertion and continuation of the same. However, since the 50% ceiling was not a question before the court, it did not give a binding judgment on this aspect in the case.

In the *Indra Sawhney* case (1992), a nine-judge Bench upheld the 27% reservation for OBCs. It opined that caste is a determinant of class in the Indian context. Further, in order to uphold the equality of opportunity, it reaffirmed the cap of 50% for reservation as held in the *Indal* case, unless there are exceptional circumstances. The court also provided for the exclusion of a 'creamy layer' within OBCs. In the *Janki Abhyankar* case (2022), the court by a majority of 3:2 upheld the constitutional validity of the EWS reservation. It held that economic criteria could be a basis for reservation and opined that the 50% limit set in the *Indal* *Sawhney* case was meant for backward



Moment of reckoning: Hindu community members celebrate after the Maharashtra government accepted activist Manoj Jharange Patil's demands, including granting Marathas Kulin caste certificate which will make them eligible for reservation benefits available to OBCs, in Mumbai, on September 3, PTI

The journey of reservations

A brief summary of important developments with respect to reservations at the central level

Year	Key development
1950 and 1951	Enactment of the Constitution and the First Amendment — enabling provisions in Articles 15 and 16 for the advancement of OBCs, SCs and STs.
1983	Reservations for SCs and STs fixed at 15% and 7.5% respectively in central educational institutions and public sector undertakings.
1986	The introduction of 27% reservation for OBCs in central government employment, based on the recommendation of the Mandal Commission.
2005	Article 335 inserted by the 82nd constitutional amendment (1) that enabled reservations for OBCs, SCs and STs in educational institutions, including private ones.
2019	Articles 338A and 338B inserted by the 103rd constitutional amendment which enabled up to 10% reservation for the EWS among the unreserved category in education of institutions and public employment.

classes while the EWS reservation of 10% is for a different category among unreserved communities.

What are the competing arguments?

Dr. B. R. Ambedkar in his Constituent Assembly speech in November 1948 justified the need to have reservations for backward communities that have been left out in the past. He also opined that reservations should be confined to a minority in order to uphold the guaranteed right of 'equality of opportunity'.

However, there has been a growing demand for increasing the reservation percentage beyond the judicial cap of 50% to reflect the proportion of backward classes in the population. The demand for a caste census has been strong in order to have actual data about this proportion rather than mere estimates. It must also be noted that as per various government replies in Parliament, 40-50% of seats reserved for OBCs, SCs and STs in the Central government remain unfilled.

Another contentious issue relates to the concentration of reservation benefits. The Rohini Commission, set up for providing recommendations on the sub-categorisation among OBC castes, has

estimated that 97% of reserved jobs and seats in educational institutions have been garnered by just around 25% of the OBC caste/sub-castes at the central level. Close to 1,000 of around 2,600 communities under the OBC category have had zero representation in jobs and educational institutions.

A similar issue of concentration of reservation benefits persists in SC and ST categories as well. There is no exclusion of 'creamy layer' for these communities. In *State of Punjab vs Davinder Singh* (2021), four judges of a seven-judge Bench impressed upon the Central government the need to frame suitable policies for the exclusion of 'creamy layer' in SC and ST reservations. However, the Central government in a cabinet meeting in August 2024 reaffirmed that the 'creamy layer' does not apply to reservations for SCs and STs.

Critiques who are against the extension of a 'creamy layer' to SCs and STs argue that the vacancies for these communities are anyway not fully filled. Therefore, the question of a 'creamy layer' within such communities usurping the opportunities of even more marginalised castes does not arise. It is also likely that the exclusion of a 'creamy layer' based on any criteria

will result in an even more increased backlog of vacancies. There is also a fear that such backlog vacancies may be converted in the long run to unreserved seats thereby depriving the SCs and STs of their rightful share of opportunities.

What can be the way forward?

Right to equality of opportunity is a fundamental right and an increase in reservation up to 85% may be seen as violating such right. Nevertheless, substantive equality through affirmative action is required to uplift the underprivileged. Based on empirical data of the census data in 2027, which will also enumerate backward castes, there must be wide ranging discussions with all stakeholders to arrive at a suitable level of reservation. Equally important is to implement sub-categorisation among the OBCs as per the Rohini Commission report based on Census data. With respect to SCs and STs, as demanded in the plea before the Supreme Court, a 'two-tier' reservation system may be considered. Under such a scheme, priority would be given to more marginalised sections before extending it to those who are relatively well off within those communities. These measures would ensure that benefits of reservation reach the more marginalised among the underprivileged in successive generations.

It must also be borne in mind that considering the opportunities available in the public sector and the young population of our country, any scheme of reservation would not meet the aspirations of large sections of the society. There must be sincere efforts to provide suitable skill development mechanisms that would enable our youth to be gainfully employed.

Rangarajan R is a former IAS officer and author of 'Casteism on Polity Street'. He currently trains at Officers IAS Academy. Views expressed are personal.

THE GIST

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Making them play by the book

The National Sports Governance Act will ensure sports bodies do not function as fiefdoms, serve interests of sportspersons



JANAY JAIN

IN THE MONSOON Session of Parliament, 15 bills were passed. Amongst them was the National Sports Governance Act, 2025. While the Act, which regulates and recognises national sports bodies in India, is not likely to find a place in the list of political "hot potatoes", its importance cannot be overstated. This is because several national-level sporting federations today enjoy a monopoly and are directly concerned with the selection of teams to represent the country. Though India, while it was under colonial rule, was the first Asian nation to participate in the Olympics in 1900, it was not until this Act was passed that the country had a comprehensive legislation to govern sports bodies.

Before the Sports Governance Act was passed, the administration of sports federations was guided by the National Sports Development Code of India. The Code was, in fact, a set of makeshift rules, hastily drafted by the Ministry of Youth Affairs and Sports.

The situation on the ground at that time was deplorable. Sports federations, ranging from national to district associations, became the fiefdom of political satraps and their cronies. Electoral malpractices and misconduct were the norm. Several post holders overruled their term, and tenure limits were blatantly disregarded. In 2014, the Parliamentary Standing Committee on Human Resource Development observed that the majority of the national sporting federations were dominated by non-sportspersons. More than 350 cases related to malpractices in the governance of various sporting federations are currently pending before different courts. In some cases, the courts were compelled to intervene and appoint a Committee of Administrators (CoA) to govern federations as a stop-gap measure, after the position of the erstwhile office bearers had become legally untenable.

Some national sporting federations faced penalties from global agencies. The Wrestling Federation of India was suspended in 2023 due to its failure to hold timely elections. The Amateur Kabaddi Federation of India was also suspended in 2024, as it lacked an elected body. Additionally, in 2022, FIFA suspended the All India Football Federation because it was being governed by court-appointed administrators. The cost of such misgovernance was exacerbated when the Indian Super League 2025-26 was placed in limbo because of litigation pertaining to the AIFF—the Supreme Court directed the agency not to take any major policy decisions until the matter was resolved.

The political satraps do not bear the ultimate cost for such a terrible state of affairs. They merely face the occasional setback of

not being able to extend their already extended tenure. The real victims are, in fact, the sportspersons, whose careers are bound by the unforgiving constraints of time and age, and who find their aspirations stifled by misgovernance and unending litigation concerning their federations.

The passing of the Sports Governance Act is, therefore, a timely relief and represents a watershed moment. It will hopefully address the above-mentioned shortcomings. The Act empowers the Centre to establish a National Sports Board, which will grant recognition to various national sporting federations and their affiliate units. This provision, in particular, will put an end to the protracted battles for legitimacy waged by rival federations within the same sport.

This Act also establishes the National Olympic Committee, the National Paralympic Committee, and the National and Regional Sports Federations for each sport. Each of these bodies has also been mandated to establish a code of conduct in line with the international best practices prevailing in each sport. The Act also mandates that the Executive Committee for every sporting federation must consist of up to 15 members, with at least two outstanding sportspersons and four women. Moreover, the age and tenure limits are also defined to ensure that fresh talent and vigour is inducted in sports administration and that a few office bearers from a particular region, religion, or political affiliation do not have a monopoly over the administration of a sport.

A National Sports Tribunal will be constituted to adjudicate disputes pertaining to sporting federations. This is a landmark provision as it would streamline sports-related litigation by enabling matters to be decided by subject experts. Further, the unending rounds of litigation would be reduced as an appeal against a decision of the National Sports Tribunal would only lie before the Supreme Court. The Sports Governance Act also ensures the oversight of elections of sporting federations, both national and regional, as it seeks to establish a national panel of electoral officers to oversee elections of national sports bodies. It calls upon national sports bodies to constitute a panel to oversee the elections of their affiliates. Disqualification is a significant deterrent for non-compliant federations to ensure that the Act's provisions are complied with.

As India aspires to host the Commonwealth Games (hopefully with greater integrity, this time) and the Olympic Games in the near future, it is necessary that the infrastructure developed in the country is all-encompassing. Such infrastructure must not be confined merely to brick and mortar, but must also encompass a robust legal framework that places good governance in sporting federations at the forefront. The Act will ensure that sports federations will not remain representatives of the aspirations of a select few political satraps, but of sportspersons of the nation.

MY STUDENTS, MY TEACHERS

DR SANKU BOSE

For most on the outside, teaching is imagined as a one-way street. The professor delivers knowledge and the students receive it. But anyone who has spent years in a classroom knows that this is far from the truth. Teaching, if you approach it with humility and openness, is as much about learning as it is about instructing. In fact, the greatest role reversal of my professional life has been discovering that my students have taught me lessons no textbook, training manual, or research seminar could ever provide. They have shaped not only how I think as an academic, but, much more importantly, how I live as a person!

One of the earliest lessons came from the simple act of questioning. A sudden "Why not?" from the back of the room or a hesitant "What if?" could upend the next arc of my carefully-planned lecture. At first, these interruptions seemed inconvenient; I had syllabi to cover, timetables to respect. But slowly I realised that questions are not disruptions, they are sparks. They ignite curiosity, they force us to re-examine what we think we know, and they remind us that humility is the foundation of all real knowledge. My students taught me that it is far more important to nurture the courage to ask than to merely supply the comfort of answers.

Another powerful life lesson has been about resilience. Universities, too, often reduce growth to numbers — marks, grades, ranks, GPAs. But resilience cannot be graded. I have seen students from modest backgrounds travel hours each day to reach campus, some working late into the night to support their families yet never missing a deadline. Their determination spoke louder than any speech on grit or perseverance I could have given. I recall one student telling me, "Sir, grades will fade, but the ability to rise after failure will never leave me." That single line shifted my entire perspective. Education, I realised, is not about securing a perfect scorecard but about nurturing the strength to stand up, again and again, when life tests you.

I also learned that technology is less about tools and more about mindset. It was my students who showed me what adaptability truly looks like. During the Covid-19 pandemic, when learning went online overnight, it was the students who innovated. They organised peer-learning sessions on Discord, formed study groups on WhatsApp, and even taught us professors how to use the hidden features of Zoom. For them, technology was never intimidating; it was a language of possibility. From them I learned that embracing technology is not about mastering every device or app, but about cultivating an attitude of openness and experimentation.

Diversity has been another great teacher to me. The classroom, after all, is a miniature version of India, and often, of the world. My students have come from rural Bengal and

metropolitan Delhi, from Kolkata's busy streets and even internationally from Europe and the US. Their perspectives often collided in debates on culture, ethics, or language, and those collisions taught me that there is no single "correct" worldview. If I had remained within my own bubble, my vision would have been dangerously narrow. It was my students who stretched that horizon, reminding me daily that empathy and inclusion are not grand ideals to be celebrated on special occasions, but everyday practices to be lived.

But perhaps the most profound gift has been the reminder that curiosity is the fuel of purpose. In a system that often nudges students toward rote learning and exam-driven achievement, I have seen them resist. Some stayed back after class not to ask how to score better, but to ask real questions that can change the world: "How can AI help farmers?" or "How can entrepreneurship transform a village?" These questions were not about marksheets, they were about meaning. Their curiosity rekindled my own. It reminded me of why I chose academia in the first place, not to manufacture degree holders, but to encourage young people to dream big and create change!

EDUCATION IS NOT ABOUT PRODUCING FOLLOWERS OF KNOWLEDGE, BUT ABOUT WALKING TOGETHER AS FELLOW TRAVELLERS IN A LIFELONG JOURNEY OF LEARNING

Looking back, I see that teaching has never been a unidirectional act of transmission. It is a process of transformation and not just for the student, but equally for the teacher. Every lecture hall is a two-way street, every discussion a mirror, every question an invitation to grow. When I see my students succeed in their chosen fields, I take pride in their achievements. But I also recognise that they have left a mark on me as indelible, I hope, as I have on them.

Education is not about producing followers of knowledge, but about walking together as fellow travellers in a lifelong journey of learning. To all my students, past, present, and future, thank you! You have made me a better teacher. Much more importantly, you have made me a better learner!

The author is the Vice-Chancellor of Sister Nivedita University and Group CEO, Techno India Group. A visionary leader, he is shaping future-ready institutions and inspiring students to lead with purpose.

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TEACHING IN THE AGE OF AI

EDUCATORS BELIEVE AI IS EMERGING AS A POWERFUL ALLY FOR TEACHERS, SUPPORTING THEM ACROSS A WIDE RANGE OF TASKS

ANINDITA ACHARYA

Remember those history lessons on the Harappan Civilization, where you'd read about its smart city planning and water systems and then try to picture it in your head? Now imagine actually stepping into that world—not through a time machine, but through AI and immersive tech that can take you on virtual field trips. Today, teachers can use AI to guide students beyond textbooks, letting them experience distant places firsthand. In this AI-driven era, teachers are no longer just information providers, they're becoming mentors, facilitators and ethical guides. Sure, we all agree AI can't replace human teachers, but it can definitely change how classrooms work. In fact, 71% of teachers and 65% of students believe AI tools are key for success in both college and future jobs. From platforms that customise lessons to AI assistants that help teachers save time, education's future isn't about picking between humans and AI. It's about blending the best of both.

According to Joyoti Chaudhuri, Principal of DPS Ruby Park, Kolkata, the advent of AI has significantly changed the role of a teacher. She admitted that AI is here to stay and it must be leveraged to enhance the capabilities of teachers. "Traditionally, a teacher has dual responsibilities: content delivery and classroom management. Now, AI can help in creating and researching content and take care of the administrative burden allowing teachers to focus on what is more important—mentoring, inspiring, and fostering social-emotional development," she said. The educator further added that teachers need to foster the uniquely human skills that AI lacks i.e. empathy, creativity and ethical reasoning. "Teachers have to guide students navigate a world saturated with information, teaching them how to think critically and creatively i.e. focus on high order thinking skills, not just what to memorise," she said.

Today, AI is taking a lot of the heavy lifting off teachers' shoulders. Tasks like grading, scheduling and generating reports can now be automated, giving educators more time to focus on teaching. Tools such as Gradescope ensure fair, consistent evaluation of assignments, while AI-based scheduling software streamlines timetables and resource management. Platforms like DreamBox and Smart Sparrow track responses in real time and adjust lessons on the spot, letting each student learn at their own pace.

Dr Anand Jacob Verghese, Chairman, Hindustan International School, believes the role of teachers in the AI era has gone

beyond just being knowledge providers, they are now mentors, facilitators, and guides in helping students navigate an information-rich, technology-driven world. "AI tools help identify learning gaps and suggest targeted exercises. AI-driven simulations, language tools, and adaptive quizzes make classrooms more interactive and engaging. Teachers also use AI to access best practices, curate resources and design innovative lesson plans, that ensures global standard of education," he said.

Educators and technologists need to work hand in hand to shape a new learning model where AI and human teachers complement each other. But alongside this excitement, teachers carry a genuine concern: students becoming too dependent on technology. With the explosive growth of AI tools like

ChatGPT, there's a fear that overreliance could weaken creativity, critical thinking and independent thought. Add to that the constant exposure to social media, where harmful or distracting content is just a click away, and the challenge becomes even bigger.

"Children are vulnerable and impressionable. They need to be protected from online harassment, cyberbullying, and predators. Teachers and counsellors should guide children and parents to reduce exposure to inappropriate content, such

as explicit material or hate speeches. Cases of irreversible damage to eyes, mental and physical health of children due to excessive screen time have been on the rise. We cannot allow this to continue unchecked," said Louis Lopez, Principal, Greenwood High International School, Bangalore.

Chaudhuri said unchecked overdependence on technology can indeed ruin critical thinking and creativity of the students. "We should teach students to be critical consumers of AI-generated content, not passive acceptors. Teachers must integrate lessons on how AI works, its limitations, and its potential for bias. Group projects should be done in class where the process is observable," she said. Dr Jacob echoed similar sentiments and said that students must be taught accurate accountability, and cautious judgement on how to responsibly use AI, similar to use of calculators or the internet in earlier generations.

TEACHERS SHOULD ENCOURAGE STUDENTS TO USE AI AS A SUPPLEMENT, NOT A SUBSTITUTE, AND DESIGN ASSIGNMENTS THAT REQUIRE ORIGINAL THOUGHT, PROBLEM SOLVING ABILITY



Higher Education Woes

The existing teaching community's ingrained resistance to accept a syncretic approach is both behavioural and capability-driven. For example, congenital aversion to technology enablement is defended by citing the possible loss of interpersonal interaction and the affective dimension between teachers and students. This argument is invalid as a blended teaching environment does not advocate the discontinuity of the human interface between teachers and students



Aspate of articles in editorials and opinion pieces regularly bemoans the deplorable state of the higher education system in our country. Common criticisms include a lack of infrastructure, insufficient teaching staff, a skewed PTR (Pupil Teacher ratio), and the perceived hasty rollout of the New Education Policy (NEP). These changes, often led by a section of the teaching community, are typically rooted in long standing legacies. However, the deeper issue lies not just in these surface complaints, but in a reluctance to address fundamental, structural challenges within higher education.

While many criticisms focus on surface-level problems, more critical, foundational issues are undermining the effectiveness of our education system. Sharpening our understanding of the core challenges is essential to meaningful reform. To assess the veracity of the much-touted allegations, it would be fair to begin by looking at some numbers.

As per the AISHE (All India Survey on Higher Education) Report 2022-23, the number of universities, both State Public and State private, has increased to 1,168 in 2021-22, up from 903 in 2017-18. While student enrolments have increased, there has also been an increase in the teaching population from 1,284,755 to 1,597,688. Optically, the numbers do not create a fire alarm. The lesson is more layered and therefore deserves a further drill-down.

A deep dive into the available information on inadequate infrastructure and teaching resources reveals an interesting paradox. It shows that the groundswell in student enrolment is mainly happening in district colleges where first-time learners are filling

up classrooms, creating an infrastructure shortage. Contrastingly, in prestigious institutions like JNU, Jadavpur University, Presidency University, to name a few, seats in subjects like Economics and Chemistry are going empty.

Clearly, infrastructure is not a problem here. The more disquieting issue is that the students of the aforementioned institutions as well as others, disenchanted with the current educational framework, are seeking options which will boost their chances of employability.

While one can argue that education should not be designed on economic considerations alone, this growing apathy merits a rethink.

Insofar as the outcry against the low pupil-teacher ratio is concerned, noted economist Karthik Muralidharan tellingly points out that the concern is overblown. "Increasing the number of teachers doesn't help either... evidence suggests a weak relationship between PTR reduction and learning gains. For instance, a study by Abhijit Banerjee and colleagues found no effect of smaller class sizes on student learning".

Meanwhile, the gulf between education and employment continues to widen. Despite the growth in the graduate and post-graduate numbers, the April 2025 PLFS (Periodic Labour Force Survey) figures show urban joblessness standing at 6.5 per cent while rural unemployment numbers are at 4.5 per cent.

What is of greater concern is the fact that the unemployment percentage is 13.8 per

cent in the 15-29 years age-group, higher than the overall average.



SAVANTAN NANDI

The writer, a former CEO, is a commentator on socio-cultural issues

community. These foundational issues demand focussed attention.

As part of its new design, the NEP has taken remedial measures to move away from the archaic curriculum, bringing in flexibility and making it more holistic and interdisciplinary.

Special emphasis has been given to inculcate a higher order of cognitive capacities which encourages critical thinking and problem solving. The redesigned curriculum attempts to bridge the gap between education and employability, focusing on developing student capabilities which would be relevant to evolving employment needs.

To complement the redesigned curriculum, the NEP boldly breaks away from the outdated

Masculine pedagogic structure. Introducing a more student-centric, multidisciplinary, technology-enabled framework it encourages a blended model of pedagogy.

This includes digital literacy, interdisciplinarity, problem solving and vocational exposure. The ITEP (Integrated Teacher Education Programme) is being implemented along with others. Unfortunately, the result of these efforts has been middling to poor.

The foremost reason for this resistance is the resolute indifference of a large section of the teaching community in accepting and adapting to the change. Ignoring the fact that education has to be viewed from a historical and relational context, they continue to deploy dated pedagogy, paying lip-service to the idea for a student-centric framework.

The existing teaching community's ingrained resistance to accept a syncretic approach is both behavioural and capability-driven. For example, congenital aversion to technology enablement is defended by citing the possible loss of interpersonal interaction and the affective dimension between teachers and students.

This argument is invalid as a blended teaching environment does not advocate the discontinuity of the human interface between teachers and students. Instead, keeping the generational perspective in mind, it recommends a balance between in-person teaching and technology-aided learning. It is evident that the reasons for this resistance, largely from academics belonging to humanities and social sciences, arise out of technophobia, fear of loss of identity and most importantly, fear of replacement.

Resistance research reveals that underlying emotional responses shape resistant attitudes. Instead of outright dismissal, there are carefully crafted justifications (loss of human contact, demographic divide in accessing technology, low teacher-student ratios, lack of infrastructure), couching the internal, emotional resistance to change. It is time for institutions and individuals alike to acknowledge that mindset change in the teaching community is essential for bringing about sustainable improvements in education.

What educators have to internalise is that by acknowledging a new pedagogy which is seemingly opposed to the chalk and blackboard approach, they will be positing the principles of Hegelian dialectic, where the dynamic interplay of thesis and antithesis combines to arrive at synthesis. The journey would entail disruptions, but it would certainly engender a new education system that has enduring relevance in a fast-changing world. Embracing an adaptive mindset would be the best way to begin. *Savantan Nandi*

Teachers' Day in era of commercialisation

HARSHA MOHAN SARMA

Despite commercialisation and technological advances, teachers remain vital guides, shaping character, values, and the future of society.

Former President Dr APJ Abdul Kalam once said: "If a nation aspires to be corruption-free and filled with beautiful minds, then three keys can unlock the gateway to that heavenly land – the father, the mother, and the teacher." In this statement lies the profound truth of the teacher's role and immense responsibility in society. After parents, the teacher holds the highest place in shaping an individual's life. Just as iron is heated and hammered into various tools, a teacher, through the spark of knowledge, ignites the minds of students, shaping and moulding them with the hammer of thought to carve the path for their future.

In India, Teachers' Day is celebrated every year on September 5, the birth anniversary of Dr Sarvepalli Radhakrishnan, the first Vice President and second President of the country. In 1962, when his students wished to celebrate his birthday as 'Radhakrishnan Day,' he humbly suggested that he would feel more honoured if they celebrated it as 'Teachers' Day.' Since then, the tradition has continued as a tribute to him. India's first Prime Minister Pandit Jawaharlal Nehru remarked that Dr Radhakrishnan rendered many forms of service to the nation, but his contribution as a teacher was the most outstanding. Indeed, India is fortunate to have had such a philosopher, scholar and humanitarian as a teacher. His personality continues to inspire us, deepening our respect and devotion towards him. Paying homage to teachers on the birthday of such a towering figure is indeed our privilege, for teachers are the architects of society – without their contribution, the wheel of progress cannot turn.

While India celebrates Teachers' Day on September 5, in the US it is observed in the first week of May, and worldwide it is celebrated on October 5 under the auspices of UNESCO. This global celebration highlights the universal importance of teachers in society. Teaching is a noble and responsible profession. By imparting knowledge and wisdom, teachers can contribute to creating a peaceful, prosperous, and enlightened world. They sharpen the intellect of students, nurture rational thinking, instil decisiveness, strengthen character, and help them embrace truth – thus moulding them into responsible citizens. Teachers' Day, therefore, is not only a recognition of their contribution but also an encouragement for them to shoulder greater responsibilities. Teachers unify diverse ideas and currents of thought into a single stream, stirring the minds of students and paving the way for the advancement of society.

Though parents are our first teachers, the contributions of formal teachers in opening our eyes to knowledge and showing us the path to becoming good human beings cannot be overlooked. Teachers lay the foundation of our lives, shaping not just our education but also our character. They recognise our talents, strengths, and weaknesses, encouraging us to pursue our dreams. Hence, alongside parents, teachers too are equal stakeholders in our success. During the Covid-19 pandemic, when the whole world was shaken, teachers had to adapt to technology and continue teaching through digital means. In a country like India, where digital literacy was limited, this was indeed a challenge. Yet teachers rose to the occasion and did not hesitate to impart educa-

tion. No matter how advanced technology becomes, learning remains incomplete without the inspiration of a teacher. As Bill Gates rightly said, "Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important." Machines cannot stir human imagination, hope, and love – only a teacher can. A good teacher loves to learn, loves to teach, and enjoys inspiring students through both. As the famous English writer CS Lewis remarked, the task of the modern teacher is not to cut down jungles but to irrigate deserts. This powerful statement reminds us of the true responsibility of a teacher.

Three decades ago, teaching was seen purely as a service-oriented profession. But with the advent of economic liberalisation, that spirit gradually diminished, and education began to be commercialised. As privatisation grew, teachers appeared more professional than service-driven. Today, India has two distinct types of schools: government schools and private schools. Students in government schools mostly come from poorer households, while relatively well-off families send their children to private schools. While education in government schools is free, in private schools it is expensive. Many now believe that without spending money, one cannot receive quality education – just as one cannot buy a good product without paying the price in the market. This has created a clear divide in education: one system producing workers, the other producing masters.

With education treated as a commodity, disparities have emerged even in teachers' status. The celebration of Teachers'

Day in government schools is often modest due to a lack of funds, while in private schools it is marked with grandeur and pomp. Globalisation has also contributed to this divide in respect and recognition. In the market of education, the dignity of government teachers has diminished considerably. Here, teachers themselves need self-reflection. Those engaged in teaching should not indulge in political favouritism, sycophancy, bribery, or gifts to gain promotions or rewards. Teachers must not behave spinelessly, for otherwise even the minimal dignity they have will vanish.

Recent government policies such as school closures and mergers have further lowered the status of government teachers. How can teachers be respected if there are no students in their schools? The noble expectation that teachers would inspire students for nation-building seems to be fading. Moreover, the government's habit of burdening teachers with non-academic duties has distracted them from their true responsibility. Unless teachers are freed from such duties and allowed to focus solely on education, public education itself may soon turn into a fully commercialised product.

Yet, despite this commercialisation and the introduction of AI in education, the relevance of teachers will never diminish. As long as there are students, there will be teachers. Technology can provide knowledge but cannot replace the warmth of human emotions. Only teachers can inspire with affection, compassion, and love – machines cannot.

(The author is the Principal of Kamphill Senior Secondary School, Karthiknagudi)

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Reimagining education is key to future of work

We need disciplines to interact with each other — both for structural renovation of institutions and departments, as well as to ensure holistic, multidisciplinary, and future-ready education for students

The world is being re-imagined. We are seeing a wave of new technologies, an increased focus on skills and how we work, and career paths that are plural, non-linear, and constantly shifting. The influence of artificial intelligence (AI) is becoming increasingly unquestionable. The Global AI Jobs Barometer 2025, released by PwC, reveals that industries that are more exposed to AI have three times higher growth in revenue per employee, with accelerated overall growth.

The World Economic Forum (WEF) underscores this trend: By 2030, the fastest-growing jobs will be "big data specialists", "fintech engineers", and "AI and machine learning specialists". Skill sets too are evolving at breakneck speed; in jobs that are more exposed to AI, the skills employers want today are changing 66% faster, with a strong emphasis on AI and technology literacy, and cyber skills.

The focus on AI and technology at work is clear, and rightly so, given

their dramatic effects — initially overwhelming but gradually positive — on productivity and efficiency levels across roles and the nature of jobs within an organisation.

In such an age of machine intelligence and automated assistants, it is easy to overlook the degree (and quality) of human collaboration with technology that enables the "outputs" that we find impressive and useful. AI is not simply automating routine tasks and becoming a default personal assistant, it is also amplifying our distinctly human abilities to think, ideate, and solve problems.

According to WEF, analytical thinking, resilience, flexibility and agility, and leadership and social influence top the core skills needed for the workplace today. These are what people call soft — or durable — skills that are foundational to being human.

And, this is fascinating because while technology and digital agility are anchoring the attraction of talent and skillsets by employers, these soft skills help us achieve desired outcomes — when individuals with such skills are able to think critically and creatively, with the right judgment of context and situational sensitivities. As human beings, we imagine, exercise curiosity, and engage with the world and all its thrills and frustrations; we do this with both text and subtext that often transcend what we typically write in our prompts to AI.

Let us ask ourselves: Can AI dream? To what extent can it picture a future reality for us while it gets trained on certain historical and current data? Such critical questions must be asked because the reasons why we take up jobs and engage in work go beyond ticking off routine tasks, producing

models, or summarising reports. We work to be able to fulfil essential needs, meet our ends, achieve stability, self-sufficiency, discover our passions, socialise, learn about the world we live in, contribute to our environment, influence lives, and much more. And, these are deeply human intentions and desires.

While AI and technology may not dream themselves, they are indeed helping us dream and extend our imaginations. They are helping us expand our thinking and our view of the world with vast amounts of information and insights. They are also enabling intersections of interests, ideas, and disciplines. This is the future of work, where AI and technology, in close companionship with human skills and our ever-expanding interests, are leading to new possibilities for work and innovation.

History tells us that every new technology revolution brings with it certain anxieties concerning job loss, transformation of roles, and the need for skill evolution. So, the worries with AI are not entirely new — although the resultant shifts will be a lot more pro-



Ashish Dhawan



Pramath Raj Sinha



AI is helping us expand our worldviews with vast amounts of information, enabling the intersection of interests, ideas, and disciplines. BY ARCHIT

nounced given its massive scale and reach. Yet, at its core, it is set to fundamentally enhance the way we work and pursue our interests.

A question thus arises: How ready are the young minds of the country to embrace this? India's universities face an unprecedented responsibility here. Strict departmental silos and traditional classrooms will not get us there. We need disciplines to interact with each other — both for structural renovation of institutions and departments as well as for ensuring holistic, multidisciplinary, and future-ready education for students. Similarly, while research in universities is often measured by publication counts, there is a growing need for relevant, impact-focused research that helps address pressing societal challenges and supports collaborations across disciplines and with industries.

These expectations can't be realised as mere co-curricular pursuits. Instead, they must form the core of what and how students learn. For decades, rote learning and high-intensity, competitive entrance exams have shaped Indian higher education, often limiting curiosity and critical thinking in students. A moderated shift towards just-

in-time learning and pedagogical innovations, centred on inquiry and exploration — as encouraged in the National Education Policy (NEP) 2020 — can lay the ground for how we live and work in a world of rapid changes. The implications of the intersections among the humanities, social sciences, and natural sciences need to emerge from learning ecosystems that foster interdisciplinary knowledge systems, digital fluency, and a culture of love for learning, rather than being realised only once individuals enter the workforce. While we need to do this for higher education, the foundation of learning begins much earlier. Our children need to be equipped at the earliest level to expand their abilities to think, solve, communicate, learn and relearn.

India is at an inflection point. With a massive young population and growing global ambitions, we have a unique opportunity, which requires a bold new movement to prioritise future-forward education. If we dream of becoming Viksit Bharat, this movement is not optional; it is required.

Ashish Dhawan and Pramath Raj Sinha are founders, Ashoka University. The views expressed are personal.

INNOVATION WITH CAUTION

In framing new clinical trial rules, government must focus on developing a research ecosystem, while ensuring safety

IN THE PAST seven years, the government has taken several measures to streamline the drug approval process. The New Drugs and Clinical Trials (NDCT) Rules, notified in 2019, reduced timelines for ratifying therapies and clarified safety-related procedures. Last year, the Drugs Controller allowed novel products to enter the Indian market without local clinical trials if they had been approved in the US, UK, Australia, Japan, Canada, and the EU. The Union Ministry of Health and Family Welfare has now proposed amendments to the NDCT rules, including waiving the local clinical trial requirement for more formulations. Nimble regulation could fast-track research in cutting-edge medicine and enable doctors in the country to deploy novel therapies for TB, cancer, autoimmune disorders, and Alzheimer's. However, in its quest to spur innovation, the government would do well to be scrupulous about another fundamental requisite of the medical sciences — the safety of clinical trial participants and the welfare of patients.

A hub of out-of-patent therapies and affordable vaccines, India has been lagging in the development of new medicine molecules. Drug discovery is a long, expensive, and often complicated procedure. In the last 15 years, the Council for Scientific and Industrial Research has tried to bring together academia and business bodies to circumvent this challenge. However, regulatory processes continue to be the Achilles' heel of pharma innovation in the country. Despite the recent attempts at simplifying research requirements, the country continues to follow complex documentation, clinical trial, and inspection processes. As a Deloitte and ASSOCHAM report pointed out last year: "Several policy challenges continue to hinder the growth of India's pharmaceutical R&D sector, such as inadequate capacity for drug regulation, the need for advanced testing facilities, and the lack of a strong framework for monitoring quality compliance in manufacturing units." Developing synergies between laboratories in the country and outside its shores could help address some of these problems.

At the same time, medical policymakers should heed the caveats of abbreviating trials. Some of the new formulations that manipulate genetic material or modify immune cells carry long-term risks that are not yet fully understood. Even drugs that promise significant therapeutic advancements need careful scrutiny when used in a genetically diverse population. That's why a section of experts caution that skipping local trials could compromise safety. Other scientists reason that regulatory authorities should strengthen the monitoring of drugs exempt from local trials — like in the US and EU, for example. The government has invited public comments on the amendments to the NDCT rules. It must patiently parse criticisms and observations, and not act in haste. *De | w*

Teacher in a changing world

New learning tools, digital classrooms, AI have only increased their importance in shaping thinkers, leaders, innovators



DHARMENDRA PRADHAN

EACH YEAR, AS the nation observes Teachers' Day on September 5 — the birth anniversary of the great philosopher and former President of India, Sarvepalli Radhakrishnan — we are reminded of his words: "Teachers should be the best minds in the country." That thought resonates even today. We believe education is the bedrock of a nation's progress, and teachers' dedication and contributions bring this vision to life. Teachers have always held a place of high esteem in Indian society. From the ancient gurukuls to modern classrooms, they have been mentors, guides and moral compasses. Our culture teaches us, "Acharya devo bhava (The teacher is akin to God)." In the hands of a teacher lies the power to ignite curiosity, shape character, and instil lifelong values.

Recently, while addressing the nation from the ramparts of the Red Fort, the Prime Minister gave a clarion call for *swadeshi* and *amanirbhar* to build a *samruddha Bharat* by 2047. India's journey towards self-reliance and development is an ambitious national endeavour, with the National Education Policy (NEP), 2020 at its core. The NEP designates teachers as "transformers" who will shape future generations into responsible, skilled and well-rounded citizens. The Prime Minister has consistently emphasised teachers' crucial role in this regard. He said, "Parents give birth; the guru gives life. These life-givers are the soul of the magnificent building. The school building which the government can construct is like the body, but the teachers are the soul."

With the NEP in place, teachers are shifting away from the traditional, rote-based style towards a more student-centric, innovative approach. This includes fostering the holistic development of students by focusing on their social, emotional, physical and cognitive well-being. Teachers are now also expected to instil values, a sense of pride in India's heritage and a feeling of rootedness, all while encouraging creativity, curiosity and critical thinking. They are at the forefront of promoting inclusivity and equity, adapting their strategies to meet the diverse needs of all students, including those with special needs and those from marginalised communities.

Today, we are witnessing a transformation that affects how we learn, teach, and develop the skills of everyone involved. The guiding principles of the NEP and the National Curriculum Framework for School Education (NCF-SE), 2023 place great emphasis on developing each student's unique capabilities. This includes promoting flexible learning, multidisciplinary education, multilingualism, the use of technology, and respect for diversity.

It has been five years since the implementation of the NEP, and several initiatives have been undertaken to empower teachers and reform teacher education. Our government's Integrated Teacher

Education Programme (ITEP), which embraces a multidisciplinary approach, is designed to create a new generation of passionate and professionally trained teachers for the challenges of a rapidly evolving educational landscape.

The NEP places a significant emphasis on teacher capacity building to empower teachers and improve student learning outcomes. As Rabindranath Tagore said, "A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame." Our government has launched programmes like NISHTHA and the Malaviya Mission Teacher Training Programme. The overarching goal is to provide continuous learning opportunities in new pedagogies like experiential, arts-integrated, and sports-integrated learning, as well as digital literacy and competency-based education. Further, the "DIETs of Excellence" initiative is a strategic effort to transform all functional District Institutes of Education and Training into model centres for teacher education. By creating dynamic hubs for professional development, research, and innovation, this initiative ensures that teachers are well-equipped to meet the evolving demands of the education system.

The last few years have witnessed an unprecedented shift towards digital and blended learning. While this transition presented challenges, it also demonstrated the resilience and adaptability of our teachers. Today, teachers are adapting rapidly to a changing world — digital classrooms, artificial intelligence, shifting curricula and diverse learning needs. Platforms like PM eVidya, DIKSHA and SWAYAM are equipping our teachers with tools, training, and high-quality content, thus creating a unified digital learning ecosystem. Moreover, AI-powered tools, personalised assessments, and data-driven insights are being developed to support teachers in enhancing learning outcomes. We believe technology will never replace the teacher; only enhance their capacity to teach, engage, and inspire.

Based on recent data, India is estimated to have the largest teaching workforce in the world — around 1.36 crore across all levels from schools to higher education institutions. This is a crucial asset for achieving the goal of a developed India. A large, qualified teaching force can fuel development by transforming human capital, driving economic growth, and fostering a more equitable society.

My dear teachers! You are the architects of *Amanirbhar Bharat* — the driving force that shapes the scientists, innovators, thinkers and leaders of tomorrow. By fostering a culture of research, critical thinking and problem-solving you empower students to evolve from mere job-seekers into innovative job-creators. Moreover, by instilling strong ethics and resilience, you prepare them to serve not just themselves, but also the broader needs of society and humanity, making every classroom a foundational laboratory of *Amanirbhar Bharat*. May you continue to ignite curiosity, foster courage and inspire students to build a self-reliant, strong and enlightened nation.

Happy Teachers' Day!

The writer is Union Minister of Education

The legacy of Savitribai Phule

Teacher's Day is not just a tribute to educators but also to reformers who saw education as liberation. Foremost among them is Savitribai Phule, India's first female teacher, who defied hostility to champion girls' education



**SAVITRI
THAKUR**

Teacher's Day is a sacred occasion to honour those who shape the destiny of our nation through knowledge. On this day, it is only fitting that we recall the extraordinary contributions of Savitribai Phule (1831-1897), the first female teacher of India and a revolutionary reformer who challenged age-old prejudices to lay the foundation for women's education in our country.

At a time when the education of women was frowned upon and often violently opposed, Savitribai Phule, alongside her husband Mahatma Jyotiba Phule, opened schools for girls in Pune in 1848. She not only taught but also designed curricula and wrote poetry to inspire women to seek knowledge. Her life was a testament to courage — walking daily to school with a spare sari because orthodox men hurled mud and stones at her. Yet she persisted, because she knew that the future of India lay in the education of its daughters.

The Legacy of Reformers and the Call of Equality

Savitribai Phule was not alone in her struggle. India's journey of social reform has been guided by visionaries like Raja Ram Mohan Roy, who campaigned against sati, child marriage, and for women's education; Ishwar Chandra Vidyasagar, who championed widow remarriage and girls' education; and later leaders like Mahatma Gandhi, who emphasised that "the education of women is the most powerful agent of social change."

Each of these reformers believed that without empowering women through education, India could not achieve true freedom.

This legacy continues to shape modern India's aspirations. Prime Minister Narendra Modi has often emphasised that "India's development journey will be led by women-led development." The vision of *Viksit Bharat@2047* is anchored in the empowerment of women as equal partners in nation-building, with education serving as the foundation of this empowerment.

Women and Education: The Progress So Far

The progress since Independence has been remarkable. Female literacy, which was barely 8.86 per cent in 1951, has today risen to 65.46 per cent (Census 2011) and continues to improve, with recent surveys indicating higher enrolment of girls in schools.

According to the Unified District Information System for Education (UDISE+) 2021-22, the Gross



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Enrolment Ratio (GER) of girls at the elementary level is now higher than that of boys. Schemes of the Modi Government, such as *Beti Bachao Beti Padhao*, launched in 2015, have shifted social attitudes, improved the child sex ratio, and increased enrolment of girls at every level of schooling. Initiatives like *Poshan Abhiyan*, *Mission Shakti*, and *SAMARTHYA* provide a holistic framework — ensuring that education is supported by nutrition, safety, and opportunity.

As per UDISE+ 2024-25 data, for the first time, female teachers now constitute 54.2 per cent of the total schoolteachers in India, a notable rise from 46.9 per cent in 2014-15. Yet challenges remain. Dropout rates among girls tend to rise at the secondary level, driven by early marriage, safety concerns, and economic pressures. The Government is committed to addressing these through scholarships, residential facilities, menstrual hygiene initiatives, and digital learning opportunities to ensure that every girl continues her education uninterrupted.

Teachers as Nation-Builders

The role of women teachers is particularly significant. They carry forward Savitribai Phule's torch by not only imparting knowledge but also becoming role models for millions of young girls.

Studies show that in rural areas, the presence of women teachers increases the enrolment and retention of girls in schools. Their contribution is critical to breaking cycles of poverty and empowering families to aspire for a better future.

On Teacher's Day, we celebrate not just the profession but also the larger vision it represents — knowledge as liberation, education as empowerment, and teaching as nation-building.

Towards Viksit Bharat

As India marches towards the vision of becoming a developed nation by 2047, education remains the key driver of growth. Women's education, in particular, multiplies the impact. Educated women ensure better healthcare, lower infant mortality, higher family incomes, and stronger communities.

According to UNESCO, every additional year of schooling for a girl increases her future earnings by 10-20 per cent. Therefore, the Ministry of Women and Child Development continues to align its schemes with SDG 4 (Quality Education) and SDG 5 (Gender Equality), ensuring that no girl is left behind. By integrating education with nutrition, safety, and skill development, we are building an ecosystem where women can thrive as students, teachers, entrepreneurs, and leaders.

A Collective Resolve

The story of Savitribai Phule reminds us that true progress is born of courage. From her modest classroom in Pune to the classrooms of modern India where crores of girls learn every day, the journey reflects a profound transformation in society's outlook toward women and learning. But the mission is not yet complete. As we celebrate Teacher's Day, let us rededicate ourselves to her vision and the call of our Prime Minister — that women's empowerment is not a matter of welfare but of national strength. By ensuring that every girl is educated, every woman is empowered, and every teacher is honoured, we can build the India of our dreams. Savitribai Phule's legacy is not just history — it is a living guide for our present and a beacon for our future. In the light of her courage, we see the path to *Viksit Bharat*, a developed India led equally by its daughters and sons.

P. V. S.

Reviving the Philosopher-President's Educational Blueprint

Dr Sarvepalli Radhakrishnan's philosophy placed teachers at the centre of nation-building. NEP 2020 brings his vision alive, empowering educators with autonomy, resources, and recognition to nurture creativity, inclusion, and holistic learning — transforming classrooms into the foundations of India's future

FIRST
Column



**SUKANTA
MAJUMDAR**

Every year on Dr Sarvepalli Radhakrishnan's birthday on 5th September, we celebrate the efforts, hard work, and contributions of teachers in India. As we celebrate his 127th birthday, it is worth examining how his profound insights about learning and education are finally being translated into practice through the National Education Policy (NEP) 2020. And moreover, how this policy empowers teachers to become the transformers for the always-emerging India.

Writing on Democracy and Education in 1954, Dr Radhakrishnan declared, "The future progress of the country depends on accomplishing in a few decades the work of centuries. The essential means of bringing about a new society is education." These words marked a fundamental reimagining of the purpose of education. For Dr Radhakrishnan, education was never about producing workers for an industrial economy; it was about nurturing complete human beings capable of intuition, compassion, and democratic participation.

This philosophy and vision rested on a simple yet often ignored premise: that true learning emerges from understanding, not memorisation. In his seminal book, *An Idealist View of Life*, he emphasised the importance of developing creative intuition over just theoretical intellect. He wrote, "Intuitive realisation is the means to salvation... intuitive insight is identical with freedom," suggesting that education should liberate the mind's creative potential rather than constrain it through rote learning. At the core of this transformation, according to Dr Radhakrishnan, were teachers. In his address at Punjab University in 1953, he said, "We have to realise that the kind of education we provide for our children is determined overwhelmingly by the kind of men and women we secure as teachers."

However, for much of independent India's history, our education policy struggled to operationalise these insights. The system that emerged often prioritised mechanical learning and rote memorisation over creative intuition and understanding. Teachers found themselves constrained by rigid curricula, expensive textbooks, and limited autonomy. Rigid subject boundaries replaced the holis-



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tic development. Dr Radhakrishnan championed, while teachers were reduced to following prescribed textbooks rather than inspiring creative minds.

As our Hon'ble Prime Minister has often said in *Mamta Ki Mitti*, "India has been the sacred land of education and knowledge. We have not confined education to bookish knowledge, but [I] see to be more as a holistic experience of life."

This holistic experience is at the heart of NEP 2020 and represents the first serious attempt to bridge this gap. Dr Radhakrishnan's emphasis on "intuitive insight" comes alive in NEP 2020's focus on experiential learning and competency-based education, and nowhere is this more evident than in the NIPUN Bharat Mission. Instead of confining teachers to rote instruction, NIPUN gives them the freedom and resources to make the teaching-learning process joyful, meaningful, and tailored to each child. Educators now have access to tools like Jadau Pitara, engaging teaching-learning materials (TLM), comprehensive teacher guides, and structured lesson calendars, which simplify planning while leaving ample room for creativity. This professional autonomy allows teachers to innovate in their teaching styles, experiment with new activities, and adapt lessons to the diverse and unique needs of their students.

Over the past five years, teachers have championed NEP's transformative initiatives like NIPUN Bharat, Vidya Prasth, and creative aids such as Jadau Pitara, laying strong cognitive foundations. The National Curriculum Framework 2020 and integrated teacher education programmes have switched educators with interdisciplinary approaches, creativity, and global perspectives.

Building on this, NEP 2020 also addressed Dr Radhakrishnan's call for developing the quality of teachers themselves. Through the National Professional Standards for Teachers (NPST), their competencies at different career stages are clearly defined, providing educators with a transparent roadmap for professional development, appraisal, and advancement. Digital platforms like NISHTHA and DIKSHA allow teachers to upskill anytime, anywhere, expanding access to high-quality professional learning. Beyond online resources, multiple state governments have established mentor cadres of senior teachers who regularly visit classrooms, observe teaching, and provide constructive feedback. Listening communities where experience and insights are shared and refined.

Our Ministry remains resolute in upholding inclusion and quality in education by promoting Indian and regional languages

in higher and technical education via technology-enabled interventions, Bharat Sangam content, and AI-powered learning portals.

Under an MoU with NCERT and NIOS, Indian Sign Language is being integrated into curricula, enabling inclusive learning for Deaf children.

Over 3,650 schools have been upgraded, more than 1,40,000 classrooms with new classrooms, and 12,50,000 schools equipped with digital facilities, spaces shaped by teachers' steadfast efforts. Over 15,000 girls' toilets have been constructed last year, a silent yet powerful testament to focusing on retention and dignity. With 1.46 lakh eco clubs leading the plantation of 5.14 more saplings in 2024, our teachers are embedding sustainability into the very fabric of school life.

Today's achievements — be it expanding PM SHRI Schools, fostering Atal Thinking Labs, or advancing digital learning through DIKSHA and SWAYAM — all testify to our teachers' adaptability and resolve.

While empowering teachers in classrooms is essential, Dr Radhakrishnan's vision extends beyond the school walls. It requires the active support of society at large.

For parents must play a pivotal role as partners in education, by seeking togeth-

er with their children, encouraging curiosity, and creating supportive learning environments at home, parents can become co-educators, reinforcing classroom innovation. This partnership not only strengthens foundational learning but also allows teachers to focus on achieving higher competencies during class, knowing that lessons are being reinforced at home.

Communities too have a responsibility to empower teachers and enrich the learning environment. School Management Committees (SMCs) should actively collaborate with teachers to ensure schools are safe, well-resourced, and conducive for learning. Communities can create platforms for interaction between students, teachers, and parents, while also bringing local artisans, professionals, and entrepreneurs into classrooms to share real-world experiences. In this way, communities become partners in education, empowering teachers to innovate, experiment, and teach more effectively, while fostering a culture of shared responsibility for learning outcomes.

Finally, state governments must listen to teachers or key stakeholders in policy design and implementation. Teachers are on the frontlines, implementing reforms daily, and possess invaluable insights into what works and what needs further refinement. By systematically incorporating teachers' inputs, states can make reforms more effective, scalable, and aligned with classroom realities. Today, we can proudly say that the system emerging through NEP would be recognisable to Dr Radhakrishnan as the education system he always believed India could and should achieve. The philosopher-president's blueprint for human development is no longer just an ideal; it is unfolding in classrooms through well-respected, supported, and trained teachers.

This Teachers' Day, let us not only celebrate our educators but also commit to giving them the tools, autonomy, and support to inspire every child. Our teachers are ready. It is now our responsibility to ensure they succeed, and through them, India does too.

As the Hon'ble Prime Minister beautifully said, teachers are "scribes of a brighter future." Let us reaffirm our unwavering gratitude to every teacher across India whose dedication, compassion, and wisdom nurture the mind, nurture the character, and nurture the nation. **Raj**

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Education Is Not A Process Of Filling A Vessel

Sumit Paul

September 5 is commemorated as Teachers' Day. S Radhakrishnan wasn't just a teacher, philosopher and educationist. He was a moralist who believed that true education and proper knowledge create morally upright humans. Like Socrates, Radhakrishnan believed that education is the kindling of a flame, not the filling of a vessel. Education is not just about acquiring knowledge and facts but rather igniting a passion for inquiry and critical thinking. It emphasises the importance of curiosity, open-mindedness, and the exploration of ideas.

Education is not a passive process of filling a vessel, but an active journey of discovery where the flame of knowledge is sparked and nurtured. True education should inspire individuals to think, question societal norms, and seek wisdom. The purpose of learning goes

beyond mere accumulation; it encourages students to become lifelong learners and thinkers. Radhakrishnan believed that true virtue and morality could only be achieved through the attainment of knowledge and understanding. He argued that ignorance was the root cause of all wrongdoing and misdeeds, as it prevented individuals from recognising what was truly good and just. He believed that by pursuing knowledge and questioning one's own beliefs, individuals could elevate themselves towards a higher state of consciousness and live a more virtuous life.

Radhakrishnan's teachings serve as a timeless reminder that wisdom and understanding are the guiding lights in distinguishing right from wrong, and that ignorance is the breeding ground for all forms of evil and injustice. He

believed that ignorance is the root and stem of all evil. People do not intentionally commit evil acts but do so out of a lack of knowledge and understanding. It is only through true knowledge and awareness that individuals can discern right from wrong and act virtuously.

Ignorance prevents individuals from recognising the consequences of their actions and perpetuates a cycle of wrongdoing. Radhakrishnan said, "God lives, feels and suffers in every one of us, and in course of time, His attributes, knowledge, beauty and love will be revealed in each of us."

He was a practical thinker and educationist who was of the view that books are the means by which we build bridges between cultures. Radhakrishnan said, "My ambition is not only to chronicle but to interpret and reveal the movement of the mind and unfold the

sources of India in the profound plane of human nature."

Reading and implementing should be the sole (and also soul) objective of a seeker. Education and knowledge that get you a decent job and also hone your sensibilities making you a humanist must be the purpose of modern education. He wasn't an armchair philosopher; Radhakrishnan was a pragmatic philosopher who combined education with philosophy and moral values and asserted that intelligence plus character must be the goal of true education. He said, "The main function of a university is not to grant degrees and diplomas, but to develop the university spirit and advance learning. The former is impossible without corporate life, the latter without honours and postgraduate."

His moral approach to education made him a universally venerable teacher who disliked being called a professor.



THE SPEAKING TREE

Equip students with ability to question power



MANOJ KUMAR JHA
NATYA SABHA INR, RUD

It is Paulo Freire, one of the greatest educationists, who must be remembered on Teachers' Day because it was he who redefined a teacher's role. While R Radhakrishnan emphasised the teacher as a guide, philosopher and moral force, Freire extended this vision, saying that a teacher is also a learner, and that the best teaching is grounded in dialogue, humility and shared inquiry.

Freire transformed the teacher-bought relationship from a hierarchical, one-way transfer of knowledge into a dialogical, participatory and liberating process where both grow together as co-creators of knowledge. In his seminal work, *Pedagogy of the Oppressed*, he characterises the traditional model as the 'banking model of education', in which the teacher assumes the role of an all-knowing authority who 'deposits' information into the minds of passive learners.

In this framework, knowledge is treated as a fixed commodity, and students as empty vessels, awaiting the teacher's wisdom. Such a pedagogy reinforces domination, fosters conformity and deprives learners of the opportunity to develop critical consciousness. It reproduces social hierarchies by conditioning students to accept authority uncritically.

Freire proposes a dialogical model of education. Dialogue is not mere conversation but a mode of co-investigation, where both parties bring their

experiences and perspectives into a search for meaning. It disrupts the rigid boundaries of authority, allowing education to become a genuinely humanising process.

Freire also advances a 'problem-posing' approach to education. Teachers and students together interrogate social, political and cultural issues, thereby linking education to concrete human struggles. This process cultivates critical consciousness, enabling learners to perceive oppressive structures and imagine possibilities for transformation.

Freire does acknowledge that teachers bring experience, perspective and responsibility. Yet, their authority is not authoritarian; it is exercised with humility, respect, and openness towards creating conditions for collective inquiry, ensuring that students' voices are heard and fostering a democratic classroom environment. Underlying this vision is a commitment to humanisation. Oppressive systems, whether political, educational or social, dehumanise individuals by treating them as objects to be manipulated.

The central role of education in a democracy is to cultivate critical consciousness among citizens. By equipping learners with the ability to interrogate power structures, challenge dominant ideologies and articulate alternative visions of society, education functions as a safeguard against hegemony and authoritarianism. When education fails in this role, it risks being an instrument of indoctrination.

So, this Teachers' Day, let us bring back the idea that education must not be used as an instrument of producing obedient subjects, but free citizens. It must give us the courage to resist authoritarian control and to say 'no' when power tries to silence truth. A society where education serves the rulers rather than the people is a society that has already surrendered its freedom.



The Tribune

TWO VIEWS

TEACHERS' DAY

The central role of education in a democracy is to cultivate critical consciousness among citizens.

Some contractual teachers pay is less than the govt-prescribed minimum daily wages for semi-skilled labourers.

Curriculum revisions have blurred the vision



MUNEET SHARMA
ASSISTANT PROFESSOR,
CENTRAL UNIVERSITY OF HP

By the government's own estimates, India requires an additional 18 lakh teachers, with nearly four lakh vacancies at the elementary level alone. With political will and administrative resolve, such recruitment could be achieved within a year. The systemic apathy towards the teaching profession persists despite India being a signatory to numerous Sustainable Development Goals.

Teacher recruitment and teacher education programmes have been mired in neglect over the past decade. The constant experimentation with one-, two- and four-year teacher education programmes, often dictated by the whims of policymakers, has generated confusion rather than clarity regarding the pathways to becoming a qualified teacher. The frequency and rapidity of these curricula revisions have blurred the vision of what constitutes a teacher and what professional competencies the role demands.

Equally disquieting are the conditions of service and remuneration. Salaries vary significantly, depending on the nature of the appointment and the type of school management. In flagship government programmes, such as the Samagra Shiksha Abhiyan, contractual teachers receive

monthly salaries of Rs 18,000 in Bihar and Rs 25,000 in Tamil Nadu. These figures are lower than the government-prescribed minimum daily wage for semi-skilled labourers and, in some contexts, half the wages of highly skilled labourers.

Furthermore, 89 per cent of private school teachers and 14 per cent of government school teachers are employed on contractual terms, leaving them devoid of job security and financial stability. Prolonged delays in recruitment processes and the acute infrastructural deficits in rural schools further render teaching an unattractive career choice, dissuading talented individuals from entering the profession.

Initiatives such as the National Professional Standards for Teachers (NPSST) and the mandatory 60 hours of Continuing Professional Development (CPD) annually risk compounding the challenges. Rather than strengthening the profession, they often add bureaucratic burdens that undermine a teacher's autonomy and morale.

Without structural reorientation, teachers will remain relegated to being subcontracted employees, compelled to comply with the ideological dictates of their superiors.

Being a teacher in the 21st century is already a formidable task. In the post-modern era, teachers are equated with search engines or AI tools. While digital technologies may provide access to information, they cannot replace the transformative presence of a teacher. What remains indispensable is the teacher as an informed being, one who inspires learners and animates the process of being and becoming. Without investing in this human capacity, India risks fostering a nation of classrooms without teachers, and consequently, a nation without direction.

Views are personal

शिक्षकों की साख संभाली जाए

आज देश शिक्षक दिवस मना रहा है। प्राचीन भारतीय परंपरा में गुरु समाज में ही नहीं, सत्ता द्वारा भी सम्मानित किया जाता था। गुरुकुल के अधिष्ठाता से मिलने जब राजा-महाराजा भी जाते थे, तो वे परिसर के बाहर ही अपना सारा ताम-झाम और सुरक्षा छोड़ देते थे, अंदर जाकर आचार्य की चरणधूलि लेकर अपने को धन्य समझते थे, लेकिन आज स्थिति अलग है? एक बार मैं हवाई जहाज में यात्रा कर रहा था, तो मेरे बगल में एक बड़े प्रदेश के मुख्यमंत्री बैठे थे। कुछ देर बाद उन्होंने मुझसे कहा कि प्रोफेसर साहब, कोई ऐसा उपाय बताइए, जिसमें शैक्षिक सुधार लोगों को दिखाई देने लगे, मगर अधिक धन लगाने की आवश्यकता न पड़े। बिना किसी देरी के मैंने कहा कि ऐसा उपाय है। अगर आप इसे लागू कर सकें तो छात्रों का नामांकन बढ़ जाएगा, अध्यापकों की स्कूल उपस्थिति में भारी सुधार होगा, कर्मठता बढ़ेगी और सरकारी स्कूलों की साख भी लौटने लगेगी। आपको केवल एक आदेश जारी करना होगा कि कोई भी अध्यापक-प्राइमरी से लेकर विश्वविद्यालय तक जब किसी अधिकारी से मिलने जाए, तो वह कुर्सी से उठकर उसका स्वागत करे, कुर्सी पर बैठाए, उसके बाद अपना आसन ग्रहण करे। उसके अनुरोध को प्राथमिकता से सुने और निपटाए, अधिकारी उसे दरवाजे तक छोड़ने जाए और उसके मातहत कर्मचारी इसे देखें। मुख्यमंत्री बोले कि यह लगता तो सरल है, किंतु इसके त्वरित प्रभाव व्यवस्था यानी नौकरशाही पर ठीक नहीं पड़ेंगे। उन्होंने इसे प्रभावशाली कदम बताया, मगर लागू करने का साहस नहीं किया।

यह सही है कि सरकारी स्कूल बड़ी संख्या में अध्यापकों की अनधिकृत अनुपस्थिति के लिए जाने जाते हैं। ऐसे अत्यंत निंदनीय चलन के लिए अध्यापक, वरिष्ठ अधिकारी और प्रशासनिक व्यवस्था ही जिम्मेदार हैं। यह 'चलन' केवल अध्यापकों तक ही फैली नहीं है, ग्रामीण क्षेत्र में पदस्थापित अनेक सरकारी अधिकारी अपने वरिष्ठ अधिकारी से 'मोलभाव' कर लेते हैं। हफ्ते में एक-दो दिन अपने कार्यस्थल पर जाकर सारे



जगमोहन सिंह राजपूत

समाज में नैतिकता और मानवीय मूल्यों की स्वीकार्यता अध्यापकों के अनुकरणीय आचरण से ही आएगी



छात्रों के प्रति दायित्वों का निर्वहन करें शिक्षक = काइल

सप्ताह की उपस्थिति दर्ज कर लेते हैं। इस सबका समाधान क्या है? इसे दूढ़ने के पहले यह जानना होगा कि ऐसी अवस्था पनपी कैसे? यह अनैतिक स्थिति मुख्य रूप से शिक्षकों के प्रति समाज की बेरुखी और व्यवस्था के अपमानजनक व्यवहार से ही उपजी है। समाज की शिक्षक प्रशिक्षण संस्थानों की साख में भारी गिरावट की स्थिति के प्रति उदासीनता ने इसे अत्यंत अशोभनीय स्तर तक गिरा दिया है। 2012 में भारत के पूर्व मुख्य न्यायाधीश जस्टिस जेएस वर्मा ने कहा था कि देश के दस हजार शिक्षा प्रशिक्षण संस्थान 'डिग्री बेच रहे हैं।' उनकी गुणवत्ता में कोई रुचि है ही नहीं। आठ साल बाद इस कथन को राष्ट्रीय शिक्षा नीति-2020 में पुनः दोहराया गया। यह कितनी शर्मनाक स्थिति है। इसके लिए जिम्मेदार एक अन्य पक्ष को भी ठीक से समझने की आवश्यकता है।

राजस्थान के दूरदराज के क्षेत्रों में 1955-60 के दौरान यदि किसी स्कूल का दरवाजा टूट जाता था, तो ग्रामीण उसे अपना स्कूल मानते हुए नया लगा देते थे। अब इतना सरकारीकरण हो चुका है कि जब ज्यादा ठंड पड़ती है, तो लोग कहते हैं कि स्कूल की खिड़की उखाड़कर

जलाएं, सरकार खुद लगाएगी। दरअसल समाज का स्कूल से जो परंपरागत संबंध था, अध्यापक का जो सम्मान था, उसके तिरोहित होने में सरकारी अधिकारियों की असंवेदनशीलता और अहंकार मुख्य रूप से जिम्मेदार रहे हैं। देश के 56 प्रतिशत बच्चे आज भी सरकारी स्कूलों में ही पढ़ते हैं। केंद्रीय विद्यालय, नवोदय विद्यालय, पीएमश्री विद्यालय जैसे केंद्र संचालित स्कूलों की साख पूरे देश में है, लेकिन सरकारी स्कूलों में सबसे बड़ा प्रतिशत उन बच्चों का है, जिनका पालकों ने उन्हें यहां प्रवेश केवल इसलिए दिलाया है, क्योंकि वे किसी निजी स्कूल में प्रवेश नहीं दिला सके। सरकारी स्कूलों की साख के लगातार गिरने का एक कारण यह है कि व्यवस्था में ऊपर से नीचे तक जिन-जिन पर इसका उत्तरदायित्व है, उनके अपने बच्चे भी निजी स्कूलों में ही पढ़ते हैं।

अध्यापकों का सम्मान उनके अपने प्रयासों का योगदान भी मांगता है। क्या वे एक अनुकरणीय कार्यसंस्कृति का उदाहरण पेश कर रहे हैं? दूसरे विश्व युद्ध के बाद जापान के पुनर्निर्माण में वहां के शिक्षकों की बड़ी भूमिका थी। समय-प्रतिबद्धता, कार्यसंस्कृति, आत्मसम्मान, उत्तरदायित्व के प्रति प्रतिबद्धता और व्यवस्था द्वारा हर पग पर उनको यह आभास दिलाया गया कि वे ही राष्ट्र निर्माता हैं, वे भविष्य के कर्णधार तैयार कर रहे हैं। उनसे व्यक्ति और व्यक्तित्व निर्माण के जो तत्व बच्चे सीख कर जाएंगे, वे बड़ी-बड़ी शोधशालाओं, अस्पतालों, प्रशासनिक कार्यालयों में भी कुछ वर्ष बाद दिखाई देंगे। आज जापान में कोई भी अपने कार्यस्थल पर देर से नहीं पहुंचता है। भारत के अध्यापक यदि चाहें तो कुछ वर्षों के अंतराल में यहां भी यह स्थिति आ सकती है। राष्ट्र निर्माण में सबसे महत्वपूर्ण उत्तरदायित्व निर्वाह अध्यापकों को ही करना है। समाज में नैतिकता और मानवीय मूल्यों की स्वीकार्यता भी अध्यापकों के अनुकरणीय आचरण से ही आएगी।

(लेखक शिक्षा, सामाजिक सद्भाव और पंथक सामंजस्य के क्षेत्र में कार्यरत हैं।)

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The Chancellor

Universities need to be headed by distinguished academicians

The recent submission by Kerala Governor Rajendra Vishwanath Arlekar to the Supreme Court of India, contending that the Chief Minister of Kerala has no role in the appointment of the Vice-Chancellors (V-C) of A.P.J. Abdul Kalam Technological University and Digital University Kerala, is another instance of how recent Governors are the political and ideological adversaries of an elected State government – as seen in Kerala, Tamil Nadu, and, to some extent, West Bengal. Mr. Arlekar had appealed against an attempt by the Court to break the long-standing impasse over V-C appointments to these universities by guiding the creation of search-cum-selection committees and laying down rules. The Governor submitted that the 2018 UGC rules for search-cum-selection committees mandate persons of eminence in higher education and must not be connected in any manner with the university or its colleges. Thus, according to his submission, the Chief Minister, as someone intimately connected to all such institutions in the State, had no role. The draft 2025 UGC Regulations take this further by divesting State governments of a role in appointing V-Cs and bringing it under the Chancellor's purview. While the Court will rule on the merit of Mr. Arlekar's position, it is worth noting that Governors in States ruled by the BJP or its allies do not seem to have such problems with the governments they nominally head.

Governors were originally instruments of colonial power and were retained by independent India. From the very beginning, however, they have often acted as political agents of the ruling party at the Centre. Over time, central and State legislation defined and restricted the discretionary powers of Governors which were vested in them by the Constitution. After Independence, State governments retained the colonial-era practice of having Governors as heads of universities – to continue the stated intention of ensuring independent higher education as well as to have a "father figure" or a wise elder. The Acts passed by State legislatures, such as those for A.P.J. Abdul Kalam University, specifically define who the Chancellor will be. The Governor owes his or her position as Chancellor of a university to the respective State government. Even as the Court circumscribes the gubernatorial powers regarding the signing of Bills into law, State governments are acting decisively against having Governors as Chancellors of State universities – one of the few other domains where Governors' have a strong say. Punjab and West Bengal, for instance, have passed a law making the Chief Minister the Chancellor. University heads need to be hands-on, distinguished academicians with a broader profile and vision, and strong managerial skills, rather than political appointees, State or Union.

2/8

START WITH THE SCHOOL

To remedy gender imbalance in IITs, encourage girls who tinker, question and solve at every step of their academic journey

IN 2018, WHEN the Indian Institutes of Technology (IITs) introduced a supernumerary quota for women in undergraduate engineering courses — allocating extra seats instead of carving them out from existing numbers — it was a necessary course correction to remedy decades of gender imbalance, especially across some of the older centres. The policy worked as intended, pushing up female enrolment between 19 and 21 per cent across campuses. But, according to Joint Implementation Committee data shared by the JEE Advanced examination organising institutes, despite the absolute numbers of women admitted having gone up due to the quota — from 16,053 seats in 2020 to 18,168 in 2025 — the proportion of women students has flattened at around 20 per cent of total admissions. Simply put, the policy has succeeded in halting the decline, but it has not moved the needle far enough towards greater inclusivity.

Behind these statistics lies a more complicated truth: Access does not automatically translate into belonging. The IITs, to their credit, recognise this. To stop the proverbial glass ceiling from capping ambitions, campuses have been moving towards structural and cultural change — better hostels, safe and equitable recreational spaces, improved washroom facilities, access to AI-driven mental health tools, peer-support groups, stress-management workshops, and even institutional innovations such as IIT Kharagpur's creation of the post of a dean of well-being, focused especially on student care, and to tackle obstacles female students face in environments long shaped by a male-majority ethos.

Yet, this is merely the groundwork. The next step must be about changing the culture that shapes female students even before they arrive at IITs. That means reforming school pedagogy to challenge gendered assumptions about aptitude; hosting workshops that address unconscious bias; creating curricula that foreground the achievements of women scientists, and encouraging girls who tinker, question and solve at every step of their academic journey. Government initiatives such as the Vigyan Jyoti programme and the CBSE's UDAAN scheme, which provide financial assistance, mentoring and exposure to IITs, IISERs, and CSIR labs for girls in Classes IX–XII, are important correctives, but their impact is still unevenly felt. Despite the parity achieved in certain STEM fields such as medicine, where female students have begun to outnumber men, barriers to aspiration continue to surface persistently, funnelling women away from technical fields. And yet, many of India's most ambitious scientific enterprises, including ISRO's Mars Orbiter Mission and Chandrayaan-2, are now helmed by women, offering proof that the glass ceiling is not immutable. And that change is possible once women learn to see themselves as part of this continuum, when they can walk into institutions like the IITs knowing they belong, not as outliers rewriting the rules, but as rightful heirs to a legacy that includes them unselfconsciously.

20/10



We the teachers

That we repair ourselves makes us all teachers — we are our most difficult students

SUMANA ROY

THE PEN THAT finds its life from human fingers feeding ink into its body is different from the pen whose intestines are consumed, used and discarded. That relationship, of keeping and throwing, can be seen in their forms, in the difference between the body — and skin — of the fountain pen and a biro. One looks for a button to match the rest on the shirt when it gets lost. That effort, along with the enterprise of sewing, makes the shirt a little more valued than it might have been before. And so with relationships between humans. Repair, with its rituals of attention, renews affection — the old becomes temporarily new. Repairing requires skills — of the hands, but, more importantly, of the mind, for it to return over and over again to the same place of tear, injury and incompleteness; it is also a gesture towards a renewal of commitment, to carry along with what has been given instead of raising a ticket for a new purchase. Repair, then, is a form of updating.

That any form of art is a practice of repair is so self-evident that neither teacher nor student need to say it to each other. Repair is repair, and it's possible for this repairing to

happen without the obvious corollary — our art is only a synecdoche of our condition, that we too are in need of gentle repair. How this *rifu* (or *rofu*), this mending of cloth through stitches, that happens in our art makes us the artists we are, is only an extension of how we are constantly repairing ourselves. That creation is actually repair doesn't occur to us because of our conditioning in stories of origin and anthems about originality. The "and" in the Bible is much more than a conjunction, for instance — it reminds us that all creative practice begins with "and", in the middle, from the middle, but, more importantly, it is a reminder that creation is restoration, an unpredictable balance of scraping and adding, sawing and joining, loss and gain. The "and" is the manifestation of an urge to stay connected to what was, and to continue. This form of repair is like the self and the world that, while remaining in flux, continues to retain an essence of its identifiability.

It's with brokenness that one comes to poetry. Think of the vocabulary, the violence in "cutting" lines, line "breaks" or "run on lines", in which is the phonetic intuition of

being "run over". But enjambment is neither surgery nor recuperation — it is a gardener's trick to allow the plant to grow more fluently. "Repair" comes from an etymological history of preparation, a line of living that connects the empirical with the spiritual, the functional with the aesthetic.

It has begun to seem to me that much of the idea of the Creative Writing workshop comes from the idea of repair. We must fix the writing. The workshop begins to feel like a garage — a space that provides the equivalent of a spare tyre, a painting job, and so on. I'd have given up on the analogy had it really not been as true — the writing must approximate a model, something as ready-made as an automobile. We've been bullied to believe in a preset idea of an efficient model — what we write must fit into that mould. Irrespective of the approach one takes — to demonstrate one's unease with the writer's style or suggesting ways in which the writing could be made more efficient — the idea of language needing repair is made obvious. It is a hurtful model of critique and pedagogy. This becomes even more compli-

cated when we come to an Indian Creative Writing workshop where there are different degrees of language fluency.

But craft is not a skill alone. If it were, it would have remained tied to *techné*, the Greek word for craft, a concept that emphasises expertise. The more we are able to move away from this idea of craft, the easier it would be to liberate it from this capitalist model of training in creative practice that funds workshops and university programmes. Repair — as concept and practice — is far more equitable and democratic than the bullish investment in craft, whose industrialisation and consequent marketing has turned writers into the likeness of fortune cookies, with something stored inside them as ready-made response, no matter who bites into it.

If repair, like prayer, is available to everyone, creativity is, too. That we can repair ourselves makes us all teachers — we are our closest but most difficult students.

Roy, a poet and writer, is associate professor at Ashoka University.

Tea

Views are personal

India's quest for knowledge

From the early vision of science and Gandhian thought to the contemporary framework of NEP-2020, each milestone reflects the nation's attempt to prepare its citizens for a changing world while remaining rooted in its cultural ethos



AARIF

India formulated its latest National Education Policy, NEP-2020, after a long gap, as the earlier National Policy on Education was formulated only in 1992. There was a major attempt to formulate a new curriculum framework for school education, 25 years. It was released on November 14, 2000, the birthday of Pandit Nehru, by the then Minister of HRD, Dr Murlidhar Joshi.

Based upon it, the school textbooks, some of which were more than three decades old, were rewritten and revised. Focus must now be on where we stand at this juncture in education and how far we are preparing ourselves for the future in the national and global context. Unprecedented changes are taking place both in the content and process of education everywhere. Simultaneously, there is an ever-increasing global realisation of the interdependence of nations, communities, and people all around. It is now left to India to resume its leadership role in the process of the reshaping of the world, which was taking shape anyway! It needs to create a vibrant knowledge society, a highly acculturated people, and excellence in spirituality. Obviously, it has to be achieved only by seriously envisioning and implementing a dynamic and visionary Indian education system.

New challenges were emerging before the education systems globally, and every nation has to decipher its own challenges. India attempted the same through the reformulation of its education policy, the NEP-2020: "This National Education Policy envisions an education system rooted in Indian ethos that contributes directly to transforming India, that is Bharat, sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all. The vision of policy is to instil among the learners a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect, and deeds, as well as to develop knowledge, skills, values and dispositions that support responsible commitment to human rights, sustainable development." This is a very comprehensive statement that would require not only tremendous efforts in implementation but also modern comprehension of the Indian tradition of knowledge quest, which in the ancient days commanded global respect and adulation. It shall have to be supplemented by the global philosophical and epistemological comprehension. The Centre for Contemporary Studies, PMML, Teen Murti Bhavan, New Delhi, has been re-energised under Nripendra Misra, chairman of the executive committee. He inspired a study on how education development during the second half of the 20th century could be reviewed and recalled for



The Pioneer SINCE 1865

THIS STUDY HAS BEEN COMPLETED OVER A PERIOD OF TWO YEARS, AND A MANUSCRIPT OF 553 PAGES ENTITLED MILLENNIAL TRANSITION: LEADERSHIP, EDUCATION, CULTURE, AND SOCIAL COHESION HAS BEEN WRITTEN

The writer is a Research Fellow at Delhi University. He voluntarily assisted Professor JS Rajput, a Padma Shri awardee educationalist, who conducted this project at the Institute of the PMML, as an Ate Fellow for two years

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the benefit of the millennials, who would be holding the reins of power in practically every country in years to come. This study has been completed over a period of two years, and a manuscript of 553 pages entitled *Millennial Transition: Leadership, Education, Culture, and Social Cohesion* has been written. It has been prepared as an outcome of the study and submitted to the organisation on July 8, 2025. The National Book Trust of India, NBT, has accepted it for publication.

This study finds that India initially began its post-independence journey of education, knowledge, and development under the shadow of the times that were characterised by STPG: Science, Technology, Production, and Gandhi, an acronym often used by an outstanding scientist and academician, Prof Daulat Singh Kothari. This motto was the futuristic vision of those days and has subsequently been substituted by STEM: Science, Technology, Engineering, and Mathematics. It was incorporated for implementation in the National Policy on Education, 1986, which was revised in 1992. Afterwards, there was a long gap, and the next policy formation was completed only in 2020. The biggest challenge that India faced during the first five to six decades after independence was to take education to every child.

Focus at this stage is on excellence and skill acquisition. Today the biggest challenges are acculturation, social cohesion, and religious unity. Towards this, the passage passes through VAT-G, the Ideas, thoughts, philosophy, and pragmatism of Swami Vivekananda, Sri Aurobindo, Gurudev Tagore, and Mahatma Gandhi. Swami Vivekananda was the most brilliant interpreter of the Indian quest of knowledge and wisdom in the contemporary context for international audiences. Sri Aurobindo, who understood Western culture and its inadequacies and

dwelled in great depth on the universality of the Indian interpretation of spirituality in the global context, and the Gurudev, who developed a subtle comprehension of the beauty of the man-nature interdependence. The comprehension of the thought, philosophy, and pragmatism of the great quartet offers an effective understanding of India, its knowledge traditions and systems, and its relationship to the global developments. Crossing this stage, one could go deeper into the works of the galaxy of illustrious persons and their works. Gurudev Tagore had highlighted the need to encourage the divine gift of the power of ideas and the power of imagination given in abundance to every child. The two I's, if inspired and nurtured with empathy, would lead to the third, Innovations, which constitutes the I³. To make it easier for the teachers and learners, three C's—Curiosity, Creativity, and Commitment—are also added: C³. Thus, the VAT-G, together with the I³ C³, constitutes the perfect combination for those interested in understanding and also in finding a solid base for Indian education, rooted in culture and committed to progress.

This identification comes after a thorough study and analysis of the initial post-independence emphasis on STPG—Science, Technology, Production, and Gandhi. It was followed by the STEM—Science, Technology, Engineering, and Mathematics. Whatever the challenges, a nation like India cannot ignore its national and international responsibilities in the world of knowledge and skill acquisition. As the Indian tradition of knowledge quest, which is not confined to a particular region, community, religion, or language, has to be studied in its broader framework and, more importantly, in light of the modern traditions of knowledge generation and creation being developed on the international map.

Mentors illuminate the journey of lifelong learning



**M J
WARSI**

2 THE PIONEER ND OPINION

As we all know, teaching is truly a rewarding and unique profession, long regarded as one of the most sacred, noble, and pious services to both society and the nation. Teachers' Day is celebrated by students across the country with the purpose of expressing their gratitude towards their mentors for their invaluable contribution. The date of celebration varies from country to country. Since 1994, UNESCO has observed Teachers' Day on October 5. In India, however, it is celebrated on 5 September, the birth anniversary of Dr Sarvepalli Radhakrishnan. Apart from being the first Vice-President and the second President of India, he also served as Chairman of the University Grants Commission in 1949. Radhakrishnan was a great scholar and an excellent

teacher, admired widely for his contribution to education. When his students and friends once sought his permission to celebrate his birthday, he modestly suggested that it would be far better if the day were dedicated to the entire teaching profession by honouring the hard work and commitment of teachers across the nation.

The purpose behind celebrating Teachers' Day is to acknowledge the dignity of the profession and the contribution of educators in nurturing young minds and nation-building. The National Education Policy (NEP) 2020 also advocates restoring high respect for teachers and inspiring the best minds to join the profession. This year's celebration held special significance for Aligarh Muslim University, as Professor Vibha Sharma of the Department of English was selected for the National Education Award 2025 in recognition of her outstanding contribution to the field of education. The role of educators in shaping society is undeniable. Teaching is one of the most essential aspects of human life, pervading individuals, society, culture, and every dimension of human endeavour. Teachers, with their profound understanding of subject matter and deep reservoirs of wisdom, continually enrich the lives of their students. It is no coincidence that UNESCO has recognised India as one of the most linguistically diverse countries in the world, a fact reflected in the richness of its teaching traditions.

The principal role of a teacher is to transmit knowledge from one generation to another, ensuring that art, ideas, and cultural nuances are effectively preserved and carried forward. In India, there has long been a tradition of respecting and honouring teachers, known traditionally as gurus. Irrespective of religious belief or linguistic background, Teachers' Day is celebrated throughout the country. From childhood, we have heard the story of Eklavya, which defines exemplary discipleship. This tale illustrates dedication, hard work, obedience, and the spirit of guru-dakshina, the offering traditionally made by students in gratitude for learning. Dronacharya, by asking for Eklavya's thumb, immortalised his disciple's loyalty. In Islamic tradition, too, the teacher holds a very high status. Hazrat Ali (may Allah be pleased with him) once said, "If a person teaches me even one single word, he has made me his servant for a lifetime." The role of a teacher extends far beyond imparting knowledge or preparing students for examinations. It includes guiding them to distinguish right from wrong, correcting their mistakes, and shaping their moral character. Teachers are recognised for their contribution to society by inspiring, enlightening, and preparing students to become responsible citizens.

Prof M J Warsi, a widely acclaimed linguist, teaches in the Department of Linguistics at Aligarh Muslim University

FRESH LESSONS


Traditionally, students and former students express their respect for teachers on Teachers' Day. Sadly, that respect has become scarce in many cases nowadays: teachers, and therefore education itself, have somehow lost their value. Teachers have become associated with tuition rackets and cupidity, with financial corruption and closeness with local politicians, especially in the suburban areas. Political intervention in education at different levels has worsened the situation. The School Service Commission recruitment scandal in West Bengal is an overt symptom of the rot in the system. The term being used — "tainted candidates" — is a shameful appellation for those aspiring to become teachers. Teachers' values are being questioned where suicides by students are exposing their ineffectuality or inaction, or where political or social discrimination within the student community is not being seriously dealt with. Are these teachers laying the foundations for a progressive, open-minded education or building up moral and ethical standards among students who will become citizens of a flourishing democracy?

Yet this is not the whole story. Numerous teachers, some nameless, are struggling in different corners of the country to teach children and help underprivileged students. Some teach street children, some slum children and those wandering about in stations, concentrating not just on lessons but on hygiene and nutrition as well. Their idealism, dedication and patience deserve the greatest respect for they make teaching a truly noble profession. Some are students themselves,

like the 12-year-old Bharti Kumari, who goes to school but teaches underprivileged children under a mango tree. Babar Ali of West Bengal started at the age of 16 and today, at 29, he and 10 others teach 800 underprivileged children. Teacher heroes emerged during the Covid years, like Sunil Kumar, who organised community classes for children without the resources to attend online classes, or teachers who turned streets into blackboards. Some retired teachers continue teaching at the lowest possible cost, while a teacher like Abdul Malik swims a nine-kilometre river every day to reach his students. Some teachers create stimulating learning environments with

A way back
to respect for
teachers and their
dedication to
their calling has
to be found

innovative new tools, like Arvind Gupta, who converts trash to toys, or like makers of other low-cost teaching aids. Sandeep Desai even begged on the streets to establish his school to teach poor children in Rajasthan and Maharashtra.

Acknowledging the quiet struggle and the patience of numberless teachers still unknown may be a way of finding the route back to the respect and the admiration that teachers should evoke. There should be more awareness about these individuals, nameless or named, for they are the true role models who hold up the values of learning and teaching, who create moral and ethical standards and show students the way towards social and moral responsibility. There is no doubt that a way has to be found back to love and respect teachers, for devaluing teachers and education is deeply damaging. Sacrifice, dedication, patience, creativity and learning all exist; the challenge is to restore them to their rightful place in awareness. 

कौशल वाली शिक्षा ही बनाएगी देश को अग्रणी



राजीव खन्ना

कौशल देना ही सफलता का असर तरी
हल है कि उन्होंने युवाओं को केवल
कितने तक सीमित नहीं किया, बल्कि
उन्हें वास्तविक काम पर अनुपस्थिति

की तुलना में कहीं अधिक है। यह अंतर
भारत के लिए गंभीर संकेत पर संकेत है।
द्वितीय से लैस युवाओं की बेरोजगारी
इस खाई को साफ दिखाती है।

हमारे विश्वविद्यालयों में हर साल
लच्छों छात्र निकलते हैं, लेकिन उनमें
से बड़ी संख्या ऐसी होती है जिनके
पास न ही उद्योगों की अपेक्षाओं के
अनुकूल तकनीकी दक्षता होती है और
न ही आधुनिक कार्यस्थल के अनुकूल
साक्ष्य कौशल। राष्ट्रीय कौशल विकास
निगम और क्रम मेकालय के अनुसार
लगभग 40 प्रतिशत स्नातक युवाओं के
पास रोजगार पाने के लिए आवश्यक
व्यवहारिक कौशल ही नहीं है। इसका
अर्थ यह हुआ कि डिग्री और नौकरी
के बीच की सेतु खोब खोब है, उसे
हमारी शिक्षा और प्रशिक्षण व्यवस्था
ने खड़ा ही नहीं किया। 2024 में एक
औद्योगिक शहर में किए गए सर्वेक्षण ने
इस तस्वीर को और स्पष्ट कर दिया। 10
हजार युवाओं में से केवल 12 प्रतिशत
ने औपचारिक प्रशिक्षण लिया था और
उनमें से भी अधिकांश पर उम्मीद के
अनुसार रोजगार नहीं मिला। यह केवल
बेरोजगारी की कहानी नहीं है, बल्कि
प्रशिक्षण तंत्र की कमजोरी का आईना
है। हमारे औद्योगिक प्रशिक्षण संस्थान
प्रशिक्षकों की भारी कमी से जूझ रहे
हैं। मशरों पुराने हैं, पाठ्यक्रम दशकों
पुराने हैं और प्रशिक्षण पद्धति में न
ही आधुनिक तकनीकी संसाधनों का
इस्तेमाल है और न ही उद्योगों की
मार्ग चाल ध्यान रखा जा रहा है। उपर से
समाज में व्यावसायिक शिक्षा को अब
भी 'दूसरे दर्जे' की पड़ौस माना जाता
है। परिणाम यह होता है कि डिग्रीधारी
छात्र भी नौकरी की कसौटी पर खरे



असंतुलित कौशल

नहीं उतर पाते। सरकार ने इस संकट
को देखते हुए प्रधानमंत्री कौशल विकास
योजना और राष्ट्रीय कौशल विकास
मिशन जैसे पहल की हैं। बजट पर
ये योजनाएं बहुत आवश्यक दिखती हैं।
इनका मकसद युवाओं की उद्योग-
अनुकूल प्रशिक्षण देना और रोजगार
के लिए तैयार करना है। हालांकि जर्मनी
तकनीक कुशल और ही कहानी कहती है।

विभिन्न रिपोर्टों के अनुसार लगभग
30 प्रतिशत प्रशिक्षित युवाओं को
प्रशिक्षण के बाद भी रोजगार नहीं मिला
और जिनमें मिला वे अधिकतर असह्यो
और कम वेतन वाली नौकरियों में सिमट
गए। यह इस बात का सूचक है कि
केवल प्रमाणपत्र धमा देना समाधान नहीं
है। प्रशिक्षण की गुणवत्ता और उरुता
उद्योगों से जुड़ाव ही असली सफलता
तप करेगा। अभी भारत में यह समस्या
और गहरी है। अधिकांश योजनाएं शहरी
और अर्ध-शहरी क्षेत्रों तक ही सीमित हैं।
गांवों में प्रशिक्षण केंद्रों की संख्या बहुत
कम है। डिजिटल प्रशिक्षण कार्यक्रम
इंटरनेट कनेक्टिविटी की कमी और
तकनीकी सक्षमता की खाई के कारण

पूरी तरह कारगर नहीं हो पाते। गांव का
युवा चाहकर भी शहर जाकर प्रशिक्षण
नहीं ले पाता, क्योंकि वहां पहुंचने के
लिए न साधन होते हैं न संसाधन। इस
असमंजस को मिटाने के लिए भारत का
कौशल संकट दूर नहीं होगा। दुनिया
के सफल अनुभव बताते हैं कि यह
स्थिति बदली जा सकती है। जर्मनी
का दुजाल एमुकेशन सिस्टम इसका
उत्कृष्ट उदाहरण है। वहां छात्र पढ़ाई के
साथ-साथ उद्योगों में व्यावहारिक
प्रशिक्षण लेते हैं।

जापान की अप्रेंटिसशिप प्रणाली और
चीन के प्रमोव प्रशिक्षण केंद्रों ने भी यह
सबित किया है कि यदि उद्योग और
शिक्षा मिलकर चलें तो कौशल विकास
स्वतः सफल हो सकता है। इन देशों
की सफलता का आधार यही रहा है
कि उन्होंने युवाओं को केवल कितनों
तक सीमित नहीं किया, बल्कि उन्हें
वास्तविक काम का अनुभव दिलाया।
भारत को भी इसी राह पर चलना
होगा। समय की आवश्यकता है कि
कौशल योजनाओं को एक वैश्वीकृत मंच
पर साना होगा, ताकि चरदीत और

समन्वय सुनिश्चित हो। प्रशिक्षकों को
मानकृत प्रशिक्षण दिया जाए और उन्हें
समय-समय पर अद्यतन किया जाए।
पाठ्यक्रमों को उद्योग की जरूरत के
अनुसार बदलना होगा और ग्रामीण क्षेत्रों
को प्रशिक्षण केंद्रों के साथ जोड़ना होगा।
मेकालय प्रशिक्षण केंद्र, डिजिटल क्लब्स
और स्थानीय उद्योगों के साथ साझेदारी
इस दिशा में अग्रिम कदम हो सकते
हैं। साथ ही उद्योगों को भी पाठ्यक्रम
निर्माण और इंटरनशिप अवसर उपलब्ध
कराने में सक्रिय भागीदार बनना होगा।
सबसे महत्वपूर्ण बात यह है कि कौशल
विकास को केवल नौकरी पाने तक
सीमित न रखा जाए। आजीवन सीखने
की संस्कृति युवाओं में विकसित करने
होगी। तकनीकी इतनी तेजी से बदल
रही है कि एक बार सीखा गया कौशल
बुझ ही क्यों में अवसंगिक हो जाता है।
ऐसे में युवाओं को लगातार नए कौशल
सीखते रहना होगा। अवलोकन प्लेटफॉर्म
और माइक्रो-कोर्स इसमें सहायक बन
सकते हैं।

भारत की युवा शक्ति तभी वास्तविक
शक्ति बनेगी, जब उसे केवल डिग्री
नहीं, बल्कि दक्षता दी जाएगी।
बेरोजगारी को सबसे बड़ा कारण सिर्फ
नौकरियों की कमी नहीं, बल्कि युवाओं
में उपयुक्त कौशल का अभाव है। यदि
नीति-निर्माण और क्रियान्वयन में सुधार
किए जाएं, प्रशिक्षण की गुणवत्ता बढ़ाई
जाए और उद्योग-शिक्षा के बीच पुल
बनाया जाए, तो भारत न केवल अपने
युवाओं के लिए रोजगार सुनिश्चित कर
सकेगा, बल्कि वैश्विक प्रतिस्पर्धा में
अग्रणी भी बन सकेगा।

(लेखक कावेस संसद पूर्व एवं केंद्रीय मंत्री हैं)

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भारत विश्व की सबसे युवा
जनसंख्या वाला देश है,
जहां 65 प्रतिशत से अधिक
नागरिक 35 वर्ष से कम आयु के हैं।
यह जनसांख्यिकीय लाभार्थ भारत की
आर्थिक प्रगति की नई ऊंचाइयों तक ले
जाने की क्षमता रखता है। हमारे युवा केवल
तैयार हैं, लेकिन उनका अत्यधिकवादा
अक्सर नौकरी के मैदान में उठर जाता
है, क्योंकि उन्हें व्यावहारिक कौशल की
कमी महसूस होती है। असल सवाल
यही है कि क्या केवल डिग्री लेकर हम
इस अनसुलझे को पुनः पारें या फिर हमें
दक्षता और व्यावसायिक योग्यता की
ओर गंभीरता से बढ़ना होगा। दुर्भाग्य
से 2025 तक की तस्वीर बताती है कि
देश के केवल साठ प्रतिशत युवा ही
औपचारिक कौशल प्रशिक्षण प्राप्त कर
पाते हैं। जबकि जर्मनी, जापान और
दक्षिण कोरिया जैसे देशों में यह अनुपात
70 से 90 प्रतिशत तक पहुंच चुका है।
यही वजह है कि यहां के युवाओं की
रोजगार क्षमता और उत्पादकता भारत

How much is spent on children's education in India?

What does a recent report by the National Sample Survey show? Why is there a divide between girls and boys?

By *Shikha Jaiswal*

The story so far:

Despite a recent drop in the World Economic Forum's gender gap rankings, India has made steady progress in recent years in terms of enrolling more girls in school, with government data showing that girls now make up 48% of the school population. In higher education, in fact, the gross enrolment ratio for women is slightly higher than that of men. However, data collected as part of the National Sample Survey earlier this summer shows a more leaden gender gap that remains in education — the differing amounts of money that families spend on their sons as opposed to their daughters for their education.

What are the differences in expenditure?

The recent report on the Comprehensive Modular Survey on education, which collected nationwide data between April and June as part of the 83th round of the NSS, shows that the per-student expenditure on girls is lower than on boys during all stages of school education, from pre-primary to higher secondary, as well as across the rural-urban divide. The survey covered 52,085 households in 7,384 villages and 2,980 urban blocks across the country, with education-related information collected for 37,742 students currently enrolled in school.

In States such as Tamil Nadu and Kerala, boys and girls go to government and private schools in almost equal ratios.

In rural India, families spend ₹1,309 or 10% more on boys than girls in terms of course fees, textbooks, and stationary, uniforms, and transportation to school. In urban

India, the per-student expenditure on girls was ₹2,791 less than on boys. In urban India, by the time students are in higher secondary school, there is almost 20% more being spent on education for boys than girls. When course fees alone are considered, the gap widens, with families paying on average 21.5% more on fees for boys than for girls across the country.

This privatising of lower education is due due to the type of schools that Indian families choose for their children. About 58.4% of girls are enrolled in government schools, which are usually free of cost in terms of course fees, with only 24.3% of them having access to more expensive private school education. However, 34% of boys are enrolled in private (aided) schools. The gap goes beyond the school classroom, and extends to private tuition that many families consider essential for a quality education. Tuition classes now supplement school teaching at all stages of education, and overall, 26% of girls and 27.6% of boys are enrolled in such classes. When it comes to expenditure, however, the gap widens, especially at higher classes. By the higher secondary level, families are spending on average 23% more in terms of tuition fees on their boys in comparison to girls.

How does this vary by State?

States differ widely in terms of the gender gap in education. When it comes to enrolment of girls and boys in government schools versus private schools for instance, the biggest gaps can be seen in States/UTs such as Delhi, where almost 54% of boys go to government schools, compared to more than 60% of girls. On the other hand, almost 38.8% of boys go to more expensive private schools, compared to 25.6% of girls. Madhya Pradesh, Rajasthan, and Punjab also have gender gaps of more than 10 percentage points. In Gujarat, the gender gap is widest in urban areas, but narrower in rural areas. In States such as Tamil Nadu and Kerala, boys and girls go to government and private schools in almost equal ratios, while several northeastern States have flipped the script, sending more girls to private schools.

Expenditures are more skewed, especially in the higher classes. In higher secondary education, for instance, families in Telangana, Tamil Nadu and West Bengal spend nearly more on boys than girls, though they spend more on girls at the secondary level. In Tamil Nadu, for instance, the average education expenditure on girls at the secondary level is ₹23,796 compared to ₹22,552 on boys. In higher secondary, however, the expenditure on boys in the State has shot up to ₹35,971, compared to just ₹15,412 for girls. Part of this can be attributed to girls dropping out at that stage, though subsidies for girl students could also account for some of the difference. States like Andhra Pradesh, Himachal Pradesh, and Kerala also spend more on higher secondary girls, especially in urban India, where data shows that transport costs become a major factor, with parents keen on safety of the girl.

Expenditure on private coaching also varied by State, especially at the higher secondary level. In Haryana Pradesh, for instance, there was a stark gap between the ₹3,813 spent per boy student in higher secondary school enrolled for private tuition in comparison to the ₹1,590 spent per girl. Bihar, Jharkhand, Rajasthan, and Tamil Nadu were among other States which showed significant gender gaps in this regard.

Saffron guard

Rajendra Arlekar

The Kerala Governor, a former functionary of the BJP, faces criticism for 'saffronising' education and violating constitutional propriety

Sarath Babu George

When Rajendra Vishwanath Arlekar assumed charge as the 23rd Governor of Kerala on January 2, 2025, few were surprised by what followed. A steadfast Rashtriya Swayamsevak Sangh (RSS) loyalist and former Governor of Bihar and Himachal Pradesh, Mr. Arlekar's appointment was widely seen as a continuation, if not escalation, of the ideological and administrative friction that had marked the tenure of his predecessor, Arif Mohammed Khan.

A member of the RSS from a young age and later associated with the Bharatiya Janata Party (BJP) since 1989, Mr. Arlekar is a seasoned political leader from Goa. He served twice as a Member of the Goa Legislative Assembly. He held the post of Speaker from 2012 to 2015, and was Minister of Forest and Environment and Panchayati Raj from 2015 to 2017. He also led the BJP in the southwestern State for four years.

If Mr. Khan had redrawn the boundaries of gubernatorial conduct by repeatedly locking horns with the Left Democratic Front (LDF) government, Mr. Arlekar has wasted no time in sharpening the same edges, particularly in the contentious domain of higher education.

Kerala's universities have long been battlegrounds for political in-



fluence. The Communist Party of India (Marxist) [CPI(M)]-led LDF and the Congress-led United Democratic Front (UDF) have traditionally dominated academic bodies. However, the BJP made significant inroads during Mr. Khan's tenure by securing entry into the Senates and Syndicates of major institutions such as Kerala and Calicut Universities.

Mr. Arlekar picked up where Mr. Khan left off in asserting the Governor's authority over State-run universities, and insisting that he holds the "final say" in higher education matters. His assertion, backed by University Grants Commission (UGC) guidelines and some court verdicts, has clashed head-on with the LDF government's stance that State governments must retain control over publicly funded educational institutions. The impasse has led to a near-paralysis in university administration. Of the 14 State universities, 13 remain without regular Vice-Chancellors, with some positions lying va-

cant since October 2022. Interim appointments made by the Governor have often been met with non-cooperation from CPI (M)-dominated Syndicates.

Judicial intervention

The judiciary has often stepped in to break such deadlocks. The Supreme Court recently adopted crucial steps by appointing former Supreme Court judge Sudhanshu Dhulia to head the search-cum-selection committees for Vice-Chancellor appointments in APJ Abdul Kalam Technological University and Digital University Kerala.

Tensions between Raj Bhavan and the Kerala government have not been limited to education. Symbolism, too, has become a flashpoint. A portrait of 'Bharat Mata', depicted holding a saffron flag before a lion and the map of 'Akhand Bharat', has been prominently displayed during official functions at the Kerala Raj Bhavan, drawing sharp rebuke from both the LDF and the UDF.

Mr. Arlekar defended the image as a symbol of the nation. But the critics viewed its use, closely tied to RSS iconography, as an affront to constitutional propriety. Chief Minister Pinarayi Vijayan wrote formally to the Governor, warning against the display of politically or religiously charged imagery at State functions. Mr. Arlekar's ideological moorings run deep. A vocal admirer of Hindutva ideologue V.D. Savarkar, he is perceived as a key BJP emissary tasked with expanding the party's ideological footprint in a State long considered hostile to it.

Both the LDF and UDF accuse him of seeking to "saffronise" campuses under the pretext of reform.

At its core, the ongoing confrontation is a clash of two visions: one rooted in the federal autonomy of elected governments, and the other in a centralised, ideologically driven re-imagination of institutions.

As the LDF government nears the end of its term, the Governor's withholding of assent to key Bills, including those seeking to reform university governance and allow private universities, has further strained the already brittle relationship.

In Mr. Arlekar, Kerala may have received a new Governor some months ago, but the old battles continue, perhaps with even sharper ideological stakes.

'EDUCATION MUST BUILD SOCIAL COHESION'

In an interview with Professor J.S. Rajput, former NCERT Director and Atal Fellow at the Prime Ministers' Memorial Museum and Library, we explore NEP-2020, teacher reforms, and the role of culture in preparing India for 2047

There are considerable discussions being conducted in practically every sector of development and in every stratum of society on creating a Vikasta Bharat by 2047. Such discussions invariably refer to NEP-2020. You have been associated with education policy formulation, implementation and innovations for over five decades. What is your perspective in this context?

J.S. Rajput: I was selected as a full Professor in 1974 and, though I took voluntary retirement in July 2004 after the change of central government, I have remained more active in retirement than before. I have seen the implementation of the 1986 policy, which was a landmark initiative. It was part of the formulation and implementation of the 1986-93 policy. All the experience—both positive and negative—were seriously considered by the five-member T.S.R. Subramanian Committee, which submitted its report as the New Education Policy in 2016, of which I was a member. Subsequently, the NEP-2020 was formulated by a committee headed by Dr. K. Kasturirangan.

I am convinced that this policy, if implemented properly, could effectively create a constitutionally empowered equipped to ensure a Vikasta Bharat by 2047. One may recall that new policy formulations in education at suitable intervals are a compulsory responsibility of the nation and governments. Unfortunately, various ministries instead of cooperating devote themselves only to finding faults and insisting what does not suit their political ideologies.

I evaluated the process of curriculum change during the transition in the Third Millennium, and this curriculum was revised on November 14, 2006. It is recommended that all children be made aware of the basics of all religions, learn the commonalities, and respect differences. This would strengthen secularism and religious tolerance. It was unanimously approved by the Union and States in the Supreme Court of India in its judgment delivered on 14 September 2006. The Court ruled that these provisions do not create a religious sect. It is stated that if a law has been implemented 56 years ago, Indian society would have been far more secular. This is considered a the best

achievement of my professional career. Since then, my years have been devoted to enriching and strengthening social cohesion and religious unity. The NEP emphasises these factors strongly, and like most ideologically constructed debates, I also consider social cohesion and religious unity as the basic ingredients to achieve Vikasta Bharat.

How convinced are you that NEP-2020 could be implemented in its true spirit?

J.S. Rajput: I am convinced the

goal is achievable, provided political leadership remains supportive and inspiring at every stage. It requires active cooperation between the Centre and states, between national and state institutions, and strong support from society. Having worked in the Ministry of Human Resource Development for five years, my experience makes me cautious. Based on political ideologies, some states have already announced opposition to NEP-2020. This could harm students in schools, colleges, and

universities who aspire to contribute to reshaping India.

I often wonder why sectors like education, health, and nutrition could not, even after eight decades of independence, arrive at a national consensus. Other countries are equally passing 50% of schoolchildren are in government schools, which suffer from low credibility. Parents, despite financial strain, try their best to give their children to private schools. Even



Former President, Shri Pranab Mukherjee presenting the Padma Shri Award to Prof. Jagdish Singh Rajput, at a Civil Investiture Ceremony, at Rashtrapati Bhawan, New Delhi on April 08, 2015.

Indian Knowledge System (IKS)

I ₃	VATG	C ₃
<ul style="list-style-type: none"> ♦ Ideas ♦ Imagination ♦ Innovation 	<ul style="list-style-type: none"> ♦ Swami Vivekananda ♦ Sri Aurobindo ♦ Gurudev Tagore ♦ Mahatma Gandhi 	<ul style="list-style-type: none"> ♦ Currency ♦ Creativity ♦ Commitment
STEM	STPG	
<ul style="list-style-type: none"> ♦ Science ♦ Technology ♦ Engineering ♦ Mathematics 	<ul style="list-style-type: none"> ♦ Science ♦ Technology ♦ Production ♦ Gandhi 	

a literacy rate of 18% in 1947, with a population of 40 crore. India has now reached nearly 80% literacy, despite the population growing to 140 crore. That is commendable. But as systems expanded, quality was not safeguarded, leading to the shocking loss of credibility in government schools.

the practice of appointing teachers on small honorariums from schools to universities. NEP-2020 also expresses concern about the quality of teacher preparation programmes. The first requirement is to fill every vacant teaching post across the system. Those who compromised recruitment examinations must be weeded and penalised. Only then can the confidence of young people be restored in the system.

I OFTEN WONDER WHY SECTORS LIKE EDUCATION, HEALTH, AND NUTRITION COULD NOT, EVEN AFTER EIGHT DECADES OF INDEPENDENCE, ARRIVE AT A NATIONAL CONSENSUS

What suggestions do you suggest to remedy the situation?

J.S. Rajput: I have always opposed

What is the main outcome of the PMHEP research you conducted?

J.S. Rajput: The Indian academic community must give serious, unbiased thought to how we can develop a model of education 'rooted in national culture, committed to progress and 'open to the world'. In other words, a new synthesis has been evolved, synthesising the wisdom/heritage of the thoughts of Swami Vivekananda, Sri Aurobindo, Gurudev Tagore, and Gandhi—VATG. Alongside this, the power of ideas and imagination must never be allowed to erode. Every child must be

Further, every teacher must internalise responsibility. irrespective of the school, from rural to urban. Curiosity, Creativity, and Commitment—C₃. At independence, the challenge was expressed in terms of VATG—Science, Technology, Production, and Gandhi. This is also reflected in the diagram.

msk/10

The Jewish woman who became Jamia's Aapa Jaan

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For someone who died far from home and family, Gerda Philipsborn's resting place — open to the skies, in the private graveyard of Delhi's Jamia Millia Islamia University — is in good condition. The inscription carries Mirza Ghalib's Urdu couplet, capturing Philipsborn's rest for life: "My pleasure will not dim because of a desert of fatigue/ My footprint resembles the bubble of a wave of movement."

Born in 1896 in a wealthy German-Jewish family, opera singer, educator and social worker Gerda dedicated the last decade of her life to Jamia as a teacher in its primary school. By the time she died in 1943, she had endeared herself to the Jamia *brادر*, affectionately addressed as 'Aapa Jaan', a beloved elder sister.

Nothing much, save a daycare centre and a girls' hostel, today commemorates Gerda's enduring bond with Jamia, its founders and the first generation of teachers and students.

'One Of Jamia's First Women'

"Gerda was one of Jamia's first women, who immensely contributed to building its base — its primary section, where she introduced innovative methodology in pedagogy she had learnt at a kindergarten in Berlin," says former Planning Commission member Syeda Hameed, seated at her family home in Jamia Nagar, Delhi.

Both Hameed and former foreign minister Salman Khurshid are linked to Gerda through family associations. Khurshid's maternal grandfather Zakir Hussain, Abid Hussain, husband of Hameed's father's younger sister Salika, and Mohammad Mujeeb, historian Irfan Habib's uncle, were students in Berlin and were Philipsborn's first links to the subcontinent.

The three first met her around



Gerda Philipsborn (right) and her final resting place on the Jamia campus

1925 at a party hosted by Sarojini Naidu's younger sister Subhasini Chattopadhyay, and her political activist husband ACN Nambiar. The friends saw German society mostly through Gerda's eyes.

Gerda's father Jacob, an assimilated wealthy Jew cloth merchant, had a paying guest named Leo Sliard, who fell in love with her. At that time, Sliard, a gifted physicist, was working closely with Albert Einstein. Gerda spurned his marriage offer, but she had lost her heart to the stories of struggle that the three Indian friends narrated over food and coffee at Berlin's eateries and cafes. The friendship, especially with Zakir Hussain (who went on to become Jamia's VC and President of India), resulted in a strong bond, bringing her into the Jamia *brادر* in its nascent years.

From Berlin To Karol Bagh

Founded in 1920 in Aligarh, in response to Mahatma Gandhi's call to boycott British-funded institutions during the Non-cooperation Movement, Jamia moved to Delhi's Karol

Bagh in 1925. Founders Mohammed Ali Jinnah, Hakim Ajmal Khan and Dr M A Ansari shifted its location to avoid conflict with Mohammedan Anglo Oriental College, later Aligarh Muslim University. Fearing a freezing of funds if it broke ties with the Raj, AMU's trustees had ignored the Jamia leaders' call to shake off British influence. A decade later, Jamia moved again, this time to Okhla village.

Gerda and her three Indian friends were still in Berlin at this point, patronising its theatres and opera houses. "Together, the four friends attended cultural events and discussed what they had seen... their discussions must have moved to the topic of Jamia," writes Berlin-based historian Margret Pernau in her 2024 biography "Jamia's Aapa Jaan: The Many Lifeworlds of Gerda Philipsborn". Pernau, whose first encounter with Gerda was in the Jamia magazine, spent months meeting individuals who had seen her or heard of her.

Retired Urdu professor Sadique Rahman Kidwai, 91, remembers

Aapa Jaan though he was not in her class. "I heard a lot about her from my father and others who worked with her. Aapa nursed Jamia like her own baby," recalls Kidwai.

A few houses away from Hameed's bungalow lives Raza Mehdi, brother of Sughra Mehdi, prolific Urdu writer who wrote 'Baron Ki Aapa Jaan', a biography on Gerda's role in mentoring children. "Sughra Aapa used oral history and diaries that many in the Jamia *brادر* kept. This biography helped Gerda receive recognition," says Mehdi, a retired engineer and keeper of many Jamia stories.

How Jamia Overcame Funds Crunch

The end of the Khilafat movement, after Turkey's revolutionary leader Mustafa Kemal Atatürk abolished the Caliphate in 1924, had left Jamia facing a funds crunch, as it depended mainly on the movement for donations. Zakir Hussain, who was among the founders, was pursuing his doctoral studies in Germany back then. On receiving a telegram from the Jamia fraternity about its imminent closure, he urged the fraternity to hang in there till he was back. "Do not shut Jamia till we return," he replied before setting sail for Colombo along with Abid Hussain and Mohammad Mujeeb. When they arrived in Delhi, Zakir took over as Shaikhul Jamia or VC of Jamia, while Abid Hussain and Mohammad Mujeeb became his comrades-in-arms.

Despite Zakir's "advice, warnings and admonitions not to come" (Pernau's words), Gerda followed them to India, joining Jamia's primary school in 1933 and being assigned responsibility for the children in the hostel. She also taught English and German and contrib-

uted stories to *Payam-e-Taleem*, Jamia's Urdu magazine for children.

Tongues may have wagged over Zakir's "friendship" with Gerda, especially as he had borne her travel expenses and gone personally to receive her in Bombay. But the controversy settled after Mohammad Mujeeb, in his biography of Zakir Hussain, quoted his wife saying "Zakir Hussain told her (his wife) how they had got acquainted and how this acquaintance developed into friendship... there was no more to it than that."

TOI met Zakir's grandson Khurshid, currently president of India Islamic Cultural Centre on Lodhi Road, in his office. "At the dinner table, I remember my nana Zakir Sahab, whom we called Miyan, talking endlessly about Gerda and her commitment to Jamia. It never occurred to us that she was Jewish," recalls Khurshid. It never became clear whether Gerda converted, but Zakir Hussain recited Quranic verses as her end neared, and she got a Muslim funeral.



These three Ps are a bottleneck to Indian girls getting an education

Safeena Husain knows a thing or two about the value of education and what it means to persevere. The founder of Educate Girls, which earlier this week was awarded the Ramon Magsaysay Award, overcame poverty and violence to complete her studies. Husain speaks with **Shruti Sonal** about bringing nearly two million girls across India back to schools, AI's potential in the development sector, and what comes next. Edited excerpts:

■ How did your personal experiences lead you to start Educate Girls nearly two decades ago?

I grew up in Delhi under difficult circumstances. A part of my childhood was spent in a lot of poverty and there was violence, abuse, and lots of turbulence, because of which my education was incomplete. I felt like a failure and my self-esteem went for a toss. But I was lucky because a family friend stepped into my life and gave me love and affection. She inspired and motivated me to get back to education. It was because of the support she provided that I ended up going to the London School of Economics at 21. Even before going for any class, I saw myself differently, the world saw me differently, and it was deeply transformative. After that, I moved to the US and learned how to run an NGO and build programs in remote areas. By the time I came back to India in 2006, I was asking myself: what is the next step for me? I knew I had to work in the domain of girls' education, as my personal journey had brought me to that point.

■ What's the biggest hurdle to girls' education?

I'd say it's the three Ps: poverty, patriarchy, and policy. Poverty puts pressure on girls to run the household so that their parents can go and work on the farm or do daily wage labour. Patriarchy deprioritises girls and marginalises them even further in decision-making. The third is policy. Today, in terms of ele-

mentary education, we have the Right to Education (RTE) Act. However, for older girls, because secondary schools tend to be further away and distance learning opportunities are still not completely available, systemic factors become a huge bottleneck.

FOR THE RECORD

■ Working across the country, how do you convince parents to educate girls?

Our job used to be much harder before the RTE Act. When we used to have conversations with parents, they'd say, "But where is the school?" Now, at least there's a primary school within a kilometre, and a middle school within three. The Beti Bachao Beti Padhao campaign has helped too, as villagers have heard of the slogan and think it must be important. There's been some progress, but in areas that are rural, remote and tribal, there are still red patches when it comes to girls' education. We do mindset change through a people-powered model, which relies on our 23,000 Team Balika volunteers, many of them young men, and our field staff who are from the same villages. I firmly believe that you and I going to a villager's house and lecturing them about girls' education and pointing fingers is not going to work. That messaging has to come from a local person whom people listen to. And it has to be a local message. We can only give a voice to members of the community.

■ Yours was the first NGO to use AI for its projects...

We built an algo-

rithm that can predict the number of out-of-school girls per village. It uses our door-to-door survey data combined with publicly available data. Usually, what we find is that out-of-school girls are clustered in certain hotspots. In a district that has 1,000 villages, you might find that 80% of out-of-school girls are actually in 20-30% of the villages. We can now predict which pockets they will be in, and validate that with our on-ground search surveys and information. A precision targeting approach helps trim the timeline of implementation by nearly 40-45%.

■ What plans for the future?

Winning an award like this makes you more ambitious. In the last 18 years, we have worked with communities to mobilise over two million girls to come back into the classrooms where they belong. In the next 10 years, we're setting our vision even bigger, of having 10 million learners. We also want to work more with adolescent girls, who either dropped out or failed classes, and are not eligible to go back into formal schooling.

■ Tell us about the memoir you have coming out soon.

It is more about the journey of Educate Girls, mixed in with my personal experience as much as it relates to this journey and this mission.

■ You're the daughter of noted actor Yusuf Hussain and are married to director Hansal Mehta. Can cinema help change gendered attitudes?

Cinema can definitely help in bringing about a norm shift. But in terms of my husband's work and mine, it's a separation of church and state. He doesn't tell me how to do education. And I prefer not to give him any kind of feedback about cinema, which I believe is the key to a happy marriage. In our work, we use storytelling, but it consists of stories from the community itself, not from outside.

■ How has the work shaped you as a person?

Patriarchy stains us all. Some of us may be a lighter shade of pink, while others may be deep red, but it stains us all. None of us is immune to patriarchy, and therefore, all of us have a role to play in constantly being aware of that, unlearning those behaviours, and then relearning new ones.



Safeena Husain, founder of Educate Girls, with some of the students.



Magsaysay just a start for Safeena's Team Balika

KAVITA KANAN CHANDRA

THE recognition has brought the spotlight on education of girls, but it is just a beginning, every single girl deserves education, says Safeena Husain, founder of Educate Girls, the non-profit organisation that has been chosen for the Ramon Magsaysay Award this year.

Safeena, who grew up in Delhi and studied at Delhi Public School, graduated from the London School of Economics and Political Science in 1995. There was a gap year in her education, which she says was the lowest phase in her life. "Getting admission to LSE suddenly changed everything. I saw myself differently, the world saw me differently. It was truly transformative," says Safeena.

Safeena shifted to San Francisco, working with a start-up in Silicon Valley. But something deep inside urged her to move on and find purpose in life. She started volunteering in health and welfare for the underprivileged in the US, which took her to Latin America and Africa. Her experiences there prepared

"We have handed over 8,000 successful villages for the community to manage."

The success, she underscores, lies in the strength of community volunteers — "Team Balika", the foot soldiers of the organisation. Herself a volunteer, she knew the power of volunteering, "for the motivation comes from within. It enables you to meet other youngsters and network with passionate, like-minded people".

In schools, Team Balika volunteers conduct 'gyan ka pitara', an activity-based fun-filled foundation course in literacy and numeracy, while there are life-skills activities like 'bol sabha' for older children.

The slogan 'Meri Gaoon, Meri Samasya, Main Hoon Samadhan' (My Village, My Problem, I Am the Solution) sums up their motivation. While their initiative 'Vidya' is aimed at enrolling out-of-school girls back into schools, 'Pragati' targets older girls who had to drop out due to marriage or other responsibilities. These older girls are helped by the NGO teachers for six-eight months to prepare for examinations under the open board.

Financially, what's worked for the NGO is the Development Impact Bond, a payment-by-results financing model, and TED Audacious Project, a collaborative funding initiative. They have also been making optimum use of data by using an app-based monitoring system, besides artificial intelligence.

Village school management committees have been revived with regular elections. "We have created a chart for these committees to monitor any issues. They are questioning the authorities — be it no running water in the toilets, or lack of teachers' attendance," says Safeena.

The road ahead remains full of challenges, says the founder of Educate Girls and wife of filmmaker Hansal Mehta. "Families don't give priority to the education of girls, restrain their mobility, marry them at an early age and push them to do household chores. Things are changing for the positive though. The number of out-of-school younger girls has decreased dramatically," says Safeena, adding that the problem now lies with older ones.

"There is huge positivity as the girls have access to education. There's the Right to Education Act and 'Beti Bachao Beti Padhao' campaign; you don't have to go and ask families to teach girls, for everyone has heard about it," she says. The challenge is to actually get them to act, shed inhibitions, and send girls to school, she adds.

— The writer is a freelance contributor

Educate Girls has helped 15 lakh girls in 35,000 villages of Bihar, Rajasthan, Madhya Pradesh and Uttar Pradesh return to school

her to build the Educate Girls model. "I worked in healthcare in Ecuador's Amazon jungle, where you have 40 homes in one place, then you walk eight hours to reach another 40 homes. Back in India, I wasn't intimidated by working in remote and tribal areas due to my grounding there," she says.

Back in India in 2005, Safeena wanted to work on the education of girls, an issue close to her heart. She realised that the biggest problem lay in rural areas. Starting small in 2007, Educate Girls' teams would visit every single village in a district and identify out-of-school girls in each household. Thereafter, they'd convince families to enrol them back in schools.

Working closely with the local community and government, Educate Girls has so far helped 15 lakh out-of-school girls in 35,000 villages of Rajasthan, Madhya Pradesh, Uttar Pradesh and Bihar return to school. The retention rate is 90 per cent. The target is one crore girls in the next 10 years, says Safeena, adding,



Yugank Goyal

Each year, several Indian students leave their small-town homes to pursue higher education in major Indian cities such as Delhi, Mumbai, Bengaluru, and Pune, as most universities and colleges are located in urban areas. About 32% of Indian colleges are located in just 6% of the nation's districts, with over a thousand colleges in Bangalore Urban alone, according to the AISHE Report 2021-22. As a result, a few concentrated urban centres have come to represent the future of higher education in India and has become so embedded in our cultural fabric.

However, this trend lacks any logical planning or necessity. A university's calibre does not necessarily depend on where it is located. In fact, for the longest time, small towns in this country were home to some of the most revered educational institutions including Nalanda and Takshashila. Even modern universities of today like Oxford, Cambridge, Princeton, Caltech, Stanford, Yale, Leiden, Warwick, Heidelberg, Duke, and Dartmouth have flourished outside of urban cities.

For far too long, Indian universities have been viewed as urban centres of knowledge that are cut off from the country's mainland. The tremendous sociocultural, ecological, and intellectual wealth found in India's

smaller districts has been disregarded by this model. If we were to embed universities in these districts, where real action and change are happening, we could unlock a transformative potential that

currently remains untapped.

Why it works

Here are four compelling reasons why this alternative vision is not just desirable but necessary for India's future:

First, it allows for knowledge creation in local realities. The purpose of any university is to produce knowledge that benefits society. A university becomes a key part of a district com-

munity when it is situated within this ecosystem. This allows our academic institutions to come in direct contact with the difficulties and challenges faced by the local communities at a grassroots level, whether it is the scarcity of water in Rajasthan or the rise in tourism in Uttarakhand. By being in close proximity with district communities, universities can problem-solve creatively and collaboratively. It also allows our country's brightest minds to collaborate with the local communities and embrace indigenous knowledge and wisdom, thus expanding the horizons of global understanding.

Second, it will help retain local talent. Most students move to bigger cities each year to pursue higher education, which is depleting the intellectual capital from our rural and semi-urban communities. This also causes students to become disconnected from their cultural roots, causing cultural deterioration and a feeling of estrangement from their own communities. In the context of faculty, universities in metropolitan areas have overshadowed and stunted the rise and recognition of local intellectuals. Decentralising universities would help reverse these trends.

Third, education spaces across districts of India can help vitalise local economies. Universities are significant economic drivers. Consider the cities of Aligarh, Kharagpur, and Pilani, where educational institutions serve as

the hub of local markets, promoting innovation, entrepreneurship, investment, and the creation of jobs.

Fourth, this will serve as a meaningful academia-industry and academia-government dialogue. In large cities, universities are often not connected to the local industries or governments that they are meant to impact. Hence, positioning them in districts would encourage direct engagement with the District Magistrate's office or local MLAs to solve pressing issues. Universities will also establish stronger connections with local businesses, which will help develop curricula that address current demands and helps in local hiring.

Looking ahead

Although this seems like a long-term goal, we need to consider this shift. That way, universities would no longer be remote establishments bound to major cities and will be community-centred, problem-solving engines that drive economic development and prevent cultural drainage. Over time, they can develop niche expertise that benefits both local communities and the nation as a whole. This approach ensures that universities take regions as the syllabus and not as a site. In a country as diverse and dynamic as India, we need to realise that polycentric education is not a choice but a necessity.

Views are personal.

The author is a faculty of public policy and director of the Centre for Knowledge Alternatives, FLAME University.



Learning from the land

By embedding universities in the country's smaller districts, we could unlock a transformative potential that currently remains untapped

शिक्षकों की पात्रता

सुप्रीम कोर्ट ने कक्षा एक से आठ तक के छात्रों को पढ़ाने वाले शिक्षकों के लिए दो साल में शिक्षक पात्रता परीक्षा यानी टीईटी पास करने की अनिवार्यता का जो फैसला दिया, उसे लेकर असहमति के स्वर उभरते रहे हैं। चूंकि सुप्रीम कोर्ट के इस फैसले से देश भर के लाखों शिक्षक प्रभावित हो रहे हैं, इसलिए असहमति और विरोध के स्वर सुनाई देना स्वाभाविक है। ऐसे स्वर इसलिए सुनाई दे रहे हैं, क्योंकि सुप्रीम कोर्ट ने उन शिक्षकों के लिए भी टीईटी पास करना अनिवार्य कर दिया है, जिनकी नियुक्ति शिक्षा अधिकार कानून लागू होने से पहले हुई थी। सुप्रीम कोर्ट ने केवल उन शिक्षकों को राहत दी है, जिनकी नौकरी पांच साल से कम है। हालांकि यदि ऐसे शिक्षक पदोन्नति चाहेंगे तो उन्हें टीईटी पास करना होगा। इसे लेकर भी असंतोष है। असंतोष का एक कारण सुप्रीम कोर्ट की ओर से यह स्पष्ट किया जाना अधिक है कि जो शिक्षक टीईटी पास नहीं कर पाएंगे, उन्हें नौकरी छोड़नी होगी। सुप्रीम कोर्ट के इस फैसले को लेकर शिक्षकों के संगठन राज्य सरकारों के साथ केंद्र सरकार पर हस्तक्षेप करने के लिए दबाव बना रहे हैं। इसके अतिरिक्त इस फैसले के खिलाफ पुनर्विचार याचिका दायर करने की भी पहल हो रही है।

कहना कठिन है कि इस मामले में क्या होगा, लेकिन इतना अवश्य है कि यदि शिक्षा की गुणवत्ता सुधारनी है तो शिक्षकों के पठन-पाठन की गुणवत्ता पर भी ध्यान देना होगा। इसकी अनदेखी नहीं की जा सकती कि अपने देश में कक्षा एक से लेकर आठ तक की शिक्षा प्राप्त करने वाले बहुत से छात्रों को वैसी शिक्षा नहीं दी जा पा रही है, जैसी अपेक्षित ही नहीं, बल्कि अनिवार्य है। स्थिति यह है कि कक्षा पांच-छह में पढ़ने वाले अनेक छात्र सामान्य जोड़-घटाव तक नहीं कर पाते। आमतौर पर यह स्थिति सरकारी स्कूलों में पढ़ने वाले छात्रों की है, लेकिन निजी स्कूलों की भी कोई बहुत अच्छी स्थिति नहीं। निजी स्कूलों में पढ़ने वाले छात्रों की एक बड़ी संख्या ट्यूशन और कोचिंग लेने को बाध्य है। यह सब शिक्षा की दयनीय स्थिति का परिचायक है। किसी भी देश की वास्तविक प्रगति का एक बड़ा आधार शिक्षा होती है। नई पीढ़ी को गुणवत्तापूर्ण शिक्षा कैसे मिले, इसे लेकर सभी को अपने स्तर पर प्रयत्न करने होंगे। इसमें सरकारों के साथ शिक्षक संघों का भी सहयोग आवश्यक है। सुप्रीम कोर्ट ने शिक्षकों के लिए टीईटी पास किए जाने की अनिवार्यता का जो आदेश दिया, उस पर सरकार कोई दखल देती है या नहीं अथवा स्वयं शीर्ष अदालत पुनर्विचार करे या न करे, लेकिन ऐसा कुछ नहीं होना चाहिए जिससे शिक्षा की गुणवत्ता के स्तर को ऊंचा उठाने के प्रयासों को धक्का पहुंचे। 6

शिक्षा में भी बढ़े स्वदेशी का भाव

इन दिनों प्रधानमंत्री नरेन्द्र मोदी और अन्य वरिष्ठजन देशवासियों से स्वदेशी वस्तुओं को अपनाने का आग्रह कर रहे हैं। इसके लिए जीएसटी में सुधार और कुछ नीतियों में बदलाव किए गए हैं, ताकि भारतीय नागरिक अपने देश की वस्तुओं को प्राथमिकता दें, लेकिन इस 'स्वदेशी राग' में शिक्षा के क्षेत्र में स्वदेशी का महत्व, जैसे कि मेडिकल, इंजीनियरिंग या अन्य विषयों की पढ़ाई के लिए अपने देश के विश्वविद्यालयों को ही चुनने की बात कहीं नहीं उठाई जा रही है। यह सच है कि आजादी के बाद भी बच्चे विदेश पढ़ने जाते थे, लेकिन तब हमारे पास विश्वविद्यालयों की संख्या इतनी नहीं थी। वर्तमान में जब हमारे पास लगभग 1000 विश्वविद्यालय और हजारों निजी एवं सरकारी कालेज हैं, तब विदेश पढ़ने जाने के कारण क्या हैं? इसका एक बड़ा कारण यह है कि आज अधिकांश राजनेता, नौकरशाह और विश्वविद्यालयों के प्राध्यापक, जो थोड़े बहुत अमीर हैं, उन्होंने अपने बच्चों को विदेश भेजने का आसान विकल्प चुन लिया है। आंकड़े बताते हैं कि पिछले पांच वर्षों में विदेश में पढ़ने वाले छात्रों की संख्या दोगुनी से भी अधिक हो गई है। एक अनुमान के अनुसार, लगभग 15 लाख छात्र विदेश में पढ़ाई कर रहे हैं, जिनमें सबसे अधिक अमेरिका, कनाडा, आस्ट्रेलिया और इंग्लैंड में हैं। भारतीय छात्रों की विदेश में पढ़ाई की चाहत को देखते हुए यूरोप, सिंगापुर और अन्य देशों ने भी विभिन्न प्रलोभन नीतियां अपनाई हैं।

एक ओर देश में युवा मेडिकल की पढ़ाई के लिए भटक रहे हैं, दूसरी ओर लाखों गांव-कस्बे अच्छे डाक्टरों की तलाश में हैं। भारतीय छात्र लगभग 90 से अधिक देशों में डाक्टरी की पढ़ाई कर रहे हैं। इस बीच आइआइटी की संख्या बढ़कर 23 हो गई है, लेकिन सरकारी आंकड़े बताते हैं कि इनमें लगभग 50 प्रतिशत फैकल्टी की सीटें खाली हैं और शिक्षकों की कमी के कारण ये संस्थान अस्थायी शिक्षकों पर निर्भर हैं। इसके चलते शिक्षा, पाठ्यक्रम और शोध में गिरावट आई है, जिससे मेधावी छात्र विदेश जाने के लिए मजबूर हो रहे हैं। छात्रों की बढ़ती संख्या को देखते हुए इन सभी देशों ने बीजा और



प्रेमपाल शर्मा



अपना स्तर बढ़ाए भारतीय शिक्षा संस्थान • फाइल

विश्वविद्यालय की फीस भी लगभग दोगुनी कर दी है। प्रति विद्यार्थी एक से दो करोड़ रुपये से कम खर्च नहीं आता। क्या विदेश में पढ़ाई करना इतना आसान है? जिस देश की 80 प्रतिशत जनता को राशन के गेहूँ-चावल पर गुजारा करना पड़ता हो, क्या उनके लिए विदेश जाना संभव है? हां, उन नौकरशाहों और उच्च पदों पर रहने वालों के लिए, जिनकी अच्छी खासी तनखाह होती है, यह संभव है। वे अपने बच्चों को विदेश में पढ़ने के लिए प्रोत्साहित करते हैं, जबकि देश के शिक्षा संस्थानों में सुधार की दिशा में कोई ठोस कदम नहीं उठाते।

हाल के समय में दिल्ली विश्वविद्यालय भी गिरावट की चपेट में आ गया है। इस केंद्रीय विश्वविद्यालय में दाखिले के लिए पिछले पांच वर्षों से कामन टेस्ट शुरू किया गया है, और नई शिक्षा नीति को भी लागू हुए पांच साल हो गए हैं, लेकिन अपेक्षित परिणाम नहीं आ रहे हैं। यह आवश्यक है कि कोई उच्च स्तरीय समिति तुरंत इसका पुनरावलोकन करे। शिक्षकों की भर्ती के लिए भी यूपीएससी जैसा कोई भर्ती बोर्ड बनाया जाए। जहां छात्रों के दाखिले के लिए कई स्तर की परीक्षाएं होती हैं, वहीं शिक्षक-प्रोफेसर की

पिछले पांच वर्षों में विदेश में पढ़ने वाले छात्रों की संख्या दोगुनी से भी अधिक हो गई है

भर्ती और पदोन्नति के लिए कोई ठोस प्रक्रिया नहीं है। जब भी शिक्षकों और शिक्षा-शोध की बेहतरी के प्रयास किए जाते हैं, तो सबसे अधिक विरोध शिक्षकों की कुछ जमातें करती हैं, जो न तो कक्षाएं लेना चाहती हैं, न बच्चों की फीडबैक पर भरोसा करती हैं और न ही प्राचार्य के वार्षिक मूल्यांकन पर। इन्हीं सब कारणों से हमारे विश्वविद्यालय दुनिया की रैंकिंग में गिरते जा रहे हैं। पिछले वर्षों में इन्हीं चुनौतियों से जूझते-हारते बच्चे आत्महत्या की ओर बढ़ रहे हैं। आइआइटी, आइआइएम जैसे संस्थानों में आत्महत्या की घटनाएं दिल दहला देती हैं। मामला सुप्रीम कोर्ट में भी पहुंच गया है। इसके लिए एक समिति भी बनाई गई है, लेकिन क्या केवल समिति बनाने से समस्या का समाधान होगा? क्या सरकार ऐसी नीति नहीं बना सकती जिससे विश्व स्तर पर शिक्षा में हो रहे परिवर्तन भारत में भी लागू किए जा सकें?

वर्तमान केंद्र सरकार ने भारतीय भाषाओं के पक्ष में अच्छा काम किया है, लेकिन शोध और अन्य नवीन वैज्ञानिक पहलुओं पर अपेक्षित परिणाम आने बाकी हैं। यह देश का सौभाग्य है कि हमारे पास दुनिया की सबसे युवा आबादी है, और उनकी मेहनत का लोहा पूरी दुनिया मानती है। ये युवा बदलाव तभी लाएंगे जब उन्हें सही दिशा मिले। इसके लिए हमें शिक्षा में भी स्वदेशी का प्रण लेना होगा। शिक्षा दुनिया और समाज में परिवर्तन का सबसे बड़ा हथियार है। हमें ऐसे कदम उठाने की आवश्यकता है कि जहां धर्म, जाति, गोत्र और क्षेत्र को भूलकर मेरिट और योग्यता को प्राथमिकता मिले। 2009 के नोबेल पुरस्कार विजेता वेंकट रामकृष्ण का कथन याद आता है कि अमेरिकी विश्वविद्यालय शोध और शिक्षा के मामले में न जाति देखते हैं, न धर्म, और न ही आप कहां से आए हैं। वे बस यही देखते हैं कि आपका लक्ष्य क्या है। इसी कारण वे पिछले 200 वर्षों से दुनिया के सर्वश्रेष्ठ विश्वविद्यालयों में अखिल बने हुए हैं। यदि हम शिक्षा में क्रांतिकारी सुधार की दिशा में कदम बढ़ाते हैं, तो हर क्षेत्र में स्वदेशी का महत्व बढ़ेगा।

(शिक्षाविद लेखक भारत सरकार में संयुक्त सचिव रहे हैं)

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When teachers are held hostage by the system

PAVAN SONI

Have you ever been in the shoes of a teacher who cannot reprimand students, monitor their behaviour, fail no one, or even stop them from walking in and out of their class right when the teacher is trying to concentrate? If you have been a teacher ever, you might have experienced the helplessness involved in this situation.

Even guest lecturers are obliged to go through this, hoping that one of the two parties survives the ordeal. Mostly, it is they learning how not to rock the boat, keep it placid, without burning the bridges. Even a slight assertion of one's position, let alone intellect, can be counterproductive.

The predicament of the current educational system is that teachers are sandwiched in not just two, but in four dimensions. The four dimensions of this vice are: 1) parents 2) promoters and management 3) society and social media, and 4) recruiters and economy.

Each of the stakeholders has urgent and often conflicting demands, and the hapless teacher cannot even ask for a raise. Parents expect the ward to carry forward their misplaced ambitions, oblivious to their capabilities or the economic realities. They expect the teachers to hone their offspring's intelligence, creativity and character over the six hours, even though the child spends a far greater time at home. It is almost as if upbringing is outsourced.



For the school's promoters and management, saying 'no' to a client doesn't amount to good business sense. The leaders are convinced that a happy customer is one whose ward is exposed to the latest and greatest, without the slightest physical or intellectual difficulty.

Since the hard infrastructure is the more visible dimension of growth, as opposed to the soft, the teachers are the last ones to be invested in. For counsellors, it isn't easy to convince schools about teacher development programmes.

There is a huge pressure on the schools to deliver a workforce and create jobs in future.

The syllabus often appears outdated, the style seems trite, and the teacher appears incompetent at bridging the generational gap. The WhatsApp university fills the informational chasm with low-value din.

As parents and students catch up on various WhatsApp groups, social media channels and more, the whole idea of a child's absorptive capacity is lost. Everyone is engaged in an arms race to be on the top. Bring in the vagaries of the economy that is obliged to adopt automation while safeguarding employment, the teacher is solving a problem created by others. They are expected to prepare a *homo economicus* who will survive for the next 40

years, all in a three-credit course with 75 per cent compulsory attendance.

A teacher who succumbs to these pressures in any way would risk being called out on the professional front. A teacher cannot do much when a student or parent is confident that ChatGPT knows it all and that they have to just 'get through' this ordeal. Corporal punishments are a bygone, outdated, inhumane practice, but even verbal reprimands are out of question today. A teacher is inches away from her video 'leaked' on social media, and her career is finished.

This is when a teacher feels helpless, held hostage by her very patrons, those whom she is supposed to serve, and those whose future she ought to shape.

It's time for us to gather the courage to prioritise education over economics, for the idea has always been to shape the character of the student. Parents must take charge of their wards, along with teachers and make it less fashionable to label schools as 'creativity killers'. Promoters must take the lead and conduct classes, and the businesspeople must stop plucking the fruits and instead invest in the roots. As a teacher, I reckon that the tribe has been shortchanged, for they aren't paid even remotely as close to what they are expected to pull. It starts with parents. Yes, you!

(The author teaches at a IIMB)

3/4/11

Ranking pitfalls

NIRF should help improve both quality and equity in higher education

India Rankings (IR) 2025, based on the National Institutional Ranking Framework (NIRF), held few surprises. As in previous years, older public institutions with a history of academic excellence dominated the top spots. Since its inception in 2016, the number of participating institutions has grown significantly, from 3,565 to 14,163, and the scope has expanded from four categories to 17, spanning a wide range of higher education sectors. However, the ranking parameters are still far from perfect. Institutions are evaluated based on five key parameters: teaching, learning, and resources (30%), research and professional practice (30%), graduation outcomes (20%), outreach and inclusivity or OI (10%), and peer perception (10%). Union Education Minister Dharmendra Pradhan is right in his scepticism about the peer perception parameter as this is feedback gathered from subject experts and employers. It can be subjective and prone to influence and prejudice, as it relies more on an institution's reputation than its actual reputability, often to the disadvantage of suburban or State-run higher education institutions. As it accounts for 10% of the total weight, it can skew rankings. A review is thus necessary.

As with any global ranking, the NIRF has its own set of flaws. While it claims to rely on verifiable metrics and third-party audits of research, it depends heavily on bibliometric data and self-declared inputs from institutions. Of concern is the treatment of the OI parameter. The NIRF booklet on the IR focuses only on outcomes related to regional and gender diversity. It conspicuously omits data on students who are economically and socially disadvantaged and with disabilities, despite these factors each having a 20% weightage within the OI component. The fact that OI is not adequately prioritised is evident: only Jawaharlal Nehru University and the All India Institute of Medical Sciences, New Delhi, are among the top 10 institutions with OI scores above 70. This is troubling as access to higher education remains restricted for marginalised communities. The NIRF must expand the scope of OI to include institutional adherence to communal reservation policies in faculty recruitment. Central institutions continue to fall short in filling vacancies for the OBC, SC and ST categories. Such affirmative action is crucial for India's progress as an egalitarian nation. Also, the IR must become more than just an annual, ritualistic event. Its insights should be used to address deep-rooted issues such as India's regional imbalances; shortage of faculty with doctoral qualifications outside the top 100 institutions; over 58% of management institutions reporting zero research publications, and the need for legacy institutions to mentor emerging ones. Above all, there must be action against institutions that submit false data. Without course correction, the NIRF risks becoming a mere ranking platform that allows private institutions to develop themselves as brands, doing little to improve the overall quality and equity in higher education.

Private kindergarten costs are disproportionately high

Expenditure gap between private and government schools across levels hints at possible overpricing

DATA POINT

Sambavi Parthasarathy
Vignesh Radhakrishnan

Data from a recent government survey suggests that the cost of private kindergarten education in India is disproportionately high. Two sets of data from the Comprehensive Modular Survey: Education 2025 point to this conclusion.

First, the cost gap between private and government schools is widest at the pre-primary level – over 20 times – while it narrows considerably at higher levels. Second, within the private system itself, expenditures rise only marginally across successive levels of schooling, in contrast to government schools where costs increase nearly nine-fold, suggesting that a large share of private schooling expenses are front-loaded at the entry stage.

The data includes only those students who reported a non-zero school-related expenditure (labelled as 'reported' students). Also, private schools refer to private unaided schools. The survey was conducted in April-June 2025.

Chart 1 shows the average school expenditure per 'reported' student (in ₹) during the 2025 academic year in rural India. Private kindergarten education costs ₹17,988 per year on average – nearly 22 times higher than in government pre-primary schools (₹823). The private-government school cost gap narrows at higher levels of schooling.

In rural areas, at the primary level, private school education costs about 11 times more than government schools; in middle school, 9.5 times; in secondary, 6 times; and in higher secondary, 4.5 times.

Chart 2 shows the average school expenditure per 'reported' student in urban India. Private kindergarten education costs ₹26,188 per year on average – nearly 16

times higher than in government pre-primary schools (₹1,630). In urban areas too, the private-government school cost gap narrows at higher levels of schooling. In urban areas, at the primary level, private school education costs about 11 times more than government schools; in middle school, 10 times; in secondary, 8 times; and in higher secondary, 6 times.

State-wise data reveal even wider gaps at the pre-primary level. In urban Karnataka, private kindergarten education costs ₹49,271 per year on average – nearly 72 times higher than in government schools (₹688). This is the highest multiple among all States in urban areas. The gap is 40 times in Odisha, and over 35 times in Rajasthan, Maharashtra, and Gujarat. In rural areas, the gap was highest in Chhattisgarh (over 100 times), followed by Andhra Pradesh and Tamil Nadu (over 40 times each), and Gujarat and Karnataka (over 35 times). Notably, Gujarat and Karnataka appear in both the rural and urban lists (Chart 3).

The figures presented till now illustrate what was noted before – that the private-government school cost gap is widest at the pre-primary level.

Average school expenditure per 'reported' student between pre-primary and higher secondary levels in India is compared in Chart 4. In government schools, costs rose from ₹823 per year at the kindergarten level to ₹7,308 in higher secondary in rural areas – a nearly nine-fold increase. In urban government schools, the rise was more modest, at about 4.7 times. In contrast, in private schools, costs increased from ₹17,988 per year at the kindergarten level to ₹33,567 in higher secondary in rural areas – less than a two-fold rise. The increase was similarly under two times in urban areas in private schools.

The figures in Chart 4 show that cost increases across levels are marginal, suggesting a possible front-loading of costs.

Front-loading school fees

The data for the charts were sourced from the Comprehensive Modular Survey: Education 2025, released by the Ministry of Statistics and Programme Implementation



Chart 1: Average school expenditure (₹) per reported student (figures above bars) by level of education in rural areas. Figures in bold are multiples



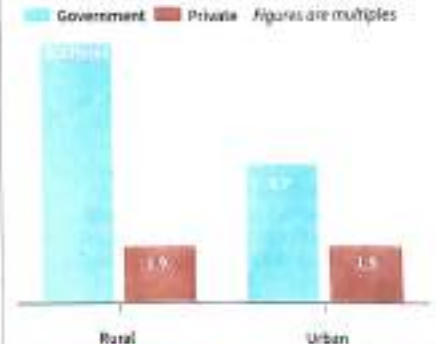
Chart 2: States with the widest private-government school cost gap at the pre-primary level. Figures are multiples



Chart 3: Average school expenditure (₹) per reported student (figures above bars) by level of education in urban areas. Figures in bold are multiples



Chart 4: The difference in average expenditure per reported student between pre-primary and higher secondary levels



Education 5.0: Shaping tomorrow's learners

PROF DAISY BORA TALUKDAR

If we teach today's students as we taught yesterday, we rob them of tomorrow.

— John Dewey

The educational landscape of the 21st century is not easy to define, as it shows greater diversity. The 'one-size-fits-all' classroom teaching is no longer appropriate. The paradigm shift, from learning the 3 'R's – Reading, Writing and Arithmetic – along with science and language, to the 21st-century age of 3 'T's – Information acquisition, Information analysis and Information display, has exposed learners to a virtual world where knowledge is unlimited and easily available. The educational scenario emphasises different learning styles, encapsulated in phrases like personalised learning, individualised learning, integration of the curriculum, students' voice, and authentic learning. Learning is all about the integration of multiple disciplines. Learners will now constantly learn by positioning and repositioning themselves to meet the needs of the changing world and workforce.

From Education 1.0, where emphasis was on pedagogical teaching based on the 3 'R's, it became Education 2.0, where communication became integral in the teaching-learning process through multimedia and technology. Education 3.0 is an umbrella term coined by educational theorists to describe a variety of ways to integrate technology into teaching-learning, blending both classroom and online teaching. Making significant changes in the higher education landscape, it emphasised learning of the 3 'C's – Connectors, Creators and Constructivists – with a heuristical approach.

The different dimensions of Education 4.0

are: personalised teaching, content development, virtual classrooms, and Massive Open Online Courses (MOOCs). Its core components include competencies, learning methods, information and communication technologies, and infrastructure. It uses the convergence of technology such as AI and the Internet of Things (IoT), all leading to personalised learning.

Education 5.0 is the new revolution occurring in education, where humans and not technology are emphasised. It is not about technology controlling our lives, but about humans holding the key. It is about 're-humanising' – preparing intellectually, socially and emotionally strong individuals who are concerned and mindful of their health and personal development, including motivation and creativity, and bringing joy back to the learners. Digital equipment, infrastructure and platforms will be the enablers, not the purposes themselves. According to the UNESCO Forum for Education, "Education 5.0 is the use of new technologies to provide more humanised teaching, with a focus on students' social and emotional development and solutions that improve life in society."

Education 5.0 stresses cultivating among learners the 21st-century human qualities and skills, which include innovation, creativity, critical thinking, compassion, communication, and collaboration. The three pillars of Education 5.0 include collaboration between industry and university, government initiatives and policies, technology, and infrastructure. It is characterised by accessibility and equity, with a comprehensive and relevant curriculum. It will need to connect the classroom to the community within the overall learning trajectory, keeping in mind the labour market and developments around

the world; viewing learners as change agents and actively engaging them in curriculum development and implementation; teaching learners to be mindful of their interaction with technology, specifically regarding safety and ergonomics at home, school and work; stressing the necessity of maintaining good physical and mental health; and highlighting the possible consequences of excessive or inappropriate exposure to technology, through virtual and augmented interactive learning experiences and awareness of data security.

Gandhi said, "By education I mean an all-round drawing out of the best in the child and man; body, mind and spirit." Education 5.0, therefore, stresses the overall development of humanity. It is the latest evolution in education that aims to leverage modern technologies to achieve the goal of lifelong learning through a human-centric approach.

Higher education will require redefining its key purpose and objectives in the context of Education 5.0 through collaboration – by promoting practices beyond institutions, changing the learning ecosystem, striking a good balance between technical and non-technical disciplines, including ethics, social inclusion, diversity and sustainability through a multidisciplinary approach; and identifying the delivery mechanism and methods of assessment through both formal and informal means, while developing quality criteria through continuous monitoring.

The elements of Education 5.0 were emerging slowly, but global events like the Covid-19 pandemic, which made online education popular along with technological innovations, impacted students' mindsets, leading them to accept technology as part of their education system. The adoption of NEP 2020 as a policy, which introduced a

multidisciplinary approach and the use of technology further strengthened this shift to 5.0. It has brought about changes in teacher training programmes, which have been revamped for interdisciplinary learning, and necessitated curriculum prioritisation of flexibility, critical thinking, vocational training, and early childhood education with foundational and digital literacy.

The adoption of these elements will impact the learning outcomes by ensuring practical skills along with academic knowledge, innovation and entrepreneurship through experiential learning. The academic curriculum must leverage knowledge to align with emerging industry technologies, so that there is an exchange of ideas and innovations alongside academics and research. Higher education will have to play a pivotal role as the knowledge architect to meet global competition by strengthening the educational ecosystem.

In this context, the universities in Assam will have to rethink and adopt advanced technologies, integrating AI into teaching and strengthening STEM, etc. Strong, supportive educational policies, starting from the school level, will be necessary. We must not forget that there are significant disparities in rural and urban areas with regard to limitations in facilities. Along with assessment and teaching pedagogy, there will definitely be resistance to abandoning traditional teaching-learning methods. Taking all the limitations into account, higher education will have to embrace Education 5.0 to meet the challenges of the present. India as a nation is shifting towards 'New Age Learning' to become a 'Global Knowledge Superhub'. Hence, our young students will have to be equipped to engage, explore, experiment, and excel.

AST/10/6

Rural literacy: How grassroots volunteers can enhance literacy



**CHANDRAKANT
KUMBHANI**

In rural India, literacy is more than just the ability to read and write, providing the foundation for lifelong learning and livelihood. Yet, despite decades of progress, a large number of children in underserved communities continue to struggle with foundational reading skills.

The inability to read fluently at the right age not only hampers academic performance but also closes doors to opportunities later in life, from higher education to dignified employment.

Schools alone cannot bridge this gap. Frequently under-resourced in rural areas, a single teacher may be tasked with handling multiple grades or classes of 30-40 children, each at different reading levels. The pressure to complete the syllabus leaves little room for personalised attention. As a result, many children are promoted year after year without mastering basic literacy, creating a learning deficit that only widens over time.

What is needed is a collective effort that mobilises communities, strengthens access to books, and nurtures a culture of reading from the ground up.

Here, grassroots volunteers can play an invaluable role. Local youth, women, or retired teachers can step forward as reading champions within their communities.

They not only lead reading sessions and inspire children to explore stories but also provide the personalised support that classrooms often cannot. Volunteers bridge the gap by grouping children according to their reading level, giving focused inputs, monitoring progress, and fostering peer learning. This tailored approach ensures that no child is left behind and that every student can strengthen reading skills at their own pace.

The urgency of this work is highlighted in the Annual State of Education Report (ASER) 2024 by Pratham, which shows that despite progress, persistent gaps remain in rural learning. For instance, the share of Class III government school children able to read a Class II-level text rose from 16.3 per cent in 2022 to 23.4 per cent in 2024, the highest level since ASER began.

Among Class V students, reading fluency improved from 38.5 per cent to 44.8 per cent over the same period. These figures highlight that while foundational literacy is improving, large sections of children still lack grade-level

skills—underscoring the urgent need for community-driven, volunteer-led reading interventions. Access to books is another crucial enabler. Small, school or community-based libraries stocked with age-appropriate and engaging material help cultivate a reading habit outside the classroom.

When children are exposed to stories that reflect their realities or spark their imagination, the joy of reading becomes self-sustaining. Evidence from villages surrounding Chandrapur, Maharashtra, provides a glimpse of what is possible. A rural Reading Promotion Programme, launched in 2019 and evaluated between 2022-2024, revealed consistent upward trends in reading across all grades, thanks to community volunteers called 'Pushtak Fairies'.

Two factors emerged as most strongly linked to improvement: the number of reading sessions attended and the number of books read. Students who stayed in the programme for more than a year

not only improved faster but also began subsequent academic years at higher reading levels than their peers—demonstrating the fact that community-supported literacy programmes create a compounding effect. Once a child builds confidence in reading, their ability to engage with other subjects also improves.

Such models prove that transformation need not be expensive. With sustained volunteer participation, steady access to books, and regular encouragement, literacy outcomes can be dramatically improved at a low cost. NGOs and civil society organisations have a key role to play in scaling this model, supporting volunteers with training and resources, and ensuring accountability through monitoring.

Rural literacy is not just an education challenge; it is a development imperative. Children who can read are more likely to stay in school, pursue higher studies, access skilling opportunities, and secure meaningful livelihoods. For communities, literacy fuels empowerment, strengthens voice and agency, and helps break the cycle of poverty.

The path forward is clear: India must invest not only in classrooms and teachers but also in the power of communities themselves. By harnessing local volunteers as reading champions and embedding reading habits with access to books, we can lay a stronger foundation for Bharat's rural children.

With the right support, every child can be given the tools to read, learn, and thrive. *Raj*

The Pioneer
SINCE 1865

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Jobs on Edge

The August labour market figures from the United States confirm what has been building for months: the world's largest economy is slowing in ways that can no longer be brushed aside as statistical noise. Employers added a mere 22,000 jobs last month, while the unemployment rate inched upward to 4.3 per cent.

More alarming was the revelation that June actually saw a net job loss, the first since the pandemic. For a country that has prided itself on its post-Covid recovery, this is a warning bell that should not be ignored.

The fragility of the labour market is not an accident of business cycles alone. It reflects the deliberate policy choices made in Washington.

Sweeping tariffs, a sharp turn on immigration, and significant cuts in government payrolls have converged to squeeze both supply and demand. Manufacturing has endured four consecutive months of losses, construction has faltered, and even the once-reliable cushion of public sector jobs has thinned after thousands of federal workers were let go. Health care remains a bright spot, but its gains are not enough to offset the declines elsewhere.

For ordinary Americans, these trends are deeply unsettling. Secure, well-paying jobs in factories and construction sites have long underpinned the middle class. Their erosion, accelerated by trade uncertainty and shrinking government support, threatens to widen inequality and weaken social cohesion.

At the same time, a crackdown on immigration has slowed the inflow of new workers, altering the balance of the labour force. While the economy may now need fewer jobs each month to absorb population growth, that statistical cushion cannot disguise the reality of a system producing less opportunity.

Investors, meanwhile, are reading the numbers differently. Financial markets greeted the weak report with relief, seeing it as a guarantee that the Federal Reserve will cut interest rates. Bond yields fell and equities edged higher, proof of the perverse logic that "bad news is good news" when central banks are expected to step in.

Yet rate cuts, however welcome to traders, are not a panacea. Cheap money cannot resolve the structural weaknesses created by trade barriers, policy uncertainty, and shrinking fiscal support.

The larger concern is that Washington seems unwilling to acknowledge the depth of the problem. Blaming statistical agencies or insisting that revisions will paint a better picture avoids the central issue: the job machine that powered America's growth is faltering under the weight of political choices. The damage cannot be reversed simply by monetary policy tweaks or optimistic rhetoric.

The lesson from August is sobering. Employment data may fluctuate month to month, but four straight months of manufacturing decline and a first net loss since 2020 are not coincidences.

They are signals of a slowing economy shaped by policy as much as by markets. If the United States fails to adapt, the weakness in its job market may mark not just a pause, but a turning point.

Mental Health Support: The Missing 'Infrastructure' in Indian Education

DR SANKU BOSE

When we think of infrastructure in education, the images that mostly come to our minds are of classrooms, libraries, and increasingly digital infrastructure like shiny, AI-enabled labs. These are tangible, visible assets, proof that an institution is serious about providing quality education. But there is another form of infrastructure, no less essential, that has long been neglected? One that doesn't appear on promotional videos but without which no amount of physical expansion can make an institution truly complete? That invisible infrastructure component, according to me, is mental health support.

The urgency of this conversation is undeniable. According to the National Crime Records Bureau (NCRB), more than 13,000 students in India died by suicide in 2022 alone, an average of more than 35 young lives lost every single day. These tragic numbers hide countless others silently struggling with anxiety, depression, burnout and loneliness. Academic pressure, parental expectations, financial stress, and the uncertainties of a rapidly changing world weigh heavily on our youth. In my own interactions as Vice Chancellor of Sister Nivedita University (SNU), I have seen students who excel in academics but quietly suffer emotionally. The brightest of minds sometimes carry the heaviest burdens. And unless we create safe spaces and professional systems to address these, we risk losing talent before it even has a chance to bloom. To treat mental health as an afterthought in education is not only short-sighted, it is patently irresponsible.

Why, then, should mental health support be considered "infrastructure"? Simply because, infrastructure, by definition, is foundational. It is not an optional add-on but the very base upon which the rest of the system stands. Just as no school or university can run without electricity, it should not be able to run without accessible and structured mental health support for the students. This aspect needs to be addressed urgently, and at a fundamental level.

Unfortunately, "mental health" in education is often framed narrowly in India, mostly reduced to a "counsellor's room" or a "stress management workshop" during exam season. But true infrastructure goes beyond tokenism. It means integrating systems, policies and resources that create a sustained culture of well-being. Every student needs to have access to trained professionals, not only during crises but as part of routine check-ins. Teachers need to be sensitised to notice early warning signs, not stigmatise them. The curriculum itself needs to be designed with mental well-being in mind—balancing rigour with reflection, competition with collaboration. Physical spaces like common rooms, quiet corners and green areas should be planned with care to allow students to decompress. That is what mental health, as "infrastructure", could and should look like.

Potential benefits go far beyond individual well-being. Students who feel supported are more likely to engage, collaborate, and innovate. Teachers in such ecosystems find themselves less

burdened by disciplinary issues, and freer to focus on mentoring. Parents gain confidence that their children are not only being educated but also cared for. Employers benefit from graduates who are not only skilled, but also emotionally intelligent and adaptable. In fact, most employers desire emotional maturity as much as they desire skills. Seen this way, investing in mental health is not a cost but a multiplier for every other investment made in education.

Critics may argue that resources are limited, and that institutions in a developing country like India must prioritise classrooms, technology, and faculty before turning to something as "intangible" as mental health. But this is a false hierarchy. A crumbling foundation, no matter how magnificent the superstructure, cannot stand. And the cost of neglect—dropouts, absenteeism, underperformance and tragically, loss of life—is far higher than the cost of building preventive and supportive systems. Moreover, technology offers scalable solutions: digital counselling platforms, 24/7 helplines, and peer-support networks can extend the reach of limited resources. The question is whether we choose to prioritise it.

TO TREAT MENTAL HEALTH AS AN AFTERTHOUGHT IN EDUCATION IS NOT ONLY SHORT-SIGHTED, IT IS PATENTLY IRRESPONSIBLE

At SNU, inspired by the ideals of Sister Nivedita herself, we believe education is about the whole individual—mind, body, and spirit. Our initiatives include structured counselling programmes, peer-led support, and workshops on stress management. But we see this as just the beginning. Our vision is to make SNU a place where students don't just earn degrees, but also learn how to live resiliently, purposefully, and joyfully.

Policymakers must recognise that mental health is as non-negotiable as fire safety or drinking water. Institutional leaders must embed it into budgets, policies and campus design. Parents must understand that academic success without psychological well-being is an empty victory for their children. And students themselves must see seeking help as a sign of strength, not of weakness.

If India's education system is to prepare the leaders, innovators, and global citizens of tomorrow, the time has come to accept that mental health is not a luxury anymore. The truest infrastructure of education is the inquisitive mind itself, so let's protect it.

The author is the Vice-Chancellor of Sister Nivedita University and Group CEO, Techno India Group. A visionary leader, he is shaping future-ready institutions and inspiring students to lead with purpose.

mk/s

EDUCATION & SKILLING HOLD KEY TO INDIA'S SEMICONDUCTOR FUTURE



ANINDITA ACHARYA

THE COUNTRY'S SEMICONDUCTOR MARKET IS EXPECTED TO CROSS USD 55 BILLION BY 2026 AND TOUCH USD 100 BILLION BY 2030

Chips are digital diamonds. 'The world trusts India, the world believes in India and the world is ready to build the semiconductor future with India,' said PM Narendra Modi at the recently-held Semicon India 2025, a mega event designed to supercharge India's semiconductor ecosystem. At the event, Union IT Minister Ashwini Vaishnaw handed over to the PM India's first fully indigenous microprocessor, a semiconductor chip named Vikram 3201, developed by ISRO's semiconductor laboratory.

Think about it. From the smartphones in our hands to electric cars, everything runs on these tiny chips. No wonder India is betting big. The country's semiconductor market is expected to cross USD 55 billion by 2026 and touch USD 100 billion by 2030, powered by booming demand in smartphones, cars, 5G, and IoT with a solid push from government policies. And here's the best part: this wave is projected to create one million new jobs by 2026, thanks to a mix of state support and private investments.

'Semiconductors are rightly being called 'digital diamonds' because they will form the backbone of our digital economy, and with this comes an enormous opportunity for employment. Industry estimates suggest that India's semiconductor ecosystem could generate over a million direct and indirect jobs by 2030, across design, fabrication, testing, and supply-chain management,' said Shantanu Roj, Founder and CEO, TeamLease Edtech. The Semicon India programme,

launched in 2021, is now showing serious results. On the state front, Gujarat has stolen an early lead, becoming the first to roll out a semiconductor policy. The Cabinet has also cleared semiconductor manufacturing units in Odisha, Punjab, and Andhra Pradesh, with a combined outlay of Rs 4,600 crore. And West Bengal is quickly carving out its own space in this high-tech race. At Semicon India 2025, when the first 33 'made-in-India' chips were unveiled, four of them came from students and researchers in Bengal with teams from NIT Durgapur, IIST Shibpur, and the University of Calcutta's leading the charge.

Adding to that momentum, GlobalFoundries (GF), one of the world's biggest semiconductor players, is setting up a fab-less design and testing centre at Kolkata Power Centre, with future plans to expand into fabrication. Following its footsteps, another US-based giant, Sanech Global Inc, has also shown keen interest in West Bengal.

Prof Animesh Bag, Associate Professor, Dept. of Electronics and Electrical Engineering, IIT Guwahati, said under Indian Semiconductor Mission (ISM), there has been a tremendous interest, investment and initiatives for fabrication and packaging of electronic system to complete the semiconductor ecosystem in the country starting from materials and devices

to circuits and systems. 'Now in this manufacturing units of semiconductor systems, along with previously mentioned electronics engineering domain UG or PG students, there will be ample opportunities for science background students particularly from physics, chemistry as well as mechanical, chemical engineering students. Not only UG or PG students, there will be lot of scope for diploma and ITI candidates for these hands-on skill-oriented jobs. Considering all these factors, this is perhaps best time for the aspiring young minds to acquire the domain knowledge in semiconductors or allied areas and prepare themselves with appropriate skills.

Apart from these opportunities, there will also be a surge from research and development sections from both fabless and manufacturing units where highly skilled PG or PhD students shall have lot of scope to contribute," he said.

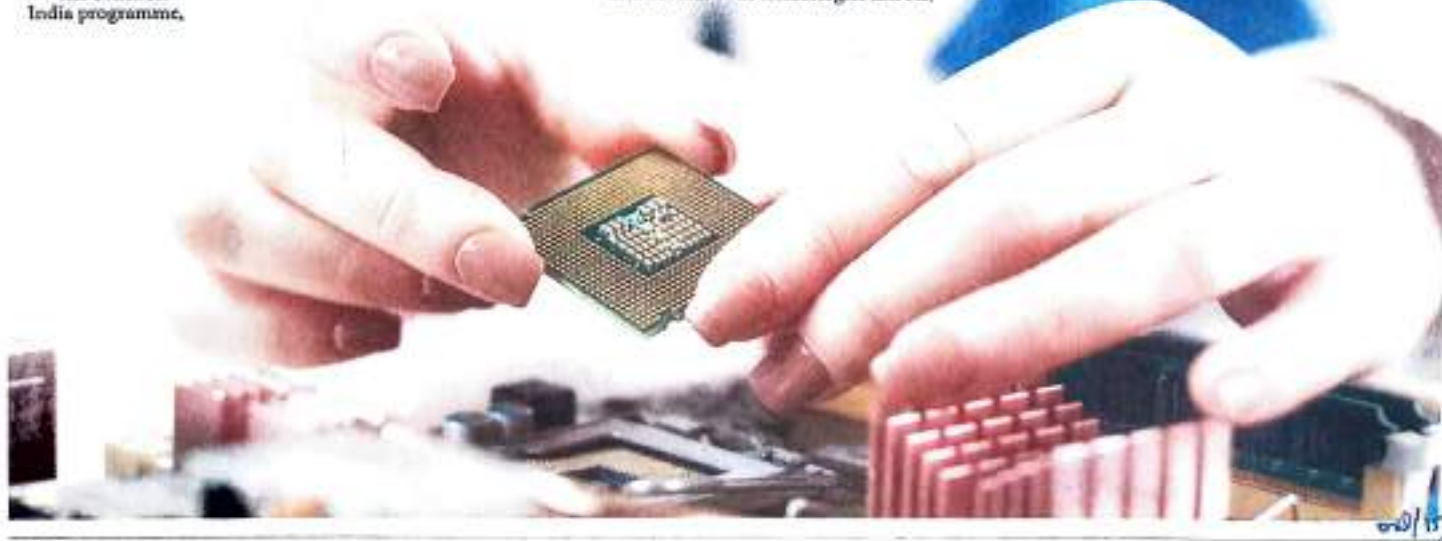
The semiconductor industry opens doors to a huge range of career paths. You could be a chip design engineer, process engineer, equipment engineer, test engineer, or product manager, each role critical in bringing these tiny but powerful devices to life. Beyond that, there are exciting opportunities in materials science, fabrication technology, automation, quality control, as well as the business side with sales, supply chain, and technical marketing. And as technologies like AI,

5G, and electric vehicles take off, the demand is only rising for experts in VLSI design, embedded systems, semiconductor physics, and advanced packaging. 'The semiconductor industry is witnessing rapid global growth, driven by the rising demand for microchips and integrated circuits that power a wide range of modern technologies from consumer electronics and automotive systems to telecommunications and healthcare devices. This expanding market is creating diverse career opportunities in areas such as semiconductor design, manufacturing, quality testing, and research and development,' said Sardar Simarpreet Singh, Director, JIS Group.

Rooj of TeamLease Edtech believes to truly shine in this sector, education must keep pace. According to him, India needs a deep bench of VLSI designers, chip architects, embedded systems engineers, and materials scientists, roles that require specialised higher education. 'At the same time, vocational skilling and certification pathways will be essential to build the technician and operator workforce that modern fabs depend on. In my view, India must create a layered approach: rigorous academic programmes at the top, supported by large-scale skilling and apprenticeships at the base. This is where employability lies - equipping young people not only with degrees but with the applied skills that industry demands. If done well, semiconductors could transform both

our technological sovereignty and our job landscape," he said.

ACCORDING TO PM MODI, INDIA CONTRIBUTES 20 PERCENT OF THE WORLD'S SEMICONDUCTOR DESIGN TALENT AND THAT THE COUNTRY'S YOUTH REPRESENT THE LARGEST HUMAN CAPITAL FACTORY FOR THE SEMICONDUCTOR INDUSTRY



India accelerates mobility innovation with MOTION Centre of Entrepreneurship



**ARVIND
KUMAR**

India's mobility sector is evolving at an unprecedented pace. As the global automotive industry pivots towards smarter, cleaner, and more connected transport systems, India is positioning itself not only as a manufacturing leader but also as a global innovation hub. Driving this transformation is the rise of Autonomous, Connected, Electric, and Shared (ACES) mobility — an area that is witnessing robust support from both industry and government. One of the initiatives in this space is the MOTION Centre of Entrepreneurship (CoE) in Pune.

A flagship initiative launched by the Software Technology Parks of India (STPI) under the Ministry of Electronics and IT (MeitY) and supported by the Government of Maharashtra, MOTION CoE serves as a sector-focused innovation and incubation hub dedicated to ACES start-ups. Located at Electronic Sadan III, MIDC Bhosari, Pune, this 10,000 sq. ft. facility is equipped with cutting-edge labs, a 75-seater co-working space, and advanced prototyping infrastructure. It is backed by a powerful consortium including Tata Motors, Kinetic Group, Intel, MathWorks, Visteon, ARAI, SAE India, TIE Pune, and the College of Engineering Pune.

The Centre offers more than just infrastructure. It delivers a full-stack support system, combining expert mentorship, physical and virtual incubation, funding opportunities through the Start-up India Seed Fund Scheme (SISFS), assistance with Intellectual Property Rights (IPR), legal and financial services, and connections with investors and industry stakeholders.

As a result, MOTION CoE has emerged as a key enabler of India's next-gen mobility vision.

To date, the CoE has incubated 55 start-ups, surpassing its initial goal of 51. These ventures have collectively achieved a valuation of over ₹465 crore, generated over ₹34 crore in revenue, attracted over ₹23 crore in external funding, created more than 500 jobs, and launched 82 products and 128 prototypes. They have also filed 67 IP applications, of which 40 have already been granted. Among these, five standout start-ups exemplify the CoE's transformative potential.

Attron Automotive is creating high-efficiency electric propulsion systems for two and three-wheelers. Their product portfolio includes integrated IPM PMSM motors and advanced controllers built on the proprietary Eta framework,



aimed at delivering superior performance and energy efficiency. Recognised by Inc42 as a top mobility start-up to watch, Attron's focus on R&D has resulted in one technology patent and two design registrations. With customisation, modularity, and performance at its core, Attron is poised to play a critical role in India's electric mobility transition.

Combat Robotics is leveraging autonomous mobility to develop rugged unmanned ground vehicles (UGVs) specifically designed for defence, disaster response, and public safety. These vehicles feature adaptive motion technology, night vision capabilities, and remote operation features, making them invaluable in high-risk environments.

Combat Robotics has secured a project from Nagpur MahaMetro for railway track monitoring and has been selected in the first phase of the Indian Railways innovation challenge.

As India scales up its electric vehicle ecosystem, energy storage becomes a critical enabler. Coulomb Li-tech addresses this with its in-house development of lithium-ion batteries, battery management systems (BMS), electric vehicle (EV) chargers, and a cloud-based analytics platform. Its comprehensive tech stack supports diverse mobility and storage applications, making Coulomb a key contributor to India's energy resilience and EV adoption goals.

Kairus Energies is innovating at the intersection of mobility, defence, and aerospace. Its advanced lithium-ion battery modules are engineered for extreme conditions, featuring a proprietary HITCH Tech™ thermal management system that ensures rapid charging, fire

suppression, and performance optimisation. Kairus has filed one technology patent, secured two design patents, and deployed 100+ kWh of storage systems.

As electric vehicles gain traction, scalable charging infrastructure is crucial. Eidikos Business Enterprises is meeting this need with its Level 2 AC charging kiosks, specifically designed for e-bikes, e-rickshaws, and electric cars. Their hybrid model includes both Captive Charging and Charging-as-a-Service (CAAS). Their composite charging stations have been granted design registration, and their distributed deployment model is well-suited for urban and peri-urban areas in India.

The journey of these start-ups reflects the broader impact MOTION CoE is making in the ACES space.

By bringing together infrastructure, mentorship, funding, and real-world deployment opportunities, the CoE has emerged as a model platform for sectoral innovation. It aligns seamlessly with national initiatives, such as the Automotive Mission Plan 2047, which aims to position India as a global leader in sustainable, tech-driven mobility.

As these ventures continue to scale, they are not only addressing India's transportation needs but also building solutions that are globally relevant. In doing so, MOTION CoE is proving that the future of mobility in India is not just about vehicles, it is about vision, innovation, and impact.

The Pioneer
SINCE 1865

India battles brain drain as students flock overseas for education

Rising remittances cannot mask the cost of brain drain, as more Indian students spend abroad than they send back. With visa curbs, high living costs, and underpaid jobs overseas, India faces both challenges and opportunities to retain its talent

**FIRST
Column**



**DINESH N
JOSHI**



United States in prestigious universities in their home country has for decades been pushing Indian students to pursue higher education abroad, resulting in what is called an intellectual brain drain. Rather than staying back and contributing to their home country, a plethora of privileged students are choosing to go abroad for college. There has been, in recent years, a large section of academics who argue that this is in fact a good thing. Remittances are rising rapidly, they say.

They're partly right but they're missing the bigger picture. While India is the largest remittance-receiving country in the world and it is in fact true that remittances have more than doubled from \$5 billion dollars in 2000-01 to \$18.7 billion dollars in 2023-24, the statistics only convey the story partly. Firstly, remittances as a percentage of GDP has remained constant at around 3 per cent since 2000. Secondly, what Indian students are now spending abroad for education has risen rapidly. According to some estimates, the total spending by Indian outbound students could reach 70 billion dollars by 2025 — a number which is rising more rapidly than the remittances being sent back.

Thirdly, and most importantly, this argument fails to consider an important hypothesis: What if these students had chosen to stay back? The argument I make is two-pronged. One, that if the students were to stay back, the Indian economy would benefit far more — in other words, remittances do not compensate for the economic and intellectual capital drain caused, and two, at times it would also be far better for the students to stay back in India, taking into account the cost of living abroad and recent anti-immigrant trends across the world.

Let me address the second claim first. According to the latest data from the Ministry of External Affairs (MEA), over 1 million Indian students are currently studying abroad in 2025 — a staggering rise from 1.1 million just two years ago. This data, however, hides one important detail.

All the top three destination countries — Canada, US and UK — for Indian students (which account for a third of all Indian students heading abroad for education) have vio-

MANY INDIANS WHO GO ABROAD ARE ACTUALLY NOT RECEIVING GOOD RETURNS ON THE THOUSANDS OF DOLLARS THEY SPENT ON THEIR COLLEGE EDUCATION. MANY ARE UNEMPLOYED OR UNDEREMPLOYED AFTER THEIR EDUCATION IS COMPLETED

The editor-in-Chief is Mr. Jagdish Chandra Joshi & Co.

- Editor-in-Chief
- Managing Editor
- Designer

lenced a sharp decline in the backlog of tightening immigration measures, including introduction of caps on student intake and restrictions on dependent visas.

Consider this: From 2023 to 2024, Canada witnessed a 50 per cent drop, with permits falling from 2.78 lakh to 1.89 lakh, the United States saw a 34 per cent decrease, with F1 visas dropping from 1.31 lakh to 86,710, and the UK recorded a 28 per cent reduction, with sponsored student visas issued to Indians decreasing from 1.20 lakh to 88,752 during the same period.

While some argue that this is a bad sign, it provides a window of opportunity for the Indian government to reverse decades of brain drain.

But will the anti-immigrant rhetoric and curbs on visas actually prevent students from going abroad, or will they just change their destination of focus? I think that it most definitely can.

Many Indians who go abroad are actually not receiving good returns on the thousands of dollars they spent on their college education. First, many are unemployed or underemployed after their education is completed.

Second, those who get jobs are getting paid less than what Americans and Europeans with the same skills are earning. At an example, the H-1B Visa Reform Act of 2004 restructured the salary scale and limited two wage levels, at the low and high percentiles of the wage survey conducted for non-residents in an area, below the highest (the 90th percentile). This implies an underpayment for

Indian (and other international) workers embedded in the low tier.

Third, their attractive salary packages include welfare and other amenities which are not actually part of what they receive in hand, and the cost of living abroad is considerably higher than the cost of living in India. Rent, groceries and travel all make up a considerable chunk of their expenditures, and what they're left with is sent back to their families.

While Indian students who get into Ivy League institutions would perhaps not want to stay back in India, to make many others stay back will be a low-hanging fruit. With minimal efforts, India will be able to retain talent which will not only show up in GDP figures for years to come but will also advance R&D in the process.

A particularly promising area of collaboration is the growing partnership between India and the UAE in the fields of education and employment. The UAE has become a top destination for Indian professionals, with the country expanding opportunities for skilled workers in various sectors, including healthcare, engineering and IT.

Education-wise, both nations have been actively exploring collaborative programmes, exchange initiatives, and scholarships to enhance bilateral ties. Indian universities and institutions are establishing campuses in the UAE, further cementing the relationship. For Indian students, this provides an alternative, thereby opening up world-class education, while also offering enhanced job prospects in the

UAE's rapidly growing economy.

There can be two ways of retaining talent in India. First, to build more good-quality higher education institutions and second, to ensure that Indians return to their home country after graduating abroad. In terms of the second objective, India is already in the process of reversing the brain drain. Under the leadership of PM Modi, the recent cutting-edge, deep tech and frontier tech start-ups, led by Indian students with PhDs from major global universities, are now taking root in India. Our start-ups have grown from just 400 a decade ago, to 12 lakh today, and nearly 50 per cent of these are coming up in Tier 2 and Tier 3 cities.

It is here that the role of political leadership deserves special recognition. Prime Minister Narendra Modi's vision, combined with the efforts of senior leaders like Suresh Kumar Prabhu and Dharmendra Prabhu, has ensured that education and employment remain at the core of India's growth story. Mahabubuddin Khan Fadnis has been instrumental in advancing educational reforms at the state level, pushing for skill development and industry-academia linkages, while Prabhu, as Education Minister, has driven initiatives that strengthen higher education, and empower students with future-ready skills. A recent example is being taken to make Mumbai a global education hub by launching over 100 new schools to give global citizens an alternative to the top global education hubs. Together with the Prime Minister's emphasis on innova-

tion and entrepreneurship, their combined leadership has laid the groundwork for India to transform its brain drain into a brain gain.

India stands at the cusp of a technological revolution, presenting immense opportunities in areas such as artificial intelligence (AI), machine learning (ML), big data, energy transition, electric vehicles (EVs), quantum computing, genomics, 3D printing, robotics, drones, and space exploration. All these sectors have been accelerated by the Government through initiatives like the National Quantum Mission, India AI Mission, and the Semiconductor Mission.

Some problems remain, however. The biggest one being domestic funding, which needs to grow rapidly. Consider this — Indian start-ups raised over \$12 billion in 2024, but about 75 per cent of this came from international sources. Another one is payment of royalties. While India produces approximately 24,000 PhD graduates annually, the country paid \$4.3 billion in R&D royalties in 2024, while earning only \$1.5 billion, highlighting a significant gap which can be filled by greater innovation.

The first challenge seems to be more daunting — building quality higher education institutions. Some top-tier education institutions like the IITs, IIMs and IISMs are producing skilled professionals and are second only to Ivy League colleges; there is a dearth of such universities in India. Another challenge is a change in curricula, which is already underway to link research and industry needs. This would involve addressing skill shortages in data science, biotech, clean energy, AI and ML, among others. For this, industries must step up and support the government.

It is a known fact that in India research is more debt-linked than industry needs in comparison to other countries. In short, it is not solely the amount of R&D that matters, but the quality. To date, two-thirds of the R&D in India is contributed by the Government. The private sector needs to step up to fill the gap.

India is well positioned to become the world's leading start-up ecosystem. With graduate upskilling programmes, the Government's initiatives to foster innovation, and the support of universities and corporates, the aspirations of students to flourish in their careers, thereby, will open up a new era of economic growth.

Dr. N. S. Joshi

REPORT CARD

Six of the ten places at the top in the "overall" category of the National Institutional Ranking Framework 2025 were taken up by the Indian Institutes of Technology. The IITs have dominated this category repeatedly. The other four places were taken by the Indian Institute of Science, Bengaluru, the All India Institute of Medical Sciences, New Delhi, Jawaharlal Nehru University and Banaras Hindu University. Is there a message in the predominance of specialist institutions in the top ten? Perhaps it raises the question whether specialist institutions should be placed on the same plane as colleges and universities that teach the arts and sciences and conduct research with different goals and assessment systems. Besides, the IITs have enormous advantages over universities — public and private — in the form of unstinted government support in funds, autonomy and resources. Universities not only have different intake rules but they also deal with much larger numbers of students and with affiliated colleges while being short of funds. Yet the remarks of the Union education minister, Dharmendra Pradhan, did not seem relevant when he expressed his disappointment that IIT graduates do not contribute to the nation as expected; they work either overseas or in multinational organisations in India. Since the IITs produce the best professional people, they will inevitably gravitate to the most enabling professional environments. They have the right to choose whether they will work for the Indian Railways or a multinational corporation. Perhaps the work environment in the country needs to change before the cause of Mr Pradhan's discontent is reversed.

The NIRF did not have good news for West Bengal. Much is being made of the fact that Jadavpur University topped the list for state public universities, but among engineering institutions, the university, once famous for engineering, has slipped down to the 18th place. Here too, IIT Kharagpur stood fifth, while overall it was ninth. Jadavpur University is ninth among universities, which is not bad, but Calcutta University is ranked 39, down from 18 last year, and is ranked 15th among state public universities, down from fourth place last year. Most institutions, even among colleges — except Lady Brabourne College at rank 47 — show a slide, big or small. This augurs ill for the state. West Bengal needs to pull back from the edge as far as education is concerned.

Open-book exams are worth a try

Our existing school system robs the learning experience of joy and wonder



AVIJIT PATHAK
SOCIOLOGIST



CHALLENGE: Pedagogic innovation is a must for the success of open-book exams. *istock*

AS I reflect on the CBSE's recent decision to introduce open-book exams for Class IX from the 2025-27 academic session, a series of critical questions confront me. I have no hesitation in saying that the idea of open-book exams is a refreshing departure from the prevalent practice that causes acute fear and stress among young students, promotes the coaching centre-driven industry of 'readymade answers' and 'guide books', intensifies the surveillance machinery to curb mass copying and turns the exam centre into a war zone.

Yet, as a teacher/educator, I must say that the real potential of open-book exams cannot be unfolded unless we are truly committed to an innovative and radical pedagogic practice. In this context, I will make two observations.

First, barring remarkable exceptions that can be seen in select alternative schools based on the educational philosophies of the likes of Jiddu Krishnamurti and Sri Aurobindo, the existing school culture tends to put heavy emphasis on the faculty of memorisation — say, the memorisation of 'objective' facts like the dates/years of wars and treaties, or, for that matter, even a scientific theory and a mathematical equation. It encourages rote learning and robs the learning experience of joy, wonder and reflexivity.

It might help one become a sophisticated parrot and answer all sorts of discrete questions —

Who was Mughal emperor Akbar's grandfather? What is the formula for measuring the curved surface area of a cylinder? Or, what is the name of Tanzania's capital?

However, there is no guarantee that this sort of memorisation of 'hard facts' necessarily leads to the development of analytical and critical thinking, which is actually needed for seeing beneath the 'facts' to understand the socio-political dynamics of history, the deeper meaning of a metaphor a poet used in his poem, or, for that matter, the process of applying a mathematical formula to solve a real-life practical problem.

What is needed is a kind of pedagogic practice that encourages the young learner to sharpen the power of interpretative skills and critical thinking and develop a taste for good books that can take him/her beyond the prescribed textbooks and the official curriculum.

This seems to be an effective way to resist the mechanised resultant tendency to copy from textbooks and all sorts of 'notes' easily available in the market.

There is a need for a paradigm shift from rote learning and mechanised memorisation to creative articulation and critical thinking.

Second, the art of teaching, as I have learned from my experience, is a perpetual process of learning and self-discovery. Unless we radiate the spirit of engaged pedagogy and fresh thinking in the classroom, we cannot inspire young students to undertake a paradigm shift: from mechanised memorisation and rote learning to creative articulation and critical thinking, or, from the fear of exams to

the joy of learning.

In a way, to borrow Paulo Freire's idiom, we need to practise dialogic/problem-posing education: a pedagogic practice that encourages the teacher and the student to walk together and explore the frontiers of knowledge with freshness and critical enquiry.

As a matter of fact, if we ask our students to write open-book exams, we too must be willing to think creatively and work really hard so that the answers to the kind of questions we ask cannot be given without deeper understanding, even if they are allowed to open their books and 'notes'.

Let me make this point clear through a concrete illustration from history. Imagine that as a teacher, I formulate a question like this: 'Write a brief note on the implications of the assassination of Mahatma Gandhi'. Well, a 'guide book' or a textbook might help the student recall a 'fact' — a man called Nathuram Godse killed Gandhi on January 30, 1948. However, the answer to this question, she/he ought to have some understanding of the mood of the country

after the horrors of the Partition and the political/cultural turmoil that confronted the newly independent nation.

In other words, even if you keep your books open, you need to think, reflect and articulate your own understanding. In fact, as teachers, we also need to cultivate the art of formulating the kind of questions and puzzles that encourage the student to think critically, see beyond standardised 'notes' and unfold their creative potential. There is no escape — the educators must educate themselves.

Will it be possible, particularly at a time when because of the centrality of MCQ-centric standardised tests, the National Testing Agency will minimise the role of good pedagogues and creative teachers?

Of course, for transforming our classrooms through a radical and innovative pedagogic culture, we need good and vibrant school libraries; we need happy and committed teachers; and, above all, we need a reasonably good teacher-student ratio.

As exclusivist private schools are becoming increasingly profit-oriented, transforming education into a commodity, we need substantial support from the government — financial as well as moral — so that a government school too can feel proud of its vibrant/creative teachers, good libraries and laboratories, and above all, a learning culture that activates a young learner's critical thinking.

As a teacher, I have no hesitation in saying that open-book exams, if conducted with due care, are difficult, yet immensely beautiful — almost like a celebration of awakened intelligence, creativity and critical thinking.

Hence, I would like to believe that the CBSE authorities, if thinking seriously of the kind of pedagogic practice that makes the idea of open-book exams a success. Good luck to them!

Heritage meets generosity



BIDISHA GHOSH

In Kolkata's iconic *kol panna*, College Street, where the air is thick with the ancient smell of old, crumbling papers, the warmth of shortly pressed-edited pages, and the nostalgia yet ephemeral history, the oldest, surviving bookshop has stepped into a new chapter. Dasgupta and Co., a cornerstone in the city's literary and academic sphere since 1886, has opened the doors of a free public library

on its historic premises. The initiative, as exceptional as it is generous, has already begun to attract more than a hundred visitors every week—among them students, scholars, and curious foreigners drawn by the allure of this cultural institution.

Sedging modern bookstores alike patrons in either skim through best-sellers and long-standing classics, Dasgupta and Co., which is deeply embedded in the city's intellectual fabric, has opted for a more

noble muse. To date, the second floor of their heritage building is a public library and, as such, provides invaluable services to students who cannot afford to purchase books. The way in which this particular bookstore, still owned by the members of the founding family, has shifted their legacy is truly astounding, transforming a commercial centre into a paradigm of education as well as solitary escapism.

"Education is our fundamental right, and books are our best

friends. This bookstore, still standing at this age, has been the witness of so many minds, shining bright like the Sun. Yet, many stood before the store, eyes brimming with tears as their empty pockets reminded them of their financial distress. Thousands of such minds could have contributed hugely to the progress of our nation, but scanty resources are more than enough to inculcate in them a sense of insecurity—insecurity of giving up an academic career due to

lack of materials. This library hence, is a small effort to disseminate knowledge and make education more accessible to all, especially the marginalised and downtrodden. And we do not mean to cater to academic purposes only; people from 8 till 80s can come up and read any book that suits their interest", remarked Arabin Dasgupta, the current managing director of the firm and descendant of its founding family. The library, an idea long in gestation, was formally unveiled on 24 July—Mr Dasgupta's birthday—after nearly three years of preparation.

On any given day, the new reading room welcomes between 30 and 40 visitors, many of whom linger for hours, absorbed in the quiet company of rare and precious volumes. "Old customers from all over the city have responded favourably to the initiative so far, and several benefactors have contributed rare books to the expanding collection. This indeed proves how even in today's age, where people have almost forgotten the art of reading books, there are people who still love and yearn to feel each letter with their fingertips," Mr Dasgupta added, his voice swelling with pride. Nobel laureate Amartya Sen, a long acquaintance of the Dasgupta family, extended a congratulatory message, applauding it on being enlisted as one of the heritage sites of Kolkata. He also explored the lanes of the wooden bookshelves on a virtual video conference, expressing avid enthusiasm.

One of the visitors remarked, "Our generation probably is the last generation to actually garner enough time from our busy schedules to run around bookstores, searching for a particular book. A bibliophile, as you young people nowadays call it, not only loves to read books. There is a different worldly feeling that can't be deciphered. You might not always find the book you want, but the book you need always finds a way to reach you. Here are such rare collections of books which one can buy, but why take it for yourself when others too can have access to stumble across it and read it? Maybe someone else needs it more than I or you do, and this notion of a public library perfectly fits the frame." Some students of the nearby

universities mentioned how they couldn't afford to buy such expensive books for their courses, but the existence of such an open library has come down as their Messiah.

"The visitors often include people from Germany, France, Italy, the U.K., and the U.S. Such people are always found to be keen on learning about our history. And being able to hand them over a piece of it contents me," said Mr Dasgupta.

Grish Chandra Dasgupta, a native of Kaligram in Jessore, modern-day Bangladesh, founded Dasgupta and Co. in 1886. The village was thought to be more literate than other villages in the area at the time, and perhaps this was the sole motivation behind the opening of a bookstore on College Street, which at the time was the epicentre of learning and literature in India's erstwhile capital. The store now has Grade IIA heritage status and serves hundreds of customers a day, the majority of whom are looking for academic titles.

The store also intends to launch an online library following the forthcoming Durga Puja celebrations, which have been on the cards for a while. Mr Dasgupta also hinted at the probability of receiving a sponsorship proposal that would fund the reconstruction of the dilapidated infrastructure as well as provide access to the digital space, so that any reader from any corner of the globe can have access to any book. Planning for the commencement of internships in publishing has also been attended, since the NEP has made it compulsory for students to complete internships for overall holistic development.

From India's struggle for independence to the immense bloodshed during the two World Wars, from the Partition horrors to the Naxalbari era, Dasgupta and Co. have seen it all. It still stands today, with the family leading the dream that was once dreamt by Grish Chandra Dasgupta. It is not only a bastion of scholarship but also a rare continuity in the cultural life of the city—perhaps even of the nation. Having surpassed such upheavals, Mr Dasgupta expresses quiet confidence that the shop will endure the contemporary challenge of online book-selling as well.

A need to address the science education crisis in schools

The National Education Policy (NEP) 2020 rightly envisaged a transformation of the schooling experience, to ensure a scientifically literate student population. It identified some of the important challenges the existing schooling system faces in providing science education. Lack of resources for advanced science education, including lab equipment, technology, and specialised materials, has been pointed out as a major challenge. The document talked of difficulties in finding and training good teachers in specialised sciences, technology, engineering and mathematics (STEM) fields like Artificial Intelligence (AI) and robotics.

Five years after the implementation of NEP 2020, its concerns about science education remain unaddressed. The recently published PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development) 2024 survey report, has highlighted significant learning gaps among students in different grades in all subjects, including science. The average scores of class 9 students were only 40% in science and 37% in maths. The scores are even lower in government and government-aided schools at 37% and 33%.

The problem takes on a different dimension in the higher secondary stage, where students must opt for subjects of their choice. While visiting a well-functioning higher secondary school in Rajasthan as part of our work on the Public Report on Secondary Education (PROSE), we found that though students scored high in their 10th board exams, most transferred to other schools at the higher secondary stage, primarily

because they could not study subjects of their choice. Only four subjects from the arts stream, which included Hindi Literature and Sanskrit, were offered. The school did not offer any science subjects. One of the important reasons behind the limited subject choice is the inability of the state teacher recruitment system to hire qualified teachers. A similar situation was seen in some other schools we visited. Even where schools did offer science subjects, some students left the school as they were not sure if the quality of science teaching was good enough to guarantee admission to their preferred universities/colleges.

Studying science is a major problem for students in other parts of India as well. The results data from around 52 state and National Boards compiled by the ministry of education showed that in 2024, only 47% of those who passed higher secondary board exams were from the science stream — 38% were from arts, and the remaining were from commerce and vocational streams. The average conceals wide inter-state variations. The state board results underline the dismal science teaching scene in certain States. At one end, around 80% of those who passed higher secondary in Andhra Pradesh were from the science stream; this was 65% for Telangana, Tamil Nadu, and Manipur. At the other, 20% or fewer of those who passed senior secondary in Punjab, Haryana, Gujarat, West Bengal and most

northeastern states were from the science stream. For students in the latter group of states, studying science is likely to be a major challenge.

The available data says little about the socio-economic background of science students. But the gender composition shows that the stereotype of fewer girls choosing science compared to boys is limited to only a few boards — mainly in the northern and eastern states, the Central Board of Secondary Education (CBSE), and Indian School Certificate (ISC). In other boards, the gender differences are minor. In Kerala, Tamil Nadu, and Chhattisgarh, it is the reverse. It is important to understand what drives state level variations.

Could the lopsided showing be partly demand-driven? That students do not want to study science. This is unlikely. The Unified District Information System of Education (UDISE) data on enrolment of students in different streams in higher secondary schools indicates that while only 37% of students in government schools were studying science in 2023, the proportion is around half in private aided schools and two-thirds in private unaided schools. This trend holds in all states and indicates a high demand for science education.

There is perhaps an unseen barrier in the mindset of government schools in several states — that the science curriculum is difficult and only high-scoring students should opt for it. That could explain why, even though more than half the government schools offer science subjects, enrolment in the stream is only 37%.

Supply-side constraints play a key role, too. At the higher secondary level, stream/subject choice is limited and mostly dependent on availability of

resources and teachers. The problem is not confined to only science subjects. In 41% of higher secondary schools, only one stream is offered. The data shows that a high proportion of government schools offer only arts.

The evidence from UDISE data shows that these challenges exist not only for advanced courses but even basic ones. Our school visits showed that several schools had very limited scientific equipment and materials, and even these were stored away, indicating irregular use. Data on laboratory facilities in all schools is not available at present. There is an extreme shortage of maths and science teachers. In the last academic year, 19% of secondary and higher secondary schools did not have a single maths teacher; and 18% of secondary schools and 13% of higher secondary schools did not have a single science teacher. Teacher shortage is a problem in all states.

The challenges of scarce resources and teacher shortage is likely to be greater in states with low per child school education expenditure. Remote areas face exacerbated challenges. So, while, in many states the proportion of students studying science is increasing over the years, such a trend is not observed in the states at the lower end for income. Appropriate policy measures and resource allocation is urgently required, both by the Centre and the states. The science stream needs to be offered in more government schools. Students from under-served areas will likely miss out on jobs/entrepreneurship opportunities if they have less access to STEM education. This is likely to have an inter-generational effect as well, as with fewer science graduates, the teacher shortage will continue. Inclusive India needs to address this key gap identified.



Anuradha De



Amarjeet Sinha

Anuradha De and Amarjeet Sinha are part of the PROSE team. The views expressed are personal

Ease of doing science

India must attract global talent at a time when external factors have created a glut of highly trained researchers seeking opportunities. Without credible pathways, these scientists will be absorbed elsewhere



KRIS GOPALAKRISHNAN
AND ASHISH DHAWAN

CRITICAL TECHNOLOGIES ARE redefining global power, but India's research profile reveals a telling imbalance. India accounts for only 2.5 per cent of the most highly cited papers and only 2 per cent of scientists in the global top 2 per cent of most-cited researchers (Stanford-Elsevier report). China not only dominates 37 of 44 critical technologies (ASPI) but also converts this into sovereign strength through aggressive talent recruitment.

India ranks in the top five in 29 technologies but lacks the ecosystem to deliver consistent global breakthroughs. This has been coupled with explicit and implicit restrictions on high-technology exports and transfers from the US and China. The gap for India lies not in numbers or talent, but in quality, driven by a strategy to attract, embed, and retain top-tier researchers.

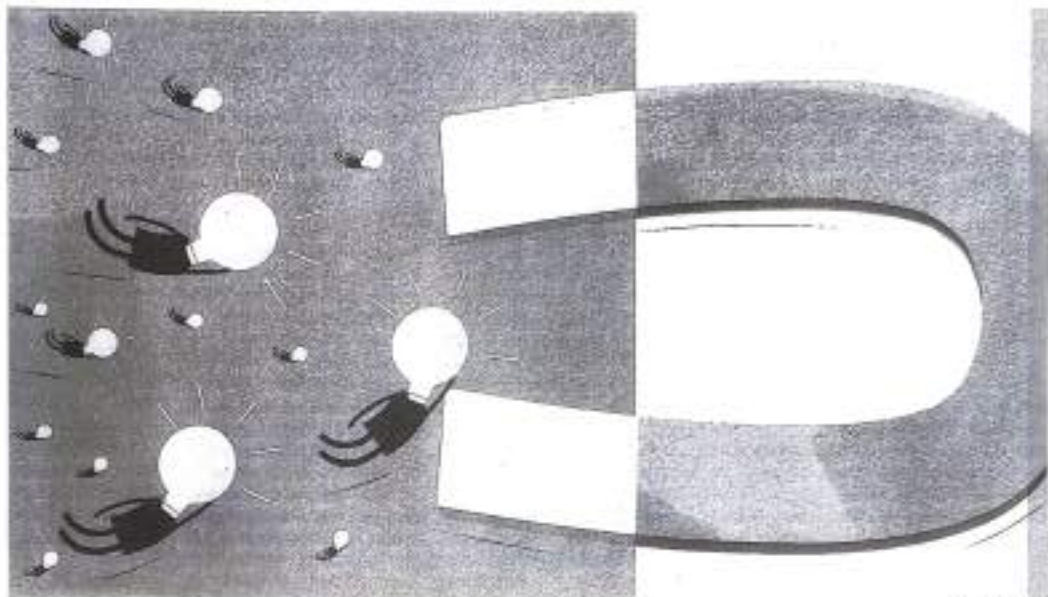
Global dynamics have created a narrow window of opportunity. The Trump administration has announced budget cuts upwards of 50 per cent for federal science grant-making bodies such as the National Science Foundation and NASA. In the US, only 15 per cent of STEM PhDs secure tenure track jobs within five years, down from 25 per cent two decades ago. Tightened visa regimes have left many Indian-origin PhDs and postdoctoral fellows stranded.

Some of them have been working in critical technology areas. Global powers are acting fast to make the most of the opportunity. The "Choose Europe for Science" conference at the Sorbonne underscored Europe's intent to attract global researchers, with President Emmanuel Macron announcing a €100 million France 2030 fund.

China offers a striking precedent. Through its Young Thousand Talents Program (2011-17), it recruited 3,500 early-career scientists with substantial incentives, contributing to its rise from housing one to eight of the world's top 10 institutions in the Nature Index by 2024. In advanced aircraft engines, including hypersonic, China now produces four times more high-impact research than the US, with seven of the world's top 10 institutions.

Thus, India must urgently attract global talent in critical technologies, especially at a time when external factors have created a glut of highly trained researchers seeking opportunities. If credible pathways are not offered soon, these scientists will be absorbed elsewhere. Scientific careers are inherently time-sensitive, and a delay would mean losing an entire cohort capable of driving breakthroughs in semiconductors, propulsion, synthetic biology, and quantum communication — domains that will define strategic autonomy in the decades ahead.

The good news is that through the Anusandhan National Research Foundation and the Rs 1 lakh crore Research and Development Innovation Fund, the government has, for the first time in decades, com-



C. R. Sankaranarayanan

mitted large-scale, mission-oriented investments in science. This has been coupled with rapid Ease of Doing Science measures. The only significant missing piece is to attract top talent and get maximum bang for the buck.

Despite multiple fellowship schemes, India has not been very successful in attracting and retaining global academic talent. Compensation remains uncompetitive compared to global benchmarks, world-class laboratories and sustained research grants are often absent, and there are no clear pathways for long-term absorption or career progression. Most importantly, recruitment has not been tied to mission-oriented research streams in areas where India must develop sovereign capability, leaving efforts fragmented. This time, we must not make the mistakes of the past.

A viable solution is the establishment of a limited number of Focused Research Organisations (FROs) — like India Urban Data Exchange at the Indian Institute of Science — in frontier domains where India must build sovereign capabilities, strategically embedded within Institutes of National Importance that already possess demonstrable expertise in the relevant technology verticals. This model should aim to attract at least 500 top class researchers in the next five years to build critical mass.

Much of the talent must be early career (postdocs and incoming professors), who will be easier to attract and create a long-term pipeline of excellence. Provisions must allow existing Indian academics with proven track records in the relevant domain to be integrated into these FROs, either through joint appointments, rotational leadership roles or competitive project-based entry.

To ensure both technological depth and transitional outcomes, these FROs should be structured as Section 8 companies with at least 51 per cent participation from industry, creating a true public-private-academy partnership. Crucially, they must be designed as permanent institutional structures rather than ad hoc schemes, providing long-term continuity, predictable funding, and clear pathways for global talent absorption, thereby embed-

ding them firmly into India's strategic research and innovation architecture.

For instance, IIT Delhi — having recently, in collaboration with DRDO, achieved a milestone in quantum entanglement-based free-space quantum secure communication over distances exceeding 1 km — stands out as a natural anchor for a national FRO on quantum communication. This model has four distinct design principles.

First, it resolves the issue of inadequate compensation for globally attracted faculty by pooling industry resources with state support, thereby ensuring internationally competitive salaries and sustained research funding. Second, it embeds strategic direction. Rather than spreading efforts thinly across institutions and domains, FROs create laser-sharp focus in select areas where sovereign capability is critical. Third, it fosters a hybrid ecosystem where global expertise, indigenous knowledge, and industry resources converge, ensuring that the FROs serve as enduring nodes of sovereign capability-building rather than isolated enclaves of imported talent. Finally, by establishing permanent, mission-driven structures with long-term continuity, FROs overcome the short-termism of ad hoc schemes and provide a predictable, credible pathway for talent absorption, innovation, and eventual translation into sovereign technological strength.

Delays in building such institutional mechanisms carry irreversible costs. Our calculations indicate that state investment in such an initiative will be very modest but lead to outsized impact. Without timely intervention, India risks ceding ground in domains that will shape future strategic autonomy and economic competitiveness. The choice, therefore, is not between acting now or later, but between creating pathways for sovereign capability and reconciling with long-term dependence.

Gopalakrishnan is co-founder, Infosys, and chair, IISc Council, and Dhawan is founder-CEO of The Convergence Foundation and co-founder of Foundation for Advancing Science and Technology

The good news is that through the Anusandhan National Research Foundation and the Rs 1 lakh crore Research and Development Innovation Fund, the government has, for the first time in decades, committed large-scale, mission-oriented investments in science. This has been coupled with rapid Ease of Doing Science measures. The only significant missing piece is to attract top talent and get maximum bang for the buck.

Himachal's journey from literacy rate of 7.9 per cent to 98.3

SUNSHINE BAJWA

SIXTY-FIVE YEAR-OLD Baga Ram was bubbling with enthusiasm as he stood with his nervous teacher and anxious Education Department officials, waiting for Chief Minister Sukhinder Singh Badhu to interact with him and other neo-literates on International Literacy Day (September 8). He looked all excited to flaunt his newly-acquired ability to read and write. He passed the test with flying colours, answering all questions the CM posed.

The interaction triggered smiles all around. However, the real significance of the feat was in what Baga Ram and others listed out the otherwise routine tasks they could perform after becoming literate. "Now, I can make a phone call without seeking help and read the boards of buses," he beamed.

Besides changing their own lives in a significant way, the neo-literates paved the way for the state to declare itself fully literate under the Centre-sponsored New India Literacy Programme (NILEP), also called ULLAS. Apart from Himachal, Mizoram, Goa, Tripura and the Union Territory of Ladakh have also declared themselves fully literate under the programme.

WHAT ARE THE PARAMETERS

Any state or UT having a literacy rate above 95 per cent is considered fully literate under NILEP. "We have achieved a literacy rate of 98.3 per cent, which is the highest in the country," said Education Minister Balbir Thakur. The objective of the programme is to make all non-literate individuals aged 15 years and above literate.

In Himachal, 95,307 individuals were identified as non-literate under NILEP and 42,578 have already been turned into neo-literates. Apart from acquiring foundational literacy and numeracy, the neo-literates have also been equipped with basic financial and digital literacy through the programme.

"I can now fill the basic forms at the post office and bank without seeking help. And I don't use my thumb imprint anymore," said Manoj Ram, another elderly person who has benefited from the programme.

WHY IT'S A BIG DEAL

Turning all its residents literate is a big achievement for any state, especially Himachal Pradesh. "Considering Himachal had one of the lowest literacy rates in the country after Independence, achieving full literacy is a remarkable feat," said Education



Education has been ingrained as a core value.

Secretary Rakesh Kanwar. Incidentally, Kanwar was one of the volunteers of the Total Literacy Campaign in the state in the 1980s.

In the 1961 Census, the literacy rate was just 7.9 per cent against the national literacy rate of 18.28. The figure for women was even more dismal at 2.55 per cent. "Today, we hardly have any gender or caste gap when it comes to education," said Kanwar.

The geographical condition of the state makes the feat even more creditable. Schools were opened in every nook and corner to ensure no child was left without education.

"We still have the highest number of small schools with low enrolment in the country," said Kanwar. Besides, the sense of self-worth any non-literate person feels on becoming literate and the contribution they can make to society and economy further underscore the significance of the achievement.

ACHIEVING THE TRANSFORMATION

The journey from having one of the lowest literacy rates post-Independence to achieving the highest literacy rate has been full of challenges. While formal education was strengthened by creating a dense network of primary and middle schools across the state, the non-literate adults were made literate through various programmes, campaigns and community participation.

The 1990s, in particular, turned out to be the most productive period for adult literacy. "The Central government started the National Literacy Mission in 1988. It took off in the state in the early 90s, and soon turned into a mass movement. The government, district administrations and volunteers all came together like never before to make the mission successful," said Kuldeep Thakur, the then adviser to the National Literacy Mission.

The campaign, apart from addressing the

issue of adult education, had a massive indirect effect as well. "It ingrained education as a core value among the people. As a result, every parent now wants to provide the best possible education," said Kanwar.

THE ROAD AHEAD

Having achieved full literacy, the state has set its sights on providing quality formal education. Having schools in every nook and corner fulfilled the goal of providing basic education, but quality remained elusive, what with thousands of schools having just one teacher and hundreds of schools running without any teacher.

In the last two and a half years, the government has taken several measures to raise the quality of education. These initiatives have shown instant results as well — the state has jumped to fifth position from the lowly 21st spot in the National Achievement Survey and fared quite well in the latest ASER report as well.

Nevertheless, the onus on private educational institutions continues. Over the years, people have apparently lost confidence in government institutions. Time will tell if the newly-introduced reforms are able to win back that trust.

T-116

'Need to equip media pupils with industry skills'

Face to Face

PRASANTA J BARUAH
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Prof Shambhu Nath Singh, Vice-Chancellor of Tezpur University, is currently heading the UGC high-powered committee on Learning Outcome-based Curriculum Framework to reform the syllabus of Mass Communication and Journalism programmes in India. He is a former Vice-Chancellor of Patna University and founder Director of School of Journalism at IGNOU.

Why do you think mass media and communication is so significant in today's world?

Mass media and communication in every form have become so deeply woven into our daily lives that they are now almost an integral part of our existence. In fact, we could even call it the fourth basic human need after food, shelter, and clothing. Beyond its social impact, it has also emerged as a major professional field globally. For instance, the recent FICCI-EY report 'Shape the Future: The Revolution in Indian Media and Entertainment Sector' shows that the sector grew by 3.3 per cent in 2024, reaching Rs 2.5 trillion (about USD 29.4 billion). Notably, digital media is now the largest segment, contributing 32 per cent of the total.

Given this rapid growth, what challenges is the sector currently facing?

The biggest challenge is the acute shortage of adequately skilled and trained human resources to fill the increasing number of positions in this dynamic sector. While we have hundreds of higher education institutions across the country – some highly specialised, like those for film, television, public relations, or advertising – most still offer general programmes. The need now is to ensure these programmes truly equip students with modern, industry-relevant skills they need.

How does this relate to the need for a common curriculum or framework?

Just like professional courses in engineering, medicine, or business management, mass media and communication also needs a coherent, modern, and flexible curriculum that can be adopted nationwide. About two decades ago, the UGC developed a syllabus

which institutions largely followed in principle. But since then, the landscape has evolved rapidly – especially with digital technologies, transforming every aspect of media. With the National Education Policy (NEP) 2020 bringing a paradigm shift, an overhaul of the curriculum became even more urgent.

What steps have been taken to update the curriculum under NEP?

To address this, the UGC set up a high-powered committee of eminent media practitioners and academicians last year to review and design a new syllabus. As the chair of this committee, I helped convene a two-day national-level convention at Tezpur University in January 2025, where experts from across the country deliberated in-depth on what this modern curriculum should look like. We then had another round of fine-tuning sessions in Delhi. Currently, the revised syllabus is in the process of finalisation by the UGC.

What makes this proposed syllabus different or special?

Several aspects make this proposed syllabus stand out. Firstly, it is designed to strengthen the relationship between academia and industry. In India, the media industry often lacks the time and structured resources to engage in deep research and development. It also does not always employ scientific methodologies to study patterns and build theories. Academia, therefore, has a crucial responsibility – not just to follow industry practices, but to anticipate trends, set standards, and provide a strong theoretical foundation. This syllabus positions academia as the torchbearer, while at the same time ensuring its work remains grounded in industry realities. The idea is to foster a symbiotic relationship where academic insights feed into practice, and industry feedback refines academic models. Through this syllabus, we are trying to build a bridge so that industry and academia come closer in a spirit of interdependence, rather than maintaining a safe distance, which benefits neither side.

Secondly, it is crafted with a modern and forward-looking perspective, so it will remain

Noted media educator Prof Shambhu Nath Singh says the new syllabus for mass communication and journalism is designed to strengthen the relationship between academia and industry.



relevant for a long time, needing only occasional updates. Importantly, it includes rich inputs from the Indian Knowledge System (IKS), aligning with the government's vision to revive and promote our own knowledge traditions for society's benefit. It is also designed to be flexible. This means institutions can take regional content based on local culture and ethos. This is crucial because whether a student chooses to specialise in film, TV, radio, print, PR, or advertising, effective communication always requires a deep understanding of local context and history.

What benefits can students and educators expect from this curriculum?

Students will find the syllabus wider, richer, and less repetitive, addressing many common concerns they have about course content. It keeps students' interests at the centre, equipping them with practical and theoretical knowledge that matches industry demands. Educators will also find it easier to contextualise lessons with local content, making teaching more reliable and effective. Ultimately, it aims to produce not just skilled professionals but thoughtful communicators who can bridge local and global narratives.

How can media education contribute to combating misinformation and fake news, especially in the age of AI?

In the age of AI, misinformation and fake news have become more sophisticated, fast-

er-spreading, and harder to detect – driven by technologies like deepfakes, AI-generated text, and algorithm-powered echo chambers. This makes media education/literacy not just relevant, but absolutely essential for shaping informed citizens and ethical communicators.

A robust media education programme can combat this crisis in several ways. First, it builds critical thinking and digital literacy, training students to question sources, verify facts, and identify bias – especially when engaging with content on social media. Second, it helps students understand AI tools – how they can both support (e.g., in fact-checking or content moderation) and undermine (e.g., through fake content generation) trustworthy communication. This is why modern curricula must now include modules on AI ethics, algorithmic bias, and responsible use of generative technologies.

Third, hands-on exposure to verification tools – like reverse image search, metadata analysis, and AI-driven fact-checking platforms – empowers learners to actively debunk falsehoods. Just as importantly, strong ethical frameworks within media education instill accountability, helping students appreciate the real-world consequences of sharing manipulated or misleading content.

Do you see AI replacing jobs in the media sector?

AI is undoubtedly transforming the media sector, automating routine tasks like news summarisation, transcription, video editing, and even content generation. As a result, certain repetitive or mechanical roles – such as basic copywriting, fact-checking, or layout formatting – may decline. However, this does not mean AI will replace jobs altogether. Rather, it will redefine them.

The demand will now shift towards AI-augmented roles – creative strategists, multimedia storytellers, data-literate journalists, AI ethics editors, and professionals who can both use and critically assess AI tools. Human intuition, empathy, cultural context, and ethical judgment remain irreplaceable in media and communication – areas where AI still falls short.

Peer review crisis is stalling India's scientific progress

BY INVITATION



V RAMGOPAL RAO

The scientific peer review system, long considered the backbone of research quality control, is showing signs of serious strain. Editors and authors alike report mounting difficulties in finding qualified reviewers. A recent study noted that fewer than half of invited reviewers now accept invitations, lengthening the review process and adding to editorial workloads. One editor recounted inviting 40 researchers just to secure two reviews for a single paper—an acceptance rate of barely 5%.

With so few willing to take on the task—even for journals in which they recently published—editors must send out far more requests, wait longer for responses, and often personally coax colleagues to volunteer. The result is a slower publication pipeline and mounting pressure on editorial teams. Perhaps more troubling are reports that journals are using swift desk rejections as a coping mechanism. This means many papers, potentially even worthy studies, are being turned away. In extreme cases, papers have been withdrawn simply because no reviewers could be found.

Meanwhile, a series of scandals has exposed how the peer review process can be gamed or outright defrauded. A notorious case emerged in 2014, when Sage Publications retracted 60 articles from the *Journal of Vibration and Control* after uncovering a peer review and citation ring. One author had created fake reviewer identities and fabricated email accounts to submit glowing reviews of his own papers, exploiting systems that allowed authors to recommend reviewers. Such incidents have since multiplied.

In recent years, the scale of fraud has become staggering. In 2022, publisher Wiley announced it would retract 511 papers across 16 journals in its Hindawi portfolio after exposing organised peer review rings. A further investigation in 2023 identified about 1,200 more compromised articles, traced to special issue editors and fake reviewer accounts. Other publishers have faced similar crises: the Institute of Physics Publishing retracted nearly 500 papers in 2022; PLOS One withdrew over 100; and *Frontiers in Physiology* retracted 13 papers after confirming that perpetrators had stolen or invented academic identities and even secured editorial roles to handle their own manuscripts. These cases highlight systemic vulnerabili-

ties. When overwhelmed editors rely heavily on author-suggested reviewers or cursory vetting, clever bad actors can slip through. The fallout is severe. Not only are fraudulent papers published, journals must devote significant effort to investigations, re-reviews, and mass retractions, all of which further burden editors and diminish trust in the publication process.

Considering these twin crises—too few honest reviewers and too many cunning fake ones—what is the way forward? Most experts agree that no single fix will suffice. On the policy front, journals and institutions are exploring ways to better reward genuine peer review, moving beyond the notion of it as a 'good karma' service. Some propose paying reviewers or offering tangible incentives, though this is controversial because of costs and potential conflicts of interest. More widely accepted is giving public credit for reviewing. Platforms like Publons now allow reviewers to show-

Image: AI



GAMING THE SYSTEM: Journals face a shortage of honest reviewers and a glut of fakes

case contributions, and some universities even consider peer review activity in hiring or promotion decisions. Another idea is reciprocity: requiring that authors who submit to journals also contribute reviews elsewhere, reinforcing the idea that publishing is a two-way street.

Technology is also being harnessed to shore up peer review. AI-driven manuscript systems now suggest qualified reviewers, track workloads, and flag suspicious patterns—for instance, when multiple submissions list the same reviewers. Forensic tools that analyse metadata or writing style are being developed to detect reviews generated by paper mills or AI. Such

measures add extra layers of defence.

Ultimately however, cultural change within academia will be key. Researchers must re-embrace reviewing as a core responsibility of scholarship. Senior scientists can help by mentoring younger colleagues in good reviewing practices, while academic leaders and department heads should set expectations that faculty devote time to peer review. Even small gestures can make a difference. In one experiment, adding a short, personalised note from the editor to accompany the standard review request email led to a measurable uptick in reviewers accepting the task. Such humanisation of the process reminds potential reviewers that they are not just cogs in a publication machine.

If these reforms take root, peer review can emerge stronger and more resilient. The stakes are high. Without reliable peer review, the credibility of published science itself is at risk. ■

Prof Rao is Vice Chancellor of the BITS Pilani group of institutions and former director of IIT Delhi

देश की अभिव्यक्ति का सबल माध्यम हिंदी



गिरीश्वर मिश्र

हिंदी केवल देश की सबसे सतक संस्कृति नहीं है, बल्कि संस्कृति के कारण सभी भारतीय भाषाओं में एकता का सूत्र भी है।

भाषा हमारी अभिव्यक्ति का न केवल सबसे समर्थ माध्यम है, बल्कि संस्कृति के निर्माण, संरक्षण, संचार और अगली पीढ़ी तक उसका इस्तेमाल भी बहुत हद तक उसी पर टिका होता है। ज्ञान के साथ ही भाषा का रिश्ता गहन और व्यापक है, क्योंकि भाषा में ही ज्ञान संजोया जाता है। भाषा के लेंस से हम अपनी दुनिया को देखते-समझते हैं। उसी से धार्मिक संसार करते हैं। भाषा के ही सहारे कुंठा-आक्रोश तथा हास-परिहास सहित विभिन्न भावनाओं को भी मूर्त आकार देते हैं। भाषा हमारे अस्तित्व का प्रमाण और साक्षी बनकर हमारी सत्ता का प्रसार तब करती है, पर भाषाओं की दुनिया बहुसंख्य है। भिन्न भाषा-परिवार की भाषाओं में साम्य उनमें संस्कृति का परिणाम है, क्योंकि भाषाओं में आदान-प्रदान भी होता है। इससे भारतीय संस्कृति की मूल एकता का भी पता चलता है। विभिन्न भाषाओं के सहित्व में ही भारतीय संस्कृति की एकता झलकती है। कहावतें, मुहावरे और

लोक-साहित्य में भी भाषाएं एकता के अनेक सूत्र मिलती हैं। अधिकांश भाषाओं का संस्कृत से निकट संबंध इस तरह के भविक साम्य का एक बड़ा कारण है।

भाषा का संस्कृति और शिक्षा से गहन संबंध अंग्रेजी ने उलट-फुलट दिया। अपने शासन संचालन के लिए अंग्रेजी को अनुकूल कर्मचारियों को तैयार कराया। इसके लिए अंग्रेजी ही उन्हें सबसे उपयुक्त भाषा लगी। उन्होंने भारतीय भाषाओं को उखाड़कर अंग्रेजी को रोप दिया। धीरे-धीरे भारत, भारतीयता और भारत-भाव को प्रभावित करते हुए गौण बना दिया गया। विचार और कर्म भाषा से अनुचित होते हैं। हमारे अस्तित्व की बनावट और चुनाव में अंग्रेजी जिस तरह पैठी, उसके चलो अपने यथार्थ को उसी के अर्थ में वह सब भी अपने में देखने लगे, जो था भी नहीं। सांस्कृतिक विस्मरण की प्रक्रिया आधुनिक होने, विकसित होने की वैश्विक लड़ाई की अनिवार्यता बन गई। सोचने-विचारने की प्रक्रिया ऐसे तितर-बितर हुई कि ज्ञान की गुणवत्ता प्रभावित होती गई। इसमें यह भ्रम भी मददगार हुआ कि अंग्रेजी एक वैश्विक भाषा है। भारतीय संविधान की आठवीं अनुसूची में संछिन्नबल के आधार पर 22 भाषाएं उल्लिखित हैं, जिनमें हिंदी को राजभाषा घोषित किया गया है यद्यपि वह राजकाज की भाषा है। सरकारी तौर पर 14 सितंबर, 1949 को हिंदी संवैधानिक तौर पर राजभाषा घोषित हुई और उसे अंग्रेजी जैसा बन जाने की सलाह दी गई। अंग्रेजी भाषा राजनीतिक-ऐतिहासिक कारणों से सहायक राजभाषा बनी, पर वास्तव में उसकी भूमिका राजभाषा की रही। उसमें दक्षता आज भी शिक्षा, नौकरी और सरकारी कार्यालयों



अशोक राजपूत

के लिए जरूरी बनी हुई है। स्वतंत्र भारत ने अंग्रेजी को शिक्षा नीति को लगभग नष्ट कर तब स्वीकार किया और उसके अनुसार अंग्रेजी के वर्चस्व को बरकरार रखा। भारतीय भाषाएं हरिद्वार पर धकेली जा रही हैं। सरकार का राजभाषा विभाग हिंदी उद्धार के काम में लगा हुआ है, पर अंग्रेजी के साथ प्रतिद्वंद्विता में हिंदी हीनत्व का पर्दाफाश बनती गई। अंग्रेजी जानने वाला ही शही और बाकी गंवार बन गए। यह दुर्भाग्य ही है कि जो भाषा उपनिवेशवाद के खिलाफ खड़ी थी, वह उपनिवेशवाद होने के बाद बंदी बना रही गई। सरकारी कामकाज मुख्य रूप से अंग्रेजी में ही चलता रहा।

देश की भाषाओं में न्याय, प्रशासन और उच्च शिक्षा में शब्दार्जन आदि को व्यवस्था न होने से आम जनता की कठिनाई बढ़ती रही। अब अंग्रेजी बोलना जानना श्रेष्ठतः वह ऐसा प्रतीक बन चुका है कि हममें से कई लोग अपनी भाषा का तिरस्कार कर हिंदी को हिंगलिस बनाने में ही कल्याण देख रहे हैं। इस परिदृश्य में राजनीति की मुख्य भूमिका रही है। इस सबके बावजूद संवाद, संपर्क और

ज्ञान की भाषा के रूप में हिंदी की भारत में व्यापक उपस्थिति है। 1909 में इंडियन ऑपिनियन में महात्मा गांधी ने लिखा था, सारे भारत के लिए जो भाषा चाहिए, वह हिंदी ही होगी। स्वतंत्रता आंदोलन के दौर में हिंदी देश की संपर्क भाषा बन गई। विचारों के रूप में गांधी ने अंग्रेजी में पढ़ाई को अतिरिक्त भार के रूप में महसूस किया था, जो जनार्जन में रोड़े अटकती है। यह खुद अहिंसावादी लेखन मातृभाषा गुजरती में करते थे। हिंदी का क्षेत्र हिमालय की तराई, नर्मदा, पंजाब, सिंध, गुजरात, बंगाल, छोटा नागपुर तक विस्तृत है। इसकी सीमाएं बंगला, उड़ीसा, तेलुगु, नेपाळी, पंजाबी, गुजराती और सिंधी से जुड़ी हैं। लच्छीली होने और व्यापक शब्द भंडार के साथ जुड़ने की प्रवृत्ति के चलते ही राजा राममोहन राय, केशवचंद्र सेन, स्वामी दयानंद, लौकमान्य तिलक और महात्मा गांधी आदि ने हिंदी को अपने समर्थन दिया था। संस्कृत से निकली मराठी, बंगला, उड़ीसा और गुजराती भाषाओं से हिंदी का निकट रिश्ता है। हिंदी क्षेत्र जनसंख्याबहुल होने से व्यापक के लिए

बड़ा काम भी उपलब्ध कराता है। हिंदी फिल्मों, संगीत पूरे भारत में प्रचलित हैं। भारत की आधी से ज्यादा जनसंख्या हिंदीभाषी है, शेष हिस्सों में अधिकांश लोग हिंदी समझते हैं। हिंदी आज भारतीय जन अभिव्यक्ति का सबल माध्यम है। हिंदी और अन्य भारतीय भाषाओं को खोने का अर्थ सांस्कृतिक एकता, भारतीयता, भारतीय मानस, भारत की पहचान को भी खोना है।

लोक-जीवन में संपर्क भाषा की भूमिका में हिंदी कालो गहले से रही है। आवश्यकता है कि हम औपनिवेशिक मानसिकता से बाहर निकलें और भारत को भारत की दुष्टि से समझें। यदि वास्तव में राष्ट्र भाषा के बिना राष्ट्र को गुंथा कहा जा तो यही आशय था कि हिंदी में संवाद सहज है। हिंदी का विकास अंतर भाषा के रूप में हुआ। अंग्रेजी का मोड़ और हिंदी से अस्तित्व वैयक्तिकता के मकड़जाल में फंसने के कारण है। इसकी सीमाएं आए दिन प्रकट हो रही हैं। फ्रांस, जर्मनी, स्पेन, पुर्तगाल, इंग्लैंड, जापान, चीन और रूस जैसे देश अपनी-अपनी भाषा में विज्ञान और प्रौद्योगिकी की सफलतापूर्वक शिक्षा दे रहे हैं। इन सब देशों में अपनी भाषा के लिए गौरव है और भाषा को हर तरह से समुद्र करने का निरंतर प्रयास भी हो रहा है। यह हमें भी करना होगा और ऐसा करते हुए वह मानव होगा कि हिंदी केवल सबसे सहायक संस्कृति भाषा ही नहीं, सब भारतीय भाषाओं में एकता का सूत्र भी है। उसका अलगाव-दुर्लभ किसी से नहीं। वह सबके साथ है।

(लेखक महाराष्ट्र की केंद्रीय हिंदी विभाग के पूर्व कलरि हैं।)

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Bringing global education home

Based on the University Grants Commission's recommendations, the Ministry of Education has handed over twelve letters of intent to top foreign universities to establish their campuses in India during the last year. One U.K. university has already opened its doors in Gurugram, launching its programmes for the 2025-26 academic session, with the remaining universities setting up campuses in Bengaluru, Chennai, Mumbai and the National Capital Region. The fact that world-class universities are establishing their physical campuses in India shows our conscious policy realignment. It opens new opportunities for our students and expands educational horizons in ways we could hardly imagine a decade ago.

The beginning point for this development is a regulation introduced by the University Grants Commission (UGC) in 2023. The idea is to allow top-ranking foreign universities to establish campuses in India with operational autonomy and regulatory clarity. The UGC took this calibrated decision to align with the vision of the National Education Policy (NEP) 2020. At its core, NEP 2020 calls for re-imagining higher education to be globally competitive while remaining locally rooted. Facilitating the establishment of global university campuses in India constitutes a direct implementation of that objective.

Why now?

India stands at an inflexion point. With a large aspirational youth population, India has a rapidly expanding and stable economy. Our start-up economy ranks among the fastest-growing globally and is a crucible of global innovation. There is a demand for quality higher education, especially in new-age fields such as AI, design, data science, sustainability, and finance.

Foreign universities are not arriving on empty ground. They are coming into a country already



Mamidala Jagadesh Kumar

is former Chairman, University Grants Commission, and former Vice-Chancellor, Jawaharlal Nehru University

Students who might not have considered international education due to economic or social constraints can make that possibility real now

undergoing serious educational reform. Multidisciplinary is being actively built into the curriculum. We are adopting hybrid educational delivery mechanisms using digital public infrastructure. Research funding is being streamlined through the Anusandhan National Research Foundation. Quality assurance mechanisms are becoming more outcome-oriented due to the reforms in accreditation. Foreign universities see the potential. Many western institutions face diverse challenges, including rising operational costs, demographic changes, and expanding globally. Establishing campuses in countries with a high youth population and growing intellectual capital makes strategic sense. India offers both.

Local advantage, global gains

For students in India, its long-term impact could be truly consequential. Access to international-quality education without the high costs of going abroad changes the game entirely. Families no longer have to stretch their finances or send their children halfway across the world. The benefits go beyond academic degrees. Students will have exposure to diverse peer networks, industry partnerships, and entrepreneurial ecosystems embedded within the country.

And here lies a critical point. Students who might not have considered international education due to economic or social constraints can make that possibility real now. From the parents' perspective, the appeal is straightforward. They want their children to have the best possible education, and they want to feel secure in that choice. Sending a child abroad involves logistical, emotional, and financial complications. With global campuses coming to Indian cities, that equation changes.

This situation, in turn, raises the bar for Indian institutions as well. Healthy competition never hurts a system. When foreign

university campuses in India offer cutting-edge programmes, our universities must innovate, reflect, and re-energise their models. There is a strong case for research collaboration, too. For instance, we have seen IITs, IISERs, AIIMS, central universities, and State universities collaborate with global partners on areas such as renewable energy, public health, and engineering. Australian and U.K. universities share strong educational collaborations with Indian universities. European and U.S. universities are intensifying linkages. These collaborations support research, innovation, and skills development.

Education powerhouse

India is a rising power in technology, diplomacy, and manufacturing. Yet, we rarely speak of our potential in global education with the same conviction. India must position itself as an emerging force in international education not by imitating the western university model, but by drawing the world to engage with us on our terms, within our cultural, intellectual, and societal landscape. India's centuries-old tradition of scholarship, from Nalanda to Shantiniketan, should not be seen as relics of the past, but as living sources of credibility in shaping a distinctive, modern learning environment. India already draws thousands of international students each year, yet the scale is negligible compared to our potential. Some claim that prioritising global education is a distraction from India's domestic needs. The truth is the opposite. Inviting the world's students, researchers, and institutions to work with us here also lifts our universities' quality, resources, and ambitions. To ignore this is to allow other nations to monopolise the narrative of what "world-class education" means, while we remain consumers instead of shapers of that narrative.

NITI Aayog's human capital revolution

More than just achieving targets, NITI Aayog has focused on creating systems that are sustainable, inclusive, and future-ready. Its commitment to the SDGs is evident in its every initiative — from digital public infrastructure to gender equity

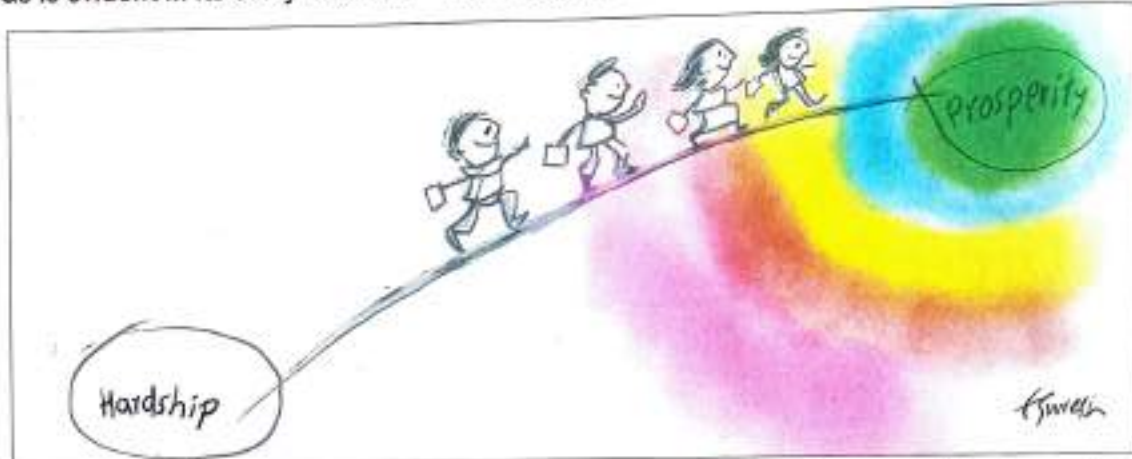


RAO INDERJIT SINGH

In a country as vast and varied as India, the true measure of progress lies not merely in GDP figures or infrastructure milestones but in how well a nation nurtures its people. Human capital — our education, skills, health, and productivity — is not just an economic asset but a moral imperative. Over the last ten years, a quiet yet formidable revolution has taken shape under the stewardship of India's premier policy think tank, NITI Aayog, reshaping how the country invests in its most valuable resource: its citizens. In a nation where over 65 per cent of the population is below the age of 35, the demographic dividend presents a once-in-a-generation opportunity. But the sheer scale of this young population brings enormous responsibility. The challenge lies in converting youthful energy into a force for economic growth and national development. This is where NITI Aayog has emerged as a visionary catalyst — charting a roadmap not just for today's progress but for tomorrow's prosperity. Over the last decade, NITI Aayog has evolved from a think tank into a reformist engine and an execution partner, known for bold ideas backed by data, collaboration, and human-centred design. It has transformed policymaking from a top-down exercise to a dynamic process of co-creation with states, private players, global institutions, and civil society. Its strength lies not just in planning, but in listening — and turning those insights into action. Education, the bedrock of human capital, has witnessed a complete reimagining under its guidance. Recognising that access alone is not enough, NITI Aayog pushed for quality and equity. The National Education Policy 2020, where it played a pivotal role, ushered in a new era — shifting from rote learning to critical thinking, flexibility, and vocational integration.

It emphasised early childhood education, mother-tongue instruction, and seamless transitions between disciplines. Through initiatives like the Atal Innovation Mission, it ensured both accountability and imagination — embedding innovation in over 10,000 Atal Tinkering Labs that now dot the country. Skilling India's youth for the twenty-first century has been another cornerstone of its mission.

From backing the Skill India Mission to ensuring that vocational programmes reach the heart of underserved districts via the Aspirational Districts Programme, NITI Aayog has helped bridge the gap between classroom and career. Under Skill India Mission, more than 1.5 crore youth have been trained through initiatives that blend technology, industry linkages, and demand-driven curricula. It did not just train for training's sake — it mapped sectoral needs and designed



The Pioneer
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Author is Minister of State
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programmes that opened real economic doors for India's rural and urban youth alike. In parallel, it championed a dynamic, inclusive labour market. It supported the rationalisation of forty-four central labour laws into four simplified codes — on wages, social security, industrial relations, and occupational safety. These reforms balanced employer flexibility with worker protection, particularly benefiting informal sector workers who make up the majority of India's workforce.

By simplifying compliance and encouraging formalisation, the workplace became not only more productive but also more humane. Healthcare, often seen as a cost, was reframed as an investment. NITI Aayog helped architect the shift from reactive treatment to proactive wellness. The flagship Ayushman Bharat scheme, backed and monitored by NITI Aayog, provided over 50 crore Indians with health insurance, while more than 1.5 lakh Health and Wellness Centres took primary care to the grassroots. Programmes targeted nutrition, maternal and child health, mental well-being, and non-communicable diseases — aiming not just to heal the sick, but to keep people healthy.

The COVID-19 pandemic tested the resilience of India's health system like never before. In this crisis, NITI Aayog stood tall — partnering with the Ministry of Health and ICMR to model infection patterns, ensure equitable medical resource allocation, and roll out platforms like eSanjeevani for telemedicine. Its post-pandemic vision emphasised not just recovery, but readiness — pushing for public health management cadres and modern digital health infrastructure.

Beyond these domains, NITI Aayog has been a lighthouse for entrepreneurship and innovation. Programmes like Start-Up India, Stand-Up India, and the Atal Innovation Mission created a fertile ecosystem for ideas to flourish. Thousands of start-ups in fintech, edtech, agritech, health tech, and clean energy are thriving today because they had policy support, incubation, and mentorship at crucial stages. These are not just businesses; they are job creators and

problem-solvers, contributing to a resilient and self-reliant India. But perhaps its greatest achievement lies in how it has institutionalised a culture of evidence-based policymaking. By leveraging big data, artificial intelligence, real-time dashboards, and rigorous monitoring frameworks, it ensured policies remain adaptive, accountable, and aligned with ground realities. Whether it was launching India's first SDG Index, guiding states on performance metrics, or using behavioural insights for policy design, NITI Aayog brought scientific thinking to the heart of governance. Its ability to convene and coordinate across ministries and sectors made it more than an advisory body — it became the conscience-keeper of development. It encouraged healthy competition among states through performance-based rankings, worked with civil society to amplify voices from the margins, and engaged global partners to bring the best practices home.

India's rising position in the Global Innovation Index and the praise from institutions like the UN, World Bank, and UNESCO reflect the world's recognition of this effort. More than just achieving targets, NITI Aayog has focused on creating systems that are sustainable, inclusive, and future-ready. Its commitment to the Sustainable Development Goals is evident in every initiative — from clean energy transitions to green mobility, from digital public infrastructure to gender equity in workplaces. India's rise as a knowledge economy is no longer a distant dream — it is a work in progress, propelled by policies that see people as the nation's greatest asset.

What NITI Aayog has done is elevate the discourse around development, reminding us that true progress is measured not by the tallest buildings or biggest factories, but by the strength, health, and dignity of its people. In doing so, it has become more than a think tank. It has become the pulse of a young, aspiring India — an India that dreams, dares, and does. At the heart of this story lies the quiet confidence that when you invest in people, you build not just a better economy, but a better nation.

The art of teaching in the digital age

Good mentors get their students prepared for the journey of learning better, writes Sujit Kumar Chakrabarti



What should we, as teachers, strive to teach in our lectures? In this age of advancements in Information Technology and generative AI, every teacher must be grappling with this question in some form or another.

In earlier days, if you had the content of the topic in your command and you were reasonably good at explaining it, you had a good chance of passing off as a good teacher. Not anymore.

Students these days have access to an abundance of superlative content through online lectures. As far as the quality of content is concerned, it's not easy to match that of these online courses.

Whether most students do indeed diligently absorb that online content is an open question. However, when an average student is deciding whether or not to take an interest in your lecture (often with a bias towards a 'no'), they will most likely compare your content and delivery with those of the best on the Internet. And in such an unfair game, most of us stand

little chance.

So, if content is almost impossible to catch the student's attention and interest with, what value can ordinary teachers like us bring to the table? A somewhat blunt variant of the question: What stopped us, human teachers, from becoming irrelevant in the face of Internet and AI content?

Three things set a human teacher apart from anything that technological advancement can offer as of today:

Guidance and mentorship

Students today are very smart and resourceful. Any goal is not too hard to achieve, no destination too distant to reach, for them. However, in this era of information overload, there's a lot

of confusion as to what to aim for and where to go. Add to this the natural lack of experience and self-awareness of their age, and the general noisiness of the atmosphere that's constantly trying to dazzle you, numb your judgement, and entice you toward wrong ideals, wrong role models. In such a situation, a guide (who helps in various decisions, not just on academic or professional matters but about matters of general life) is of great value.

Awaken interest and excitement

The only way to awaken excitement about anything is to display it in yourself. Being excited about a subject is often harder than being an expert in it. There are many experts in a field

who are not able to communicate their knowledge to others. Excitement doesn't lie in immaculate and rigorous exposition of a topic, but in evoking excitement, suspense, surprise and other human emotions associated with storytelling about an otherwise dry topic. Where applicable, relation to real life and significance also helps. Creating continuity between topics already learned also contributes positively to the interest. Personal anecdotes add a touch of credibility to the narrative.

Personalisation

A teacher who's keenly aware of the specific characteristics of their students is in a far better position to personalise the teaching. This may consider the

students' current level of knowledge, intelligence, intellectual capacity and inclination, other interests and ambitions. In a very close teacher-student relation (e.g. between a PhD scholar and her advisor), even details about personal nature, health (both physical and mental as well), personal situation (e.g. family and economic), etc., can also be very much considered. Even when the cohort is large and such a high degree of personalisation may become infeasible, even then, insights about the general characteristics of the class can be used effectively to generate a personalised experience.

For example, when teaching a large class, I try to keep track of what other courses those students have already done or are currently doing in that semester. Crossing connections between my course and those other ones also has subtle positive effects. It demonstrates how various subjects don't exist in isolation but are deeply connected. It is convincing evidence that the teacher is interested and aware of the learning journey of his students over and beyond the boundaries of his own subject. This personalisation is a very human thing, extremely hard to replicate by even the most state-of-the-art AI agent today.

When a teacher who acts as a good mentor to his students; ensures to keep seeking their curiosity and excitement about learning continually through a variety of storytelling methods and develops a personal 'human' connection with his students and uses the same to personalise the teaching/learning method, the students would be far more prepared and capable to take the journey of learning, along with its hardships and perils alike, all by themselves. Such a teacher is guaranteed to stay relevant in the learning story of today's students.

(The author is an associate professor at a Bengaluru-based technology institute)

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India's economic ambitions need better gender data

Women contribute just 18% to India's GDP today, but continuing with business-as-usual means that trillions of dollars will be left on the table. India's aspiration to become a \$30 trillion economy by 2047 rests on a simple truth: inclusive growth cannot happen if half its population remains invisible in the data that drive policy and investment. Nearly 196 million employable women are outside the workforce. While the Female Labour Force Participation Rate has improved to 41.7%, only 18% of these women are in formal employment. The question is not just how India creates opportunities for women, but how it ensures that these opportunities are visible, measurable, and acted on across every department of governance.

A district-level tool

The launch of the Women's Economic Empowerment (WEE) Index by the Government of Uttar Pradesh – the first in India – offers a glimpse of what is possible. This district-level tool tracks women's participation across five economic levers: employment; education and skilling; entrepreneurship; livelihood and mobility, and safety and inclusive infrastructure. Its significance lies beyond the index. It signals a shift toward embedding a gender lens in every dataset, every department, and every decision.

India produces multiple indices on health, economic well-being and infrastructure. Very few disaggregate this data by gender. Without this lens, gaps remain hidden. Without visibility, reforms stall. And without reforms, exclusion becomes entrenched.



Pooja Sharma Goyal

Is the Founding CEO of The Udati Foundation



Vivek Kumar

Is Program Lead, The Udati Foundation

The Government of Uttar Pradesh's Women's Economic Empowerment Index is a model that can be replicated across the country

When inequities become visible, action follows. In Uttar Pradesh's transport sector for instance, data analysis of bus drivers and conductors in the State and the low percentage of women in this segment prompted the department to redesign recruitment strategies and address foundational infrastructure gaps such as women's restrooms in bus terminals. These changes, while modest, are catalytic, and are unlikely to have occurred without gender-specific insights.

The WEE Index shows how such insights can be systematised. By mapping where women drop off – from school to skilling, skilling to work, or entrepreneurship to credit – it moves the conversation beyond participation rates to structural barriers. Consider this striking pattern: while women dominate (more than 50%) enrolment in Uttar Pradesh's skilling programmes, they represent a fraction of registered entrepreneurs, with their access to credit being even more limited. This highlights not only participation gaps but also the systemic barriers to finance and enterprise support – data that can directly inform policy reform.

The need for data from every system

If India is serious about closing its gender gap at scale, gender-disaggregated data must become universal and normative. This requires integrating gender breakdowns into every departmental management information system – from micro, small and medium enterprises to transport to housing – and building the capacity of local governments to collect and use this data effectively to create effective gender action plans.

It also calls for moving beyond surface-level counts to track retention, leadership, re-entry, and quality of employment, particularly at stages after Class 12 in school and post-graduation, where female dropout rates surge.

Equally important is the need for a rethink on gender budgeting. Too often, gender budgeting is confined to finance departments or specific women's welfare schemes. True gender budgeting applies a gender lens to every rupee spent – across education, energy, infrastructure, and more. It is simple – you cannot budget for what you do not measure.

Help for States moving ahead

What Uttar Pradesh has piloted is a foundation that can be replicated and scaled. States such as Andhra Pradesh, Maharashtra, Odisha and Telangana have already set trillion-dollar economic goals. To achieve them, they must leverage their gender dividend. A robust framework such as the WEE Index can help States translate intent into implementation – turning data into district-wise gender action plans that guide budget allocations, infrastructure priorities and programmatic reforms.

India's gender gap is not new, but India's response to it must evolve. The solution would involve a fundamental change in how India sees, measures and responds to gender across every level of governance.

The WEE Index is not the finish line but the starting block. It makes visible what has long been invisible and offers a road map to move women from the margins to the mainstream of India's growth story.

Unlocking innovation with India's procurement reforms

Procedure policies, often designed with transparency and cost-efficiency in mind, have long had unintended consequences for research and development. While preventing fraud, these frameworks frequently kill innovation, one process at a time, by prioritising procedural compliance over scientific needs. India's recent reforms to its General Financial Rules (GFR) – particularly exemptions from the Government e-Marketplace (GeM) portal and enhanced financial thresholds for research and development (R&D) procurement – are a welcome change.

Procurement as innovation catalyst

The tug-of-war between procurement policies and innovation is not new. Studies have shown that public procurement, when done properly, can give a push to private-sector R&D by creating stable demand for advanced technologies. Moreover, it has been found that targeted procurement spending is associated with increased patent filings and private R&D investment, forming a virtuous cycle of innovation. However, as the Brazilian case study in EconStor's 2023 report notes, generic procurement rules rarely achieve this unless explicitly designed to spur innovation. India's pre-reform framework fell into this trap: mandating GeM purchases for all sub-₹200 crore equipment, regardless of specialisation, which forced scientists into a time-consuming exemption process for globally benchmarked tools. Vendors on GeM often supplied materials of poor quality, compromising research.

The Government of India's policy changes in June 2025 directly address these issues. By allowing institutional heads to bypass GeM for specialised equipment and raising direct purchase limits from ₹1 lakh to ₹2 lakh, the reforms acknowledge that cookie-cutter procurement is incompatible with R&D's bespoke needs. Delegating approval for global tenders up to ₹200 crore to vice-chancellors and directors eliminates bureaucratic lag – a chronic grievance highlighted by the Prime Minister's Economic Advisory Council. These adjustments align with theories of "catalytic procurement", where flexibility enables public institutions to act as early adopters of advanced technologies, stimulating private-sector innovation.

Yes, the reforms stop short of a full paradigm shift. While empowering institutional leaders, they retain safeguards such as departmental purchase committees for higher-value acquisitions. This could be argued as a necessary balance. However, even the revised ₹2 lakh direct purchase limit could remain inadequate for high-cost fields such as quantum computing or biotechnology. Additionally, the focus on global tenders, while ensuring quality, could marginalise domestic suppliers unless local R&D systems are empowered and left free to collaborate globally, and compete at that level.

The policy's success will depend to a large extent on implementation. Trusting institutional heads with procurement discretion assumes high ethical standards, which is something that will have to be built up, slowly, in a system that has been historically plagued by inefficiency. As the policy rolls out, monitoring mechanisms will be vital to prevent misuse while preserving agility.



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How has procurement evolved globally? Globally, nations leading in R&D outcomes have already reimagined procurement as something that acts as a catalyst for innovation – not just a cost-control mechanism. India can learn from their experiences. Procurement processes have evolved from ancient record-keeping to Artificial Intelligence (AI)-driven strategies. India would do well to learn from these.

Germany's approach is a good example of balancing procurement checks and R&D ambitions. Through its High-Tech Strategy, the federal government mandates that public procurement be used to promote innovative solutions, supported by KOENNO, which is a dedicated agency advising procurers, curating supplier databases, and hosting cross-sector innovation forums. This institutionalises what economist Mariana Mazzucato terms "mission-oriented procurement", where state-purchasing power deliberately shapes technological markets. Similarly, the 'Small Business Innovation Research (SBIR) program' of the United States reserves 3% of federal R&D funds for startups, using phased procurement contracts to derisk early-stage technologies while maintaining competitive tension among vendors. These models recognise that procuring innovation is not about buying predefined products but in fostering ecosystems where suppliers compete on breakthroughs.

India's GeM reforms partially embrace this philosophy by exempting specialised research equipment from mandatory portal use – a nod to the fact that Indian labs often face delays extending to a few months when dealing with niche instruments. However, the policy lacks Germany's proactive market-shaping elements or the SBIR's staged funding structure. For instance, India's ₹200 crore global tender limit for institutional heads still prioritises cost benchmarks over technical ambition, unlike South Korea's "pre-commercial procurement" system that pays premium prices for prototypes meeting moonshot criteria.

Procurement's evolutionary arc

Procurement's 5,000-year journey, from Egyptian scribes tracking pyramid materials to AI predicting supply chain details, reflects an evolution from control to creativity. The Industrial Revolution looked at procurement as a cost-centric function, but the two World Wars exposed its strategic role in securing scarce resources.

Post-1945, this duality deepened: corporations adopted Just-In-Time inventory systems while governments used procurement to spur sectors such as semiconductors (via National Aeronautics and Space Administration contracts) and renewables (through the European Union's green mandates).

Today's frontier is "cognitive procurement", where tools such as generative AI analyse supplier ecosystems, simulate scarcity scenarios, and automate compliance – freeing researchers to focus on creative sourcing. Consider Pfizer's COVID-19 vaccine effort, where AI-optimised procurement identified multiple critical suppliers within a few hours, compressing a months-long process into weeks.

The discussion over procurement policies often leads to calls for privatisation of national

labs, as that would probably open up the procurement process. However, it would be wise to consider that the debate over privatising India's national labs hinges on a false binary. As the U.S. experience shows, privatisation is not about abandoning public oversight but redefining it. When the Department of Energy handed over the management and operation of Sandia National Laboratories in 1993 to a private company, it retained mission control through performance-based contracts while unlocking private capital for laser and materials research. The result? A huge increase in patent filings and partnerships with a number of small and medium enterprises within a decade.

India's Council of Scientific and Industrial Research (CSIR) could adopt this hybrid model. Laboratories working in strategic fields such as space tech or quantum computing might benefit from corporate-style agility in procurement and hiring, provided the government maintains some control to safeguard national interests. However, success requires robust accountability frameworks and some alignment with innovation road maps.

Procurement as a research variable

India's procurement reforms are necessary but insufficient. Four systemic shifts could anchor deeper change. The first would be outcome-weighted tenders. Following Finland's example, there must be an evaluation of bids not just on cost but also on an index that weighs various qualitative factors such as supplier R&D investment and scalability potential.

The second would be providing sandbox exemptions. Allow institutions such as the Tata Institute of Fundamental Research or the Indian Institutes of Technology to bypass GFR entirely for some percentage of their purchases, provided they meet annual innovation targets audited by third parties.

The third intervention should be AI-augmented sourcing. Deploy the INDIAAI ecosystem to create a procurement assistant that scans global catalogues, predicts customs delays, and suggests alternative materials – reducing decision cycles from months to hours.

And finally, go in for co-procurement alliances. Replicate the European Union's Joint Procurement Agreement, enabling multiple Indian labs to aggregate demand for high-cost items such as cryogenic coolers, achieving economies of scale.

Privatisation is not a silver bullet but a tool among many. As this study on U.S. labs warns, merely transferring ownership sans performance-linked funding or accountability pressures risks slowing growth and innovation. The goal must be creating a procurement continuum where public and private entities coexist – each accessing shared innovation marketplaces but governed by distinct risk-reward matrices.

India's GeM reforms are a tentative step toward procurement systems that value time-to-lab as much as cost savings. By marrying these changes with global best practices in market-shaping, cognitive tools, and hybrid governance, the nation could transform procurement from a research impediment to its accelerant. The lesson from history is clear: civilisations that procured for monuments left ruins; those that procured for inquiry built futures. *—V/S*

Research and development can be transformed by blending these changes with global best practices in market-shaping, cognitive tools and hybrid governance

India's roadmap to a global knowledge powerhouse

Beyond economic might, the true strength of a developed India will rest on its intellectual, social, ethical, and innovation-driven ecosystem. To achieve this, a comprehensive roadmap for higher education must be envisioned — one that builds an inclusive, future-ready, and globally competitive learning environment

FIRST
Column



**RAGHAVENDRA
P TIWARI**



**THE GOAL
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GLOBAL
COMPETITIVENESS**

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The Pioneer

By 2047, when India celebrates a century of independence, higher education will emerge as one of the most powerful forces shaping the nation's transformation into a global knowledge superpower. The future of a developed India depends not only on its economic power but also on the intellectual, social, ethical and innovation ecosystem it must nurture. In this context, a comprehensive roadmap for higher education has to be envisioned. The roadmap should seek to build an inclusive, future-ready, and globally competent learning ecosystem that ignites innovation, research, employability, and cultural leadership. The goal should be to position India among the top three higher education systems globally, where higher education institutions (HEIs) act as engines of socio-economic growth, social equity, and global competitiveness.

The rationale behind this ambitious transformation rests on four key foundations. Firstly, India's demographic dividend presents both an opportunity and a challenge. A young and aspirational demography requires world-class, accessible higher education to unlock its true potential. Secondly, as India transitions into a knowledge economy and aims for a \$40 trillion GDP by 2047, cutting-edge research, innovation, and highly skilled talent have become indispensable. Thirdly, to strengthen its global competitiveness, India must take a quantum leap to enhance its standing in research, technology, and education in order to lead in the 21st century. Finally, higher education must reflect India's civilisational traits, where ancient knowledge systems are harmoniously blended with modern scientific and technological advancements to add unique value to contemporary civilisational discourse.

Achieving this vision requires a grand strategy. Access, equity, affordability, and inclusion must become integral components of this strategy to enable every aspiring learner to pursue outcome-based higher education, regardless of gender, geography, or socio-economic strata. By 2047, the Gross Enrolment Ratio should reach 75 per cent, supported by expanded institutions, community colleges, open digital learning platforms,

and targeted support for disadvantaged groups. Massive use of digital infrastructure and local/regional language content will be crucial in bridging existing divides.

Alongside inclusivity, India ought to promote academic excellence and multidisciplinary. All HEIs should embrace flexible, multidisciplinary curricula on existing and emerging disciplines that integrate vocational, academic, and research pathways through the National Credit Framework (NCrF). A STEAM-based curriculum, enriched by AI-enabled personalised learning pathways, will help prepare students to negotiate the complexities of the future. Concurrently, inter- and transdisciplinary learning should be cultivated through interfacing disciplines across sciences, engineering, humanities, and social sciences, empowering youth with real-life problem-solving skills.

Equally important is the alignment of higher education with skills, employability, and entrepreneurship. Industry-integrated curricula, mandatory internships, apprenticeships, and entrepreneurship modules must become integral parts of the curricula, enabling learners not only to seek but also to create jobs. Special emphasis should be laid on social entrepreneurship for promoting employment opportunities for social science graduates. Universities should nurture start-ups and spin-offs, strengthening India's innovation

ecosystem. For this, HEIs should become creative centres for skill development, innovation, and entrepreneurship to thrive in a highly competitive and fast-changing learning landscape. HEIs should strive to promote critical thinking, creativity, and exploration.

Technology-enabled higher education is the future. A digital and technological transformation of higher education will accelerate growth at an unprecedented pace. Every campus must become digitally enabled, blending physical and virtual learning seamlessly. AI tutors, AR/VR-enabled labs, and metaverse classrooms will redefine pedagogy, while blockchain-based credentialing will ensure seamless global credit mobility.

Yet another equally vital aspect is the strengthening of research, innovation, and knowledge economy ecosystems. The Anusandhan National Research Foundation will have to serve as the backbone of India's translational research ecosystem, driving the establishment of over 100 Centres of Excellence in frontier areas such as artificial intelligence, quantum technologies, biotechnology, green energy, defence, space, and social sectors. These must be complemented by world-class research parks, incubators, and innovation clusters. The ultimate target is for India to rank among the top three nations globally in real-world

problem-solving research output by 2047.

Massive curricular, pedagogical, and assessment reforms are essential for holistic education and for transforming India's classrooms into centres for shaping her destiny. These critical components of education should not limit the learning of youth. This is not possible without a renewed focus on faculty development and leadership. Curricula should be industry-aligned, pedagogy has to become engaging and immersive, and assessment should measure transformation in students. The establishment of a National Higher Education Leadership Academy will ensure continuous faculty training in curriculum design and development, pedagogical and assessment reforms, research, and industry exposure. India must also attract global faculty and encourage cross-border mobility of faculty and researchers.

Another crucial aspect is internationalisation. India must emerge as a global hub of higher learning, attracting more than two million international students annually by 2047. This requires accelerated collaboration, expanding joint and dual degree programmes, building international campuses, and showcasing India's civilisational knowledge systems on the global platform.

For such an ambitious vision to succeed, governance and funding reforms are

essential. The focus must shift from input-based regulation to outcome-driven governance, with institutions enjoying autonomy coupled with accountability. Public investment in higher education should be raised from the current 4.6 per cent to at least 6 per cent of GDP, complemented by resource mobilisation through philanthropy, endowments, and public-private partnerships.

In line with India's commitment to sustainability, HEIs must evolve into green campuses, embracing renewable energy, net-zero practices, and research aligned with the Sustainable Development Goals. Social responsibility must also be central, with students engaging in rural immersion programmes, community service, and social innovation and entrepreneurship projects.

A vibrant cultural ecosystem is central to India's emergence as a globally respected knowledge and innovation hub. By 2047, India's cultural ecosystem must reflect the harmony of tradition and modernity. Her cultural landscape must envision the synthesis of its ancient civilisational discourse and modern global outlook. A culturally vibrant India will not only nurture its own citizens but also inspire and lead the world in creative, intellectual, and civilisational excellence. Therefore, the vision for Viksit Bharat 2047 should place equal emphasis on inclusivity, sustainability, creativity, and international cultural engagement.

To ensure accountability, a robust monitoring and evaluation framework must be created. This will have to include a National Higher Education Dashboard offering real-time data on enrolment, outcomes, employability, and research; an independent evaluation agency to track institutional performance; and an annual "State of Higher Education Report" presented to Parliament.

The outcomes of India's education system have to be transformative by 2047. India's universities will have to be globally benchmarked for producing thought leaders, innovators, entrepreneurs, and cultural ambassadors. Higher education should be able to serve as the engine of India's \$40 trillion knowledge economy.

Most importantly, India will have to reclaim its place as a global knowledge superpower, offering inclusive, sustainable, and future-ready higher education that contributes not just to national progress but also to global well-being.

Why B-schools must embrace public policy

ANILKUMAR M

In India, management studies and public policy often exist in separate silos — distant acquaintances rather than natural partners. Except for a handful of leading institutes, business schools rarely integrate public policy into teaching or research, even though today's managerial skills are deeply linked to understanding of social systems, policy design, analysis frameworks, and evaluation and monitoring methods. Many B-schools continue with compartmentalised departments of marketing, human resources, operations, and finance. Interdisciplinarity, particularly the integration of management with public policy, remains limited. Faculty focus on departmental expertise, even as the real world demands broader perspectives.

This divide is rooted in India's colonial legacy. Public policy as a systematic discipline matured in countries such as the United States, while in India it often remained confined to political science, public administration, or law. Practitioners from these disciplines often assumed the role of policy experts, rather than professionals trained in public policy as an interdisciplinary field. This legacy, reinforced by centralised bureaucracies and contentment with the *status quo*, slowed the development of public policy as a discipline in its own right. The colonial education system further entrenched this neglect after independence. The result: ad hoc policy processes in government and industry and a traditional higher education system ill-equipped to address policy complexity.

Research think tanks increasingly provide useful policy insights, but their work is often fragmented and project-bound. Consultancy firms, meanwhile, face growing demand to tackle complex policy matters but struggle to find trained policy professionals. Academia has not kept pace with this need.

Integrating public policy into the B-school curricula could enable systemic change. It would equip students to become problem-solvers in business management while engaging actively with policy issues. This approach aligns with India's National Education Policy (NEP) 2020, which emphasises interdisciplinarity. Embedding public policy into management studies would train students to analyse problems through multiple frameworks and design solutions addressing both societal challenges and business goals.

For B-schools, the case is stronger still: many consultancy projects they handle from industry and government already carry policy dimensions. Without in-house expertise, their research risks being partial and less impactful.

The urgency is growing. Businesses operate within an ecosystem of rules, regulations, and social expectations. The Goods and Services Tax (GST) rollout, for instance, forced companies to rapidly overhaul systems, and those led by managers alert to regulatory change adapted more smoothly. With tax reforms continuing, regulatory knowledge has become a managerial necessity.

India's new data protection law requires startups and tech firms to rethink how they handle customer information. Policy literacy equips managers to respond effectively. Similarly, the rising Environmental, Social, and Governance (ESG) requirements are reshaping corporate practices. Global investors increasingly expect Indian firms to meet sustainability standards beyond financial performance. Managers who understand frameworks set by regulators such as SEBI are better placed to attract capital, build trust, and maintain credibility.

These policy aspects cannot be seen in isolation. They demand broad-spectrum frameworks: understanding agendas behind policy-making, using analytical techniques for adaptation, and developing stakeholder engagement skills. Such grounding allows managers to connect policies to wider consequences, resulting in more informed decisions.

Future managers and entrepreneurs must therefore learn to frame problems systematically, explore alternative solutions, engage with diverse stakeholders, anticipate trade-offs, and communicate effectively — not only with investors, but also with governments and the public.

Introducing public policy concepts into B-schools can bridge this gap, enabling students to navigate the "wicked problems" of societal ecosystems. Leadership now requires more than management acumen; it requires awareness of how business decisions interact with policy outcomes. A successful leader can frame issues logically, contribute to policy discourse, and develop solutions that benefit both markets and society.

(The writer is an assistant professor and public policy researcher at Ramaiah Institute of Management)

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Lessons Hidden in Failure: Marks Fade, Character Lasts

DR SANKU BOSE

For most of us, from our earliest days at school, we have been led to believe that marks define us. Report cards quietly transform into verdicts on intelligence, potential and even character! A percentage point here or there can decide which college accepts us, which scholarships we receive, and in some cases, which doors of opportunity remain closed forever. For many, grades and ranks become not just a measure of performance but a mirror of self-worth.

But let us pause and ask, do marks truly capture capability? Or do they merely reflect performance at a fixed moment in space and time in a rigid system? The truth is uncomfortable: marks measure memory, exam temperament and conformity more than creativity, resilience, or originality.

In today's rapidly shifting world, where industries vanish within a decade and skills expire in just a few years, clinging to your academic credentials alone in defining your future is foolhardy, to say the least. What sustains careers and lives today is not the ability to reproduce answers but the ability to adapt, imagine, and reinvent!

While marks may fail to measure worth, stress quietly, but most certainly, erodes it. Anxiety around grades, parental expectations, and peer comparisons has become a silent epidemic. We spoke about this at length in our column last week. Students chase numbers as if they were tickets to dignity—while their mental health deteriorates in the shadows. Stress narrows the mind.

Ironically, many "toppers" crumble when real-world uncertainty confronts them, while those branded as "average" often go on to launch startups, lead global teams, or create art that moves millions. Stress doesn't just hurt; it blinds us to life's broader canvas.

Herein lies a paradox: failure often teaches us more than success! Success reinforces what we already know; failure forces us to question, adapt, and grow. Every rejection fuels reinvention. Thomas Edison once remarked that he hadn't failed 10,000 times, but had discovered 10,000 ways that a light bulb would not work. Closer home, Dr APJ Abdul Kalam failed in his dream of becoming a fighter pilot but went on to become India's "Missile Man" and one of its most beloved presidents. These stories remind us that failure is not the opposite of success: often, it's the foundation.

And yet, as a society, we glorify success while erasing the lessons of failure. We place toppers on billboards and full-page newspaper advertisements but rarely honour those who found new paths after stumbling. In doing so, we send students a dangerous message: play safe, fear experimentation, define yourself by applause rather than growth.

Imagine if universities and employers began to ask not just about grades but about resilience. What was the hardest challenge you overcame?

What did you learn from your biggest failure? When did you demonstrate curiosity, adaptability or teamwork? These questions reveal far more about a person's potential than marks ever could. Today's workplaces demand creativity, emotional intelligence, and adaptability, the very qualities that a mark-obsessed, stress-fuelled culture often suppresses.

If we truly wish to prepare our young people for life, we must redefine what success means. Mental health should be treated as an essential part of educational infrastructure. Just as we build libraries and laboratories, we must create spaces for counsellors, peer support groups, and stress management programmes. Failure stories, too, must be celebrated as much as success stories. Alumni should feel encouraged to speak not only of their placements but also of their detours, experiments and setbacks, so that students understand that life is not a straight line but a curve of constant learning.

At Sister Nivedita University (SNU), we encourage students to treat marks as milestones, not endpoints. Through experiential learning, entrepreneurship, and interdisciplinary exploration, we try to prepare graduates who leave not just with degrees but with confidence and versatility.

SUCCESS REINFORCES WHAT WE ALREADY KNOW; FAILURE FORCES US TO QUESTION, ADAPT, AND GROW. EVERY REJECTION FUELS REINVENTION

Parents, as foundational stakeholders, can help immensely by changing the questions they ask. Instead of measuring their child's progress with ranks and percentiles, they might ask, "What new thing did you try this year?" That small shift in parental attitudes could open big doors for their confidence! And students themselves must be encouraged to build second skills, abilities that endure long after marks fade. Coding, design, communication, public speaking, or critical thinking: these are the currencies of resilience in uncertain times.

Marks may open doors, but character decides how far we go once inside. Stress, if unchecked, slams those doors shut. Failure, if embraced positively, teaches us to build new ones altogether. Education, after all, is not about passing exams. It is about preparing for life!

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CAN INDIA'S DREAM CAREER BOUNCE BACK?

INDIA PRODUCES 1.5 MILLION ENGINEERS EVERY YEAR, BUT ONLY A FRACTION ARE EMPLOYABLE DUE TO THE WIDENING INDUSTRY-ACADEMIA GAP

ANINDITA ACHARYA

About a decade ago, if you asked Indian parents what they wanted their kids to become, the answer was almost always the same, engineers or doctors. Let's be real, many of us gave in to that pressure too, thanks to family expectations or peer influence. For some, the interest was genuine. But for many others, engineering simply became the go-to option after Class 12 if you scored well in science. It was seen as the "safe" path to land a job. Plus, the IT boom made it look even more attractive, with fat paychecks and chances to go abroad. But soon, the field got overcrowded. Colleges mushroomed everywhere, churning out engineering degrees by the truckload. Even the IITs, once seen as the holy grail of engineering education, are now facing an unprecedented placement crisis. Today, India produces nearly 1.5 million engineers every year.

Dr Lalit Narayan, VP & Sr. Dean - Academic Affairs, Medhavi Skills University, rightly pointed out that engineering was a passport to safe jobs in the 1990s and early 2000s during the IT boom. This resulted in the proliferation of institutions from top IITs and NITs to private universities numbering in the thousands and independent colleges. However, this accelerated growth has led to a demand-supply mismatch. "Though millions pass out every year, hardly 20-25% are considered employable in their core streams without further training, as emphasized by NASSCOM and AICTE. Most colleges still exist as business enterprises, with outdated curricula that do not keep pace with the requirements of new sectors like AI, data science, green technology, and electric mobility. The surplus and uneven quality have watered down the value of an engineering degree," he said.

According to the Unstop Talent Report 2025, a staggering 83% of engineering school graduates and 46% of business school graduates are still without a job or even an internship offer. That's an alarming number by any standard. Adding to the concern, a Parliamentary Standing Committee report flagged an "unusual decline" in placements across 23 IITs—showing more than a 10 percentage point drop between 2021-22 and 2023-24. "This isn't just a red flag for anxious parents pushing their kids toward engineering or students chasing the dream of an IIT seat. It's a wake-up call for educationists and policymakers as well. The problem is bigger than individual choices, it's about the system itself. At present, we are producing more



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degrees than employable engineers due to the industry-academia gap. The distinction lies in how much practical, industry-ready capability is built during those four years. Unless curricula, teaching models, and evaluation systems shift from theory-heavy learning to real-world problem solving, the employability gap will persist. However, with focused collaboration and the right changes, we can ensure that the next generation of engineering graduates has the skills and confidence to create solutions

from day one," said Sachin Alug, CEO, NIB Services. He further mentioned that employability in engineering is going to be much more than just about technical knowledge. Skills in AI, semiconductors, green energy, EVs, advanced manufacturing, and cybersecurity will be in high demand. "But equally, problem-solving, data fluency, and the ability to work across disciplines will set engineers apart. So, the future engineer in India is not just a specialist, but someone who can adapt, collaborate, and keep learning," said Alug.

Reports suggest that while lakhs of students continue to enroll in engineering programmes every year, only about 43% actually land jobs after graduation. The root cause is clear: a glaring mismatch between what colleges teach and what the industry really needs. Traditional engineering curricula often focus heavily on theory, with little emphasis on practical skills, live projects, or industry exposure. On the other hand, companies are hungry for talent in sunrise sectors - AI, semiconductors, green energy, electric vehicles, advanced manufacturing. These are the fields shaping the future of technology and economy, yet most engineering graduates are ill-equipped to enter them. This gap is widening every year. Dr Nipun Sharma, CEO, TeamLease Degree Apprenticeship, mentioned that the issue of industry-academia skill gap needs to be tackled holistically. He suggests that the revolutionary and upcoming areas

like AI, semiconductor, etc., need enhanced curricula and trainers, which can be achieved through academia-industry collaborations for curriculum realignment that emphasises hands-on training. "The other aspect of this skill gap lies in the missing soft-skills. Leadership attributes, discipline, verbal and communication skills, all need to be addressed and fixed through systematic training," he said. In fact, Dr Sharma also highlights the crucial role of apprenticeships, vocational skilling and industry tie-ups in bridging this gap. "The goal is to create a skilled and sustainable workforce. This can be done through apprenticeships, vocational skilling, and industry tie-ups - which will all work towards enhancing youth employability. Today, skills and qualifications are becoming inextricable, and lifelong learning continues to be the norm in any industry. The policies to bridge the gap between industry and skilled workforce is already in place. The need of the hour is for proper execution at the ground level where the youth, employers, and academia come together in a unique collaborative effort to enhance the employability of engineers," he said.

As Dr Narayan pointed out, engineering was once the ultimate dream degree in India. Today, it stands at a crossroads. With the right focus on research, skills, and industry linkages, though, it can still reclaim its place as the driver of India's growth and innovation story. ml/s

Despair, desperation over jobs in Bihar

The state's youth find it hard to avert unemployment due to lack of opportunities



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BARELY had the dust settled on Rahul Gandhi's Voter Adhikar Yatra in Bihar that Gen Z youth staged protests in neighbouring Nepal and overthrew its government. The leaderless Nepalese protestors expressed their disgust at corruption, the government's authoritarian ban on social media and a lack of concern for youth aspirations and public welfare. They targeted the 'nepo kids', the children of the rich who led an extravagant lifestyle, while the ordinary youth suffered.

In Bihar, Rahul's yatra pushed the issue of democratic accountability in the people's court, even as Bihari boys spouted the slogan of 'padhoai-kamaoi-dasaoi' — education, employment and healthcare.

The similarity of issues, the timing and the geographical proximity of a state and a nation lead to several questions about resentment of the youth against indifferent rulers. Can we understand the churn in Bihar politics through the prism of the Nepal protests? Have unemployment and widening inequality, combined with democratic backsliding, emerged as decisive factors in tipping the political scales? And what lessons does poll-bound Bihar draw from the upsurge in the neighbourhood?

Drawing on three years of ethnographic work in an urban gali in Patna, I have witnessed the struggle of Bihari youth's struggle to avert unemployment. Youth unemployment has been very



MAKING A BEELINE: There is a mad scramble for government jobs in poll-bound Bihar. *PN*

high in Nepal — quoted to be upwards of 20 per cent — whereas it is claimed to be on the decline in Bihar and now stands at 10 per cent. Yet, Bihari youth find it hard to overcome the odds, with no opportunities for meaningful education in rural areas. They flock to urban galis in Patna, where low-cost coaching centres proliferate.

These centres lure subaltern aspirants with the guarantee of success in bharti (recruitment) for government jobs. The centres are run in the name of their 'sirs' — Bipin sir teaches English to rustic Biharis, Guru Rahman promises daroga bharti and Goswami sir offers coaching in 'sampoorna ganit' i.e. 'entire mathematics'. In the same gali, Samrat Ashok sir claims his lineage from the legendary Maurya dynasty ruler and offers a 'dhamaka bumper' offer for his course pack — what was now offered at Rs 500, exhorting students to enrol fast.

The king of the gali, how-

Coaching centres in Patna lure aspirants with the guarantee of success in recruitment for govt jobs.

ever, is Khan sir, a 'youth icon' who teaches with a pronounced vernacular accent, has his own YouTube channel and leads youth protests against paper leaks in recruitment. Over a thousand students sit through his lectures every evening,

while many more sit outside the classroom and pay attention to him on TV screens. Others simply bang around to beg for photocopies of his lecture notes as they cannot afford even the 'low fees' for coaching. I am told that there are millions of 'online' students who attend Khan's lectures on their mobile phones as they cannot afford the cost of living in Patna.

Dealing with unemployment is being accepted as an individual responsibility in Bihar (and elsewhere in India). Even as public sector employment is shrinking in neo-liberal India, its lure persists. It is seen as the only way out of the desperation of rural lives, immersed in hopeless agriculture.

The coaching 'sirs' themselves are unemployed young men of a senior generation, who are selling hopes to ordinary youth in a mad scramble for government employment and only avenue for self-respect in a society that stopped offering

social mobility opportunities a long time ago. Hopelessness, joblessness and desperation are all being managed in this informal coaching enterprise as a project of hope for youth aspirations.

The critical difference between Nepali and Bihari youth is the missing climate activist, the rapper, the DJ in the Patna gali. Instead, Bihari youth are drawn to markets built on the promise of success — a phenomenon in which poor people themselves accept the retreat of the State and rely on shadow markets to lead them on.

Political protests, even over genuine issues concerning the youth such as contractual entry into the Army as Agniveers, are perceived as risky ventures for unemployed Bihari youth. There is a chance that they will be arrested and get 'bad character' certificates from the police, rendering them permanently unemployable. Better to bear the ignominy and run the mile every morning as part of physical training necessary for bharti.

Before the break of dawn, I visit Patna's Gandhi Maidan — the city centre and nerve centre of its political history, replete with poetic calls for 'singhasan khaali karo, janata anti hai' — lines of Rashtrakavi Dinkar which became the rallying cry for anti-Emergency youth crusaders in 1975-77. There, I find thousands being trained by physical training coaches. Many young aspirants jog barefoot in the race for employment. No songs, no poets and no time for the politics of protests for these Bihari youth. And Nepal is not even a 'guess question' in the coaching textbooks there.

In this backdrop, Rahul's yatra is an organised expression of dissent, foreclosing Nepal-like possibilities.

When university professors stop questioning power



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The professoriate of today has largely abdicated its critical responsibility to scrutinise power, contest injustice and challenge compromised truth, regardless of their potential to disrupt dominant narratives.

Self-censorship has, therefore, emerged as a strategic mechanism for professional survival, wherein academics refrain from bearing witness against hegemonic power structures. Aligning with avoidance movements or contesting democratic erosion. This reticence is not born of intellectual laziness, but of a fear that critique may imperil one's ascension in the administrative hierarchy.

Consequently, public pronouncements circumspect, scholarly articles shorn of polemical fervour and few academics dare to venture into the fraught terrain of dissent. The resultant silence constitutes a betrayal of the professoriate's sacrosanct responsibility to interrogate power and champion intellectual freedom.

Thus, what Julian Benda diagnosed nearly a century ago in his landmark 1932 book, *The Treason of the Intellectuals*, has become that which intellectuals align themselves with the political, nationalist or institutional forces of their time: they cease to be guardians of truth and, instead, become clerks or functionaries of the dominant order.

Their vocation, once grounded in truth and moral universality, becomes subordinate to ambition and fear. Today, Benda's



NO DISSENT Today the intellectual has been largely domesticated, sequestered

warning has become prophecy, with his words echoing with unsettling accuracy.

Edward Said, in *The Rest of Us*, later published as *Representations of the Intellectual*, took Benda's thesis further, arguing that the true intellectual is not a bureaucrat of state or institution but an 'outsider' who resists 'co-optation' and speaks from a position of moral independence and critical inference to authority even if it comes at a personal cost.

The intellectual is not servile to institutions but holds up the idea of dissent with a voice of moral indignation. 'The intellectual's role is to present alternative narratives,' Said insisted, 'to challenge orthodoxy to question.'

And this includes the ability to read the subtleties of dominant discourses, to see through the

surface of official narratives and understand the structures of power and propaganda that sustain them.

For Said, the public intellectual's role is adversarial: to question received dogma and to refuse the comforts of complacency. An intellectual who chooses silence in the face of injustice, Said argues, becomes complicit in the very systems they should be critiquing.

Which brings us to Professor Noam Chomsky, whose idea of 'manufactured consent' must be at the heart of any intellectual's ethical framework today. Chomsky, in exposing the mechanisms by which state and corporate power distort public discourse, teaches us that to accept dominant narratives at face value is itself a form of complicity.

The intellectual must resist the

seduction of consensus, looking askance and fearlessly asking what is left unsaid, whose interests are being served and what forms of violence are being encouraged by language.

And what of the university, the site that is meant to house these intellectuals, nurture their courage and amplify their nonconformity? As Howard Zinn, radical American historian, argued, the university should never be a sanctuary for conformity.

It must be a space of widening horizons, a place where thinking moves beyond borders, beyond the code of belief and into the realm of moral possibility. Zinn reminded us that history itself must be written 'from below', from the standpoint of the oppressed, not the victors. Likewise, the university must be aligned not with state power or capital, but with the struggles for freedom, justice and truth.

Understandably, lecturing, writing and research are not neutral acts, but interventions in culture, politics and society aiming for liberation. And if not, they risk becoming handmaidens of the state.

Today, however, the intellectual has been largely domesticated. We, who live and breathe in the academia, are witness to the seminar gone sterile, the lecture apologetic, and the public statement absent.

Professors write in the language of bureaucrats, lecture like diplomats within the constraints of the overhearing

ideological environment and publish like acquiescent minions. The answer of our time demands a different response to the long-held moral questions of freedom and justice.

Thus, pressing questions about the role of academia in the contemporary moment, arise. How can we conceptualise freedom in an era marked by pervasive surveillance and authoritarian governance? What forms of justice can be envisioned in a society fractured by communalism and entrenched inequality? Where does the university stand in relation to such global crises as war, genocide and ecological collapse?

The absence of a robust critical voice from the professoriate is notable. If the professoriate fails to critique power and challenge dominant ideologies, the university risks becoming indistinguishable from the very structures it purports to critique. This raises fundamental questions about the purpose and function of higher education in a democratic society.

The reclamation of intellectual authority necessitates a fundamental posture of resistance, one that articulates a principled refusal to acquiesce to the dominant logic that subordinates intellectual integrity to ambition. This requires a critical interrogation of the quantification of knowledge, which reduces education to metrics and rankings and a steadfast defence of dissenting voices in the public sphere.

The resultant silence constitutes a betrayal of the professoriate's sacrosanct responsibility to interrogate power and champion intellectual freedom.

वैचारिक भटकाव के शिकार आइआइटी

आइआइटी के जिन परिसरों में प्रयोगशालाओं, तकनीक, विज्ञान की गूंज होनी चाहिए, वहां अब विरोध, धरना और राजनीतिक नारे सुनाई देने लगे हैं। उसके इस वैचारिक भटकाव का उदाहरण बर्कले में एक सम्मेलन का आइआइटी-बांबे का सह-प्रायोजक बनना रहा। साउथ एशियन कैपिटलिज्म नामक यह आयोजन इंस्टीट्यूट फार साउथ एशिया स्टडीज और यूनिवर्सिटी आफ मैसाचुसेट्स-एम्हर्स्ट द्वारा किया गया। यह आयोजन भारतीय उद्योग और उद्यमिता को शोषण की व्यवस्था बताता था। विरोध में आवाज उठाने पर आइआइटी बांबे को स्पष्टीकरण जारी करना पड़ा कि उसका इस आयोजन से कोई लेना-देना नहीं। यह ध्यान रखा जाए कि आइआइटी की स्थापना का उद्देश्य विशिष्ट तकनीकी संस्थानों की रचना था, जहां से विज्ञानी, अभियंता और प्रौद्योगिकी विशेषज्ञ निकलकर भारत को आत्मनिर्भर बना सकें। प्रयोगशाला-आधारित शिक्षा, उपयुक्त अनुसंधान और पूर्व छात्रों का वैश्विक नेटवर्क ही आइआइटी की वास्तविक पहचान रहा है। इसी विशेष ध्येय ने उन्हें भारत के अन्य विश्वविद्यालयों से अलग और विशिष्ट बनाया, किंतु यूपीए शासनकाल में यह ध्येय विचलित होने लगा।

यशपाल समिति ने 2008-09 में अनुशांसा की कि आइआइटी और आइआइएम को बहुविषयी विश्वविद्यालय बनाया जाए। यह योजना सतही रूप में आकर्षक प्रतीत होती थी, किंतु वस्तुतः यह मार्गभ्रष्ट करने वाली थी। तकनीकी उत्कृष्टता के लिए निर्मित संस्थान को सामान्य विश्वविद्यालय का रूप देने का अर्थ था उसकी विशिष्ट पहचान का ह्रास। आइआइटी में मानविकी विषयों का प्रसार संस्थान की प्रतिष्ठा में कोई नवीन मूल्य नहीं जोड़ सका है। इसके विपरीत, इसने उनकी स्थापित ख्याति का सहारा लेकर परिसर को राजनीतिक आंदोलनों और विचारधारात्मक टकरावों का मंच बना दिया है। इंजीनियरिंग छात्रों के लिए कुछ मानविकी विषयों का परिचय निश्चय ही हितकर है, लेकिन अब आइआइटी मानविकी विषयों में पूर्ण स्नातकोत्तर और शोध कार्यक्रम चला रहे हैं। आइआइटी-मद्रास ने 2006 में



संक्रांत साधु

अपने उत्कृष्ट तकनीकी संस्थानों की श्रेष्ठता के लिए उनकी मौलिक धारा को बनाए रखना होगा



विज्ञान एवं प्रौद्योगिकी पर रहे छात्रों का पूरा ध्यान • फाइल पंचवर्षीय एमए प्रारंभ किया, जिसे बाद में द्विवर्षीय पाठ्यक्रमों-अर्थशास्त्र, अंग्रेजी और विकास-अध्ययन-में विभक्त किया गया। आइआइटी-गांधीनगर ने 2014-15 में 'समाज एवं संस्कृति' में एमए प्रारंभ किया। आइआइटी-बांबे और आइआइटी-दिल्ली अब अर्थशास्त्र, समाजशास्त्र, साहित्य तथा मनोविज्ञान में पीएचडी तक प्रदान कर रहे हैं। यह आइआइटी के उद्देश्य से उलट है। जहां अभियंताओं को व्यापक दृष्टिकोण देना था, वहां अब सामान्य विश्वविद्यालय जैसी समानांतर मानविकी शिक्षा स्थापित हो रही है।

मानविकी की वजह से परिसर में प्रायः राजनीति स्वतः प्रवेश कर जाती है। आइआइटी-मद्रास का अंबेडकर-पेरियार स्टडी सर्किल 2015 से विवादों में है। आइआइटी-बांबे में नागरिकता संशोधन कानून पर विरोध-आंदोलन हुए। आइआइटी कानपुर में छात्रों ने जामिया, एमयू के समर्थन में जुलूस निकाला और फैज की कविता 'हम देखेंगे' पढ़ी। उस कविता को लेकर 'सांप्रदायिक' होने का आरोप लगा और आंतरिक जांच समिति गठित करनी पड़ी। ये दृश्य उन सामान्य विश्वविद्यालयों के प्रतीत होते हैं जहां वर्षों से राजनीति का वर्चस्व रहा है, किंतु आइआइटी जैसे तकनीकी संस्थानों के लिए यह अस्वाभाविक और हानिकारक है।

आइआइटी-दिल्ली के मानविकी विभाग की एक सहयोगी प्राध्यापिका ने 2023 में हिंदू धर्म को 'प्रपंच' करार दिया। ऐसे कथन आइआइटी की प्रतिष्ठा का उपयोग कर वैचारिक कलह फैलाते हैं, जबकि उनका संस्थान की तकनीकी पहचान से कोई संबंध नहीं है। आइआइटी का नाम इस प्रकार राजनीतिक और विचारधारात्मक युद्धभूमि बनाने के लिए प्रयुक्त होना संस्थान और राष्ट्र, दोनों के लिए घातक है। आइआइटी को 'सामान्य विश्वविद्यालय' बनाने का नुकसान यह है कि मानविकी विषयों का फैलाव महंगे विज्ञान और तकनीकी विषयों पर बोझ डालता है। मानविकी के लिए पहले से ही भारत में पर्याप्त विश्वविद्यालय हैं, किंतु अभाव है तो तकनीकी विशेषज्ञों और नवाचार-आधारभूत संरचनाओं का। यदि संसाधन सीमित हैं तो उनका प्रयोग वहीं होना चाहिए, जहां उनका अधिकतम राष्ट्रीय लाभ हो। यह सच है कि भारत को दोनों प्रकार की संस्थाएं चाहिए-सामान्य बहुविषयी विश्वविद्यालय और विशिष्ट तकनीकी संस्थान, किंतु यदि तकनीकी संस्थानों को ही सामान्य बना दिया जाएगा तो हम अपनी विशेषता खो देंगे। अब समय है कि हम आइआइटी को उनके मौलिक मार्ग पर पुनः स्थापित करें। विधि में संशोधन कर यह सुनिश्चित करना होगा कि आइआइटी तकनीकी विश्वविद्यालय ही बने रहें। मानविकी विषय केवल स्नातक स्तर की पूरक शिक्षा तक सीमित हों। राजनीतिक गतिविधियों को परिसरों से दूर रखा जाए, ताकि कक्षाएं और प्रयोगशालाएं पुनः नवाचार का केंद्र बन सकें। पूर्व छात्रों को भी अपना योगदान प्रयोगशालाओं, अनुसंधान-केंद्रों और तकनीकी छात्रवृत्तियों में लगाना चाहिए। जब चीन कृत्रिम बुद्धिमत्ता (एआइ), चिप-डिजाइन और क्वांटम कंप्यूटर में तीव्र गति से प्रगति कर रहा है, तब भारत अपने श्रेष्ठतम संस्थानों को राजनीति का अखाड़ा बनाने की भूल नहीं कर सकता। आइआइटी को तकनीकी उत्कृष्टता के केंद्र के रूप में सुरक्षित रखना ही होगा। यही समय है स्पष्ट शब्दों में कहने का-आइआइटी हमें पुनः चाहिए।

(लेखक आइआइटी के स्नातक और गरुड़ प्रकाशन के संस्थापक हैं।)

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[OUR TAKE]

Spare maths, and students, please

Mathematics education in the country can do with a pedagogical fix, not re-orientation of the curriculum towards the past

After history, mathematics seems to be in the crosshairs of the UGC. Over 900 researchers, mathematicians, and academicians from India and abroad have urged the UGC to reconsider its proposed changes to the undergraduate mathematics curriculum. The higher education regulator wants BA/BSc maths courses to foreground Vedic mathematics, *Bharatiya bijaganita* (algebra), the *Puranas* and ideas of ancient Indian astronomy. It wants students to be taught the *Narada Purana*'s citations of geometry, and calculation of *muhurtas* (auspicious time) for rituals using the *panchanga* (Hindu almanac). Students must also learn about ancient Indian time units, evolution of Indian algebra, and ancient formulae in other areas of mathematics.

India's rich epistemological heritage in mathematics is well documented. There is no harm in taking pride or showcasing these civilisational accomplishments; it may even help understand the interconnectedness of knowledge generation across the globe mediated by the exchange of ideas — lopsided in many instances, though — that have happened throughout history. But it becomes a problem if these, as part of a revivalist impulse, are foregrounded ahead of modern, evidence-based science learning. For instance, in its bid to privilege the past and encourage esoteric topics such as Mathematics in Meditation, the draft curriculum has reduced the importance of core subjects, including real analysis, linear algebra, algebra, statistics, programming and numerical methods.

UGC must heed the experts' advice. Keeping in step with the knowledge requirements of the modern world means keeping the cartography of university education and national pride separate. The purpose of university education is to familiarise students with evidence-based learning, its methodologies and frameworks, and prepare students to compete with the best in the world and engage in cutting-edge research in the best institutions around the world. UGC's move will only ambush such a prospect — not upgrade or improve the course and enrich learning.

If there is a crisis in mathematics education in India, it is with pedagogy rather than curriculum. While several Indians do exceptionally well in mathematical research and children win accolades, including in Maths Olympiads, numeracy levels among school students — as reported by ASER and PISA inter-country comparisons — remain depressingly low. In many homes, mathematics is a subject of fear and anxiety rather than joy, mostly because of poor teaching methodologies. That's an area the UGC must focus on with the help of serious maths educators, not in chasing chimeras of a golden past.

NT 16

TECH RESCUE

That India's demographic dividend is not being mined effectively cannot be denied. At present, youth unemployment in the country stands at an estimated 16.03%. Moreover, many of those entering the job market, it is feared, lack the skills to meet its requirements: the *India Skills Report 2025* found that only 54.8% of graduates were fit for employment. The employment sector is already confronting strong headwinds with the rise of Artificial Intelligence that is expected to lead to significant job losses and displacement. Yet, can it argued — perhaps ambitiously — that some adjustments in policy could allow India to harness AI to make the most of its demographic dividend? India's working-age population will increase by at least 12 million per year until 2030. The country needs to create around 8.5 to 9 million jobs every year until 2030 to utilise this surplus labour. At the same time, AI is predicted to transform 38 million jobs in India by 2030. If the existing working-age population and those who are set to enter it can be trained in how to work with AI — in data training, writing the right prompts or using deductive reasoning on content summarised by AI — India could see a 2.61% productivity gain in the organised sector and 2.82% in the unorganised sector, according to a study by Ernst & Young. Nearly two-thirds of Indians are younger than 35 and fluent in technology, giving the nation an edge. Hearteningly, the *Economic Survey* of 2024-25 already laid out the need for the public sector to work in tandem with the private sector to skill the youth in handling data and AI. Three Indian Institutes of Technologies hosting centres for excellence in AI is also a positive development.

But using AI to turn India's demography into a dividend has its own challenges. There is the digital divide — National Sample Survey data have revealed clefts in terms of gender, geography and language. Worryingly, only 4.8% of men and 29.4% of women can create an electronic presentation and just 26.1% men and 19.5% women can draft documents using word-processing software, say NSS figures. Initiatives like the IndiaAI Mission, the Bhashini project — it promotes AI solutions in Indic languages — as well as public-private partnerships, such as NASSCOM's skilling programmes, must work to address these diverse challenges. However, the foremost role in the skilling of India's youth in AI has to be that of education. India's education policy must be responsive to this emerging need and make necessary changes at the earliest. १८/११/१०

Gen Viksit Needs to Start Young



Amitabh Kant

Research shows that 85% of a child's brain development happens before age 5, and 18 months of structured early learning can boost IQ. For India's 13.7 cr children under 6, these years will shape innovators and drivers of productivity in 2047. After 75 years focused on survival — tackling mortality, malnutrition, hunger and poverty — the next 25 must deliver growth and competitiveness. Anganwadis are at the heart of this transformation, nurturing the future workforce from the very start.

But evidence on early learning is sobering. Nearly half of Class 1 children can't read a word or recognise a number. Despite NEP 2020, learning poverty persists. Yet, progress offers hope — ASER 2024 finds rising anganwadi enrolment, signalling growing parental trust. That trust must drive transformation. GoI's Swasth Nari Sashakt Parivar Abhiyaan and Poshan Maah are embedding health, nutrition and childcare into the system — laying foundations for stronger mothers, children and, ultimately, a stronger nation.

For decades, anganwadis were seen as mere feeding centres. They are

hubs where nutrition, health and playful learning converge, led by 14 lakh workers. Mothers are children's first teachers; anganwadi workers are the second. As frontline educators and caregivers, they must be empowered with training, resources and dignity — without these, the quality of outcomes will suffer.

Expanding anganwadis into a universal system of childcare would enable higher female labour force participation, lift household incomes and strengthen human capital. At the same time, close to 9 cr children, healthy and school-ready, would become the driving force of India's future growth.

► **Tata Trusts' Project Spotlight** in Maharashtra, for example, provides evidence of what is possible when existing public systems are strengthened with focus and intent. Implemented across 4,100 anganwadi centres in Chandrapur, Gadchiroli and

Palghar, and reaching close to 2.8 mn people, the programme was designed to reinforce ICDS. Its approach rests on three pillars: system strengthening, community mobilisation and multi-level advocacy.

Anganwadis were refurbished and equipped. Frontline workers, including anganwadi workers, ASHAs and ANMs, were trained in nutrition and growth monitoring, and large-scale public campaigns engaged families on breastfeeding, dietary diversity and caregiving practices. Between 2019 and 2021, dietary diversity among mother-child pairs in intervention areas increased from 10% to 25%, while poor diversity declined significantly.

► **Technology, too, can accelerate** transformation when designed around people. Founded in 2020, Rocket Learning, a non-profit dedicated to improving early childhood education for underprivileged kids, has reached more than 40 lakh children and worked with three lakh anganwadi workers. Its model combines digital nudges with behaviour change. Daily activities sent on WhatsApp guide parents to engage their children in play-based learning using household materials.

An independent evaluation in Amravati, Maharashtra, found Rocket Learning's intervention improved

mathematics skills by 0.217 standard deviations and language skills by 0.154 standard deviations, at a cost of just over \$1 per child. Parents report higher confidence, children arrive at Class 1 better prepared, and anganwadi workers gain recognition as educators. This is tech deployed not for substitution but for support, amplifying human relationships among caregivers, children and educators.

► **Pratham's Teaching at Right Level (TaRL)** has established that even the weakest learning foundations can be rebuilt — and at scale. Independent evaluations confirm that Pratham's Read India programme recorded a 51% increase in reading ability among children in Classes 3-5, alongside large gains in addition and subtraction. The efficacy of the programme, validated by Nobel Prize-winning research in development economics, shows the power of simple, scalable pedagogy when embedded into state systems.

These models demonstrate that India is not short of solutions. The challenge is urgency and resolve.

Today, investment in children aged 3-5 years is less than 20% of what we invest in children in middle and senior school. We must start investing more in the anganwadi system, where the potential of children is shaped for the rest of their lives. If we succeed, this Viksit Bharat generation will be the most capable in our history.



All hands on deck

Equity, access must be part of AI education

DR. RAMANAND

Across India's vast and diverse educational landscape, a silent shift is underway, but not one of replacement or disruption alone. With over 250 million students in schools and many more in higher education, the narrative that Artificial Intelligence (AI) will simply enter and transform Indian education is not just simplistic; it's grossly misleading. It belies a complex reality - as AI enters the ecosystem, India's many education systems will also shape it in return. This is not a story of technology replacing tradition. It is one of mutual engagement that is fluid, contextual, and necessarily adaptive.

Unlike in many countries, India does not have one singular education system. Our learning spaces range from expensive private schools in metropolises to government-run village classrooms, from digital-first urban universities to informal local knowledge hubs. Each of these responds differently to change, and AI will be no exception. Consequently, AI will not deliver a uniform impact and must be designed to respond to India's plural realities. Just as our classrooms are diverse, so too

will be the ways AI is adopted and adapted.

Globally, AI is being rapidly integrated into education systems to prepare students for an uncertain future. According to the World Economic Forum, nearly 40 per cent of core job skills are expected to change in the next five years. Consequently, AI literacy is becoming as important of a building block as reading or arithmetic. It is not only about using technology but also about thriving in a world intensively shaped by it. In this context, India cannot afford to lag. However, our response must be rooted in the understanding that any AI-for-education strategy must mirror the diversity, decentralization, and dynamism of Indian education itself.

India already has the beginnings of a supportive policy environment in the shape of the National Education Policy (NEP) 2020. However, to truly succeed, these efforts need to fit different local contexts rather than be copied the same way everywhere.

The real test is not whether AI can support education. It is about how AI will be experienced across India's many learning environments. To understand its true impact, we need to look beyond technical potential and focus on how students,

teachers, and communities actually use it in everyday settings. Some possibilities like personalized learning and teacher support are already showing promise. These, too, need to be shaped by the diverse realities of Indian education.

One of the most promising areas is personalized learning. In theory, AI can tailor lessons to each student's pace, strengths, and learning gaps. In practice, this can look very different depending on the environment. In a pilot by NITI Aayog, AI-powered tutoring led to a 40 per cent improvement in learning outcomes by identifying and addressing individual needs. Yet, the impact of such tools in a rural school with limited connectivity versus an urban private institution with tech-savvy staff will vary. A personalized algorithm must also be context-aware.

Equally important is how AI is reshaping the role of teachers. Across contexts, educators are moving beyond being content-deliverers to becoming mentors, facilitators, and co-learners. AI can take over administrative tasks like grading or attendance, freeing up teachers to focus on student engagement, critical thinking, and emotional support. But this

transformation cannot be top-down. Teachers must have the agency to shape how they use these tools in their unique contexts. In a multilingual classroom, for example, teachers may rely on AI-powered translation or speech tools to support their teaching.

Outside schools, higher education and lifelong learning are also being reimagined. AI is making continuous learning more accessible, especially through self-paced modules in regional languages. Government initiatives like "AI for All" are already expanding digital literacy to broader audiences. Nonetheless, it is useful to recall that the reception and effectiveness of such programs depend on infrastructure, cultural attitudes, and existing pedagogical traditions in different communities.

This brings us to the most critical concern: equity and access. Technology does not enter a neutral field. Its impact is shaped by, and can reinforce, existing inequalities. Students without reliable internet or devices may be left out, deepening the digital divide. AI tools trained on biased or limited data sets may disadvantage certain linguistic, social, or regional groups. We are already seeing AI being used to translate complex engineering

content into Indian languages, but we must go further. Inclusion must be built into the foundation, not added as an afterthought.

To mitigate these risks, ethical oversight and local governance are vital. AI in education must be accountable, and its design and deployment must be transparent and inclusive. Educators, developers, policymakers, and even students must be part of shaping how these tools evolve. India's education transformation will not come from importing readymade solutions. It will require co-creating systems that recognize the diversity of learners and empower teachers to adapt tools meaningfully.

Ultimately, AI in Indian education must be a story of interaction over replacement. Our systems will shape AI just as AI will shape them. This dynamic exchange, rooted in India's diversity, is an important strength. If we combine innovation with local insight, India's classrooms can become models of adaptive, inclusive, and future-ready learning. AI will not transform education for us; we will shape that transformation together, with care and context.

CHALKS TO CLICKS

We have EdTech, but is it the right one?

To prepare for the future, investing in human capital is key, and early childhood education can offer the highest returns. Betting on this, non-profits across India are decentralising education using tech & innovation



BY INVITATION
Ashish Dhawan

Indian children born today will enter the workforce as young adults by 2037. At this point, India is largely on the back foot for universal school enrolment. The one that beckons is universal school learning — imparting high-quality education that will create opportunity for all and provide the human capital for a developed India by 2047.

Economist Stobal Laursen James Heckman's work on human capital emphasises the high returns to investment in early childhood education (ECE), as early interventions enhance cognitive and non-cognitive skills critical to long-term success. The well-known Friedman curve shows that for all stages of education, the highest economic returns come from the earliest investments in children. The rule of thumb is intelligence at the start of life is a strong case for investing heavily in ECE, raising the share of the Samagra Shiksha budget to 5% (up from around 2% currently).

The ubiquity of smartphones in India today — a recent survey reported a smartphone ownership of 1.2 per thousand in urban India and 1.2 in rural India — offers a never-before-seen opportunity to rapidly scale up high-quality educational inputs to children across the country regardless of their socio-economic status. This is a simple idea with great power. Educational non-profits have begun work to precisely this, and their efforts will only expand in future.

For instance, *Booklet Learning*, a non-profit founded in 2019, has developed interactive and highly engaging information systems that can be deployed via WhatsApp to teachers, parents and children. Every day in the WhatsApp chat groups, it sends live lesson materials and provides personalised support in the form of language learning tools for play-based children

with children in the classroom or at home. These activities take less than 10 minutes and involve readily available materials.

Research shows that greater parental involvement in children's education leads to improved academic performance. That sense of participation is reinforced by encouraging parents and educators to share images and videos back to the WhatsApp groups, creating a sense of a shared learning community.

Chample is an android app developed in India, that uses games to instill foundational literacy and numeracy through a teacher-directed, at-home learning model. Using the app, a teacher can remotely assign content for children to practice, based on the teaching plan for the week. In a pilot study involving Class I and II students in Haryana, the treatment group saw a 30% improvement in test scores over the year with 10 minutes of usage of *Chample* in a day. Similar improvements were recorded in English as well, and the low-performing learners at the baseline benefited even more.

Going up to higher grades of schooling, new learning opportunities can be reinforced by personal AI — a powerful use-case for which is Personalised Adaptive Learning (PAL). Instead

of the rigid, one-size-fits-all mode of learning that conventional classrooms offer, students can learn at their own pace and in their own space with PAL — making engaging, immersive and interactive learning available at even the remotest of locales. If children of the elite have an edge because they have access to individual high-quality coaches to quickly resolve their problems, such access can be universalised with the help of PAL.

Educational non-profit Central Square Foundation (CSF) is working with Khan Academy to contextualise Khemingo, India's AI-powered personal tutor for low-income contexts. State governments are beginning to leverage PAL for their school systems. Anand Prakash has been a pioneer here as it has made PAL part of its World Bank-aided Supporting Arithmetic's Learning Transformation (SALT) programme. Use of PAL to level educational divides can only grow in future.

PAL, however, is not the only AI use case in education. AI can generate the learning content itself — scripts, videos, worksheets and illustrations are created using LLMs, saving time and boosting creativity. AI can translate and dub across languages, simplify animation and



Illustration: Uday Desh

India's EdTech sector is already large and bound to grow further. But what part of it are relevant and useful, and go from being a handmaiden for the rich to being universally enabling? In order to evaluate the many available EdTech solutions, CSF has developed — jointly with IIT Bombay and IIT Delhi — an evaluation index that enables governments and other users to make quality-led, evidence-informed choices regarding EdTech procurement for schools, especially those catering to low-income students.

The index is called *EdTech Tiers*, and helps define quality standards for what good EdTech looks like. It stresses educational goals and designing for decision-makers to apply these standards to evaluate EdTech products, and publishes reviews of products to drive demand and shape supply.

Apart from EdTech innovations, there are innovations at the level of school governance and regulation that can dramatically uplift quality. At present, regulation of schools is heavily input-focused. This priority must now shift to measurement of outcomes, which should be reported transparently, publicly and regularly. Such data will allow parents to choose the best school for their children and ease with their fees. Building pressure to improve school quality it will also allow the best schools to emerge as exemplars whose best practices can be replicated at others too.

Other countries have followed this transparency model to effectively improve school quality — including the Office for Standards in Education (Ofsted, UK), Knowledge and Human Development Authority (KHDA, Dubai) and Sistema de Mediciones de la Calidad de la Educación (SIMCE, Chile).

The National Education Policy (NEP 2020) talks about a school regulator called the State School Standards Authority (SSSA). At present, states and the central government set standards and publish the level of each school in the state, based on those standards. To be effective, SSSAs need to function independently of the department of education and other government bodies, and assess the quality of all schools — whether public or private — impartially. As NEP 2020 recommends, they should shift regulation from being overly restrictive (especially for private schools) to being "light but tight". SSSAs should regularly report on the quality of schools and put these out in the public domain.

Every child in India deserves a chance to reach their full potential. With new tools, techniques and enabling systems, we need to ensure that no child is left behind.

*Ashish Dhawan is member of CSF's
The Governance Foundation, and founder
chairperson of Central Square Foundation.*

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What is the best time to take examinations?



**SPEAKING OF
SCIENCE**

D. Balasubramanian

A paper published on July 24, 2025, by Carmelo Vicario et al., titled 'Timing Matters! Academic assessment changes throughout the day' in journal *Frontiers in Psychology*, presents an analysis of the academic performance of over 1,04,552 students across Italy. The study finds that the time at which they take their examination matters. Examinations conducted between 11 am and 1 pm were found to offer very good results, with those taken at around noon being the best, while those conducted between 8 and 9 am and between 2 and 5 pm threw up poorer results.

The timing of critical decisions can thus have far-reaching consequences.

The success rate followed a bell curve with a peak at noon. That is, there was no significant difference in the chance of passing the exam if one sat for it at 11 am or 1 pm, but the chances of passing were lower if the exam was taken at 8 or 9 am or at 3 or 4 pm. The chance of passing was equivalent in the early morning and in the late afternoon.

"These findings have wide-ranging implications," Prof. Alessio Vennanti of the University of Bologna and a co-author of the study said.

"They highlight how biological rhythms, often overlooked in decision-making contexts, can subtly but significantly shape the outcome of high-stakes evaluations."

Although the study did not identify the mechanisms behind this pattern, the peak in the number of students passing at midday is consistent with evidence that cognitive performance



Students' falling energy levels could lead to diminishing focus, compromising their performance. K. Murali Kumar

improves over the course of the morning before declining during the afternoon.

Students' falling energy levels could lead to diminishing focus, compromising their performance.

Professors might also experience decision fatigue, causing them to grade answer papers more harshly.

Meanwhile, poorer results earlier in the day could be down to compet-

ing chronotypes, or body clocks. People in their early 20s are usually night owls, while people in their 40s or more tend to be morning larks. The students thus might also show sleep inertia: low cognitive performance at a time when the professors are most alert.

"To counteract time-of-day effects, students might benefit from strategies like ensuring [good] quality sleep, avoiding scheduling important exams during personal 'low' periods, and taking mental breaks before performance tasks," Dr. Vicario, of the University of Messina in Italy, suggested.

"For institutions, delaying morning sessions or clustering key assessments in the late morning may improve outcomes." But more research is needed to fully understand the factors that contribute to the influence of the time of day on academic performance and to develop ways to en-

sure fairer assessments.

"While we controlled for exam difficulty, we can't entirely exclude other unmeasured factors," said Prof. Massimo Mucchiari of the University of Messina and a senior author. "We couldn't access detailed student- or examiner-level data such as sleep habits, stress or chronotype. This is why we encourage follow-up studies using physiological or behavioural measures to uncover the underlying mechanisms."

While this research was in Italy, the findings may also apply in India, when students appear for many entrance exams, which are typically held during the daytime, with morning and afternoon sessions.

For example, the Common University Entrance Test (CUET) is conducted in two slots at 9-12 am and 3-6 pm. If we go by the Italian example, the slots are better off being at 9-11 am and 12-2 pm.

Sustainability education for green jobs

Education today stands as India's unfinished bridge between promise, purpose, and practice

TEAM AGENDA

The 7th International Conference on Sustainability Education (ICSE), held at the India Habitat Centre in New Delhi, came at a crucial moment. With the world racing against climate deadlines and youth struggling to find meaningful employment, the theme — Sustainability Education for Green Jobs — struck a vital chord. India is positioning itself as a global leader in renewable energy and sustainable practices, yet the reality of green jobs still feels like a distant goal for many.

Union Minister for Environment, Forest and Climate Change, Bhupender Yadav, opened the conference with a message both urgent and hopeful. "India is taking tremendous strides to shift from fossil fuel dependence to renewable energy sources," he said.

ICSE has become a crucible of innovation where ideas are shaped into practical solutions. This year's theme on 'Green Jobs' underscores the urgency to equip youth with the skills needed for a green economy. "We must align education with employment to ensure our development remains in harmony with the planet," adds Pradip Burman, Chairman of Mobius Foundation.

India stands as the third-largest producer of renewable energy globally. But without widespread adoption of sustainability education, our growth will stall. Education remains key to accelerating progress.

At present, the green jobs ecosystem in India remains fragmented. While demand is growing in sectors such as solar installation, green construction, sustainable agriculture, waste management, and circular economy solutions, the supply of trained professionals lags far behind. Most graduates remain unaware of opportunities in the green sector, and vocational training programmes are still limited in scope and accessibility.

In rural and semi-urban areas, awareness and infrastructure to support green skills are especially lacking. Policy efforts have intensified over the last few years. The Ministry of Environment, Forest and Climate Change, along with NITI Aayog and the Ministry of Skill Development and Entrepreneurship, has introduced initiatives aimed at integrating sustainability into education



and training systems. The National Education Policy (NEP) 2020 highlights environmental awareness, experiential learning, and vocational readiness as priorities. Yet, implementation remains patchy, with a disconnect between national goals and local execution.

Private and non-profit actors have tried to fill the gap. Foundations such as Mobius have launched programmes that link education to real-world sustainability challenges — especially in underserved areas. However, such efforts, while impactful, are still not operating at the scale required to meet India's climate and employment targets. What is clear is that sustainability education is no longer optional — it is central to economic resilience. Without a structured framework to train youth for emerging green industries, India risks falling behind not just in climate targets but also in providing secure livelihoods. As automation and climate-related disruptions threaten conventional jobs, the green sector could become a powerful employment engine — if properly supported.

The future of green jobs in India depends on three critical shifts. First, education systems must align closely with market demands. Curricula across

schools, colleges, and skill centres need to include green technologies, sustainable development practices, and entrepreneurial training. Second, access must be equitable. Rural youth, women, and marginalised communities must be included in this transition through targeted outreach, scholarships, and community-based training models. Third, industries must actively collaborate with education providers to ensure a steady flow of job-ready professionals and innovators.

Events such as ICSE signal growing recognition of these needs. However, recognition must lead to reform. India has the potential to lead not only in renewable energy production but also in building a workforce that powers the green economy. That leadership will depend on how quickly the gap between promise and practice is bridged. As the global climate clock ticks, the pressure to act is undeniable.

The idea of a green jobs reality can no longer remain a policy slogan. It must become an everyday opportunity — for students in classrooms, for workers in training centres, and for communities looking to grow sustainably. Sustainability education must rise from conferences and reports to become a transformative force on the ground.

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“Is this discipline even relevant any more?” This question from a former student of M.A. English resonates, as universities suspend Humanities programmes due to declining enrolment numbers. In 2013, when I began teaching, English departments flourished, not because of students’ passion for Austen or Achebe, but because they ensured government teaching positions. This created a closed system – teaching English so that students could teach English to students who would also teach English – which remained hidden when teaching positions abounded.

But the decline today is predominantly due to the failure to create thought leaders and critics who would positively impact society. English Studies has nurtured a romanticised backward gaze fixated on recovering a ‘golden’ past rather than envisioning golden futures. Many departments in India still resist the half-a-century-old ‘cultural turn’ that, when enabled, allows scholars to study everyday cultural expressions with academic rigour.

Self-defeating stance
Traditional Humanities disciplines increasingly distance themselves from the ‘Humanities’ label. Media Studies seeks classification under Social Sciences, as to be known as



Need for Empirical Humanities

The English Studies curriculum must explore technology’s humanising potential and offer paths toward critical inquiry and progressive human reform

a ‘Science’ discipline suggests a worthwhile academic contribution. With History and Philosophy programmes sinking, English Studies is left fighting a solitary battle.

The most self-defeating stance has been that of literary scholars taking positions against scientific pursuits. During a recent

conference, a medical practitioner expressed frustration with literary scholars making romanticised claims about wellness that ignored empirical evidence. Such anti-scientific attitudes do not preserve disciplinary integrity but will destroy it.

The persistent framing of Humanities versus

Sciences damages both fields. Humanities scholars often argue against technological advancements as “dehumanising” while benefiting immensely from them.

This resonates an elitist glorification of a ‘simple life’ while conveniently ignoring the subtle privileges of technological advance-

ments that are still a distant dream for many.

Investigate and explore
Rather than opposing it, Humanities must explore technology’s humanising potential in empowering neurodivergent thinkers, preventing diseases through gene therapy, democratising knowledge and liberating marginalised communities. Instead of unfounded resistance, literary inquiry should address questions of equity and ethics in scientific pursuits. Because the adversities of technology stem not from technology per se but from the human interests driving them. This constructive approach aligns with India’s constitutional endorsement of ‘scientific temper’

and offers paths toward critical inquiry and progressive human reform. We need an empirical Humanities that honours interpretive traditions while embracing evidence. It serves as a counterweight to Digital Humanities while developing technologicality that interprets narratives across platforms using frameworks conceptualised by English departments.

Imagine Literature scholars working alongside doctors, scientists, and programmers. In Medicine, they could analyse patient stories to improve doctor-patient communication, exploring how diagnostic language shapes experiences, and how cultural narratives and beliefs influence healthcare decision-making. In climate discourse, rather than denouncing technology and romanticising pre-industrial life, they could acknowledge that the universe itself is a “glare killer machine” – as DeGrasse Tyson observes, ‘natural’ asteroids devastated Earth long before technology intervened – and explore how technology can ensure ethical sustainability.

Instead of resisting AI for its ‘artificial’ tag by idealising human intelligence as an isolated natural entity, literary scholars could investigate how large language models mirror existing human biases and shape experiences accordingly. This shift involves understanding conversational engineering and creating rich knowledge for AI systems.

While content engineering certainly requires technical skills, literary skills such as linguistic competence, critical thinking skills, interpreting ability, and cultural analysis could be the missing pieces in our AI revolution that can help transcend mere pattern-matching to achieve genuine cultural understanding.

The collaborations can be realised by envisioning a paradigm shift in the English Studies curriculum, including digital literacy, data visualisation, and collaborative practices alongside honing traditional literary skills. Innovative courses like “Narratives Across Media”, “Narrative Medicine”, “Bio-Tech Sustainability”, and “Algorithmic Culture” must become standard.

Indeed, literary discourses help us encounter our fragmented world, but they should do so with a scientific temper. Only then will English Studies forge tomorrow’s thought leaders rather than mere analysts of yesterday. Departments envisioning critical perspectives with a scientific spirit will flourish. Those clinging to outdated models will become curious relics. Is it time to pause, reflect, act? Not just to be or not to be but to be relevant or not to be?

Views expressed are personal.

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Breaking the academic paywall

India has the fourth highest number of PhD graduates globally, according to the Organisation for Economic Co-operation and Development. A number of these students come from regions where universities do not have the resources to subscribe to journals. A PhD student has to read hundreds of papers and books to complete research. How can students, who already suffer resource constraints, and get a stipend of ₹20,000-35,000, be asked to spend \$20-3,000 (₹17,000-2.64 lakh) to access a paper online? This cannot be the norm.

Blocking access to knowledge

In August, the Delhi High Court ordered the blocking of free access sites – SciHub and Libgen. This triggered a debate over the rights of students and the scientific community, particularly in the Global South, in accessing knowledge. The sites were blocked on grounds of copyright infringement, based on a plea filed by three of the biggest academic publishers in the world, which corner 40% of the market.

Academic publishing is a business where publishers do not create content or review its quality. Instead, they benefit from the free labour of the research community, which is paid for by taxpayers or student fees. In short, multi-billion dollar companies are able to block access to scientific knowledge to the vast majority of the world.

So, who is committing the real theft? A 2021 study published by the *Journal of Scientometric Research* found that India accounted for 8.7% of the total download requests on SciHub, amounting to over 13 million, in 2017. Of these, 19% were related to the medical and health sciences. Access to such information allows students and professionals to build on existing knowledge and customise it to their local needs in regions plagued by inaccessibility and deficit in resources.



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has witnessed the painful health realities of countries in the Global South. Overburdened systems are unable to meet the growing needs of communities that are often underserved in the face of systemic gaps, climate disasters, and violence. Medicine is not absolute; it evolves with the world around us. As our environment changes, our bodies adapt, and organisms evolve, the healthcare sector demands constant innovation, research, and deeper understanding of ground realities to deliver the best practices and treatment plans.

MSF teams, especially those treating patients with drug-resistant TB and antimicrobial-resistant HIV, have seen how disease patterns can evolve and shatter remote communities. For best results, health experts must work on complex treatment plans, customised to the patient's needs, which differ depending on cost, severity of infection, geography, malnourishment, age, and co-morbidities. The fact that two-thirds of TB cases are reported from eight countries, all in the Global South, where patients are struggling to access effective treatments that are at least a few decades old, means fighting these diseases is a matter of equity and justice.

Like medicine, knowledge should never be a luxury commodity. Currently, corporate forces overwhelmingly gatekeep scientific knowledge – whether it is in increasingly corporatised universities, or through corporate-funded research and journals. The primary motive is profits, and the resultant practices are ownership of human knowledge within patents and intellectual property rights. This exclusionary system has a narrow understanding of what knowledge is. Universities have started seeking out researchers who have already published papers in well-known journals instead of seeking research that benefits the most underserved.

In addition to advocating for open access, it is also important to recognise the knowledge gathered by grassroots communities. The Global South is otherwise often treated as an exotic field site for researchers from the Global North. There is gross under-representation of researchers from the Global South in authorship; they are typically reduced to field assistants, while the so called 'cerebral' work is relegated to those from the Global North. This is particularly concerning as issues in the Global South are conceptualised under Global North-centric language.

Collective efforts

The Global South is disproportionately impacted by increased protectionism, violence, climate disasters, displacement, inaccessibility, drug resistance, and more. These challenges demand collective efforts from governments, innovators, and health experts. During the COVID-19 pandemic in 2021, 193 member countries of UNESCO, including India, adopted the first international framework on open science, to make science transparent and accessible and enhance international scientific cooperation. However, just a few years later, multi-billion dollar publishers continue to hold knowledge at ransom.

We are producing an artificial scarcity of knowledge, which is otherwise an infinite resource, a commons. Science is already produced as a collective exercise; it must be recognised as such. Even research conducted in the Global South is inaccessible to the people who participate in these studies. As a society, we need to exert pressure on publishers and governments to open channels for easy access to scientific information. If we are to have a fighting chance at facing the health implications of war, climate crisis, drug resistance, and systemic inequities, we must dismantle paywalls and stake claims on knowledge as commons.

Science is already produced as a collective exercise; it must be recognised as such.

For H-1B Bed-Out Talent, What's Here?



M Muneer

Trump's latest H-1B Bomb, after his tariff missiles, has brought some 'hope springs eternal'-wallas out of the woodwork, proclaiming that the US' resultant loss of Indian talent will trigger a 'reverse brain drain' to India. At first glance, that seems logical enough.

In their article, 'Atmagarbar America's Loss Can Be India's Gain' (ET, Sept 22), former Infosys CPO T V Mohandas Pai and Nisha Holla argue that India's role in the IT services industry won't be reduced by the US clampdown, but could actually deepen. With nearly 4,20,000 Indian students in the US, restrictions on work visas and career pathways should, in theory redirect the best minds home.

But the US' loss is unlikely to be India's gain. Instead, beneficiaries will be Canada, Australia, Singapore, Europe and West Asian countries, which have built infrastructure and policy frameworks to welcome global talent. The British government is reportedly exploring proposals to do away with some visa fees to attract top global talent — the world's best scientists, academics and digital experts.

Unlike Chinese students, funded by the state, Indian students are self-funded, investing over ₹1 cr of family money or loans. The calculation is clear: a US salary offers strong ROI. Returning

to India upsets this equation. A falling rupee makes even a \$120,000 salary in California look attractive.

The same skills in India yield higher stress, slower growth, weaker safety nets and poorer quality of life. Chinese students are encouraged to experiment. But Indians, risk-averse by necessity, find reverse migration economically irrational.

India's work culture is also a deterrent. Corporates are marked by archaic hierarchies, micromanagement, mediocrity and a 9 am-to-9 pm, six days-a-week in-office work culture dogma. KPIs show bias towards obedience and incrementalism. There's no focus on innovation and new product development.

Unless risk-taking is rewarded, hierarchies flattened and failure encouraged — as in San Francisco, Tel Aviv or Helsinki — disruptive innovation will be elusive in India. Add to this scepticism towards foreign-educated jobless returnees, along with growing domestic unemployment.



Let's just sit back and wait for them to return

Quality of life compounds the challenge. Add divisive politics, short-term populism and retrogressive research dressed up as 'national duty', and the misalignment between individual ambition and national trajectory becomes clear. Brainpower thrives where systems enable it. India's systems still largely suffocate it.

India boasts 1,340-plus universities and 45,500-plus colleges, producing over 10 mn graduates annually. But quality? Global rankings elude Indian institutions due to poor output standards in R&D. Last year, 7,50,000-plus students went abroad, taking \$30 bn with them. Policymakers should have built competitiveness, but preferred regulatory controls and cronyism, resulting in this poor state. Here's what other countries did:

► China faced a similar exodus three decades ago. Beijing committed over \$250 bn annually to higher ed. Today Chinese universities feature in global rankings, and its R&D ecosystem fuels leadership in AI, semiconductors and biotech.

► Singapore created a cosmopolitan hub with strong IP protections, world-class universities and predictable policy.

► Israel turned scarcity into abundance through heavy investment in research, entrepreneurship and commercialisation initiatives.

These nations aligned institutions, incentives and mindsets. India either lacked foresight or political will. Its efforts remain

fragmented — incubation centres at IITs, scattered corporate initiatives and Nasscom awards. Each is valuable, but insufficient without an overarching vision and execution.

The hard truth: India's brightest, once exposed to global systems, return to find little space to apply those lessons. Academic systems remain exams-driven. Labour arbitrage and services, not product innovation, dominate India Inc. Policymakers remain reactive, chasing electoral cycles rather than long-term vision. Those who do return often compromise, settling for lower-quality work, or struggling as isolated entrepreneurs battling systemic inertia.

Meanwhile, Canada, Australia, Germany and the UAE are opening their doors wider. Post-study work visas, golden visas, fast-track permanent residency and progressive talent policies make them natural magnets for talent blocked by US immigration. Rationally, students will choose these destinations over India.

India can course-correct, maybe in a decade. Silicon Valley teaches risk and capital, China shows the power of patient state investment, and Israel proves scarcity can spark ingenuity. For India, three reforms are non-negotiable:

- Rebuilding universities into global contenders.
- Rewiring work culture to reward risk over obedience.
- Reimagining policy with long-term vision beyond politics.

Without these, Indian talent will flee to everywhere but 'home'.

The writer is co-founder, Medici Institute for Innovation

cmg

H-1B's new \$100k entry cost: why young Indian women are most at risk

The impact will be particularly felt by women H-1B beneficiaries as they generally earn less than men

DATA POINT

Vignesh Radhakrishnan

The U.S. government's latest decision to impose a one-time \$1,00,000 fee on new H-1B visa applications – a steep jump from the current fee of a few thousand dollars – is likely to hit young Indian women applicants the hardest, according to data.

H-1B visa workers are predominantly male. In FY24, among workers approved for continuing their jobs (extending or changing their jobs), 74% were men and only 26% were women (Chart 1). Among workers approved for initial employment, 37% were women. This indicates that while men historically dominated the pool of H-1B holders, women are catching up as their share is relatively high among fresh applications. As the new fee targets new applicants, women's prospects look dim.

Also, the annual salaries earned by those seeking initial employment through the H-1B route are relatively low. For instance, if we line up 100 H-1B beneficiaries approved for initial employment in FY24, the bottom quarter (25th percentile) earned about \$77,000, the middle worker (50th percentile) earned \$97,000, and the top quarter (75th percentile) earned around \$1,30,000 or more. Among continuing workers, the bottom quarter earned about \$1,02,000, the middle-range salary was \$1,32,000, and the top quarter earned above \$1,69,000 (Chart 2).

With the new visa cost consuming most or even all of the workers' annual pay, sponsoring initial employment beneficiaries may become economically unviable for employers. This raises questions about the future of the H-1B programme for new entrants. For instance, if a company sponsors a new beneficiary, the total cost in the first year will far exceed that of supporting an experienced worker seeking continued employment.

This impact will be particularly felt on women beneficiaries, as they generally earn less than men in the H-1B programme, especially in the bottom quarter of workers. If we line up 100 H-1B beneficiaries who were approved for initial employment in FY24, the bottom quarter of women earned about \$71,000 compared with the \$80,000 that men earned. At the median level, women earned \$94,000, while men earned \$99,000. In the top quarter, women earned \$1,25,000, while men earned \$1,31,000 (Chart 3). Across all percentiles, women H-1B workers earned less than men, which makes it an even tougher choice for employers to sponsor them.

This peculiar skew is more pronounced among Indian women beneficiaries than those from most other countries. For instance, if we examine India and China alone, which together accounted for 83% of the beneficiaries in FY24, the gender skew is evident in India but not in China (Chart 4).

The burden of the new fee also falls heavily on younger applicants, particularly women. Among women approved for new jobs in FY24, 75% were under 35 years of age, compared with 65% of men. This means the entry cost will hit a larger share of women who are beginning their careers (Chart 5).

Among women approved for new employment in FY24, 44% had completed a Master's degree, compared with only 39% of men. The share of women with a Bachelor's degree alone was lower. At the doctorate and professional levels, the difference between men and women was negligible. Since the new fee applies only to new petitioners, it will impact women more heavily, despite their higher educational qualifications relative to men (Chart 6).

While much of the above data refers to H-1B beneficiaries in general, the picture is largely shaped by Indians who made up 60% of the female and 75% of the male beneficiaries in FY24.

Slamming the door on young women

The data for the charts were sourced from the United States Citizenship and Immigration Services



Chart 1: Approved H-1B beneficiaries by type of petition and gender in FY2024 (in %)



Chart 2: Annual compensation of H-1B beneficiaries by petition type in FY2024 (figures in \$)

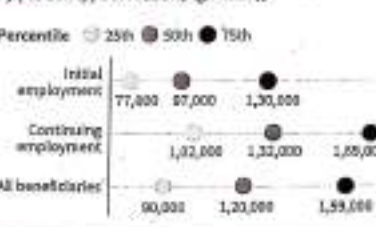


Chart 3: Annual compensation of H-1B beneficiaries (initial employment) by gender in FY2024 (figures in \$)

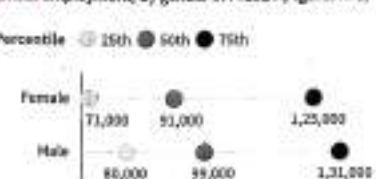


Chart 4: Approved H-1B beneficiaries by type of petition and gender in FY2024, among Indians and Chinese (by place of birth)



Chart 5: H-1B petitions approved (initial employment) by age and gender of beneficiaries in FY2024

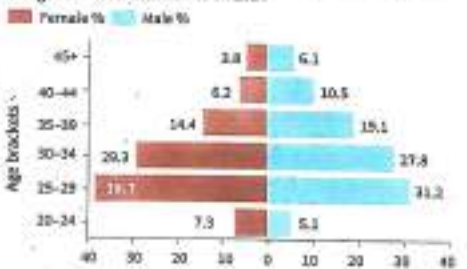
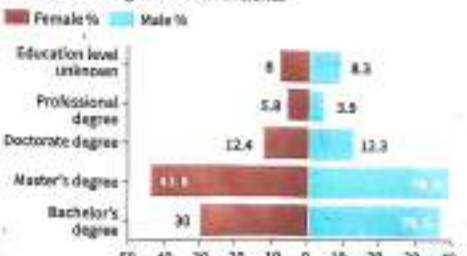
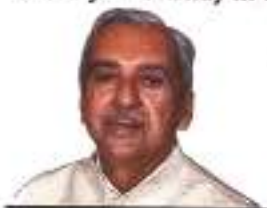


Chart 6: H-1B petitions approved (initial employment) by level of education and gender of beneficiaries



Concerns confronting the young of today

From an information-driven society, humanity has transitioned into a knowledge society, and many would argue that a wisdom society is already in the making. Education, innovation, creativity, and skill acquisition now stand at the forefront of progress



JS
RAJPUT

Quarter of a century in the third millennium have made it amply clear to one and all: things are going to change far faster in the next quarter than in the first! It would be pretty prudent not to make any guess about the next two! These are also the times of the fortunate grandfathers, who are fortunate enough to be with their grandchildren — going gaga on how their young ones, who are so brilliant, knowledgeable and skilled! These are also the times of reciprocal learning. It unfortunately loses its relevance in the times of nuclear families. The information society has transitioned to knowledge society.

Some would say the transition to the wisdom society has already begun! Fine, that is accepted, but the focus now is on the acquisition of excellence in education, learning and skill acquisition. Recall the days of 'STD Booths'? These were grabbed with expected enthusiasm, expanded fast, became popular, and vanished without a whimper! The depression and dejection it caused amongst the majority of those who had accepted that they could spend a lifetime in this occupation has not been — to my knowledge — studied in depth and detail.

The positive aspect of the current times is that the education policies in particular and policies in general are now explicitly focussed on life-long learning, innovations, self-dependence through state-assisted initiatives. There are very encouraging instances of individuals with ideas, imagination and initiative, augmented by the bubbling curiosity, nurtured creativity and sustained commitment, who have indeed become job-givers instead of job-seekers.

This, however, is not all that could define the world before the young of the 21st century. The world before them is becoming increasingly complex, competitive, insensitive, and most importantly, in-cohesive, full of distrust, and the debilitating adherence to the belief that competition to generate more and more fatal weapons is the only way to create a peaceful and cohesive world! The young of today; the millennials, or the Generation Z, are making news.

As the nature of Indian struggle for independence was unique, so was the genesis of the student agitations in post-independent India! In 1974, a localised protest against the rising mess fees ballooned to a state-wide agitation, 'Naiinman Andolan'. It received full public support, with its horizons extended to include public resentment against corruption, unemployment and rise in prices that had impacted the lives of practically the majority of the people. Its success in getting the state assembly dissolved and the chief minister unseated



The Pioneer
SINCE 1865

TWO BASIC PRINCIPLES MUST BE STRICTLY ADHERED TO. THOSE IN POWER MUST CREATE FORUMS FOR THE YOUNG TO EXPRESS, ANALYSE AND INFER, AND SYNCHRONISE THEIR POLICIES ACCORDINGLY, WHILE THOSE OUT OF POWER SHOULD NOT FALL PREY TO THE LOFTY IDEAS OF INCITING THE YOUNG FOR POLITICAL ENDS

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- The Pioneer

led to a similar uprising in Bihar. It was led by the indomitable JP. Though it preceded the dreaded 'Emergency', imposed on 25-26 June 1975, it eventually led to the emergence of Janta Party, and unprecedented upheavals in post-independence India. There were two major outcomes in my view: the success of the fight against corruption, nepotism, and the destruction of the basic tenets of democracy by corrupt elements could be curbed, abolished and banished only by the active support of the youth! The JP movement was led by a person of unimpeachable integrity, unparalleled commitment, and support of the young. Unfortunately, most of the young leadership that grew under him failed to maintain even a minimum level of such values and 'purity in public life'. The scenario in respect of values, morals and ethics in public life declined to such low levels that Assam was being flooded by the East Pakistan/Bangladeshis, with full connivance of leaders of well-known political outfits.

They were settling them in places of their choice, determined by intensive mathematical calculations with next elections in mind. The names mentioned included state and Union ministers! It was transforming not only the demography of Assam, but became a serious danger to its age-old traditions and culture. One vividly recalls the great launch of the Asom Gana Parishad on October 13-14, 1985, all of them university students. They could mobilise people's support throughout the state, and the agitation that followed led to the downfall of the state Government, and a glorious victory of the nascent political outfit!

It was a great phenomenon in the political history of India. On both of these occasions, the failures were an 'inevitable' consequence of the alignments of power, a sure recipe for generating distrust amongst even the staunchest of friends and colleagues. Distrust invariably destroys democracy. Recall the world before the 20+ year olds after independence, and that before the same age group maturing up in the first quarter of the 21st century! The challenges are so different! One belonging to first set — like yours truly — had

high hopes from the then leadership; men and women of high character and sacrifice. The fortunate ones in colleges and universities were sure to get jobs, had full faith in the honesty of the recruitment agencies and individuals manning institutions and recruitment agencies, no one had heard about paper leakage mafias, of solvers, or jobs for land and consideration! The young and educated of today are destined to suffer all of these, irrespective of the ideological orientations of those in power. The young of today are mostly restless, uncertain and worried, as most of the leaders of today are just a study in contrast to that of the initial years of independent India. It is a journey from total sacrifice to accumulation, accumulation and more accumulation. The recent events in Bangladesh and Nepal have woken up politicians globally for varied reasons depending upon which side of the political spectrum they are. In fact, there is smoldering unhappiness amongst the young in several countries, particularly in Europe.

The latest protest march in London has organic links to the discontentment amongst the youth, particularly in Europe, as the demographic changes are threatening their culture and cohesion — and the developing countries. A deeper in-depth analysis would indicate how the immigration policies have impacted every aspect of not only the economic contours of the society in several nations; it has also drastically transformed the socio-cultural scenario practically across every national boundary! Visionary politician, and educationist Dr S Radhakrishnan had envisioned the consequential changes on the global scale, and had cautioned people some eight decades ago. Unfortunately, though people do understand the inevitability of the increasing inter-mingling, it is not easy to come to terms with it.

Two basic principles must be strictly adhered to. Those in power must create forums for the young to express, analyse and infer, and synchronise their policies accordingly, while those out of power should not fall prey to the lofty ideas of inciting the young for political ends.

Priced Out Talent

The latest decision by Washington to impose a staggering annual charge on skilled-worker visas marks a turning point in the global contest for talent. By attaching a six-figure fee to each new application, the United States is sending a clear message: the door remains open, but only for those who can afford an entry ticket more expensive than many college degrees. For Indian professionals and the companies that rely on them, the consequences will be immediate and profound.

For decades, the H-1B visa has been the primary channel through which Indian engineers, data scientists, and other specialists have entered the American workforce. They have filled critical gaps in sectors ranging from software to biomedical research, contributing to innovations that have defined the modern economy.

The new policy, which requires companies to pay an additional \$100,000 every year for up to six years, changes the calculus entirely. Hiring a single foreign professional could now mean a government surcharge of more than half a million dollars over the duration of a visa.

Large technology firms with deep pockets might grudgingly absorb the cost for a handful of exceptional recruits. But smaller start-ups and mid-sized firms, which have often turned to global talent precisely because they cannot find or afford local workers, will be pushed out of the game.

The policy thus risks transforming a merit-based pathway into a privilege of the richest corporations, narrowing the diversity and dynamism that have powered America's technological edge. For India, the stakes are high. The country supplies the majority of applicants to this programme, and countless families have planned their futures around the prospect of working in the United States.

An abrupt escalation in costs will disrupt those plans, forcing many to reconsider career paths and migration strategies. Domestic companies that have used US postings as a training ground for their best engineers may also rethink their models, with ripple effects on salaries and recruitment here at home.

The irony is that America itself may lose more than it gains. By pricing out promising minds, the policy invites companies to move their research centres and development hubs to more welcoming jurisdictions.

Nations from Canada to Singapore have been waiting for such an opening, ready to offer competitive visas and stable pathways to permanent residence. If talent is indeed the oil of the twenty-first century, the United States is choosing to tax the well until it runs dry, almost as if it were a bankrupt economy desperate for funds and not the world's richest country.

India must respond with both caution and creativity. Strengthening our own innovation ecosystem, streamlining immigration for returning professionals, and forging partnerships with alternative destinations can turn a challenge into an opportunity. The world's brightest minds will always seek the best place to build their dreams. If America raises the price of entry so high, we should be ready to welcome them home. *stat/c*

Inverse equation

SUKANYA SARKHEL

India is dealing with a disturbing rise in sexual violence, forcing many women to stay at home, stay silent, and stay out of jobs. A 2018 study by the economist, Tanika Chakraborty, and her team argues that rising sexual violence and falling female workforce participation are directly linked. The study sees sexual violence not just as a crime but as a way of controlling women, keeping them afraid and limiting their freedom. This fear affects everyday decisions: whether to take a job, ride public transport, or even go out after dark.

A national study found that in places where crimes like rape, abduction, and kidnapping are high, fewer women are working, suggesting that the fear of violence, made worse by conservative family values, stops women from working. Studies from the United States of America in the 1980s also support this idea. In India, this avoidance can go so far that women drop out of the workforce altogether. Cultural expectations also play a big role. In many families, women are taught to fear the outside world. Their bodies are the site of family 'honour'; so any risk of violence also carries a social cost.

India's problem with sexual violence took centre stage after the horrific rape case in 2012 in Delhi. According to the National Crime Records Bureau, crimes against women have been rising over the last decade. We have witnessed more such cases that triggered more public protests for justice and stricter laws against sexual violence. In 2024, a 31-year-old doctor at the R.G. Kar Medical College and Hospital was raped and murdered while she was on duty. This year, a law student was gang-raped at the South Calcutta Law College, allegedly while a campus security guard did nothing. In Varanasi, 23 men raped a 19-year-old girl over several days. In Nainital, a 12-year-old was attacked by a 73-year-old man. In Mizoram, a national-level coach was caught abusing underage athletes. In Odisha, a female college student took her own life after

being harassed by a teacher, a tragedy so extreme that even President Droupadi Murmu visited the hospital. These are not isolated stories. They reflect a larger pattern: violence and the pervasive fear of it influence the way women live and work in India, with serious consequences for the nation's economy.

Between 2005 and 2010, women's labour force participation dropped sharply: from 33.3% to 26.5% in rural India and from 17.8% to 14.6% in urban areas. This decline continued through the 2020s. For a country chasing high economic growth, this is a red flag. The United Nations says that if women participated equally in the workforce, India's GDP could grow by 60%. The fear of stepping out is not limited to rural or conservative families. Even in cities, many educated women turn down job offers because they do not feel safe. This shows that patriarchy is still shaping modern India.

A recently published work by the economist, Sofia Amaral, and others looks at how different types of police patrols affected harassment in Hyderabad during 2019 and 2020. They found that visible, uniformed patrols help reduce serious harassment. But this is not the case for milder, everyday kinds of harassment because many officers do not take minor offences seriously. Police teams with more progressive attitudes were more effective, showing how much police mindset matters. Better training is thus as important as boots on the ground.

This tells us something big. Fighting sexual violence is not just about having stricter laws or holding protests. It is about real change: safer streets, smarter urban planning, better reporting systems and, most of all, changing how we see women and their freedom. The Prevention of Sexual Harassment in the Workplace Act looks great on paper, but often fails in practice. But tools like the SHe-Box, an online platform managed by the ministry of women and child development, has made a difference by making it easier to report abuse. If India wants real progress, women should not have to choose between safety and opportunity. When women disappear from the workforce, it is not just a personal loss; it is a national crisis.

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H-1B: When One Door Closes...

● Trump will be sending more pain India's way ● GOI needs to buckle up ● Help the talent now stuck here build AI, robotics, chips ● Help young Indians hit by Trump's student visa cuts find non-US paths to get serious skills ● Learn from the transformative Make in China 2025 programme

Amit Gupta



The decision to slap a \$100,000 fee on American companies who hire a new H-1B visa employee is a victory for the MAGA crowd and also for other American conservatives who do not want to see Indian workers being employed in US.

They think, as the conservative *Washington Times* stated in an editorial, "It makes no sense to import 290,000 noncitizen programmers when plenty of Americans would fill those positions if given the opportunity. Too often, the visa holders' loyalty remains in their homeland, considering the staggering sums they send back to India."

Further, the slapping of the huge fee on companies is most likely the first step in substantially reducing the programme. Both American political groups and India's govt and public need, however, to recognise that the implications are not as clear-cut as the Trump administration thinks they will be.

What Americans need to understand

● Firstly, for those who want to Make America White Again, the H-1B constriction will do little to stop the demographic change that is coming in the country. Its census bureau has estimated that by 2045 US would become a country where minorities would account for over 50% of the population.

Minority students were supposed to reach 50% of all children in primary school in 2022 but that happened in 2019 instead. Put simply everyone who will shape the browning of America is already in the country and restricting H-1B visas can do little to reverse this trend.

● Secondly, some of the work done by H-1B visa holders will be outsourced to Indian back offices, although the Trump administration will likely tax that process. Employment, therefore, will increase in India, which is good for the country, but will not fulfil the aspirations of H-1B seekers, who wish to emigrate.

● Thirdly, the \$100,000 fee is expected to make companies hire only at the highest level of the H-1B scale, which is that of experts. With AI now doing much of the entry-level

work, the Trump administration is arguing that American companies should be hiring workers who add substantial value to the company's product and make them world beaters. Low-level hirings do little to further that goal. But hiring someone who can achieve a breakthrough in say battery technology will.

What Indians need to understand

Whileracial preferences and technological strategy



may be driving the Trump administration's actions, what are the implications for India?

● One obvious consequence is that those in India hoping for a Trump U-turn should recognise that is unlikely to happen. A section of the Indian media, diplomats, academics, and politicians desperately hopes for things to go back to normal in the US-India relationship. These were the people who were so happy when Trump wished Modi happy birthday, not

recognising that symbolism and optics mean little to American govt.

Instead of a U-turn or an improvement, what followed was the H-1B decision. And more pain is likely to follow. So what GOI needs to do is recognise that it has a major problem on hand and look for alternatives.

● The country does best when it faces a crisis. After the 1962 war serious defence planning took place and in 1981 the country undertook significant economic reforms. New Delhi is not in as bad a predicament today but it should take the opportunity to make major reforms.

One such step would be to use the now available Indian talent domestically to work on AI, robotics, and chip manufacture. Learn from the Chinese whose Make in China 2025 programme has led to sixth-generation fighter jets, robot tanks, cell phones that match the iPhone, laser weapons, and electric vehicles that are considered better and cheaper than Tesla.

Over the years there have been claims of making indigenous computers, cell phones, and an alternative to WhatsApp in India. None have borne fruit. But if India is going to have a skilled labour force that cannot leave the country, it is time to have a technological initiative to gainfully employ these workers.

● Finally, how many times does the Trump administration have to take a tough stance against India for the mandarins in New Delhi to realise that the two countries are not going to go back to business as usual?

Apart from the H-1B issue there is the fact that student visas have been cut by 50% and Trump is now talking of bringing in 600,000 Chinese students. New Delhi can respond by negotiating with Moscow and Beijing, as part of BRICS, to get more Indian students into computer, engineering, and medical courses in Russia and China. Their schools provide a first-rate education in these areas and if the goal is to train the next generation of Indians then this is an easy way to do so.

Those going abroad will have to understand that now studying abroad or working abroad is no longer going to be an easy first step to citizenship. But they can gain the skills to become world beaters.

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205/20

Who can afford the \$1,00,000 US dream now?



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While these clarifications have somewhat eased anxiety, the initial hours after the announcement assembled a panic drill. Airports reported a surge of travellers rushing back to the US, families cancelled trips, students fretted about career prospects and employees assembled for legal guidance.

PRESIDENT Donald Trump's recent executive order has sent shockwaves through the United States' skilled immigrant workforce and the companies that rely on it. On September 18, the administration announced that new H-1B visa applications would now carry a fee of \$100,000 — a quantum leap from the modest amounts previously charged.

The White House insists the move will shield American workers from wage suppression and risks in alleged abuse of the H-1B programme. But in practice, the sheer magnitude and sudden implementation of this policy have triggered widespread fear and confusion, particularly among professionals from India and China, who constitute the lion's share of H-1B recipients.

The order applies only to new visa petitions submitted after September 18. Current H-1B holders, renewals and applicants already selected in this year's lottery are exempt.

On platforms like X and Reddit, the human cost of the policy became apparent. Posts chronicled cancelled flights, sleepless nights and the uncertainty of family viability. One widely shared post read: "I have a mortgage, two children in school, and an H-1B renewal coming up next year. I don't know if my employer will continue to sponsor me."

The \$1,00,000 question of who can afford the American dream now is looming large over so many lives.

The financial implications are, indeed, formidable. Even with employer sponsorship, the six-figure fee could deter companies from taking on new foreign talent. For prospective employees, this translates into fewer opportunities; for students graduating from US universities, the once reliable pathway from study to work is narrowing.

Historically, the H-1B visa has served as a conduit for highly skilled Indian professionals to contribute to the US technology and research sectors. It has



OPTIONS: Canada, Australia and Europe are capitalising on the US policy shift, offering skilled migrants simpler path ways and greater certainty, sources say

underpinned the growth of India's IT industry and generated remittances that support millions of households back home.

For many visa holders, the stakes are deeply personal. Thousands of Indian families in the US depend on timely renewals, with children raised in America and embedded in its schools and communities. Sudden policy changes threaten to uproot these families overnight.

The plight of "documented dreamers" — children of H-1B workers who lose legal status upon turning 21 — exemplifies the emotional

Thousands of Indian families in the US face sudden upheaval, with children uprooted from schools and communities they have always called home.

tor, now exacerbated by Trump's order.

For young professionals, the uncertainty is particularly crushing. Years of investment in education, competitive exams and student loans hinge on the ability to secure a US job. The visa represents more than employment; it symbolises social mobility, international exposure and professional recognition. A sudden spike in fees risks rendering that preparation futile.

Students are caught in the crossfire as well. Indian parents have long sent their talented wards to US universi-

ties, lured by world-class education and a clear path to employment through the H-1B programme. Policy shocks of this magnitude erode the allure of US education, prompting many to consider alternative destinations.

Globally, America risks squandering its magnetic pull for talent with the prohibitive entry fee slapped on H-1B. Canada, Australia and several European nations, including Germany, are already snatching the opportunity.

They are wooing skilled migrants with simplified visa regimes and attractive residency prospects. For young engineers weighing studies today, the US seems less predictable, less welcoming and more costly.

Economists have questioned whether the policy will genuinely protect domestic workers, as it purports to. A Wall Street Journal report suggests that H-1B employees frequently complement US talent rather than replace it, enabling companies to expand and create additional roles. Paradoxically, by slamming the door, Washington could hobble the very innovation it seeks to protect.

The psychological impact is also significant. Visa renewals and lotteries are more than bureaucratic processes; they are recurring stressors that influence family planning, schooling and financial decisions. The American dream, once ap-

practical, now increasingly feels elusive.

Industry groups and observers, including India's Nasscom, have warned of potential legal challenges. The fee is so steep that some have described it as punitive or discriminatory. The lack of clarity surrounding its implementation — whether this fee could become recurring or extend to renewals — compounds the problem, leaving companies and workers alike in limbo.

The policy has also sparked diplomatic tensions. The Indian government has decried the move as "unreasonable and discriminatory" and flagged it as a key concern in upcoming trade talks with Washington. Officials stress the need to safeguard their skilled workforce while preserving bilateral ties. Economically, India may need to reduce over-reliance on a single visa system by diversifying global operations, encouraging IT companies to expand in Europe, Asia and Africa and fostering domestic innovation hubs to retain talent.

Ultimately, this episode underscores a fundamental principle: nations are built not solely on markets or trade deals, but also on the lives, aspirations and well-being of the people who contribute to them. The American dream was never meant to carry a price tag — let alone one prohibitive enough to exclude those who helped build it.

Building SEZs with labs and universities

Many countries have started to view the Trump administration's anti-immigration policies — the hike in the H-1B visa fee is just one of them — as an opportunity. *Financial Times* has reported that the UK government plans to waive visa fees to attract top talent, including scientists, academicians, and digital experts, to the country to drive its economy. Beijing was early to spot the change in sentiment in the US, and started wooing talent, a lot of them of Chinese origin, to shift to China, promising not just a waiver of visa fee, but competitive pay and comparable research ecosystems. The rise of a vindictive State-backed conservative culture on US universities seems to have prodded many liberal academicians to explore opportunities in Europe. The decline in foreign students in US campuses — including a 45% year-on-year fall in Indian students — needs to be seen against this backdrop. It is clear that the America First policies of the Trump administration are beginning to pinch — and not where they were expected to.

The visa regime is just one factor in attracting top talent across disciplines. More is needed, including a well-developed research ecosystem, legacy departments, faculty, and, most importantly, a liberal work and living environment. The US, a country built by immigrants, offered all this for the past 80 years at least, attracting talent from Europe and Asia.

But the alternatives need not be restricted to the UK and China. India too has an opportunity in this churn. It can look beyond the H-1B mess and work to build a research and academic ecosystem that attracts the finest minds, especially the young who may be rattled by the current discourse in the US. Indian states could build special education zones (SEZs) with the best infrastructure for learning and research, invite top universities from across the world to set up campuses, and attract researchers and academicians — and not just of Indian origin. That would require significant investments by both government and the private sector, and a commitment to protect and nurture academic freedom. Is India up to it? h7/16

\$100,000 fee, Asian opportunity

In the wake of US, West's stringent immigration policies, India can collaborate with its neighbours to become a global AI hub



KRISHNA SHARMA AND
NARENDRA REGMI

A TOP INDIAN engineer working remotely for Google from Bengaluru realises that, in purchasing power terms, her earnings are not much lower than those of her colleagues in Mountain View, and she enjoys the added advantage of being close to family. Similarly, Chinese workers also have the advantage of access to advanced manufacturing capabilities and vast consumer markets, while both watch colleagues abroad navigate increasingly complex visa policies as they build the future from home.

This scenario reflects a shifting global landscape. As the US administration imposes a \$100,000 fee on new H-1B visas and much of the West makes immigration procedures increasingly stringent, something remarkable is unfolding in India. India's venture capital funding jumped 43 per cent in 2024 to \$13.7 billion, reinforcing its position as Asia-Pacific's second-largest VC destination. For perhaps the first time in decades, the economic mathematics may favour building technological capabilities closer to home, creating an intriguing possibility: Could South Asia, led by its largest economies, develop a more integrated technological ecosystem?

The global AI race is reshaping technological leadership. China has accumulated approximately 70 per cent of global AI patents, including over 38,000 generative AI patents between 2014 and 2023, compared to America's 6,276. Meanwhile, India demonstrated remarkable growth in AI investments, with generative AI funding reaching significant levels in 2023. These developments suggest that innovation centres are becoming more geographically distributed, with India's strength in software services complementing manufacturing capabilities elsewhere, while our large consumer market provides valuable data for AI system training.

However, we must acknowledge the complexities. While patent numbers indicate research activity, they don't automatically translate to commercial success or technological leadership. Quality, international relevance, and practical application matter as much as quantity. Even without regional cooperation, India possesses formidable technological assets — from the world's largest digital identity system to sophisticated payment platforms.

This foundation provides India with specific policy opportunities to accelerate technological leadership. The government's recent elimination of angel tax and simplified foreign venture capital investor registrations represent important steps, but more targeted interventions could amplify our advantages. India should consider establishing dedicated AI research zones with streamlined regulations, like Special Economic Zones, but focused on emerging tech hubs. These zones could offer fast-track approval for AI startups, reduced compliance burdens, and direct government-industry collaboration on projects like autonomous vehicle testing or healthcare AI deployment. Additionally, expanding the Production Linked Incentive scheme to cover AI hardware components would reduce our dependence on imports while building domestic manufacturing capabilities.

India's engineering talent pool remains unmatched globally, but policy interventions could maximise this advantage. Creating specialised policy for returning Indian diaspora technologists, offering tax incentives for international patents filed by Indian residents, and establishing government-backed venture funds targeting deep tech startups would strengthen our innovation ecosystem.

Current global trends present both opportunities and risks. Changes in visa policies affect talent mobility. These shifts could potentially redirect talent flows toward Asian innovation hubs. Our returning diaspora brings valuable networks and expertise, while policy changes both at home and in host countries may accelerate the trend of global companies establishing significant operations in India.

The question of broader South Asian technological cooperation, particularly with China, is economically intriguing but politically complex. Despite tensions across the region from India-China border disputes to various bilateral challenges, economic cooperation has historically found ways to proceed when mutual benefits are substantial.

A more integrated South Asian tech ecosystem could theoretically offer complementary advantages: Software expertise from India, manufacturing capabilities from China, emerging talent pools from other regional economies, and combined market access representing nearly half the world's population. Practical cooperation with China could begin in carefully selected, non-sensitive areas, joint research initiatives on climate modelling, traffic optimisation algorithms, or medical diagnostics could demonstrate mutual benefits while maintaining appropriate security protocols.

However, we must be realistic about the challenges. Security concerns, regulatory differences, intellectual property protection, and ongoing political tensions create substantial obstacles. Any cooperation would need to address these concerns transparently and maintain respect for national sovereignty and security interests. The key is positioning India to benefit regardless of how regional cooperation evolves. Whether through partnership or independent development, our technological capabilities must continue to strengthen.

Any regional technological cooperation would need to start modestly and build trust gradually. The European Union's evolution from coal and steel cooperation between former adversaries offers one model, though South Asia's path would necessarily be different given our unique circumstances.

Regardless of the prospects for regional cooperation, India must prioritise strengthening its own capabilities. With 23 Indian startups preparing for IPOs in early 2025 and sustained growth in software and SaaS funding, the country's technological ecosystem is gaining strong momentum. By 2030, leadership in AI development will be a decisive factor shaping the global economy. India possesses the talent, increasingly supportive policies, and expanding capital markets to claim a major role.

The question is no longer whether India can build a technological future, but how swiftly it can unlock its potential. The opportunity is immense, but success will demand navigating both technological hurdles and intricate regional dynamics. In this landscape, economic pragmatism, not political rhetoric, must chart the course.

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Skilled Migration Dilemma

India must rethink the unrestrained migration of doctors and technology professionals, aligning skilled workforce policies with trade strategy to protect domestic needs and strengthen international bargaining power

RAVY BHARAL

Tariff pressures compel India to evaluate its policies from multiple perspectives. We cannot continue to have unrestrained brain drain while national interests are jeopardised. India is one of the world's largest hubs of both medical talent and technology professionals. Each year, thousands of Indian-trained doctors and tech experts migrate to the United States and other developed countries. In this context, regulating the migration of the skilled workforce, linking it to broader economic strategies, including tariff reduction/negotiations, calls for consideration.

While migration of trained professionals, such as highly skilled doctors and technology experts, enhances India's global soft power, it simultaneously contributes to domestic shortages, especially in health-care within rural and under-served regions. The suggestion is not just a reaction to unprecedented policies like tariff hikes, but overall in the national interest. Moreover, India has substantially progressed from what it was decades back, when migration was sometimes a necessity for individuals.

The National Medical Commission Act, 2019 (which replaced the Indian Medical



The unchecked outflow of India's best-trained professionals undermines national interests

Council Act, 1956) regulates recognition of medical qualifications and licensing within India. The Emigration Act, 1983, governs the overseas employment of Indian citizens and focuses primarily on protecting vulnerable workers. None of these statutes, or any other statute, prevents highly skilled professionals from leaving for overseas employment. One possible policy option would be to promulgate a fresh statute or amend the Emigration Act, 1983, classifying doctors, technology profes-

sionals, etc., as a special category requiring government clearance before migration. Such modifications would help not only domestic workforce requirements but also aid in foreign policy considerations, including tariff negotiations. India could leverage its skilled professional power not just as a domestic asset but also as a strategic tool in international negotiations.

However, any such restriction must pass the test of constitutionality. The Indian Constitution guarantees the freedom to practice any pro-

fession and the right to livelihood under Article 19(1)(g) and Article 21. In *Maneka Gandhi v. Union of India* (1978), the Supreme Court held that restrictions on movement should not be "just, fair and reasonable." However, precedents also exist for imposing limited obligations. In *State of Punjab v. Ram Lal Singh Bagga* (1998), the Apex Court upheld the principle that government policy can evolve to protect public interest.

Furthermore, the Foreign Trade Policy and tariff-related

legislation, such as the Foreign Trade (Development and Regulation) Act, 1992, could be amended to link migration of skilled professionals with international trade negotiations. Restricting this flow can be used as leverage in negotiations, particularly in the context of US trade policies. For instance, India could retaliate by limiting the flow of doctors to the US, affecting American hospitals that rely heavily on Indian-origin doctors.

Most importantly, the domestic advantage of this is

clear: retaining doctors would improve the doctor-patient ratio, strengthen public health infrastructure, and ensure that the taxpayer's investment in subsidised medical education benefits Indian citizens. More doctors in India would improve primary care, reduce disease burden, and help tackle issues in remote areas without dependence on foreign-trained professionals. Additionally, skilled manpower becomes a bargaining chip in diplomacy and trade negotiations, much like natural resources or industrial tariffs. However, over-restriction must be avoided, as that may violate constitutional rights to employment and movement under Article 19(1)(g) and 21 of the Constitution.

Some states impose bonds on doctors who study to government colleges, requiring them to serve in India for some years, although enforcement remains inconsistent. Similar bonds also exist in certain private institutions, including for tech professionals. Expanding this practice more systematically across the country would not only strengthen public health and tech delivery but also give professionals time to reflect on their long-term career goals.

A balanced policy approach is necessary. Skilled migration could be aligned with trade pol-

icy through targeted agreements to existing laws. At the same time, there could be incentives such as better pay and improved working conditions to make it more attractive for professionals to remain in India. On assignment-based models, short-term global engagements, research exchanges, and assignment-based overseas service should be encouraged, as they allow professionals to contribute internationally while contributing to serve domestic needs, apart from adding to India's income and reputation.

The challenge posed by rising tariffs should be converted into an opportunity for India to rethink its policies. Were we being too generous in allowing unrestricted outflow of our best-trained talent? Thoughtful changes could allow the government to retain critical human capital, especially for domestic health requirements, while at the same time using skilled migration to leverage in trade negotiations, particularly in the context of tariff actions by the United States. The solution lies in building a balanced ecosystem where Indian doctors, tech professionals, etc., serve the nation first while also engaging globally in ways that strengthen India's healthcare system, economy, and bargaining power on the world stage.

Views expressed are personal

7/25/25

Doctors and tech experts are India's hidden resource — vital at home, powerful abroad, and central to trade diplomacy

World Teacher

Buddha, Mahavir, Moses, Jesus, Muhammad, Nanak, Chaitanya and Ramakrishna were world teachers. They were born among different races at different times in different situations. But their advents took place with the one common purpose of alleviating the misery of the masses with spiritual remedies, integrating them in faiths suited to them as per their specific roots and socio-cultural needs and milieu. The way they did it was through subtle 'adjustments' which would have been impossible for ordinary persons

A world teacher is the one who, in the first place, lives on truth, purity and austerity alone, in order to serve man and God. He is so for his glowing spiritual grandeur and immaculate character. He unconsciously holds out a sweet charm and draws numerous followers from far and wide. In his proximity they intensely feel that he harnesses a divine power and is a blissful saint of the highest order. Hence he naturally stands out conspicuously as a beacon. People often witness his God-intoxicated inebriation with baited breath, and eagerly watch his elevated mood with wonder. They hang on to his words and internalize them.

Given such experiences, they believe that he is God sent and capable of emancipating them from their worldly afflictions. They find in his life and work answers and remedies which always remained elusive to them. They accordingly think that he is a world teacher. More so, because they are inspired and transformed by his sublime tutelage.

His love and compassion for mankind know no bounds. They spring from his love of God where there exist no divisions or exclusions. He blazes the trail towards God, annihilating confusion and conflict created about religion. In order to carry out his divine mission of re-establishing and redeeming religion and society with truth, he gladly puts his life at stake. He is prepared to suffer severe hostility and extreme torture for the accomplishment of his cause. Failing to control and bring him to heel, his detractors try to stop and ruin him. They suspect their decimation is definitely in his hands. But he is not the least perturbed by their evil plans. He is fearless and resists none doing him harm. He is always awake to his divine descent and kinship, as well as to the providential onus on him to show the way to salvation. He regenerates the human soul and society through moral and spiritual resurgence. A world teacher in the realm of politics, though unimaginable, was found

in Mahatma Gandhi. Scholars who have studied his life deeply have to say: "From very ancient times, we understood that every human being has the potentiality to evolve into a brahmana (truth-loving, God-abiding, learned and sacrificing) of this type, without any enmity or hatred, and with a heart full of love and compassion. We had Mahatma Gandhi in the modern period. In one sense, caste-wise he was a vaisyas; but, by his character, he was a brahmana. He showed no hatred to anyone..."

He sacrificed his life to political rivals who assassinated him using a furtively trained and indoctrinated person. But the legacy of spiritual, moral and ethical values he left behind in politics, dwelling on truth and non-violence, is a lofty ideal to be emulated. Since his demise, uncountable people have drawn on his political precepts and perception, believing them to be the real teaching for political struggle and freedom. He raised himself as an icon in politics by his 'patience, purity and perseverance vis-a-vis conflict, chaos and conspiracy for the sake of righteousness, achieving the appellation 'Mahatma' from Rabindranath Tagore. He is worshipped in many nations as a political saint.

In his book "Universal Message of The Bhagavad Gita", Swami Ranganathananda (the 13th President of Ramakrishna Mission) significantly writes: "That person is an extraordinary person who though he or she has no wealth, no power, no resources, is yet full of joy, full of cheer; though he or she has no helpers, is infinitely strong; ever satisfied though not experiencing sense pleasures; though he or she is incomparable, looks upon all others as his or her equal. 'Asamah samadarsanah, he or she is asamah, like Mount Everest; no other peak can be equal to it, but yet he or she treats all as one's equal.' In our life, we see one person in the political field who approached the ideal depicted in this particular sloka (Vivekachudamani, Verse 543) of Sankaracharya. That was Mahatma Gandhi. This kind of greatness is called spiritual greatness. Ordinary greatness cannot produce this quality."

Two thousand years ago priests colluded with politicians (rulers) and killed Jesus Christ, hatching a conspiracy. But he died a terribly painful death with the name of God on his lips, having not a single word of curse for his killers, like Gandhiji. He, too, had to face such a tragic end at the hands of his countrymen. Both of them were full of God and Truth. They were not understood by some in their motherlands, stigmatizing their national histories by those despicable and dastardly acts. Similarly, centuries before Christ, Socrates had to die at the hands of his own people for teaching them the highest good. "Though the oracle of Delphi had told the Greeks, 'man, know thyself', they knew man only from the external point of view; eating, drinking, pleasure, comfort and then imperialism and war was all that they knew. They were very gifted in all these fields. The only one who knew this truth was Socrates, and therefore the Greeks could not understand this man. And they brought a charge against



him of misleading the youth. Imagine such a great soul being charged in the court by the Athenian state as one who misled the youth of Athens and was condemned to death by drinking hemlock poison! He taught about the supreme Self, which he himself realised and found to be the ultimate truth, by knowing which man could become liberated from his worldly miseries forever and grow blissful.

A world teacher is born in accordance with the spiritual laws. Sankaracharya says people practise the dharma for a long time. Then last arises among them: discrimination and wisdom decline. Unrighteousness prevails in the world; the Creator, wishing to ensure the continuance of the universe, incarnates Himself, in part, as world teacher. He is born for the protection of the good people on earth and their spiritual ideal. By the protection of their ideal the eternal dharma is preserved. The Lord, the eternal Possessor of Knowledge, Sovereignty, Power, Strength,

Energy, and Vigour, brings under His control maya - the primordial Nature, belonging to Him. And then, through that maya, He is seen as though born, as though endowed with a body. Buddha, Mahavir, Moses, Jesus, Muhammad, Nanak, Chaitanya and Ramakrishna were world teachers. They were born among different races at different times in different situations. But their advent took place with the one common purpose of alleviating the misery of the masses with spiritual remedies, integrating them in faiths

suited to them as per their specific roots and socio-cultural needs and milieu. The way they did it was through subtle 'adjustments' which would have been impossible for ordinary persons. They were equipped with the Divine Power, Knowledge and Wisdom, as Sankaracharya has said, required to complete their work as world teachers. They are a class by themselves and unforgettable because of their undiminishing impact on human civilization.

Ramakrishna was a world teacher born in the fourth decade of the nineteenth century (1836). His advent happened when there was a pressing need for another 'adjustment' in the world being divided into Occidental and Oriental civilizations based on materialism and spirituality respectively, both indispensable for the peaceful co-existence of mankind. "It is also fitting that when the Oriental wants to learn about machine making, he should sit at the feet of the Occidental and learn from him.

When the Occidental wants to learn about the spirit, about God, about the soul, about the meaning and mystery of the universe, he must sit at the feet of the Oriental to learn." He "put in motion such a wave in India". He brought about equilibrium between the two by teaching an inclusive religion which he himself practised in broad daylight before the public. People saw it and learnt a new lesson relevant in the modern times. Thinkers at home and abroad discussed and wrote on his life and teachings during his lifetime, considering them congenial to human development in this age.

Ramakrishna's deep love and respect for all the world teachers who came before him was legendary. He demonstrated this by practising their teachings seriously, and had upheld them conscientiously with cogent and facile articulations.

"Spiritual ideas spread when they are understood and practised by men and women of more than ordinary good qualities: like lighting one lamp from another already lighted lamp, it slowly improves the moral and spiritual health of the community." Ramakrishna's ideas were properly understood and assimilated by Swami Vivekananda. The Swami made it the mission of his life to spread his teaching to mankind. He presented it before the world in simple language and arguments in the light of history, sociology, science and philosophy, which was appreciated across the globe. Vivekananda told the West: "This is the message of Sri Ramakrishna to the modern world: Do not care for doctrines, do not care for dogmas, or sects, or churches, or temples; they count for little compared with the essence of existence in each man, which is spirituality; and the more this is developed in a man, the more powerful is he for good. Earn that first, acquire that, and criticize no one, for all doctrines and creeds have some good in them. Show by your lives that religion does not mean words, or names, or sects, but that it means spiritual realization. Only those who have attained spirituality can communicate it to others, can be great teachers of mankind. They alone are the power of light."

When the world is rife with religious and communal hatred alongside burgeoning materialism now, Ramakrishna's comprehensive teaching is a vigorous countering force against their arrogant advance. As a world teacher he founded it on simple pragmatism intelligible to all, whether educated or not, making his "Gospel" so dear and intimate. He objectively removed obfuscation regarding faiths and "harmonized" them, binding mankind in bonhomie and brotherhood.

People cutting across countries and communities see in it a sure solution to human problems in this era. It is like an oasis for those thirsting for perpetual rest and tranquillity. A world teacher is heavenly born. Every moment from his birth to death is meant as a lesson for man. He is a real leader. No political leader can match him. Falsely promoting any truth-defying, power-hankering and fame-hungry flashy deceiver as a world teacher is abominable as well as reprehensible. A. S. S.



SWAMI RANGANATHANANDA

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Trump targets India: End to the biggest brain drain?



Sunanda K.
Datta-Ray

Reflections

If US President Donald Trump's brutally sudden fiat isn't just a bargaining ploy, it has cut short what could have burgeoned into the biggest brain drain in history, affecting one million Indians and more than 70 per cent H-1B visa holders. Even without this sudden cut-off, dismay and disappointment may have awaited India's leaders who expected Artificial Intelligence to bring untold opportunity without realising the daunting challenge it presented to a nation where the "India Skills Report 2025" found that only 58.4 per cent of local graduates are fit for employment.

Nowhere else in the world will 15,75,760 sturdy young men scramble for 4,543 jobs, as witnessed recently in CM Yogi Adityanath's Uttar Pradesh, said to be the pointer to India's future. Indian politicians must be re-educated and retrained as AI's high demands reduce the number of vacancies.

The repetitive stress on "Digital India" exposes their naivete. India's education system must acquire the ability to retrain workers and enable them to transition to the new roles that will be created. India's manufacturing sector has traditionally been labour-intensive, with a large number of low-skilled and semi-skilled workers in the textiles, automobile, and electronics industries. However, the advent of automation technologies like robotic process automation, AI-powered machinery, and 3D printing is reducing the demand for manual labour, especially in assembly-line tasks.

There is little room for complacency. A report by the McKinsey Global Institute estimates that automation could displace up to 60 million workers in Indian manufacturing by 2030, particularly impacting jobs in textiles and electronics.

The IT and services sectors, which are integral to India's growth story, are

also undergoing significant transformations. While India has been a global hub for IT services, the automation of basic IT tasks (such as coding, testing and system maintenance) is reducing the need for entry-level jobs.

India's vast informal workforce is particularly vulnerable to disruptions. As we saw during the Covid-19 pandemic, thousands of men and women on flexible employment terms and without formal job contracts or social security are the first to be displaced and face the most severe challenges in coping with the transition. Approximately 90 per cent of India's workforce is employed in the informal sector, which is especially susceptible to automation, as these workers often lack access to retraining programmes and support systems. A World Bank report warns that rural-to-urban migration is expected to increase as automated jobs grow in cities, leading to urban congestion, a shortage of accommodation, rising demand for schools, transport and other urban facilities, as well as pressure on all forms of infrastructure.

Without targeted policies, automation may lead to greater rural-urban migration and intensify uneven development, widening the great divide between town and country.

Agriculture remains India's largest employer — supporting approximately 47 per cent to 60 per cent of the population, and the adoption of AI and automation in agriculture would undoubtedly mean more efficient practices, reducing waste and increasing yields. This reliance makes agriculture a cornerstone of the country's economy, and agricultural reform could improve the social and economic status of between 42.3 per cent and 47 per cent of Indians, especially since the 2011 Census noted that 54.6 per cent was engaged in agriculture and allied activities.

Who will benefit most if education is improved to serve AI? Not India, at least not in the immediate future. The beneficiaries will be countries that can best use the new skills and technology.

Low-skilled workers are more vulnerable to job losses, while those with advanced technical skills are likely to benefit that could widen the income gap and deepen socio-economic divides.

Not that the future is entirely bleak. India's demographic dividend — the growth potential from its high proportion of working-age people (15-64 years) compared to dependents — began around 2005-2011 and is expected to last until 2055, peaking around 2041. Properly managed, this presents a window for growth through increased productivity, savings and consumption, but realising this potential requires addressing challenges like a widening skills gap, ensuring employment, and leveraging the increasing pool of female STEM (Science, Technology, Engineering and Mathematics) graduates. As this column has noted before, India has the world's largest youth population and a significant pool of STEM graduates, providing a skilled workforce for industry.

This favourable age structure can fuel economic growth by increasing the labour force, boosting savings and investment, and increasing consumption. This demographic window started between 2005 and 2011, and is expected to last for several decades, until approximately 2055 but peaking around 2041, when the proportion of the working-age population will be at its highest.

A larger workforce can drive economic expansion, with growth potential in manufacturing, services, IT, and healthcare sectors. Much depends, however, on bridging the significant gap between the skills offered by India's archaic education system and the requirements of the evolving job

market. Investing in skill development and aligning educational curricula with future job demands is crucial to avoid a "demographic time bomb". A supportive policy environment, including good healthcare, decent employment opportunities, and gender empowerment, is essential to harness the dividend but they all demand investing far more in human welfare instead of extravagant fancy projects to which the Prime Minister's name can be attached.

This is not beyond India which is already the world's largest exporter of manpower. More than 30 million Indians fled these shores and settled abroad because the motherland could not offer them a decent living. Even the external affairs ministry admits that a record 225,620 Indians relinquished their citizenship in 2021. Between 120,000 and 140,000 Indians migrate annually, belying the National Sample Survey's claim that the unemployment rate for urban individuals aged 15 and more has fallen to 6.8 per cent from 8.2 per cent a year ago.

"If the bitter truth be told", says West Bengal's former finance minister Amit Mitra, "47 million people were unemployed, mainly youths, during the festive month of October 2023". He adds that youth unemployment hit a record high 23.22 per cent when the comparable figures for Bangladesh and landlocked and resource-poor Bhutan were only 12.9 and 14.4 per cent. Yet, it has always been our pride that with half of India's 1.4 billion people aged below 25 (65 per cent being under 35), the "youth dividend" gives India a huge advantage over China.

Who will benefit most if education is improved to serve AI? Not India, at least not in the immediate future. The beneficiaries will be countries that can best use the new skills and technology. That's what the brain drain is all about, and it's not clear yet whether President Trump is seriously trying to belittle India's prospects or preparing the ground for some tough bargaining on a trade pact.

The writer is a senior journalist, columnist and author

ANC

The \$100k visa fee raises new hurdles for Indian students eyeing U.S. jobs

Indians who recently became the largest group of foreign students could be priced out of the American job market

DATA POINT

Arceena Arora
Ygnesh Radhakrishnan

Following the U.S. government's decision to impose a one-time \$100,000 fee on new H-1B visa applications, data suggests that foreign students pursuing their degrees in the U.S. — particularly Indians, who form the largest group of international students — will be significantly affected.

Associated Press quoted U.S. student visa holders who are attempting to secure an H-1B, saying they are now reconsidering settling in the country. Not just students already in the U.S., but also many in India who aspire to enrol in American universities and work there told AP and Reuters that it feels like "a door [is] closing."

Most experts believe the new rule will apply to foreign students in the U.S. Some immigration lawyers, however, caution that significant grey areas remain. While the finer details are still being worked out, the fee hike would have a telling impact on Indian students, who only last year overtook Chinese students to become the largest group of international students in the U.S. (Chart 1). Together, these two countries account for 80% of the foreign students.

A majority of Indian students go to the U.S. for their Master's degree. Those who graduated in 2022 and opted for an optional practical training (OPT) work permit — which allows immigrant students to work in the U.S. for 1-3 years — will typically now be in the queue for an H-1B visa. This means students who will be hit by Mr. Trump's new visa fee will be those who have been in the country for many years, having already invested tens of thousands of dollars.

The new rule will especially hit those who graduate with a STEM (Science, Technology, Engineering, Mathematics) degree, one of

the most sought-after fields for employers. Indian students are particularly vulnerable because a majority of them pursue STEM courses. Among the two largest groups of foreign students in the U.S., more than 75% of Indians are enrolled in STEM fields, compared with about 50% of Chinese (Chart 2).

Typically, a STEM student enters the H-1B queue 2-3 years after graduating. Last year, 37% of all H-1B petitions approved for initial (new) employment — the category to which the new fee applies — were filed by foreign students in the U.S. who were on F-1 visas. In some previous years, this share crossed the 45% mark (Chart 3).

While the exact share of Indian students on F-1 visas who were approved for initial H-1B employment cannot be determined directly, two other figures highlight the scale. In FY24, 57% of all initial H-1B beneficiaries were Indians, with Chinese nationals a distant second at 14%. When this is read alongside the fact that over 75% of Indian students in the U.S. are enrolled in STEM courses, it strongly suggests that a very large share of H-1B beneficiaries moving from student status to initial employment were Indians.

By the time Indian students complete their OPT, they would have already contributed several years of tuition and living expenses to the U.S. economy. Last year, international students spent nearly \$44 billion on their education including tuition fees, housing, food and other daily expenses in the U.S. Over half of this money comes from their personal and family savings (Chart 4). A study by non-profit NAFSA, the Association of International Educators, found that in 2024, on average, international students spent about \$39,000 each in the U.S. Given that Indians are among the largest group of international students, a significant share of this spending comes from Indian households, many of whom take on loans or exhaust savings to cover these costs.

Tough lessons

The data for the charts were sourced from DataFu, the U.S. Citizenship and Immigration Services, and NAFSA: Association of International Educators



Chart 1: Country-wise number of international students studying in the U.S.

Last year, Indian students overtook Chinese students to become the largest group of international students in the U.S.

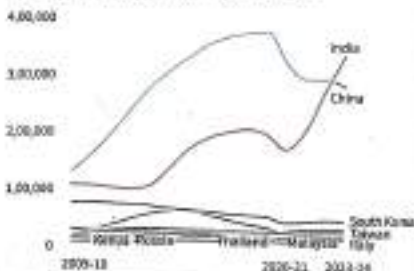


Chart 2: Share of initial (new) H-1B beneficiaries previously holding F-1 student status

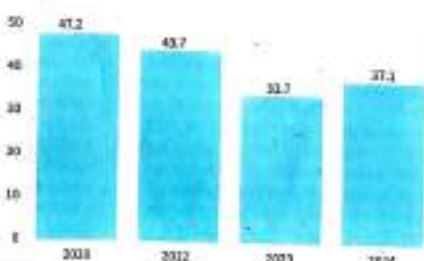


Chart 3: The share of students from China and India enrolled in STEM and non-STEM courses as of 2024. Figures in %

Graduates from STEM (Science, Technology, Engineering and Agricultural) courses are the most sought-after by employers

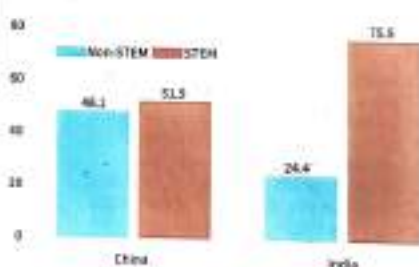
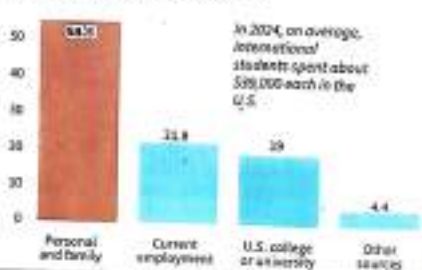


Chart 4: Sources of funding used by international students studying in the U.S. for the year 2023-24





Minister of Education (Prime Minister) in conversation with the Ministry's Political Advisor Meeta in Helber and Senior Deputy Editor A.H. Jagdish in New Delhi, September 2025

'India prepared for a quantum jump'

Describing National Education Policy 2020 as a blend of Indian ethos and futuristic vision, the Education Minister batted for multilingual learning and equitable access. The senior BJP leader addressed global disruptions such as the U.S. visa hurdles, underscored Government's role in higher education, acknowledged challenges of dropouts and mental health, and reaffirmed commitment to inclusive reservation.

INTERVIEW

Dharmendra Pradhan

Countering criticism of various aspects of the five-year-old National Education Policy (NEP), such as the three-language formula, Indian knowledge system, and the university in pillars, Union Minister Minister Dharmendra Pradhan told *The Hindu* and A. H. Jagdish in an interview that the Centre is upholding its discourse and a multidisciplinary approach for a higher form of holistic results. The Opposition's narrative, he said, is politically motivated, and reinforced the India is equipped or face challenges such as the U.S. visa restrictions and other global disruptions, added concerns.

How took over as the Education Minister exactly one year after the implementation of the NEP. Now, five years on, what do you consider the major change the policy has brought to the sector?

July 25, 2020, was the day of implementation of the National Education Policy. But due to the pandemic, we practically got four years to implement it. The NEP represents a paradigm shift. It encompasses two things: It is rooted in Indian values, ethos, and civilisation, while at the same time being futuristic and forward-looking. A large share of India's population today is young. This trajectory will continue for the next three decades.

Those who are opposing the NEP are doing so for the sake of it, driven purely by political reasons, even though the spirit of the NEP has been accepted in their own States.

There are 30 crore students in India. The primary responsibility is with the federal government. I am confident today, five years after the NEP's implementation, that there is a broader consensus to implement the new policy, and the country is confident to carry it forward very smoothly.

Throughout these years, there has been criticism that no discussions were held on the NEP in Parliament. Regarding the language formula, there are concerns. States say the Indian knowledge system is being questioned on the grounds that traditional knowledge may vary from State to State.

The Opposition parties should behave more responsibly in their representation and discourse. The late Dr. K. Karunanidhi (former DMK Chairman) created a national consensus on the NEP. He travelled to every part of the country and held discussions with all the stakeholders. Those who are opposing the NEP are doing so for the sake of it, driven purely by political reasons, even though the spirit of the NEP has been accepted in their own States.

On the language formula, the NEP recommends using the mother tongue for learning and teaching during the preparatory and foundation

As a responsible country, we have faith in our youth, academics and institutions. We can create global standards. That is the reality today.

of stages. Everyone supports the policy of learning and teaching in the mother tongue during the early stages. The resistance by the Opposition parties is unfortunate. Today is a time when these things and systems beyond the kind of political narrative, the passing the Indian knowledge system, is how people learn a global language. There, in the world, India, and towards the education of Indian kids. For they are a microscopic reality.

What are the associated third languages in third speaking States? The NEP does not specify any language for anybody. From Class 1 to 10, there are two languages: language as a subject and language as the medium of instruction. The medium of instruction is the mother tongue of the respective State, their home language or mother tongue. Deciding on the recent language to use in the students. The policy does not throw any specific language on them. It is up to the State.

From Class 11 to 12, there are three languages. Certainly, one will be the mother tongue. The rest depend on the choice of the students. One out of the three languages will be Indian. Language is not a divider. For a few friends, language will be a political tool. At the policy level, language is a bridge.

Many heartland languages such as Odia and Marathi are often marginalised under the NEP. When is the government doing to protect them? The Ministry of Education is planning to create teaching-learning material for all the 22 scheduled Indian languages. We have to appreciate and understand the power of technology and the power of multilingualism. Come on the days

when political narratives were formed. The Prime Minister has said that all the languages are national languages. This is our strength.

The U.S.'s decision to increase the H-1B visas has caused anxiety among students. How do you respond to this? There are 3 crore students in the higher education sector. Out of these, only 10 lakh are going overseas for higher education. That is the reality. We have to live with the changing geopolitical scenario. It is not a new thing. But as a responsible country, as a progressive country driven by self-respect, we have to look at our youth and our students. We have to look at our institutions. We have to create global standards. That is the reality today. India is prepared for a big quantum jump.

What is your advice to students unable to get U.S. visas?

The confidence about my institutions. I will not be aggressive on this issue, but I'm confident about our IITs and those from our IITs, IITs, and State universities. They are doing excellent in the global economy. The Indian education system has a huge depth and capacity. But we have to be open, we have to be bold, we have to accept the global best practices. So, we're seeing others go outside, but we have to be with the globalised education.

How is the Ministry preparing the next generation for robust opportunities abroad? Policy. I disagree with this argument. We are not a banana republic. We are not dependent upon any foreign institutions. We have to cope with the changing geopolitical scenarios also. I cannot compare with a colonial master. National pride is always everything.

You recently questioned the criteria of participation in NEET rankings. Similarly, in the PMAT accreditation, there were issues. What should be the ranking and accreditation framework to be followed? The National Institute of Ranking Framework (NIRF) and the National Assessment and Accreditation Council (NAAC) are not by assessment bodies. The government is not controlling everything. There are choices.

The NEET ranking has to be objective, transparent, and open. I have nothing to hide. The government is giving these institutions the autonomy to run. But they have to function transparently. Democracy thrives in an accountable society.

He is confident in success.

The role of Governors is closely linked to universities. Several IITs, especially those linked to higher education, are pending with Governors. Another issue is the

appointments of Vice Chancellors and teachers. What should ideally be the role of a Governor?

Historically, before independence, Governors were the heads of the education institutions in their respective provinces and later in States. This is a pre-independence practice.

It should remain. Sometimes, a few states want to dilute the authority of the Governor by appointing the Chief Ministers or the Education Ministers as Vice-Chancellors, which is not accepted by the judiciary either. If some States want to replace the UGC (University Grants Commission) norms, approved by the courts, and appoint their own political entities as Vice-Chancellors or Professors, should the Governor keep silent? If he does, then somebody will oppose, asking why the Governor is keeping the file with him or say that the Governor should not question the respective State governments. You have to consider both perspectives.

Unified District Information System for Education (UDISE) data shows nearly 35 lakh students aged between three and 11 dropped out in 2024-25. What corrective measures are you taking?

Previously, for Class 1, students were admitted at the age of five. The NEP recommends six as the age of Class 1 students. At the entry level, today, we have almost 80% enrolment. Those who have registered birth certificates of the faculty, almost 80% are coming to schools. Due to different socio-economic conditions, dropouts came primarily from the 10th grade. There are multiple reasons for this. Various States have started campaigns around it. This challenge we have to address, and we are on it.

Cases of suicides of students in IITs, IIMs and other institutions have raised concerns. How do you respond?

On mental wellness, I accept that this is an issue. It never existed from this time. It's a challenge, but it's not among us due to various reasons. It's our responsibility. I cannot deny away from it. It's a cure. It's a failure. They have to learn.

We have to look at sports. We have to look at our environment. More interpersonal lessons have to be developed. We have to find new methods.

What about the perception that reservations are a disadvantage to general category students? And the debate on extending it to private institutions?

This is a constitutional responsibility. There has been a consensus, since the time of the Constituent Assembly till now, to uplift the deprived section of society, and we have to have affirmative action. Prime Minister Narendra Modi is the first leader to extend reservations to the poor sections among the upper caste. No segment of society should be left behind.

Reservations in private institutions is an issue, and there is a greater debate on this. Gradually, things are moving. Some who is taking this question? Those who did not fulfil their responsibility during their tenure.

They have ruled this country for a longer period. They could not do anything. They were at a deprived, and poor, and SC, and ST, and OBC. Now they are perverting themselves at the expense of social justice.

Scan the QR code to watch the full interview



Minister listening to the dialogue with Union Minister Dharmendra Pradhan in New Delhi, September 2025

H-1B mess is set to kill US tech's golden goose

Last Friday, just as Americans were winding down for the weekend, the White House dropped a shock-and-awe measure affecting many leading US businesses. On that day, President Donald Trump signed a proclamation announcing a staggering \$300,000 fee on H-1B visa for each employee hired under the programme, effective September 21. This H-1B proclamation could be extremely problematic for the technology industry in the US and India and strains the already strained relationship between the two great nations, even further.

The H-1B proclamation sparked 24 hours of absolute mayhem. Microsoft and other major employers urgently advised their H-1B workers abroad to return before the deadline and instructed those still in the US to avoid international travel. By Sunday evening, perhaps bowing to business pressure and the turmoil unleashed, the White House clarified that the fee would not apply to current H-1B visa holders or petitions filed before September 21. Sunday's clarification, through an H-1B FAQ posted on the White House website, offered some relief to existing visa holders, but it also carried ominous signals about what lies ahead.

The FAQ noted that the administration is preparing further reforms to the H-1B programme. Among them, the department of labour will launch a rulemaking process to "revise and raise the prevailing wage levels in order to upskill the H-1B program and ensure that it is used to hire only the best of the best temporary foreign workers." Prevailing wage levels have long been at the heart of the H-1B debate. Under the current system, employers can classify jobs into four wage tiers, with the lowest tier often set well below the median market rate. Critics argue this framework incentivises companies to hire foreign workers at "entry-level" wages, even for jobs requiring significant skills, thereby undercutting US workers and holding down salaries across the industry.

This is not the first attempt to recalibrate wages. In 2020, during Trump's first term, the department of labour issued an interim final rule that substantially raised the required wage levels for H-1B and other employment-based visas. The measure faced immediate backlash from industry groups, universities, and employers who argued that it would make hiring foreign talent prohibitively expensive. Multiple federal courts struck down the rule, citing both procedural flaws and substantive concerns that it exceeded the agency's authority.

The H-1B FAQ also outlined forthcoming rulemaking by the department of homeland security to overhaul the H-1B lottery system.

WHILE THE TIMING OF THE H-1B PROCLAMATION SURPRISED MANY, THE POLICY DIRECTION SHOULD NOT HAVE. FOR MONTHS, RUMOURS HAD CIRCULATED AMONG TECH INSIDERS AND IMMIGRATION EXPERTS THAT THE TRUMP ADMINISTRATION WAS PREPARING A CRACKDOWN

Under the proposed change, priority would be given to higher-paid, higher-skilled applicants over those at lower wage levels. This marks a sharp shift from the current lottery system, which is largely randomised. It signals the administration's intent to reshape the programme into one that favours elite earners, a move that could dramatically alter the demographics of future H-1B cohorts.

While the timing of the H-1B proclamation surprised many, the policy direction should not have. For months, rumours had circulated among tech insiders and immigration experts that the administration was preparing a crackdown. The H-1B visa programme has long been a lightning rod in America's immigration debate. For critics, it represents a threat to US job security, with accusations that companies exploit the system to import low-wage workers — particularly from India — to undercut American employees.

This is not the administration's first assault on high-skilled immigration. Earlier, the White House tightened F-1 student visa rules, making it harder for international students to pursue US education, which is a critical pipeline feeding into many H-1B jobs. Together, these moves threaten to shut down avenues that have consistently brought the best and brightest from abroad to America's universities and companies.

Friday's proclamation, if it withstands legal challenges, will strike hardest at Indian professionals and ripple through India's IT sector, which relies heavily on H-1B talent to serve US clients. Indian nationals account for more than 70% of all H-1B recipients. As noted, the timing also compounds the strain on US-India relations. Coming just weeks after the administration slapped a 50% tariff on Indian goods, the H-1B proclamation represents a second blow.

With US companies as its largest clients, India's IT sector stands to lose heavily, both economically and in terms of workforce morale. The diplomatic fallout is equally troubling: Tariffs and visa restrictions together have driven bilateral ties between the US and India to their lowest point in years.

The new policy is not only a setback for India but also a self-inflicted wound for America's own innovation ecosystem. The role of H-1B workers in powering Silicon Valley's meteoric rise is undeniable. Nearly every US tech CEO acknowledges that the programme has fuelled growth and value creation.

There is definitely a need to improve the US H-1B programme. But instead of reforming the system, imposing a six-figure fee amounts to gutting it. Even America's "Fab Five" tech giants, with trillion-dollar market caps, would balk at paying \$300,000 per employee on top of already high compensation costs. The likely outcome: Diminished global competitiveness and a surge in outsourcing. US companies are already expanding their global capability centers in India, a trend that this policy could accelerate. Ironically, a measure billed as protecting American jobs may end up exporting even more of them.

The H-1B programme has long been a golden goose for America, fuelling innovation, job creation, and global leadership in technology. To kill it with punitive measures would be self-destructive.



Frank F Islam

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The views expressed here are personal

ht/14

Prompt Engineering: A Fundamental Life Skill

DR SANKU BOSE

When people hear the phrase "prompt engineering," the instinct is often to imagine someone typing clever lines into ChatGPT or another AI tool, as if the skill lies in finding a magic formula of words. It is easy to mistake it for a typing trick or a kind of digital wordplay. But that view is shallow. At its heart, prompt engineering is not about typing at all—it is about thinking. It is a discipline of clarity, structure, creativity, and intentionality. It is about how we frame problems, how we define context, and how we guide intelligence—whether human or artificial—towards meaningful outcomes.

In many ways, this is no different from the history of coding. Writing computer programmes was never truly about memorizing syntax or hammering out lines of text at speed. The best coders were never the fastest typists, but the best thinkers. They designed logic, imagined systems, and anticipated outcomes. The same is true of prompt engineering today. The value is not in knowing secret phrases, but in designing thought processes that make intelligence useful. The keyboard is only the surface. What matters is the thinking beneath.

The shift from traditional computing to AI-driven interaction makes this distinction clearer than ever. Traditional computing was about rigid commands—you had to tell the machine exactly what to do, in painstaking detail. AI has changed that dynamic. Prompts are no longer mechanical instructions, but conversational cues. They open up dialogue. They don't just direct the machine—they guide it, shaping relevance, usefulness, and context. That changes everything about how humans and machines interact. Prompt engineering is not about commanding; it is about conversing. The better we can understand a problem and define its context, the better the response.

That is why thinking matters so much more than typing. A one-line prompt and a one-page prompt can both fail if they are based on muddled thought. By the same token, a short, sharp, well-framed prompt can succeed beyond expectation. What separates success from failure is not length or form but clarity of thought. Good prompt engineers are not wordsmiths; they are problem framers. They are strategists who can simplify the complex, teachers who can guide understanding, explorers who can see multiple pathways at once. Prompt engineering, in essence, is higher-order thinking—analysis, synthesis, and creativity made visible. The AI does not replace human thought, but it can amplify it—if the human thought is structured and intentional.

This is why prompt engineering is emerging as one of the defining skills of our time. Over the next decade, prompt literacy will become as fundamental as digital literacy. Just as email, spreadsheets, and search engines once became unavoidable tools, the ability to engage effectively with AI will soon be non-negotiable. Doctors, lawyers, architects,

entrepreneurs, journalists—every profession will require it. And the edge will not belong to those who memorise fancy hacks or pre-written prompts. It will belong to those who can clarify their goals, set context with precision, iterate intelligently, and transform thought into dialogue.

Much has been written about machines taking over jobs, but prompt engineering demonstrates the opposite truth: the human edge lies not in outputs, but in questions. AI can compute faster, but it cannot yet define what matters, why it matters, or how to weigh competing priorities. Humans bring the empathy, the ambiguity tolerance, and the capacity to connect distant ideas. The real value is not in typing faster, but in thinking deeper.

The discipline of prompting carries lessons for life itself. Consider how we set goals. If our "prompt" to ourselves is vague—"I want to be successful"—the outcome is equally vague. But if we refine it—"I want to master data science in the next 12 months so I can qualify for global roles"—our brain, like an AI model, begins generating pathways that are more concrete. Clear prompts lead to clear outcomes, whether we are working with machines or motivating ourselves.

PROMPT ENGINEERING IS HIGHER-ORDER THINKING—ANALYSIS, SYNTHESIS, AND CREATIVITY MADE VISIBLE. THE AI DOES NOT REPLACE HUMAN THOUGHT, BUT IT CAN AMPLIFY IT—IF THE HUMAN THOUGHT IS STRUCTURED AND INTENTIONAL

This is why prompt engineering should not be seen only as a technical skill. It is a philosophy of intentionality: how to ask better, how to frame better, how to think better.

Imagine a classroom of the future where students are assessed not by how many facts they can memorize, but by how effectively they can frame questions that unlock deeper inquiry. Picture workplaces that reward not the speed of typing, but the ability to collaborate with both human colleagues and AI systems in pursuit of innovative solutions. In this future, the defining skill is not rote learning but structured curiosity—the ability to probe, to contextualize, and to converse meaningfully across boundaries of human and artificial intelligence.

The real challenge is not learning how to "talk" to AI but learning how to "think" with AI. The better we think, the better we prompt. And the better we prompt, the better futures we can co-create!

The author is the Vice-Chancellor of Sister Nivedita University and Group CEO, Techno India Group. A visionary leader, he is shaping future-ready institutions and inspiring students to lead with purpose.

ABVP's surprise win reshapes PU politics



RAMA NARAIN

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THE fact that the Akhil Bharatiya Vidyarthi Parishad (ABVP), the student wing of the BJP, has won the presidential post in the recent Punjab University Campus Students' Council (PUCSC) elections has left many observers, political and academic, puzzled. Quite understandably so. For never before has the ABVP registered an impactful presence in local student politics. The last time it bagged any post in these elections was in 2000. In the first three that this outfit has claimed the much-coveted top post.

The ABVP and other student outfits affiliated with political parties — the National Students Union of India (NSUI), a Congress affiliate, the Student Organisation of India (SOI), the student wing of the SAD, and Chhatra Yuv Sangharsh Samithi (CYSS), propped up by AAP — have not played a dominant role in the PUCSC. It was in 1997 that the NSUI bagged the president's post. The CYSS claimed it in 2002, which incidentally coincided with the AAP securing a staggering 42 seats in the Punjab Assembly. Significantly, though girls constitute almost 80 per cent of the student population, only once in its 50-year electoral history has the PUCSC elected a girl as president — in 2018.

One may ask: Is there any connection between the fortunes of a political party in the region and the upswing in the fortunes of its student wing? The PUCSC's history does not point to any such connection, barring one or two cases. By and large, the student politics of Punjab University and its affiliated colleges in Chandigarh don't throw up any predictable pattern.

Over the past two-and-a-half decades, student politics has been dominated by two student outfits, viz, Punjab University Students' Union (PUSU), set up in 1977, and Students' Organisation of Punjab University (SOPU), established in 1985. However, both are now fighting for survival, having been largely replaced by student bodies affiliated with national political parties.

In their heyday, both these outfits claimed to be student-centric and without direct political patronage. It is another matter that after the completion of these terms as office-bearers, many of these leaders launched their political careers, courtesy some political party or the other.

The political parties often use student outfits as "puppets" and focus on quelling dissent, manipulating

ing impressionable young adults for political outreach, even inciteful ends. Punjab University student politics is no exception. While traditional wisdom demands that students be initiated into the best practices of grassroots democracy, in practice, student politics merely mirrors the worst ills of mainstream electoral politics.

Be it making false promises, offering bribes, a brazen display of money and muscle power during campaigns or intimidation in the name of caste, creed, language, region or religion, student leaders pull out every trick in their electoral bag, as is often deployed by state or national-level leaders, to maximise political gains.

Worse, these student leaders often fall prey to the machinations of the faculty and administrators in colleges and universities. The latter too, being political animals, have political affiliations and the interplay of this dynamics only makes the scoring more murky.

In such a scenario, to expect student leaders to fight for common organic demands of the student community, in perhaps asking for the moon. Demands of student leaders are often politically motivated, even dictated to, as the strategies depend on who the political masters are and the direction they wish to steer student politics in a given context.

Often, these demands have no connect with ground reality. Genuine demands such as better facilities and improved sanitary conditions in hostels, installation of heaters, generators, washing machines or improved quality of food in the mess are rarely raised.

Besides, year after year, we get to hear of complaints from the student leaders in the opposition about numerous anomalies in the manner the annual budget of the student council (in the case of PUCSC, it is around Rs 40 lakh) is spent, or worse, mispent.

One wonders, if student politics, either in Punjab University or elsewhere, can chart a course different from the one in which one political ecosystem is embedded. It would be ironic to expect student leaders to work selflessly for their community when their political masters present role models that are hardly worthy of emulation.

Let's not forget that in a college world of a microcosm of the mainstream that our society or polity is! How can student politics be result-oriented or student-centric if the political masters practice zero accountability or apathy towards the needs of the people, whose destinies they claim to preside over? After all, last student politics only a reflection of the politics we espouse, practice and perpetuate?



TWO VIEWS

PU STUDENT ELECTIONS



TANVI SHARMA

STUDENT OF P.U. B.P., PUNJAB UNIVERSITY



SANDEEP JINDAL

Wisdom demands that students be initiated into the best practices of democracy, but student politics merely mirrors the worst ills of mainstream politics.

Whisper are making the rounds about the selling of votes and the involvement of authorities in this win. These claims are feeding a broader debate over reaffirmation and strategic realignment in academic spaces.

Sohal (3,348 votes) defeated the Student Front's Samir Sharma (2,896 votes), with the NSUI and ASAP following behind. The turnout had plummeted to 54.9 per cent from last year's 66.6 per cent, due to the heavy rain on polling day, among other factors. The ABVP had made tactical pacts with the NSUI and the NSRA — rebels of the NSUI — to consolidate support in the larger departments of ULLS and UJEE. Widespread cross-voting was reported. Many groups had been inighting — NSUI was beset by ticket disputes and

Polls stir debate on saffronisation



TANVI SHARMA | NISHALET SINGH

STUDENT OF P.U. B.P., PUNJAB UNIVERSITY

ON a rain-soaked afternoon in Chandigarh, the Punjab University campus was eerily lively with celebrations. Gaurav Viree Sohal, a 27-year-old law research scholar, was holding a shikhar in his hand. All around him, supporters were shouting "trishakti" and pledging their allegiance to the ABVP for the first time since 1977.

The Akhil Bharatiya Vidyarthi Parishad (ABVP), a student wing of the RSS, had secured the presidency of the Punjab University Campus Students' Council (PUCSC). The result is significant as it is also an indication of the broader changes seen in student movements.

PU has historically taken pride in its intellectual independence and regional political identity. Ever since elections began in 1977, power has roughly alternated between local parties — the Students Organisation of Punjab University (SOPU) and the Congress-linked NSUI — with independents and others picking up a few seats. These groups would present themselves as the protectors of Punjab's pluralistic culture, pushing back against any national party affiliation even as the ABVP was making inroads in other universities.

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Widespread cross-voting was reported. Many groups had been inighting — NSUI was beset by ticket disputes and ASAP could not move beyond its core group, which later supported the ABVP. The outcome has been labelled as the saffronisation of PU, proof that Hindu nationalist forces are making a headway into Punjab's academic realm. ABVP leaders characterised it as a cultural watershed moment.

Most students we talked to said they voted as interest promises to renovate hostels, revive transportation threats and advocate against tuition fee hikes. Students talked about undue influence. Some felt they were guided by teachers on voting. Science students raised the role of money, claiming that votes were valued at Rs 3,000-5,000.

The ABVP's organisational model is very disciplined. It trains its cadres in debate, canvassing and promotion. They have stronger ideological commitment and cadre strength than other student parties in PU. Last year's win of Javinder Rana as joint secretary formed the ABVP's base this year. Through the party split this year, with the other faction named the ABVP Front, the fragmentation also catalysed the ABVP win. ABVP front sympathisers voted for the ABVP presidential candidate as the Front was contesting only for the vice-president's post; they had a strong sympathy for the RSS and the BJP.

Thus, to declare the victory purely as saffronisation would be an oversimplification; political alignments on the campus are more complex.

PU's political culture has always been centrist. Da student leaders often flow into Punjab politics, where the Congress, SAD, AAP and, now, the BJP vie for space. The BJP has devoted considerable attention to strengthening its presence in Punjab in recent years. A campus breakthrough by the ABVP gives the party's ideological complexion a toehold among the educated urban youth of the region.

Culturally, the victory signals a shift as well. It implies that younger voters are receptive to different narratives.

But will the ABVP presence in PU survive? History suggests student affiliations are fickle, the local organisations may wobble and establish wider coalitions to offset the ABVP's organisational strength. As increases in student turnout can change the dynamics.

But this single win has a symbolic weight. Only time will tell if this is a start to a transformation in ideology or just a repositioning.

Is the American Dream dead for Indians?

PARLEY

In September 18, U.S. President Donald Trump signed an executive order, raising the H-1B visa fee to \$100,000. Many fear that this will disproportionately impact Indian workers, especially those with lower median salaries. Although the White House has clarified that the fee applies only to new applicants and not those up for renewal or already in the country, there are concerns, especially against the backdrop of immigration control and protectionism. Is the American Dream dead for Indians? Arjun Appadurai and Ajay Srivastava discuss this question in a conversation moderated by Saptarshi Ghosh. Edited excerpts:

The hike in the H-1B visa fee has led to some panic in India. Would you say the American Dream is now dead?

Arjun Appadurai: Dreams do not die in the same way as realities change. I would say the American Dream remains alive for a very large number of people from all classes from both within the U.S. and outside. The U.S. still remains the place where, in some way, the dream or the myth that anything is possible (remains). I do not think that is dead. In the present circumstances, the doorway may have narrowed, but the dream seems to be highly operative for the large majority of people.

Ajay Srivastava: About 3.4 lakh Indian students are in the U.S., enrolled in either STEM (Science, Technology, Engineering, and Mathematics) or management courses. They pay upward of \$20,000, having taken loans from banks or relatives, for one and half to two years of education. If they do not get jobs, the dream comes down in scope gradually over the years. The hike in visa fee makes it almost impossible for anyone to be hired, except top STEM graduates. No U.S. company is going to take a risk given the vitiated political environment. The curdling of the dream would mean that both come out as losers. The U.S. earns \$15 billion an trillion fee from Indian students and more than \$40 billion in living expenses.

Some say that the H-1B regime is being exploited to gain residency. How would you respond to that?

AS: I do not agree with the narrative. There may have been some cases of misuse. But overall, the system has been great for both the U.S. and the immigrants. It is an emotional issue for the U.S. Many MAGA (Make America Great Again) supporters are either jobless or have low-paying



A U.S. flag and H-1B visa application forms are seen in this illustration. SHUTTER

jobs. It is natural for them to blame outsiders for this. The White House, too, is fueling this narrative, exploiting the discontent among American workers. Again, there may be some cases of misuse, but largely, most of the people who have gone there are top STEM talent or are pursuing top-class research. They have either built companies or have expanded them, creating thousands of jobs. This includes Indians and non-Indians – Sergey Brin who is Russian and built Google, Elon Musk who is of South African and Canadian descent and built Tesla, Satya Nadella from India who heads Microsoft, and Sundar Pichai from India who heads Google... the list is endless.

AS: The U.S. is unique. It is a society built on immigration. So, to suddenly say that we must control all immigration is not realistic, not just in today's world but at any point of time. More importantly, it is a global pattern that when things are not right internally or when somebody wants to make a claim to power, the easiest way for them appears to be to blame new arrivals. The tougher question to ask is this: why has a society that is producing extraordinary amounts of wealth been unable to provide a simple social canopy, social security, health, or jobs? That is the big scandal that nobody wants to talk about excluding a minority in the U.S., including Bernie Sanders. That is what is wrong with the [anti-immigration] assertion. You see, whenever H-1B visa-holders do, whether from India or other parts of the world, by and large is nothing illegal or criminal. So, even if they come to the U.S. and stay for six years and then obtain a green card, it is through law and established procedures. Additionally, what must be noted is that the beneficiaries are in a legitimate way pursuing and strengthening research in American universities, making these institutions a global force. Therefore, some enter the global economy. It is a win-win situation. What is the



Why has a society that is producing extraordinary amounts of wealth been unable to provide social security, health, or jobs? That is the big scandal that nobody wants to talk about excluding a minority in the U.S. That is what is wrong with the [anti-immigration] assertion.

ARJUN APPADURAI

point of this sudden restriction is a land built on the idea of immigration?

The U.S. has invested heavily in AI recently. Indian workers are preferred for their skills, knowledge, and sustainable wages. In that light, would the U.S. be able to sustain itself?

AS: The U.S. has plans to spend \$600 billion-\$1 trillion in AI in the next five years. OpenAI, Microsoft, Google, Amazon and others will be contributing billions of dollars. There are about 3,00,000 Indian H-1B visa holders, constituting about 70% of the overall share, and these people, most of whom work at major technology firms, are also working in fields connected to AI. So, of course, their renewal process will be difficult, except at the higher levels. The middle and entry-level things will not be remunerative. And that is where they would need to be replaced by American workers. There would be some glitches [in the U.S.] but these will not be noticed because of the capital drive. If someone is deemed important, companies will pay the visa fee to retain them. However, in most cases, these roles will need to be filled by American workers. Again, while some glitches will occur, they will largely go unnoticed because much of the work being done is redundant – many people are developing similar AI applications.

AA: AI is an extremely new space. It is my belief that the large amount of the investment in the sector would go to the higher end. Several studies have also indicated that winning the AI race would depend on a small number of extremely high paid people. Some studies have also pointed out that there are 100 people in the world who can make a breakthrough in AI, and the tech giants would be chasing them. If there were hundreds of H-1B visa-holders who could come and revolutionise AI for you, then it will be a cheaper market.

The more poignant question is not just about AI but about larger digital technology. How can the U.S. substitute for quantity, reliability, and quality? There will be a lag because once you start squeezing supply from places such as India, your educational system must start pumping up

people from below. That is not impossible for the U.S. They will have to change policy, but that won't happen overnight.

Is the H-1B visa issue an isolated matter, or does it form part of a broader geopolitical strategy involving pressure tactics?

AS: My understanding is that President Trump is a bully, and he had to look big in the eyes of his MAGA voters. With China, he could not and therefore he had to invent a fall guy. India unwittingly became that fall guy. This has happened despite U.S. Presidents cultivating India as an alternative to China. How did this happen? Mr. Trump first said he was the one who stopped the India-Pakistan war; India denied that claim. I think he thought India came between him and the Nobel Peace Prize and had to punish India for it. The immediate reason for punishing India, he said, was that the country buys Russian oil. But China is the largest buyer, not India. Europe also buys oil from Russia. So, the U.S. isn't concerned with facts. Also, before the H-1B directive, the Trump administration lost a case in the U.S. Appeals Court, which said that the legal basis of using tariffs to punish countries is not sound. Now, to defend its actions, the administration has named India.

AA: The H-1B is not that important – either in India or the U.S. So who made it important? It is obviously a mixture of politics, politicians, some over-reaction, and the reactions of certain sectors that are worried.

So, what should we expect from here?

AA: First, assess your plan for investment and the return on investment because it is not like you can land in the U.S. and start earning money. You will have to invest for years in training and skilling. Second, go to the U.S., but keep your bags packed. Third, President Trump is not going to be there forever, so this program won't last forever either.

AS: There is a little-known clause in the directive which says the fee would be waived if the U.S. Commerce Secretary is satisfied that the prospect entrants are being allowed for a project of national importance. I would suggest Indian professionals make their name in their respective fields. They will then be noticed and be allowed to enter the U.S. without the visa fee.



Listen to the full conversation. Scan the code or go to the link www.thehindu.com

Telling the India story through its manuscripts

Long before silicon chips and supercomputers, India had already designed its own architectures of intelligence. Etched on palm leaves, inscribed on birch bark, and expressed in countless scripts, these manuscripts carried algorithms of thought — governing not just sciences and mathematics, but philosophy, medicine, aesthetics, and astronomy. They were not passive texts; they were dynamic codes through which a civilisation organised knowledge, transmitted wisdom, and generated innovation. To open a manuscript is to access India's oldest operating system.

Civilisations are remembered not only for their monuments of stone and metal, but also for the words of wisdom they leave behind. A manuscript, whether on palm leaf, birch bark, copper plate or handmade paper, carries with it the spirit of its age — the anxieties, the hopes, and the wisdom of those who shaped it. In today's world, where nations are locked in a contest not just of arms but of ideas, India's manuscripts are our greatest arsenal of knowledge. They remind us that India is not simply an old civilisation; it is a continuing one, with the resilience to endure and the vision to guide.

The wars of the 21st century are often fought in symbols, stories, and narratives. Europe looks back to the Enlightenment, China to Confucius, the Islamic world to its juristic traditions. India, despite being the custodian of one of the world's richest archives of knowledge, has too often allowed its story to be told by others. This is where the thought of Gyan Bharatam steps in. Our manuscripts are not museum pieces; they are the very foundations on which our philosophy, science, art, and governance once stood. The Vedas, Upanishads, epics, treatises on mathematics, medicine, astronomy, and architecture — all survive because generations of scholars and scribes cherished them enough to copy, recite, and safeguard them. Yet nearly 10 million manuscripts or more still lie scattered, uncatalogued, and undeciphered. To preserve, decipher, and contextualise them is not merely an act of conservation — it is an act of reclaiming our voice in the global conversation.

Unlike many cultures, India's knowledge tradition was never bound to a single language or faith. It thrived in pluralism. Buddhist monasteries in Ladakh, Jain libraries in Gujarat, Shaiva mathas in Tamil Nadu, Persian archives in Delhi — all formed part of the same intellectual ecosystem.

Even where oral tradition dominated, manuscripts provided a guarantee of precision. The fact that the Vedas are recited today with

the same phonetic accuracy from Kerala to Kashi is proof that this is a living culture. Words here do not sleep between covers; they move, sing, and breathe through chants, ballads, and proverbs.

This continuity came at great cost. From the 10th century onwards, waves of invasion and colonisation sought to erase libraries and institutions. Nalanda was set aflame. Countless manuscripts were lost. Yet the tradition endured — families hid collections, teachers committed texts to memory, scribes rewrote fragile palm leaves. That resilience is what makes India's manuscript heritage not just archival but civilisational.

The recent International Conference on Reclaiming India's Knowledge Legacy Through Manuscript Heritage was a civilisational mission, bringing together survey, conservation, digitisation, decipherment, and dissemination into one national effort. By engaging not only Indian but also global scholars, librarians, conservators, and technologists, Gyan Bharatam placed India at the forefront of heritage discourse.

Digitisation efforts are underway to preserve and study our priceless manuscripts, shedding light on India's rich intellectual heritage and offering new opportunities for historical and scientific research worldwide. At a time when the world searches for sustainability, plurality, and ethical frameworks for technology, India's manuscripts offer more than history — they offer guidance. They remind us that our knowledge system never divided science from spirituality, art from ethics, or language from logic.

Every nation must ask itself: What story will it tell the world? For too long, India's story has been told through colonial eyes — as mystical, exotic, or regressive. Reclaiming the manuscript tradition is, therefore, an act of intellectual sovereignty. It declares that India is not just a consumer of global knowledge, but also one of its oldest and richest sources.

The task is daunting. Ten million or more manuscripts are yet to be conserved and interpreted. But the reward is greater still: To illuminate India's civilisational wisdom not through assertion but through evidence. To let manuscripts themselves speak, as envoys of a culture that has always believed in dialogue. The Gyan Bharatam Mission is our pledge that this reservoir of wisdom will not be lost to silence.



Sachchidanand Joshi

Sachchidanand Joshi is member secretary, Indira Gandhi National Centre for Arts, Delhi.

The views expressed are personal

PLUG THE GAPS

Irregularities at Skill Development Corporation must be addressed urgently. Agency is critical to demographic dividend

THE PROBLEMS OF the National Skill Development Corporation have festered for too long. Only a few months after the NSDC's board fired its then CEO, Ved Mani Tewari, the Ministry of Skill Development and Entrepreneurship has now filed a complaint with the Delhi Police against officials alleging "misappropriation at NSDC" as per a report in this paper. Skilling is perhaps the biggest challenge facing the country — the ability to harness the demographic dividend rests on a skilled labour force. The sorry state of affairs in an agency deemed one of the "principal architects" of the country's skill ecosystem is, therefore, a cause for concern.

The NSDC's support to the skilling ecosystem was operationalised through various instruments such as funding, designing skill-based programmes and partnerships with industry. Reports in this paper, however, paint a less-than-flattering picture of the its operations. Several FIRs have been filed against its training partners across the country. Investigations have shown the "blacklisted" training partners were "allegedly tampering with attendance records to include students who were missing from training centres". This is not the first time that the NSDC has been mired in controversy. In 2015, a CAG report had noted that "there were serious issues in the governance and accountability mechanisms at NSDF (National Skill Development Fund) and NSDC and the implementation of the identified roles by these bodies". Over the years, concerns have also been raised over the quality of the training imparted and employment prospects. The corporation has an ambitious goal — to skill or up-skill 150 million people. Its recent track record does not inspire confidence.

The Centre has taken several steps to skill the country's labour force. It has, for instance, launched initiatives such as the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), and allocated a considerable amount of funds to this area. Under the various avatars of this scheme, Rs 10,570 crore were released till March 2024. The total number of people certified under PMKVY and STAR (Standard Training Assessment and Reward Scheme) stood at 1.13 crore, while the total reported placement was 24.4 lakh. The government's increasing involvement indicates that it recognises the criticality of the skill mission in achieving the goal of developed country status by 2047. It now needs to undertake a detailed examination of the skilling ecosystem and of the players therein. The problems need to be resolved urgently.

H1B changes alone can't secure India's AI Future

AMIT KAPOOR AND
MOHAMMAD SAAD

One of the most contentious policies of the Trump administration was just announced: a \$100,000 fee to apply for an H1B visa. Naturally, the announcement unsettled the Indian diaspora and many prospective Green Card applicants in India, since over 70 per cent of H1B visa holders are Indian, with many of the brightest among them likely contributing to the development of foreign AI systems and large language model companies.

The White House promptly reassured existing H1B visa holders, though, by making it clear that the \$100,000 fee would only be charged to new applicants, not to those who already had one. Since then, the action has generated discussion about its possible advantages and disadvantages for national interests, with some applauding it as a step to stop the long-standing 'brain drain' phenomenon. While preventing brain drain is directly relevant to the global AI race, retaining domestic talent alone does not fully address India's AI challenges.

From an objective standpoint, Trump's decision to significantly raise H1B visa costs will inadvertently slow down the flow of some of India's most talented individuals to the West, something India has long failed to stop. The large immigration to the United States was driven because of what America could provide but India was unable to — merit recognition, better infrastructure, better education, and cleaner air.

The numbers speak for themselves. Consider for instance that at the national level, India's Central Sector Scheme of Scholarships for College and University Students awards a maximum of 82,000 scholarships annually for graduate and postgraduate studies. In contrast, the United States awards more than 1.7 million private scholarships and fellowships annually, valued at over \$7.4 billion as of 2020.

Now consider infrastructure, education, and pollution: In the 2024 infrastructure rankings by the World Population Review, the U.S. was ranked seventh, while India ranked 28th. According to the latest QS World University Rankings, the US has 193 ranked universities, including 44 in the top 100, whereas India has only 54 ranked universities and none in the top 100. Last year, India's capital was ranked the most polluted city in the world. Collectively, these factors have incentivized India's most talented workers to contribute to the U.S. economy, rather than to India's own development.

In light of the AI revolution, which makes it crucial for countries to protect their interests and seize new opportunities — something that is impossible without the right human resources — the loss of India's brightest minds becomes even more pressing. Naturally, a lack of talent could further disadvantage India, which was already far behind in the global AI race. Inadvertently, Trump's move could allow India to keep more of its skilled workforce, which could lead to a chance to take a more active role in the AI race. However, this must definitely

not invite unwarranted optimism as India's capacity to take full advantage of this opportunity is still constrained by the same elements that drove talented people to relocate to the United States: infrastructure, funding for research, and a favourable business environment.

To make the point clear, one must first realize that creating AI systems necessitates a large investment in R&D. Regrettably, neither the public nor private sector of India invest much in research and development. The private sector makes significant investments in countries that have successfully developed AI systems, but the government cannot be held entirely responsible. As a percentage of GDP, India's R&D spending has stayed between 0.6 and 0.7 per cent, which is less than the global average and less than that of nations like the U.S., China, and South Korea.

Furthermore, only roughly 36 per cent of India's total R&D expenditure comes from the private sector, compared to over 70 per cent in these other countries. Low R&D investment in India means that retaining talented individuals does not automatically translate into the creation of AI systems. The fact that AI innovations typically originate from start-up ecosystems that promote entrepreneurship is another crucial point. India has yet to establish such an environment.

For instance, take the corporate tax system in both countries: The Tax Cuts and Jobs Act of 2017 established the 21 per cent flat rate in the United States. All corporate income brackets are subject to the same rate. In contrast, corporate taxes in India range from 25 to 30



per cent plus surcharges. Businesses are further burdened by the intricacy and ambiguity of India's tax laws, especially smaller ones that cannot afford professional advice. Delays and a lack of transparency in tax administration are examples of inefficiencies that can increase mistrust and encourage tax evasion. The favourable business climate in California undoubtedly aided the Indian talent who migrated there and established their businesses, but it looks unlikely that India would provide similar opportunities for some time to come.

Another possible effect of Trump's decision is that India could experience a temporary decline in wages instead of seeing an increase in domestic AI job creation. This is because workers who may have migrated to the United States will now stay here, boosting competition in terms of both quantity and calibre. The fact that AI is now performing tasks like homework and assignments that are typically used to indicate proficiency, undermining the legitimacy of degrees and causing

information asymmetry, complicates this situation. Short-term wage pressure is likely to continue, and it might only subside if some of this talent moves abroad, perhaps to Canada, the United Kingdom, Australia, or Germany, where there may be a greater influx of Indian professionals.

Ultimately, retaining talent within India alone will not be sufficient. The country will continue to face the persistent challenges that have long been part of public discourse, and these issues may now become even more pressing. It is time for policymakers to decide how best to leverage the current situation. The problems are well understood, and many of the potential solutions are already clear, including higher R&D spending, greater domestic AI job creation, easier business conditions, and broader improvements in India's standard of living, among others. Therefore, what is now required is decisive action.

(The writers are, respectively, Chair and a Researcher at the Institute for Competitiveness.)

Beyond placements: The case for social sciences in IITs



ANUJ PATHAK
SOCIOLOGIST

NOT everybody, it seems, is happy with the departments of humanities and social sciences in the IITs. Or, is it that there is some fear that the kind of critical questions some professors and researchers from these departments are raising might unsettle the primary function of the 'brand' IIT — the production of skilled and efficient techno-managers, the establishment of a close affinity between the dissemination of knowledge and the needs of the industry, and hence, the urge to retain a depoliticised/ 'value-neutral' learning milieu? In recent times, we are witnessing this tension rather sharply.

Take, for instance, an international workshop on 'South Asian Capitalisms' in which IIT-Bombay's Centre for Liberal Education wanted to be a

partner. However, because of the discomfort with the workshop flyer, particularly its critical symbolism, the IIT authorities asked the organisers to take down the flyer from all social media platforms and remove IIT-Bombay's name from everything to do with this event. No wonder, many 'nationalists' came forward, saw it as a conspiracy and began to allege that it was another attempt by the 'left-liberal ecosystem' to take over the brand IIT! Not solely that.

The active presence of the Ambedkar-Periyar Study Circle at IITMadras has also caused some embarrassment to those who want the IITs to be free from the culture of protest and resistance. Even the Vice-Chancellor of a leading public university in the national capital — a university known for its departments of social sciences and liberal arts — has warned of the presence of the 'weh-jhadi complex' in the IITs.

A meaningful response to this tension, I believe, would require a reflection on the politics of knowledge. To begin with, it is important to acknowledge that an educational centre that nurtures a new generation of vibrant young minds ought to be oceanic. That is, it should be open to diverse epistemologies and multiple traditions of



knowledge. British scientist and novelist C.P. Snow pleaded for it sharply in 1959 in his book *The Two Cultures and the Scientific Revolution*. He warned us of the danger implicit in the growing division between sciences and humanities.

Re-evolving a more comprehensive understanding of the world, as Snow argued, we need to build a bridge between the two cultures of sciences and humanities. Snow's message has acquired special relevance in our times when the hegemonic technoscience is all-pervading, and there is growing devaluation of liberal arts and humanities.

Let us understand it through an example. Suppose you wish

As AI invades our imagination, it is important for scientists, visionaries and educators to redefine the role of technology in our daily life.

to be an engineer and you are pretty good in your specialised field. However, it is equally important for you to be aware of the political economy, or the social context of your work. It is important to be reflective, and ask yourself whether the techno-capitalist system uses you as a mere resource, and as a result, the knowledge you have acquired fails to serve the downtrodden in this highly asymmetrical society. Even if you are good in physics, mathematics and engineering, a meaningful study of the likes of Gandhi and Marx will further expand your mental horizon, and enrich you as a politically *more* socially sensitive professional.

Instead of seeing the wall of separation between 'logical' science vs 'subjective' fiction, or 'useful' engineering vs 'philosophic' social sciences, we need to think of a more integral and holistic curriculum. Hence, it will be good if IIT students study a bit of critical theory and subaltern studies. There is nothing to worry. The books of George Orwell and Michel Foucault will not diminish their engineering skills; instead, they will become more open to alternative visions of the world.

It is equally important to assert that there are limits to a purely technocratic/ instrumental notion of education. Of course, the narratives of placements and salary packages, and the presence of the IIT alumni in all major corporations across the world are tempting. Yet, it will be suicidal, if in the name of neoliberal/ market-driven logic of 'productivity', we forget that the higher objective of education, as political philosopher Martha Nussbaum said, is also to nurture the ethos of democracy, ecology peace and social justice.

Thus, it is important for an IIT product to alter his/her self-perception; from a hyper-competitive/ atomised self-centric covert to a politically conscious citizen in search of democratic and egalitarian values.

Finally, I recall communication theorist Neil Postman's book *Technopoly: The Surrender of Culture to Technology* (1986). Technopoly, he warned us, is 'totalitarian technocracy'. In fact, the logic of technical efficiency has become the unchallenged mechanism of progress. And technopoly eliminates all alternatives; the result is that we tend to lose our agency and creative thinking; we become the tools of tools.

Is it possible to resist this trend and create an alternative imagination of a meaningful life and our relationship with technology? As AI invades the collective imagination, it is important for scientists, thinkers, visionaries and educators to redefine the role of technology in our everyday life. We need the spirit of critical pedagogy; we need a mode of thinking that can use beyond the lure of every new technological innovation, redefine the philosophy of life, and imagine a world free from what we are witnessing today: techniques replacing creative imagination; 'development' internalising the horrors of climate emergency; and the alliance of billionaire technocrats and neoliberal fascists becoming a new reality.

Can the IITs be wholly indifferent to these challenges?

AT
VANTAGE

SHRUTAPA PAUL

THE WRITER
IS AN AUTHOR
AND MEDIA
ENTREPRENEUR

Trump's move may not immediately force a reverse brain drain because those who are already settled into the American way of life may opt to find ways to continue it

The Indian Dream

Donald Trump may have crushed the American dream for highly skilled talent, but here's what we can do to retain our youth on Indian shores

For far too long, Indian techies harboured the American dream. With one swift hand, US President Donald Trump has punctured those lofty plans. The imposition of the sky-high H-1B fees of USD 1,00,000 is a brutal decision, alright and without any rationale except that of the whims of an eccentric megalomaniac. Indians make up 71 per cent of H-1B holders, with Amazon and Tata Consultancy Services (TCS) leading the recruiter list. The US loses out on the incredible Indian talent that other countries would queue up to lap up. But hey, let India be the first in line!

Trump's move may not immediately force a reverse brain drain because those who are already settled into the American way of life may opt to find ways to continue it. But let's talk of those who haven't flown the coop yet, or those who have been touched by the entrepreneurial fire. Thought leaders and patriots have always canvassed for fellow Indians to work and build in India. But the promised land has been too alluring, with its fat pay packages and better quality of life. India has not yet managed to retain all of its fleeing talent, many of whom have chosen practicality over nationalistic ideals: some have chosen cleaner air, safe public transport, and an enhanced standard of living. But now we have an opportunity — a chance to once again entice the workforce to look inwards for work.



Trump's move may not immediately force a reverse brain drain, but because those who are already settled into the American way of life may opt to find ways to continue it

The fee hike on new visas can pave the way for laid-off workers who are visa holders. News reports suggest that in this year alone, almost 1.44 lakh techies have been handed the pink slip, while 2.38 lakh were laid off in 2024. The UK, Germany, China, and Canada are aiming to turn the tightening of skilled immigration policy to their advantage. They are turning on the charm by introducing friendly, predictable policies and attractive incentives. And here's where my plea goes out to all our founders, investors, family businesses, and the gov-

ernment. Forget Make America Great Again (MAGA), let's Make India Great Again for STEM (science, technology, engineering and mathematics) professionals. Let's make it rewarding for our workforce so that they can see an upward professional trajectory. Let's dole out more research grants and sops for startups. Let more wannabe entrepreneurs want to start up in India, so that they can, in turn, also create more jobs. Let our governments motivate tech companies so convincingly that they can't ignore setting up shop or

expanding on Indian shores. There is also a strong possibility of an increased number of global capability centres (GCC) being set up in India, which would be cost-effective and operationally viable for foreign companies that can still hire Indian talent. Experts say that at present, 1,600 GCCs are operating out of India, employing 1.7 million professionals. As per a news report, less than 30 per cent of Fortune 500 companies have GCCs in India, creating a potential 60 per cent expansion of GCCs in the next couple of years.

Realistically speaking, US immigration policies for highly skilled professionals may change. Trump may see sense, and Indian negotiators may succeed. But if we are to build a Viksit Bharat with a USD 34.7 trillion economy by 2047, we need another economic wave. This resurgence will require stronger policies and government support, as also top human resources. Unknowingly, Trump may have just handed us the best chance to push the pedal on our growth. We must make the most of it.

Views expressed are personal

m3/7

Being simple as the route of success

It has not even created, with sufficient vigour, its own school of thought. Yet the truth is that when comparative strategy formulation begins, being simple and direct, succeeds as nothing else can



VINAYSHIL
GAUTAM

A literature survey on strategy, be it personal, group, or institutional, has been attempted multiple times since the period when such literature was first recognised to exist. Various schools of thought have been marked, debated, and accepted or rejected. This has given rise to various schools of thought, from the passivist approach to the activist approach. Indeed, to have a strategy is considered basic to the act of survival, and everyone practices some strategy at some level, irrespective of the size of the institution or the stature of the individual. This is not the place to get into the lengthy literature survey of what is available, as such an effort would literally take thousands of man-hours.

There are additionally regional differences in the quality of analysis from one region to another, reflecting various schools of thought according to languages, according to regions, and according to times.

An illustration may help. Going by the time dimension, human history is divided into ancient times, medieval times, and modern times. Such distinctions are useful, but once one starts analysing problems, issues can and do arise. Ancient times obviously begin with time immemorial, but it takes on a literature survey only when issues of periodisation are solved. There can be no beginning of history unless some evidence is there to mark the times. The marking of the times can be architectural, linguistic, or indeed any traces which the people of the time left behind for posterity to find and analyse.

Obviously, all human beings spoke, and since time immemorial, there must have been a language; otherwise, no community of Homo sapiens could have survived. They needed to talk to each other and relate to one another. However, spoken language leaves no tracks, and for language to survive, it must have a script; without a script, no traces can be found. One of the oldest languages in the world is the language used by the Egyptians.

They used it in their active commerce, rigorous warfare, running of the state, and commercial activities, and for everything else which human beings need to communicate over to keep the civilization going. The script which they used has been called hieroglyphs. Hieroglyphs have been deciphered, and Egyptian writing on walls, pillars, and elsewhere can be deciphered to know about the times. It was largely pictorial, and later on, the study of languages shows that these scripts evolved; pictures gave way to simplified presentations, and static alphabets evolved into flowing alphabets linked with each



The Pioneer
SINCE 1865

FOR BEING
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EXPLORED FOR
DUE ACTION

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other. That is another story.

The number of scripts across the world is huge. There is the Roman, the Devanagari, the Chinese, the Arabic, and the list goes on. Each of these mother scripts had its own dominant language; illustratively, the Roman script was known for its Latin and Greek languages. Devanagari was known for its Sanskrit and Pali texts, and this list also goes on with variations of languages which came to be written in scripts such as Arabic or Chinese. Modern-day Urdu, for example, has a strong influence from the Arabic script, and unlike Roman or Devanagari, which is written from left to right, it follows the right to left flow typical of the Arabic script.

The difference in flow from left to right and right to left is so obvious that it needs no further explanation or elaboration. Similarly, the Chinese script has its own characters, and unlike the Roman or the Devanagari scripts, it has its alphabets in a discrete manner and does not have the flow which the Roman or the Devanagari texts have.

Be that as it may, ultimately, language generated its own typologies, and civilizations were fathered also according to linguistic delimitation or differentiation. The languages and the sub-languages which arose are too many to relate in the limited space of this text. Soon enough, civilizations started communicating on linguistic overtones.

There were authors who saw language as a distinctive force across cultural boundaries, and a noted British author even attempted what he called the "History of English-speaking People." The interesting dimension of this history was that ethnically it included Americans, Africans, Asians, Australians. Even though English was written in Roman script, other languages attained prominence using

the Roman script while having a different identity of their own. Interesting references can be found by going through the narratives in French, Portuguese, German, and the list can be long. The Slavonic script is pervasive in Russian and other similar languages, creating even more varieties in human typology.

Be that as it may, the long and short of the matter is that as the scripts multiplied, so did the languages, and so did the strategies. The quest for success became a subject matter in its own right, and even literature surveys reflected the amount of thought devoted to the concept of success, along with the growing number of strategic options that emerged.

In this medley of competitive success strategies, one thing that has skipped much attention is that it is the urge to be successful has led to all these schools of thought. Indeed, not too much attention has been paid to being simple and straightforward for achieving success.

Since nobody is expected to be simple or straightforward, perhaps being simple and straightforward gives rise to the greatest amount of success stories. This has rarely been studied in sufficient academic depth. It has not even created, with sufficient vigour, its own school of thought. Yet the truth is that when comparative strategy formulation begins, being simple and direct, succeeds as nothing else can.

Perhaps the time has come to take a look at this point of view and realise that not only is honesty the best policy, but being simple and straightforward has the potential of being one of the best strategies. At least, as long as few people see it as a possibility, for being successful in life, being simple is worth a try. The matter needs careful thought and must be explored for due action.

The true measure of growth is job creation, not just GDP



ARUN MAURYA
FORMER MEMBER,
PLANNING COMMISSION

Among the innovation outputs are patent applications, scientific papers published and high-tech exports.

The WIPO's Global Innovation Index uses a resource-intensive model of innovation for ranking countries, with countries that spend more ranking higher.

India must spend more to climb WIPO's innovation rankings. It is already the highest, and has been for 15 years, in the Innovation Efficiency Index, which measures the ability to get more outcomes from fewer resources, which is a better measure of innovativeness.

When I began consulting for automobile companies in the US in 1980, my partners and I made a bet about which automobile companies would survive in the next millennium. Their thesis was that since a diversity of new products would be required to compete in a globalising economy and new product development requires substantial investment, only companies with the most financial resources would survive. Therefore, only the largest companies — GM, Ford, VW, Toyota, and possibly Nissan — would survive.

However, I bet that the small Honda would be a winner because Honda was more innovative, whereas GM would try to spend its way out of trouble. The bet was 50 to one against me. I won: Honda continued to expand in the new millennium while GM teetered on bankruptcy.



Growth, innovation, productivity and efficiency are fundamental concepts in economics and management. Economists and management consultants rank countries and companies by their performances in these parameters to spur others to catch up. More of whatever is being measured is presumed to be better and those behind are advised to adopt the practices of those ahead of them — without analysing what is being measured.

This is the fundamental problem with ranking countries by their GDP. GDP measures the size, not the health of an economy.

The health of any complex system — a human body or a nation's economy — cannot be measured by a single index. If the health of a human body was assessed only by its size and weight, the

India leads the world in innovation efficiency but lags in global rankings that reward resource-heavy spending models.

most obese persons should be the healthiest, whereas they are often the least healthy. The overall health of a human body depends on the health of many sub-systems within it — the cardiovascular, digestive, musculoskeletal and brain systems, etc.

All systems must be sufficiently healthy to keep the body well. If even one fails and the rest are in a perfect condition, the body ceases to function. Therefore, the average of their separate health indices is a dangerously misleading calculation of the system's overall health.

Weak subsystems should be cared for on priority, rather than increasing the size of the whole with the expectation that more growth will take care of everything within.

Productivity and efficiency are similar concepts. They are ratios of the amount of

output from an input. The output (numerator) is what one needs more of at the time — in an economy or a company. The input (denominator) is the ratio should be what is the scarcest resource.

A universal measure applied to measure productivity is the final output produced by the number of human beings in a country or company. Productivity can be increased by innovations in production processes, to get more from the same number of people.

Or an easier way to increase the measured productivity is to reduce the number of people employed in the production process. The use of more technology (automation and AI) enables replacement of human bodies and minds within the organisation.

Companies have the option of reducing the number of people they employ to improve their productivity by this measure. Those they discharge will find employment in other companies, they hope, or will be taken care of by the government's welfare programmes. At the same time, they don't want to be taxed to provide governments with resources for public welfare.

Compared to other countries, India has more human beings for whom it must provide employment and income. The people of India are expected to provide the demographic dividend to its economic growth. Which they can, provided their incomes increase, and with

that, the overall consumption and size of the internal market — which will attract more investments in the economy.

The right measure of productivity of businesses in India should be their output divided by the amount of capital they use. Human beings are plenty in India; resources of financial capital are relatively scarce. Businesses in India should rely less on capital and employ more people. They must nurture the growth of human beings, not just profits.

India's economic development must be measured by how many good jobs each unit of GDP is creating in which India is performing badly rather than by the gross size of its GDP.

More wealth must be created at the bottom of India's socio-economic pyramid rather than more wealth at the top, with the expectation that it will trickle down in the future to improve the lives of the masses below. Wealth and income inequalities are increasing in India. This is not a sustainable model of growth.

Our policymakers must rethink concepts of growth, productivity and innovation. They can learn a lot about innovation, and less high-tech, healthy growth and also about frugal innovation from within the country instead of slavishly adopting the models of the West. The West must change its ways, too, to make global growth less resource-intensive, more inclusive and environmentally sustainable.

INDIA ranks the highest in the world in the Innovation Efficiency Index, according to WIPO (World Intellectual Property Organisation). But it ranks a lowly 38th in WIPO's Global Innovation Index, in which the first five countries are Switzerland, Sweden, the US, the Republic of Korea and Singapore (China is tenth). Innovation Efficiency is a measure of the outcomes produced from all the inputs provided for innovation.

The Global Innovation Index is the simple average of two sub-indices: one measuring a country's performance on inputs, i.e. how much inputs it provides for innovation and the second, its performance on outputs. Therefore, a country which provides more inputs can rank high on the Global Innovation Index even if it ranks low on the output side.

Innovation inputs in the WIPO index include R&D expenditure, researchers per capita, quality of top universities, venture capital deals and market capitalisation.

What does Trump's latest H-1B directive state?

What will be the consequences for both American and immigrant workers? Do overseas workers displace Americans in tech jobs? What do surveys show? What are immigration lawyers saying? What are the trends likely to play out in the tech sector?

Saptaparno Ghosh

The story so far:

In September 19, U.S. President Donald Trump signed a proclamation increasing the fee for processing H-1B visas by about 60 times to \$1,00,000. The White House underlined that the objective was to help "curb abuses that displace U.S. workers and undermine national security". A tentative calm returned when Washington clarified the revised fee would only be for new applications, starting September 21, and not for present visa-holders or those up for renewal.

What is the purpose of the hike?

The entire contestation revolves around the perception that the H-1B visa programme was leading to a "disadvantageous labour market for American citizens". The H-1B programme seeks to help employers in the U.S. obtain crucial skills and abilities, not existing within the current local workforce, by authorising them to temporarily bring certain specialised talent from overseas to work in the U.S. However, the White House argues the programme has been exploited to make it challenging for U.S. STEM graduates to find jobs. This is because companies prefer to hire foreign workers at a "significant discount". It has been misused to the extent where tech companies have fired their domestic workforce in favour of H-1B workers, the White House alleges.

What's the argument for legal migration?

In a survey conducted by the U.S.-based think tank Pew Research Centre in 2024, about 40% of respondents believed high-skilled workers should be given top priority for legal

Both Republicans and Democrats have maintained the need to reform the H-1B visa regime

immigration. About 60% of respondents said legal immigrants fill jobs that U.S. citizens do not want. Further, Daniel Aodba, former professor of accounting information and management at the Kellogg School of Management (U.S.), had investigated these questions in 2016 with respect to H-1B workers hired as auditors. He observed that the workers, most of whom attended U.S. schools, took jobs in "less desirable offices or that [which] require highly specialised skills". Thus, he inferred, "they complement – rather than displace – U.S. workers". His research came across no evidence that hiring more H-1B workers lowered wages at these offices. However, he cautioned this may not be true for foreign-educated H-1B holders in the U.S. employed at outsourcing firms.

According to data from the U.S. Citizenship and Immigration Services (USCIS), Amazon.com is the most prominent employer of H-1B employees, followed by the India-based Tata Consultancy Services, Microsoft, Meta and Apple. India was the top beneficiary of the H-1B programme in 2024, accounting for 71% of approved beneficiaries. The U.S. approved more than 2.8 lakh Indian H-1B workers, across varied sectors, at the end of 2024, according to data from the USCIS. The agency had given approval to approximately 4 lakh applicants during the period; of these, it approved only about 1.4 lakh applicants for initial employment. If the USCIS receives more registrations than the visas provisioned for the year, it runs a lottery to determine eligibility. Pro-immigration advocacy group American Immigration Council observes that the presence of skilled legal immigrants ensures that businesses expand their operations in the U.S. itself than searching for avenues overseas. Further, it also notes that immigrants are known to create new businesses and helping expand the labour market. Prominent examples being Elon Musk (South African and Canadian descent) and Sergey Brin (Russian migrant who founded Google with Larry Page). Additionally, H-1B holders are not just contributors to the more business-centric sectors but also civic essentials like medicine and health, as well as educational and scientific research. In a letter to the Secretary of Homeland Security, Kristi Noem, post the directive, the American Medical Association (AMA) emphasised the "growing need for [a] larger physician workforce that the U.S. cannot fill on its own".

Why is immigration a 'problem' in the U.S.?

In his order, President Trump quoted a 2017 study that stated that wages for native U.S. computer scientists would have been 2.6%-5.1% higher with employment being approximately

6.1%-10.8% higher (in 2001) in the absence of an immigration regime. It is interesting to note that the same study, authored by professors from the University of Michigan and University of Chicago, stated immigration helped lower prices and raised the output of IT goods by 1.9%-2.5%, benefiting consumers.

The story is, however, not that simple. Earlier this year, the U.S. Equal Employment Opportunities Commission (EEOC) was learnt to be investigating Mumbai-headquartered TCS for discrimination in favour of H-1B workers. Bloomberg reported last December that at least 33 former employees had filed complaints at the EEOC alleging they were fired in favour of hiring Indian workers. TCS dismissed the allegations as "meritless and misleading". In fact, the U.S.-headquartered IT solutions provider Cognizant too found itself mired in similar allegations (in 2017). The company was also accused of firing non-South Asians at "disproportionately high rates". It did not receive a favourable verdict and sought to challenge it at an "appropriate time".

Reforming the H-1B programme to curb alleged misuse has traditionally had bipartisan support from both Democrats and Republicans. Democrats, including senator Bernie Sanders, have maintained the need to reform the regime to address "low-wage indentured servants from abroad". "The cheaper the labour they hire, the more money the billionaires make," he had said.

What lies ahead?

Ajay Srivastava, founder of the Global Trade Research Initiative (GTRI), in *The Hindu's* 'Parley' podcast earlier this week, pointed out that the hike in visa fee makes it almost impossible for anyone to be hired, except top STEM graduates. "No U.S. company is going to take a risk given the vitiated political environment," he observed. But Mr. Srivastava also pointed at a "little-known" clause in the directive, which allows for a waiver if the applicant serves in a project of "national importance". Immigration lawyers say lawsuits to challenge the directive is inevitable. In a Facebook post, U.S.-based immigration lawyer Karin Wolman said the proclamation was "drafted badly" and obfuscated processes. She argues that while the President has the power to execute a travel/entry ban, any collection of fees would have to be formally established as being "reasonably related to agency costs". Further, they can only be put out with a formal notice supported by a consultation over a period before being instituted.

Mr. Trump's directive comes against a larger backdrop of tariff-related tensions between the U.S. and India. Industry body Nasscom holds that with the revised fee effective with the next round of lottery expected in March, companies in the U.S. would have time to step up skilling programmes and enhance local hiring, which has already increased "tremendously".



New rules: U.S. President Donald Trump signs order introducing a \$1,00,000 fee for H-1B visas at the White House on September 19. GETTY IMAGES

PERSON OF INTEREST

UMA MAHADEVAN DASGUPTA:
LIBRARIES OF
CHANGE

A social miracle unfolded when the IAS officer put rural local bodies in charge of community transformation

Imagine a library with green walls. Or yellow. With murals of award-winning writers or a local queen who took on the tyrant. There's a well-stocked children's section with picture books that you'll often see seniors reading. A copy of the Constitution. A dictionary, a rug, maybe colourful curtains, potted plants or child-sized tables or sofas.

Someone has also donated a globe. And a water filter. There's definitely a computer. And Alexa. A volleyball and a cricket bat. Carrots and chess. The library may have a garden, with a pergola where seniors hang out for some Vitamin D. Or a well-lit terrace where teenagers can study after closing hours.

Now place the library in rural Karnataka and run by the State. There's no better description of Uma Mahadevan Dasgupta's work these past five years than the pithy one she

provides: a "library card as a portal" to another world.

Of the many things she's done as an IAS officer for 33 years, the dramatic makeover of forgotten rural libraries into vibrant community spaces fits a "large part" of her heart. "One of the children told me, 'I like Alexa because if I ask my teacher the same question 2-4 times, the teacher might scold me, but Alexa never does that,'" says Mahadevan Dasgupta, 58, the development commissioner of Karnataka, who has a postgraduate degree in English literature.

Nearly five years after she began, 50 lakh children are enrolled in the rural libraries of the State. Library timings have increased from four hours to eight hours a day, including on the weekends. It's a cause for much consternation in the village if the librarian doesn't show up for work. By the end of the year, thanks

to government assistance, Karnataka will have 12,500 rural libraries, likely the largest number in any State. "I really think that these libraries can change trajectories for this generation," says Mahadevan Dasgupta.

Encouraging a sense of play Shortly before the COVID-19 pandemic hit, the State's 5,623 rural libraries were transferred to the Rural Development and Panchayat Raj Department, where Mahadevan Dasgupta was, until recently, additional chief secretary. Her idea to use libraries to help children stay connected with reading was simple: introduce a children's section in all libraries, offer all children free

membership, encourage gram panchayats to revive the libraries, find someone to donate computers (Defi Technologies stepped in and avoid using government funds. Rather, try to build a people's movement.

Public servants by definition have the power to impact the lives of many but how many can take credit for spreading joy? How many are granted the privilege of watching a small idea blossom into an exuberant community-led movement with the potential to change lives?

A collection campaign yielded a million books. Private companies and NGOs pitched in. Panchayats took charge enthusiastically. Some even painted stars on the ceiling. A

Uma Mahadevan Dasgupta serves as Development Commissioner, Karnataka.

university trained 4,000 librarians. "The most important learning for me has been that service delivery has improved dramatically when the rural local bodies run the library," says Mahadevan Dasgupta.

Now, seniors or self-help groups often meet here in the mornings. ASHA and Anganwadi workers visit to write their registers. The Rotary Club organises YouTube live sessions. When astronaut Sunita Williams returned from space, a librarian on her Telegram group (yes, there's a feel-good group of librarians somewhere) shared a photo of a woman reading a newspaper account. "I've seen a 90-year-old man sitting in a small library in Karwar trying to solve the Rubik's cube," says Mahadevan Dasgupta.

The Nature Conservation Foundation introduces children to birding and, indirectly, to climate change. The Indian Institute of Astrophysics used Oreo cookies in a month-long session to explain the lunar eclipse and the phases of the moon. Bengaluru's Science Gallery also partners with these libraries and the National Gallery of Modern Art will soon be on board.

A woman who takes steps in to look up new designs for art classes. A farmer wants the librarian to research the pest that's attacking his cattle. A librarian and a school organise extra computer classes for children. "In some ways, the library is allowing for different forms of association, both at the individual level and at the group level. It's allowing a sense of play to come

back into community life and I love that," says Mahadevan Dasgupta.

Road to liberation

At one library she visited, Mahadevan Dasgupta saw a well-used chess board. The two "champs", so she puts it, were a trident boy who attends a government school and a boy in a private school uniform. Both would face-off every evening. "I just thought that at a time when boundaries are being created between children, here is the library, a space that allows these boundaries to be blurred a bit."

As the rural societies redefined the library as a community space, it also became a safe space for girls to study, away from the pressures of household chores. "It's actually turning into a place for children to hang out and even shape their dreams, because who knows whether they even have the space within their homes for quiet study and to grow mentally," she says.

Mahadevan Dasgupta believes decolonisation is the main reason they were able to scale this idea across the State: "We kept it flexible, based on only the basics, and kept encouraging more things."

As she went down the library "rabbit hole", she read about how the institution was key to the Indian freedom movement. "There were thousands of little village libraries that came up because reading is liberation," she says. "These are the little ways in which countries like ours should solve problems."



Priya Ramani is a Bangalore-based journalist and the co-founder of India Love Project on Instagram.

History
HEADLINE

SHYAMLAL YADAV

UPSC @ 100: The story
of India's top recruiter

WHEN THE Constitution came into effect in India on January 26, 1950, so did some institutions that enabled the foundation of a newly democratic nation. One such institution was the Union Public Service Commission (UPSC), located at Dholpur House on Shahjahan Road in New Delhi.

At the time it was founded on October 1, 1926, under the Government of India Act, 1919, the UPSC was known as the Public Service Commission. Before its current name, between 1937 and January 26, 1950, it was called the Federal Public Service Commission (FPSC). On October 1 this year, the highest recruiter of officials to the Indian government will enter its centenary year.

A constitutional body, its mandate under Article 320 (outlines the functions of Public Service Commissions) is "to conduct examinations for appointments to the services of the Union and ...State respectively".

Today, the UPSC mostly holds written exams (usually the two-tier prelims and mains) and interviews (called personality tests). According to its latest annual report, during 2022-23, the UPSC conducted 15 recruitment exams — 11 for civil services and four for defence services.

UPSC's roots date back to the arrival of the East India Company in India as a "traditional trading concern" in the 1600s. As a "traditional trading concern", its employees — writers, and junior and senior merchants — were purely mercantile servants, appointed and paid according to their individual merits for decades. In the second half of the 18th century, especially after the Company's victories in the Battle of Plassey in 1757 and the Battle of Buxar in 1764, it realised its new role — to rule India.

Around this time, Governor Generals Warren Hastings (from 1773 to 1785), Lord Wellesley (from 1798 to 1805) and Lord Cornwallis (from 1786 to 1793) had reshaped the bureaucracy in British India.

By 1858, the character of the Company and its civil servants had changed. To manage a rich empire like India efficiently, the Company had started feeling the need to appoint bureaucrats. Before this, its administrative machinery was essentially based on the structure of the Mughal-era, though the Company kept refining its administrative machinery over time.

The Macaulay Committee of 1854 was a huge leap forward in the direction of modern-day bureaucracy. In 1855, a Civil Service Commission came into existence in Britain. By 1858, its jurisdiction was extended to the



The Union Public Service Commission is headquartered at Dholpur House in New Delhi's Shahjahan Road. Getty Images

Indian Civil Service (ICS). At first, recruitments to the Commission were done via the direct route — through a written test and, if needed, an interview. After the First World War (1914-1918), a Staff Selection Board (SSB) was set up to manage this.

However, entry to the Commission would remain out of bounds for Indians till 1922. Two years after the ICS exams started being held in India from 1922 onwards, in 1924, the Lee Commission recommended early establishment of a Public Service Commission in the country. From 1926 onwards, the SSB handed over the responsibility of recruitments to this very Public Service Commission. Sir Ross Barker served as its chairperson till 1932.

A new proposal under the Government of India Act, 1935, established a Commission for both the federation and each province or group of provinces. By the time this new format — the Federal Public Service Commission (FPSC) — rolled out in on April 1, 1937, and Sir Eyre Gordon took over from Sir David Petrie as its chairperson, India was merely a decade away from Independence. Already, the Constitution was being debated and provisions were being framed for an independent recruiter of civil servants in India.

When India became independent on August 15, 1947, the FPSC was headed by its first Indian chief, H K Kripalani. After him, R N Banerjee headed the Commission from 1949 to 1955. During his tenure, the Constitution came into effect, as did two change of names — the FPSC was now the UPSC, while the ICS was renamed as the Indian Administrative Service (IAS).

The UPSC's most prestigious examination is the Civil Service Exam (CSE). Nearly 10 lakh candidates apply for the preliminary test (Civil Service Aptitude Test or C-SAT) for recruitment to the three all-India services — IAS, Indian Police Service and

Indian Forest Service — and several other services, called Central Civil Services. In 2022-23, the UPSC received and processed 33.51 lakh applications. Despite the massive number of applicants, the fee for UPSC exams is among the lowest compared to that of several state Public Service Commissions.

The UPSC's Dholpur House headquarters, where it shifted in 1952, too has an interesting backstory. Belonging to the erstwhile Raja of Dholpur, Uday Bhan Singh, it was transferred to the government after Independence, when the Raja decided to merge his state with the Union of India. The Raja was then appointed as the Rajpramukh (similar to a Governor) of the Matsya Union, a state created with the merger of some princely states after Independence. This building continues to be the house of UPSC.

Over the years, the UPSC instituted several reforms within. It has also disclosed several details related to its exams after Right to Information (RTI) queries were filed, though it resisted the law at first.

Various commissions and committees — the first Administrative Reforms Commission of 1966 (headed by Morarji Desai, and later by K Hanumanthaiah), the Thorat panel of 1967 (headed by Lt Gen SP Thorat), the Kothari panel of 1976 (headed by Daulat Singh Kothari), the Satish Chandra panels of 1989 and 1990, the Alagh Committee of 2001 (headed by Y K Alagh), the P C Hota panel of 2004 and the Arun Nigavekar panel of 2012 — too have shaped the UPSC's current recruitment pattern.

As it enters its centenary year, both Central and state-level service Commissions are struggling to retain their credibility, especially in the wake of malpractice by candidates like Puja Khedkar, who was dismissed as an IAS officer in 2024.

The writer is Senior Associate Editor, The Indian Express

Bhagat Singh to students

HARISH JAIN

BHAGAT SINGH is remembered as the young man who flung a bomb in the Central Assembly, who walked calmly to the gallows, and who turned defiance into legend. Yet there was another Bhagat Singh, less often recalled — the thinker who measured the limits of violence, the strategist who recognised the strength of mass action, the writer who drafted a future in words.

Among his scattered writings, his *Message to the Punjab Students' Conference*, delivered on October 19, 1929, stands apart. It was read aloud to the gathering by Subhas Chandra Bose, who presided over the conference held at Bradlaugh Hall, Lahore. This brief text, framed as a "wireless message" from Bhagat Singh and Batukeshwar Dutt, reveals a turning point in his thought: a shift from armed militancy to a vision of mass political mobilisation rooted in socialist ideals.

"Today, we cannot ask the youth to take to pistols and bombs," the message begins. The sentence is startling in its candour, coming from a man who only months earlier had carried out the Assembly bombing and had stood unrepentant in court. But this was not a renunciation of revolution. It was a sober recognition that sporadic acts of violence could not carry the weight of a national movement. Bhagat Singh had seen how the assassination of Saunders, though dramatic, had not stirred the masses beyond outrage. He had seen how the Assembly bombs, designed as a protest, could at best awaken but not organise. The hour demanded a different approach.

With the Congress preparing to demand complete independence at its forthcoming Lahore session, Bhagat Singh understood that the stage of Indian politics was shifting. In this moment, he chose to urge students to adopt a more arduous and more enduring role — that of educators, organisers, and torchbearers of revolutionary consciousness.

For Bhagat Singh, independence was never to be defined by the mere withdrawal of British rule. "A revolution that will bring freedom and would render exploitation of man by man impossible," the message declared. Here, in one phrase, lies the mature Bhagat Singh: nationalist, socialist, and humanist. His was not the

dream of a flag replacing a flag. It was the abolition of all forms of exploitation — imperialist, capitalist, feudal, and casteist. The words echo unmistakably of Marxist thought, but they are also grounded in India's own reality, in the villages and slums where millions lived in poverty.

To him, a struggle that ended with the transfer of power to a new Indian elite would be no liberation at all. True freedom meant economic justice, social equality, and a republic built on solidarity. That vision, he told the youth, was their responsibility to carry forward.

The students, he argued, must become the channels through which this revolutionary message flowed. "The youth have to convey the message of revolution to the farthest corner of the country, to the sweating millions in factories, slums, and village huts." The appeal is remarkable not only for its breadth but also for its clarity.

On his birth anniversary, it is fitting to recall not only the image of Bhagat Singh walking to the gallows, but also his voice, his message

ty. It was not addressed to leaders or notables, nor to the educated elite alone, but to those living in "worn-out cottages" and "industrial slums". Bhagat Singh was redefining the very constituency of politics: the poor, the workers, the peasants. And it was the educated youth, with their relative freedom and access, who were charged with the task of awakening them.

The revolution was to be built not on isolated conspiracies, but on the slow, patient, and disciplined work of consciousness-raising.

In making this appeal, Bhagat Singh also turned to his own province. "The Punjab is considered politically backward," he admitted. Rather than bask in the martial pride of his homeland, he asked its students to confront the stigma of inertia and prove it false. Responsibility, he reminded them, was not distributed evenly by geography; it had to be assumed. And to give flesh to this responsibility, he invoked the fresh memory of Jatindra Nath Das, who had died only weeks earlier

after a 63-day hunger strike in Lahore Jail.

"Following the glorious example of our great martyr Jatindra Nath Das," he urged, let the youth rise with fortitude and firmness. Das' sacrifice was not to be mourned in silence but to be translated into action. In that moment, Bhagat Singh turned martyrdom into pedagogy, grief into fuel for organised struggle.

What emerges from this brief message is not just an exhortation but a political doctrine. Students were not to be mere demonstrators or temporary recruits to a nationalist cause. They were to be the vanguard of an ideological movement, tasked with spreading socialist consciousness, organising the dispossessed, and shaping the moral compass of the nation.

Bhagat Singh's tone is not romantic, nor is it sentimental. It is instructive, precise, and demanding. He does not flatter the youth; he burdens them. He does not call for blind sacrifice; he calls for clarity of thought, discipline, and political responsibility.

Bhagat Singh had entered politics as a teenager — impatient, impulsive, and drawn to the drama of conspiracy. By 1929, in jail and surrounded by comrades, he had grown into a thinker who could look beyond the immediacy of action. His subsequent essays — on atheism, on the meaning of revolution, on the tasks of young political workers — would deepen this philosophical turn. But already here, in this message, we see him moving from passion to purpose, from the romance of violence to the architecture of social transformation.

The Tribune, in its October 22, 1929, report on the conference, noted: "The president then read the following message which he said the conference had received by wireless from Bhagat Singh and Mr Batukeshwar Dutt." How the message could have been transmitted "by wireless" from revolutionaries confined in jail is a puzzle. More likely, it was a rhetorical flourish or a device to dramatise its arrival. But the fiction itself is revealing. It suggests how the figure of Bhagat Singh had already become larger than life — his words expected to leap over prison walls, to travel invisibly across airwaves, to speak to youth as if by direct communion. Myth was being woven even as history unfolded.

He glorified not death, but purpose. His revolution was not merely against colonial rule, but against injustice itself.

— The writer is an author and publisher

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The American Dream has not died, but has certainly earned itself a hefty price tag, both in dollar terms and in terms of peace of mind

Plan B if no H-1B



PREKSHA TREHAN

UNTIL last week, Supriya Mehta, an international student at the University of California, Berkeley, was happy that her life was headed in the right direction. A senior at college, she had a job offer from a company where she had interned the previous two summers. "I thought I would have to go back to Delhi after graduation. Then I got this job and I was so happy I could stay back and work in the US." After starting work under the Optional Practical Training (OPT) program, a benefit granted to F-1 student-visa holders that allows them to work in the US for up to three years after graduating, she planned to apply for the H-1B visa. President Donald Trump's new visa rules, announced last Friday, have thrown a wrench in her plans. The future is, once again, uncertain.

Now, Supriya says, she dreads opening her inbox, certain that a mail regarding the job offer will come any day. After all, most companies are unlikely to pay the steep \$100,000 fee required to apply for an H-1B visa for a fresh graduate.

On September 18, President Trump unveiled new rules for foreigners holding H-1B visas, a visa category that allows highly educated individuals or those with special skills to work legally in the US. A fee of \$100,000 would have to be paid by companies for each employee on the visa. The proclamation was met with immediate panic by the sizeable Indian community

in the US—out of the 7.3 lakh H-1B visa holders in the US, over 70 per cent are from India. "It's time to start packing our bags," was the reaction of a senior IT executive in the Bay Area employed with a Pune-based company.

A clarification from the White House on September 21, that the fee would apply only to fresh H-1B positions and would not affect current visa holders, was greeted with relief. For the moment at least, it seemed the storm had blown over. However, a realisation of how vulnerable foreign workers are in the US and how a single statement from the President has the potential to upend lives continues to linger in the Indian community.

On Tuesday, the Trump administration added another proposal to the visa rules that seeks to prioritise higher paid and higher skilled international workers in the H-1B lottery system that until now has been random, giving all petitioners an equal chance.

For international students, all these measures have made the prospect of landing a job after graduation extremely remote. At a time when fresh graduates are seeing record levels of unemployment—according to the Federal Reserve Bank of New York, the unemployment rate among recent college graduates rose to 5.3 per cent in March 2025, up from 4.8 per cent a year earlier—the outlook for international students hoping to work in the US is even more bleak.

Even before the latest visa rules, it was hard enough to land a job. It is common for

job applicants to apply to hundreds of positions and not hear from a single place.

Poonam, a Bay Area-based volunteer educational consultant, shares the case of her nephew, who graduated with a Master's degree in investment banking from Northeastern University in February and has still not found a job. "He has applied to more than 150 positions and not heard back from anywhere," says Poonam. The 23-year-old is currently living with friends, stuck between a tightening job market and India-based parents who say he shouldn't consider coming back to India until he gets an H-1B visa. "We worry about him," says his aunt, "his life has not even started yet."

Realistically, no company is going to be willing to pay \$100,000 to hire fresh gradu-

ates. The new lottery system will also make it harder for lower wage entry-level workers to get visas. The OPT, once a ray of hope for international students, especially those in STEM, now appears to be a pipe dream. "No one is hiring OPT anymore," says Poonam. "No company wants to waste its time training an employee for three years if there is no chance that the person will get an H-1B visa."

So, is this the end of the American Dream for international students? Not necessarily, says Poonam, "American education is still a worthwhile experience. If one can afford it, it is definitely worth coming to the US for. Just don't expect to stay here." This is a sentiment that Manu, a Pune-based mother whose son is studying in an Ivy League university, agrees with. "Even though we are investing a lot in his education, when we started applying to US universities, jobs and H-1B were not a major criteria for us. Our sole aim was getting the best education."

While some might agree with this approach, many are bound to rethink their educational plans. Given the price of getting a US degree, which can be anything from \$80,000 to \$100,000 for a four-year degree, the prospect of not being able to work in the US post-degree will likely be a deal breaker for the vast majority of students. "It is time for a plan B for Indians headed to the US," says Sanjeev, a senior human resources executive.

Supriya speaks with equal parts easy and hanging about. Friends who moved to

Germany and Singapore for work. Once the dreaded mail arrives, those are the destinations she plans to set her eyes on. "I am not going to give the best years of my life to a country that doesn't want me," she says. "After all, the US isn't the only option. Germany, UK, South Korea and China have already taken steps to attract talent away from the US."

For those already enrolled in US universities, it might not be feasible to move to other destinations before graduation. However, some do not plan to bother looking for jobs in light of the new rules. "I am going to cut my losses," says Subhash, a third-year Computer Science student at San Jose State University. "I will start applying for jobs in Canada and Australia. If I do not get anything by the time I graduate, I will go back to India and work there. My parents have taken a big loan to fund my education and I cannot afford to be unemployed."

Soma, like Anushka, a pre-med student at Michigan State University, have already set the wheels of plan B in motion. Her parents have started the process of moving to Australia, where she plans to join them and enrol in a medical school.

While the American Dream has not died, it has certainly earned itself a hefty price tag, both in dollar terms and in terms of peace of mind. It still remains to be seen how many will be willing, or are even able, to bear the cost.

—The writer is a freelance contributor based in San Jose, USA

President Trump's new rules for H-1B visas have caused panic among Indians in the US—out of the 7.3 lakh H-1B visa holders, over 70 per cent are from India. **PREKSHA TREHAN**



Make the State School System Fit for Purpose

India's education sector has become a perpetual sandbox—endless reforms, pilot projects and big-bang ideas keep rolling in, but old gaps linger, and new ones emerge. As the Fifth National Conference of Chief Secretaries approaches in November, the education ministry has red-flagged uncomfortable truths: high dropout rates (halved in two years, says MoSPI, but still alarming), deep learning gaps, private schools largely missing the reform bus and the urgent task of future-proofing 43 million higher education students for an AI-driven world. In short, India faces a formidable human capital challenge that could derail the dream of Viksit Bharat.

It isn't as if nothing has worked. Sarva Shiksha Abhiyan, the Right to Education Act, midday meals and anganwadis expanded access and retention. More children now enter classrooms and stay longer. But learning outcomes remain stagnant, and the weakest link—teachers—continues to hobble progress. Appointments riddled with politics and patronage, inadequate training and poor accountability mean that too many children pass through school without acquiring even basic skills.



This is the moment for the chief secretaries' conference to stop recycling familiar slogans. Identify interventions that improved outcomes in elementary education and replicate or adapt them to stem losses during the critical transition from upper primary to secondary school. Make the state school system fit for purpose—schools parents want to send their children to, not those they settle for. At the core lies one truth: without committed, competent teachers, no reform will stick. India needs a selection and training system that attracts talent, rewards merit, and equips teachers to prepare a generation to learn, innovate and thrive. That is the only way to deliver on the promise of Viksit Bharat.

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Anil Nagar

India's education system has expanded dramatically in recent years, democratising access across geographies and social groups. But while degrees have become more accessible, employability has not. Each year, over 10 million students graduate, yet, fewer than half meet industry-defined benchmarks for job-readiness. This gap is not a reflection of low aspiration or poor intent. It is a systemic issue rooted in how we define, deliver, and measure education.

Disconnect

There is a dangerous illusion that completing a degree is the same as building a career. For many young people in India, especially in smaller towns, higher education is treated as an automatic gateway to employment. However, only 8.25% of graduates find jobs related to their field of study. Most are either left underemployed or pushed into unrelated roles, not due to lack of intelligence, but due to lack of direction.

Our education system remains syllabus-driven and exam-oriented, rarely aligned with actual market needs. The result is a generation of graduates, confident in theory but underprepared in application. In sectors like engineering, the disconnect is even sharper, with over 80% of graduates deemed unfit for core roles.

A critical gap in India's education-to-employment journey is the absence of hands-on exposure. With limited industry touchpoints, especially in non-metros, students graduate without workplace awareness, communication skills, or portfolios that re-

cruiters expect as a baseline. This is further widened by an ecosystem that rewards course completion and enrollment numbers, not placement outcomes. Institutions have little incentive to build employer networks, integrate applied learning,

or support structured mentorship. Students are left navigating the most critical phase of their lives – career launch – largely on their own.

Looking ahead

The way forward lies in rethinking education not

as a product but as a full-stack system that drives employment. This means introducing students early to the landscape of career possibilities through localised, relatable role models and vernacular resources. Skilling must follow, but in industry-aligned formats

that are accessible and affordable. Mentorship should no longer be optional. It must be embedded through digital coaches, alumni engagement, and structured guidance that helps students match their strengths to the right opportunities.

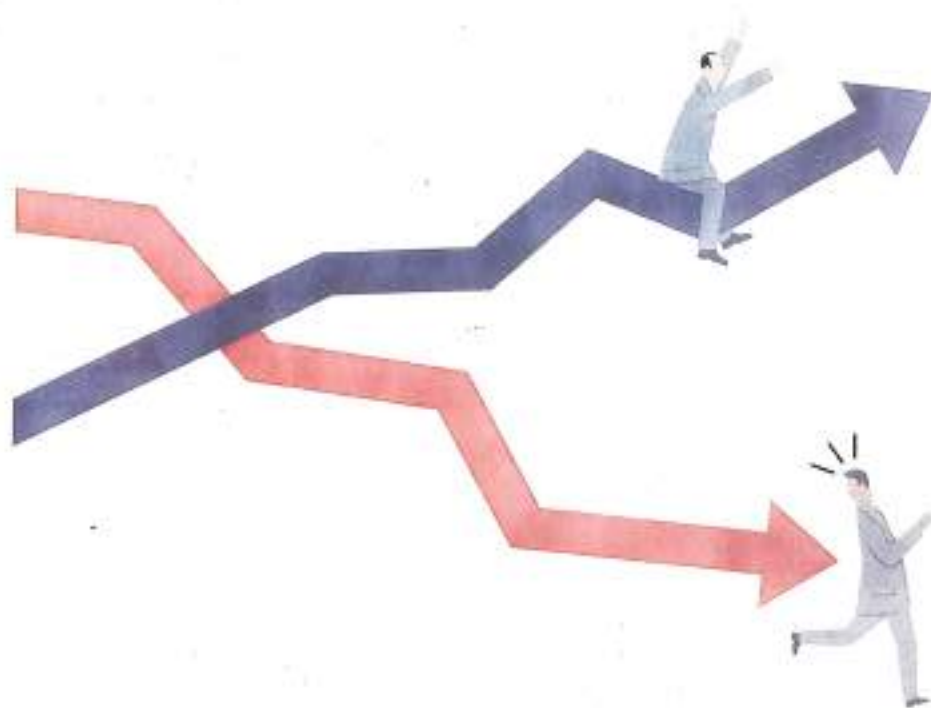
Finally, placement support must go beyond urban job portals. We need regional placement ecosystems that reflect local economic realities, connecting graduates to jobs in BFSI, digital services, logistics, healthcare, and beyond. Job creation isn't a peripheral goal; it is the test of whether our education system works. If education is reimagined as a system, it must be wired into demand, employer partnerships, local enterprise incubation, and clear employment pathways. This means creating jobs and not just churning out graduates.

India's ed-tech sector has a critical role to play in enabling this transformation. But the entire focus needs to shift from enrollments to measurable, long-term outcomes. We can no longer measure progress by scores or degrees alone. The real metric is 'how many young Indians find jobs that align with their skills?' It is time we stopped asking, "How many graduated?" and start asking, "How many progressed?" It is not the certificate that secures the future; it is the pathway.

The writer is Founder and CEO, Adika Education.

The graduate dilemma

We need to rethink education not as a product but as a full-stack system that drives employment



GETTY IMAGES/ISTOCKPHOTO

Quality learning can accelerate growth

PATRANGA BASU

A nation is recognized by the presence of educated, rational and responsible citizens, just as the strength, potential and purpose of an apple tree are inferred from ripe and nutritious apples and not from the hundreds of fruits that remain undeveloped, immature and insect-ridden. Good education right from the school determines a child's ability to become a respectable citizen.

School education imparts wonderful knowledge gathered by our ancestors and predecessors over generations, spreading thousands of years. The knowledge is acquired by tremendous enthusiasm, energy, labour and initiative. Every generation adds to it and thus knowledge grows.

'Knowledge is dead.' But a school nurtures and serves living beings - the budding humans. Schools should transform young learners into future citizens who can contribute to the community with rational and logical thinking. The school system is not meant for rote learning but for training each individual to think and act independently. The pupils today should become part of society but with individual dignity and honour.

Young pupils aerated with energy and creativity must have dreams. Schools hold the responsibility to guide the tremendous energy of children into the right direction. Even if the goals are not achieved, the journey of life on the right path will give them immense gratification and happiness. Children should also learn the crucial lesson of managing failures. History tells us that it is a hard struggle to make the life of mankind better

as a human being has a terrible capacity for destruction.

It is important that the children are asked in schools to actually perform - writing a composition, translating a text, solving a mathematical problem, experimenting with physics' laws or with chemical reactions, practising sports events or performing an art. Such performances ignite one's mind, strengthen the physique and generate confidence. The pupils start to ask questions.

Undoubtedly one of the greatest problems plaguing our education system in India is that an enormous number of children do not learn to read or write or learn elementary mathematics at an early age. They cannot comprehend what they read. This creates impediments for their higher learning and employment. A large proportion of these pupils are first-generation learners. They would not get any assistance from home. Schools are the only resort for them. But various reports, findings and surveys tell us grim stories.

The ASER Survey 2010 raised a pertinent question: 'Is the child who enrolled in Std I in 2006, and who has reached Std 5 today, in a better position than his or her counterpart who was in Std 5 in 2006?' The findings were not at all comfortable. Again, in 2025, the ASER Survey 2024 noted that 'children in government schools in Std 5, apart from a decline in reading levels between 2010 and 2012,' had reading levels that over time are 'low' and 'stuck'. 'Percentage of children in Std V who can read Std II level text is only 48.'

This figure remains almost the same since 2010 when it was about 50 per cent. ASER 2024 further reported: 'The gap in reading levels between children

enrolled in government schools and private schools seems to be growing over time.' The performance of children in number recognition, counting and simple arithmetic is no better. In essence, school education is in a dismal condition though the performance varies from state to state. It indicates rote learning still dominates and shaping of a child's life is a distant prospect. A large section of children remains undeveloped.

The capacity to read, write and count, i.e. basic education, has a powerful effect on the quality of life of citizens. Written elements like government notices and newspapers play crucial roles in modern society. The ability to understand written information is essential to live with dignity. 'Being illiterate is like being imprisoned and school education opens a door through which people can escape incarceration' (Amaritya Sen). Illiteracy generates insecurity and alienation. However, expansion of basic school education in India is remarkably slow.

Data reveals the adult literacy rate for ages 15 years and above was merely 48.5 per cent in 1991 (i.e. half the adult population was illiterate). It has now risen to 77 per cent in 2023 after reaching 68 per cent in 2001 and 69.3 per cent in 2011. It took almost 30 years to increase 30 percentage points in literacy. Women are particularly vulnerable with only 70 per cent adult women being literate now as against 85 per cent of adult men. This shows disparity and lack of opportunity for women. Good schooling for young women in our country will substantially enhance the voice and power of women in families as well as in society and economic activities of the nation.

School education is the prime ally of poor families. Basic education

for them has become essential to tide over their precarious monetary situations. They would not be able to participate in economic activities if they cannot read and write. Even the poorest of the families perceive the importance of education and send children to neighbourhood schools. However, the poor must have opportunities to access good education - 'the weaker should be given more chances than the stronger'.

But the reality is starkly different. The chances of getting free education in government schools by the poor are getting reduced. In ten years, from 2014-15 to 2023-24, 89,441 government schools in India have closed down, an 8 per cent decline. It is conveyed that most closures resulted from a merger policy often called 'rationalisation'. The primary reason for merging these schools was low enrolment. This requires serious review of why enrolment in government schools is decreasing. On the contrary, the number of private schools during the same time period increased by 42,944, a 14.9 per cent rise. The cost of education in private schools is nine times higher than in government schools. This state of affairs obviously denies poor children easy access to education.

Are all children in India going to school? Enrolment for 6 to 14 year-olds which was 96.7 per cent in 2014 has increased to 98.1 per cent in 2024. However, this almost near universal enrolment over a decade does not convert to full overall literacy, which is 80.9 per cent for those aged seven and above. Drop outs at all levels - 2 per cent at primary, 5 per cent at upper primary and 14 per cent at secondary levels - is a major hindrance for full literacy. Another



report suggests that an alarming number of over two crore children dropped out of school from classes 1 to 8 in just three years from 2021 to 2024. Premature departure of students from the education system represents significant wastage of resources.

Students who leave before completing at least secondary education are more likely to be pushed to low paying, insecure, informal work and would face low self-esteem and reduced confidence. Their family would suffer. Drop outs reinforce poverty and inequality. Society will be losing talent which ultimately lowers economic growth and development.

Poor learning outcomes in schools and drop outs affect mostly the underprivileged. It is time to cover the huge backlog in basic skills by urgently addressing it on a mass scale. Deep thinking and wide deliberations in the public domain about what ails school education must help us find a way out of the stagnation. After all, the function of education is 'to open the way to thinking and knowing' and schools must serve that end universally.

(The writer is a cost accountant who retired from a public sector power utility.)

The ontology of teaching and the burdened self



SAKSHI
SETHI

2ND THE PIONEER OPINION

In the towering edifice of education, teachers and school leaders are often portrayed as tireless sentinels — guardians of knowledge and architects of young minds. Yet behind the chalk-streaked hands, carefully drafted lesson plans, and calm demeanours lies a truth often overlooked: educators are not superhuman.

They are ordinary individuals, subject to the same anxieties, stress, and emotional upheavals as anyone else. Parental expectations, though rooted in care, frequently slip into the realm of the unrealistic. Many parents look to schools for an all-encompassing package — academic excellence, flawless character development, and thriving co-curricular participation. Teachers are expected to be endlessly patient, perpetually creative, and infi-

nately available. Few pause to consider the immense burden these demands place upon those already stretched thin. A teacher is far more than a conveyor of knowledge. They are mentors, counsellors, and sometimes even surrogate parents. Beyond the classroom, they balance lesson preparation, assessments, administrative duties, and the ever-shifting landscape of digital education. The pandemic amplified this reality. They are expected to resolve conflicts with Solomon — like wisdom, enforce discipline with delicacy, and oversee complex institutions with machine-like precision. To many, a school leader becomes less of a person and more of a system — programmed for endless productivity. Yet beneath the polished exterior lies a human being wrestling with sleepless nights, personal dilemmas, and the crushing responsibility of shaping an institution.

This tendency to view educators as functionaries reflects a troubling dehumanisation of the profession. It overlooks the daily emotional labour: the quiet encouragement offered to a timid child, the patient repetition of a concept until understanding blooms, or the discreet attention given to a struggling student's mental health. These gestures, rooted in empathy and connection, rarely feature in report cards or school rankings,

yet they define the essence of teaching. Like everyone else, teachers and school leaders require rest, validation, and compassion. A single word of appreciation from a parent, a gesture of trust, or even the acknowledgement of "you are doing enough" can rejuvenate a weary educator. It is time, therefore, to recalibrate the parent-teacher relationship from one of demand and delivery to one of partnership. The irony is striking: while schools emphasise emotional intelligence for students, society often disregards the emotional ecosystem of those who teach. Teachers may be showered with ceremonial praise, but in moments of difficulty, they are reduced to faceless professionals. What is needed is not episodic reverence but sustained recognition of their humanity.

As each school year unfolds, it is worth remembering a teacher's smile may conceal exhaustion, and a principal's calm may hide turmoil. To humanise educators is not to excuse inefficiency but to affirm that they, too, deserve grace and understanding. Only when we accept that teachers are human and leaders are not machines can we nurture an education system rooted in compassion. A cared-for teacher, after all, is the surest catalyst for a cared-for generation.

The Pioneer
SINCE 1983

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सुधार की मांग करती प्रवेश प्रक्रिया

दिल्ली विश्वविद्यालय के 30 प्रमुख कालेजों में रेजुएशन की करीब नौ हजार सीटें अभी खाली हैं। जहां नियमित पढ़ाई की शुरुआत आमतौर पर जुलाई के मध्य में होती थी, वहीं इस वर्ष सितंबर के अंत तक भी दाखिला प्रक्रिया जारी है। पिछले वर्ष भी प्रवेश प्रक्रिया में गड़बड़ियों के कारण दाखिले अक्टूबर में समाप्त हुए थे। ऐसे में छात्रों को पढ़ाई के लिए समय कब मिलेगा? अक्टूबर का महीना दशहरा, टीवाली और छठ जैसे त्योहारों में व्यतीत होगा तथा दिसंबर के अंत में क्रिसमस और नए साल को छुट्टियां भी आ जाएंगी। विश्वविद्यालयों में प्रवेश के लिए चार साल पहले एक कामन प्रवेश परीक्षा की शुरुआत की गई थी। इस प्रवेश परीक्षा का सबसे बड़ा दुष्प्रभाव गांव के गरीब बच्चों पर पड़ा। वे आनलाइन परीक्षा कंप्यूटर पर देने के लिए उतने अभ्यस्त नहीं होते। इसके अलावा उन्हें जो विषय पढ़ाए गए हैं, परीक्षा में उनसे अलग प्रश्न पूछे जाते हैं, जिसके लिए शहरों में कोचिंग का धंधा तेजी से फैल रहा है। इसका परिणाम यह है कि पिछले चार वर्षों में लड़कियों के दाखिले की संख्या में कमी आई है। साथ ही दूसरे राज्यों से आने वाले बच्चों की संख्या में भी गिरावट आई है। किसी भी अच्छे विश्वविद्यालय के लिए यह अच्छे संकेत नहीं हैं, विशेषकर केंद्रीय विश्वविद्यालयों के लिए। इसका और भी बुरा परिणाम यह है कि बच्चों को अपनी रुचि के विषय में दाखिला नहीं मिल पा रहा है।

दिल्ली विश्वविद्यालय के प्रमुख कालेजों में कंप्यूटर, विज्ञान, गणित जैसे विषयों में भी सीटें खाली हैं, जो आवश्यक हैं। हिंदी और संस्कृत जैसे विषयों में दाखिले का हाल तो अतीत में भी अच्छा नहीं रहा, लेकिन वर्तमान में इसमें इतनी गिरावट आई है कि कहीं ये विभाग बंद न करने पड़ जायें। दिल्ली विश्वविद्यालय समेत अन्य केंद्रीय विश्वविद्यालयों में हिंदी और संस्कृत जैसे विषयों को पढ़ने के लिए बच्चे आगे नहीं आ रहे हैं। सरकार ने भारतीय भाषाओं को बढ़ावा देने के लिए कई कदम उठाए हैं, फिर भी समाज में अपनी भाषाओं में पढ़ने के प्रति उत्साह नहीं



प्रेमपाल शर्मा

केंद्रीय विश्वविद्यालयों में प्रवेश के लिए होने वाले कामन यूनिवर्सिटी एंट्रेंस टेस्ट की समीक्षा की जानी चाहिए



छात्रों की समस्याओं पर ध्यान देने की आवश्यकता • फइल लौट रहा है। छात्रों को यह बताने की आवश्यकता है कि अब अपनी भाषा के माध्यम से वे केंद्र समेत राज्यों की सभी नौकरियों में आसानी से भर्ती हो सकते हैं, लेकिन छात्र अब भी अंग्रेजी की ओर दौड़ रहे हैं। उनके मन में यह बैठ गया है कि भले ही सरकार कितने भी प्रयास करे, हिंदी और संस्कृत पढ़ने से नौकरी नहीं मिलेगी। सीटें खाली रहने का एक और कारण यह है कि पिछले कुछ वर्षों में केंद्रीय विश्वविद्यालयों के कालेजों में फीस कई गुना बढ़ गई है। इससे विद्यार्थियों को लगता है कि फिर बीबीए, एमसीए, जैसे व्यावसायिक कोर्स अपने गांव के आसपास क्यों न किए जाएं?

केंद्रीय विश्वविद्यालयों में एक कामन प्रवेश परीक्षा से दाखिले का विचार इसलिए आया था, क्योंकि अलग अलग राज्यों में 12वीं के अंकों का प्रतिशत समान नहीं होने से विद्यार्थियों को अलग अलग विश्वविद्यालयों में भगना पड़ता था, लेकिन इसका विकल्प तो आया, उसने रिश्तियों को और खराब कर दिया है। जो दाखिले की प्रक्रिया 15 जुलाई तक पूरी होकर पढ़ाई शुरू

हो जाती थी, अब उस किर्लव के कारण बच्चे निराश होकर निजी विश्वविद्यालयों की ओर भाग रहे हैं, जहां फीस कई गुना अधिक है। कोचिंग का धंधा भी इससे बढ़ा है। नई शिक्षा नीति बार-बार रटने पर लगाम की बात करती है, लेकिन इस प्रवेश परीक्षा में तो रटना और भी अनिवार्य हो गया है। अमेरिका, इंग्लैंड और यूरोप के देशों में प्रारंभिक शिक्षा में कंप्यूट्रिकेशन पर सबसे ज्यादा जोर दिया जाता है। यानी वहां बच्चों की पढ़ना, लिखना और बोलना सिखाना सबसे जरूरी है। नई प्रवेश परीक्षा में जहां मल्टीपल च्वाइस प्रश्न होते हैं, वहां उत्तर लिखने की आवश्यकता ही नहीं पड़ती। आज जब अमेरिकी राष्ट्रपति बीजा फीस बढ़ाने से लेकर भारतीय विद्यार्थियों के लिए नई नई मुसोबतें पैदा कर रहे हैं, तब हमें तुरंत ऐसे कदम उठाने होंगे जिससे हमारी युवा पीढ़ी निराश न हो। विश्वविद्यालयों का उद्देश्य उनका रचनात्मकता को बढ़ाना होना चाहिए, न कि रोकना। चार वर्षीय स्नातक प्रोग्राम के चौथे वर्ष में हर विषय में सीटें खाली हैं। इससे शोध की गुणवत्ता भी प्रभावित होगी।

पिछले वर्षों में सीटें खाली रहने के कारण देश के कई राज्यों, विशेषकर उत्तर प्रदेश, आंध्र प्रदेश और महाराष्ट्र में कई इंजीनियरिंग कालेज बंद करने पड़े हैं। दिल्ली में करीब एक दर्जन प्रतिष्ठित विश्वविद्यालय हैं, जिन पर प्रति विद्यार्थी खर्च भी देश में सबसे ज्यादा आता है। इस समय दुनिया का ज्ञान सर्वत्र सुलभ है। हमारी युवा पीढ़ी बहुत मेहनती है। यह दुनिया के सभी देश कहते हैं और इसका प्रमाण भी है। दिल्ली केवल राजनीति और सत्ता का केंद्र नहीं है, बल्कि शिक्षा एवं संस्कृति का भी उभरता केंद्र है। इसलिए दाखिले की प्रक्रिया से लेकर शिक्षा, पाठ्यक्रम तक सभी पहलुओं पर तुरंत ध्यान देने की आवश्यकता है। अन्यथा यह उक्ति चरितार्थ होगी कि भारतीय विश्वविद्यालय तो बस तीन काम करते हैं—एडमिशन, इलेक्शन और एग्जामिनेशन। हमें शिक्षा नीति में इन पहलुओं पर तुरंत ध्यान देने की आवश्यकता है।

(भारत सरकार में संयुक्त सचिव रहे लेखक शिक्षाविद हैं।)

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