THE HINDU

Monday, December 29, 2025
CHENNAI

EDUCATIONPLUS

GET THE EDGE Follow us facebook.com/thehindu twitter.com/the_hindu instagram.com/the_hindu

New ways of learning

An educationist considers some crucial differences between higher education institutes in India and the U.S.

A. Joseph Dorairaj

As an educationist who has visited dozens of higher education institutes in India and the U.S. and interacted with faculty and students, I have found major differences between Indian HEIs and their American counterparts.

Most American HEIs are international in character. No matter which department or discipline, there are faculty from different parts of the world and students of different races, complexions, world views, and sexual and ideological orientations. This leads to cultural plurality and promotes diverse viewpoints and debates, making teaching-learning dialogical and meaningful. In contrast, even top-ranking Indian institutions have hardly any international faculty. At the most, there are a couple of visiting professors who may spend a maximum of one semester teaching one or two courses. This extends to the student body as well, leading to an acute absence of cross-cultural discussions and debates.

Variety of activities

American campuses are buzzing with various activities: intellectual, cultural, political, sports and more. The Ivy League institutions are members of the Ivy League Athletic Conference, making them not only intellectually vibrant but also strong in terms of sporting activities. In contrast, Indian HEIs are committed primarily to academic pursuits.

While cultural and sporting facilities are available in some, Indian institutions have a long way to go before they reach American standards. Many campuses are deserted after regular class hours. As a result, students lack a holistic dimension.

The third aspect is the contrasting teaching styles. Indian classrooms are largely teacher-centred and rote-memorisation is the norm. But American institutions encourage debates and discussions, even dissent. Teachers are guides and catalysts. Critical thinking is the bedrock of teaching-learning with problem-solving being a key strategy. Technology has been seamlessly integrated in all institutions.

Indian institutions have made some successful attempts in integrating technology with teaching-learning but much more needs to be done. Universities and colleges in India have introduced the Choice-Based Credit System but this is plagued with issues. There is hardly any interdisciplinarity. Credit transfer too is a thorny issue though there have been attempts to iron these out. Indian HEIs have a lot to learn from their American counterparts regarding the credit system, which facilitates an individual pace of learning.

American institutions, including medical and technology institutes and community colleges, focus on liberal education, which claims that knowledge is an end in itself. But, in the Indian educational system, liberal education is being discounted and the future of the Humanities is uncertain. HEIs are being turned into skill development institutes.

Assessments

There is a crucial difference with regard to assessment though both systems talk of formative and summative assessments. The American system encourages self-study and personalised learning, and emphasises formative assessment. Evaluation is individualised to a reasonable extent. There is a conscious attempt to go beyond marks and grades. In India, given the large number of classes, evaluation is standardised.

American universities are centres of excellence, especially in terms of cutting-edge research. Many top journals in diverse disciplines are published in the U.S. and the American universities boast of publishing the highest number of papers in indexed journals. Indian universities are trying to catch up in terms of the number of publications but lack of research funding, plagiarism and retraction are key challenges.

Finally, a striking difference is the stark absence of political activism on campus. In recent times, some university presidents had the courage to speak truth to power. A sizeable percentage of students in American institutions are politically active, voicing their concern for the disempowered.

On the contrary, the faculty and the students in most Indian institutions are politically non-committal though student wings of major political parties are active on campuses. But the political activism in the American HEIs is issue-based while it is drawn on party lines in Indian HEIs.

In the realm of higher education, India has a lot to learn from the U.S., especially in terms of promoting liberal education, critical thinking, interdisciplinarity, individualised learning, and holistic and transformative education. In particular, Indian HEIs should realise that political activism is not an enemy of the academia, but a tool of empowerment. If India emulates some of the best American educational practices, it can improve its ranking and stature in the international area and empower its students.

Views are personal

The writer is Emeritus Professor, Gandhigram Rural Institute, Gandhigram, Tamil Nadu. Email josephdorairaj@gmail.com

SCHOLARSHIPS

Aspire Leaders Programme
An initiative from Aspire Institute
Eligibility: Students who are first-generation learners from limited-income households, between 18 and 29 years, and are enrolled in or have completed a UG degree
Rewards: Free access to training modules, live sessions by Harvard faculty, and more
Application: Online
Deadline: January 23
www.b4s.in/edge/ALPS2

John Willett International Scholarship
Offered by Griffith University, Australia
Eligibility: Open to Asian students with minimum 4.0 GPA on a seven-point scale who are enrolling in a full-time Master of Global Development at the Griffith Business School and meet all academic and English language requirements.
Rewards: 50% tuition fee waiver for up to two years.
Application: Online
Deadline: January 26
www.b4s.in/edge/GUJW1

Young India Fellowship
Offered by Ashoka University
Eligibility: Open to those holding a recognised UG degree or an equivalent in any discipline.
Rewards: Partial or fully-funded fellowship benefits.
Application: Online
Deadline: March 23, 2026
www.b4s.in/edge/TYIF1

Courtesy: Buddy4study.com

Testing times ahead

Uncertain about your career options? Low on self-confidence? This column may help

OFF THE EDGE
Nandini Raman

I have done B.A. English Language and Literature and an M.A. Education (ECCE), and am doing B.Ed. English. The M.A. was more research-focused and I needed practical skills to teach. So, I opted for B.Ed. But I miss ECCE and am unsure of what do next. Esther

Dear Esther,

Think about what you enjoy? Do you want to work with children daily? Then, teaching is the best. If you enjoy designing learning materials and activities, consider curriculum design, training, and ed-tech content. You can also explore ECCE research. Ed-tech, curriculum design, and early-childhood consulting will offer creative freedom. You could integrate a few of these roles in career paths like early childhood curriculum designer, ECCE teacher training, academic coordinator, ed-tech content developer with preschools, NGOs, and ed-tech companies. NGOs that work in the ECCE sector are in need of people with research and classroom experience.

Consider a PG Diploma in ECCE or Certificate in ECCE, Montessori or other training programmes from institutions such as TISS, Ambedkar University in Delhi or NIEPA. If you want a stable school job in a school, then pursue PRT or Early Years Teacher roles, which can lead to bigger roles eventually.

I have a UG degree in Zoology and briefly pursued Law. I am preparing for the UPSC CSE, which was my goal. But I don't have a backup plan and am uncertain about alternative career options. Naman

Dear Naman,

You could look at roles in education, governance, communication, research, environment, and the social sector, as a research assistant or programme associate. Look for Fellowships across various organisations and research institutes.

If you enjoyed Zoology, look for opportunities in environment, wildlife or ecology such as research assistant, conservation project coordinator, research intern in ecology labs. For roles such as field biologist or lab technician, you may need some short-term certifications. Other options include academic content writer, UPSC faculty, or content creator in an ed-tech company. Your Law credentials could offer roles in paralegal or legal research in NGOs, compliance or documentation roles in corporates or law firms.

Focus on getting a stable job that will give you time to prepare for the UPSC. Consider teaching in coaching centres, a research assistant role in NGOs, content writing and so on.

I am doing a B.A. (Hons) in Political Science and International Relations. I plan to pursue a Master's in Human Rights and Humanitarian Action at Sciences Po, France. What internships and research can I do to strengthen my profile? What scholarships can I apply for? Niranjana

Dear Niranjana,

Sciences Po offers a variety of scholarships for international students such as Emile Boutmy, Eiffel, Campus France, Charpak and so on. Indicate which scholarship you are applying for in the 'Financial Information' section of your application and research the scholarships you are eligible for on the institute's website.

Internships are a great way to gain practical experience and strengthen your profile. The UN offers a variety of internships in human rights and humanitarian action. Look for opportunities at the Office of the High Commissioner for Human Rights (OHCHR), UNICEF, UNDP, and other UN agencies. Other options include Human Rights Watch (HRW), Amnesty International, International Committee of the Red Cross and think tanks.

Research can again demonstrate your academic abilities and your commitment to the field. Apply for a Research Assistantship or undertake an independent research project under the guidance of a faculty member. Publish papers in credible academic journals or present them at conferences. Take online courses in research methodology and data analysis to enhance your skills.

I am in Class 11 (Science), but don't want to pursue STEM. I want to try the CLAT or CUET and study subjects such as Economics. Will I be able to crack them, given my Science background? Nivedya

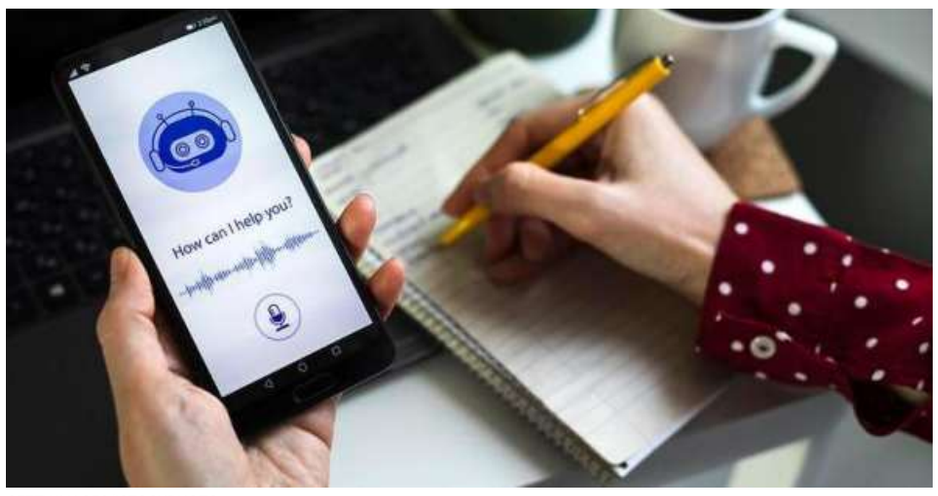
Dear Nivedya,

CLAT is a stream-neutral exam designed to test your aptitude for Law. The test has sections on Logical Reasoning, Quantitative Techniques, and Analytical Skills, which the Sciences will prepare you for. Focus on English and develop a strong reading habit and comprehension skills, as the paper has long passages. Current Affairs and General Knowledge require you to be up to date with current affairs. Legal Reasoning provides legal principles and asks you to apply them to factual situations. Your logical skills will be key. Practice with past years' papers to understand the exam.

Taking the CUET to pursue B.A. (Hons) in Economics from top universities will require you to excel in Maths, as it is mandatory at many top universities. Focus on Economics as a domain subject, as the syllabus is the Class 12 NCERT curriculum. You have ample time to study these books. A significant part of the CUET is the General Test, which includes Numerical Ability, Logical and Analytical Reasoning. A good percentage in your board exams will help. So do not neglect Classes 11 and 12. Dedicate an hour daily to your entrance exam preparation.

Disclaimer: This column is merely a guiding voice and provides advice and suggestions on education and careers.

The writer is a practising counsellor and a trainer. Send your questions to eduplus.thehindu@gmail.com with the subject line Off the Edge.



GETTY IMAGES/ISTOCKPHOTO

Beyond using AI

Incorporating AI in business and finance education is more than just a technology upgrade; it involves mindset and behaviour change.

Kartikeya Bolar

People are always saying that AI will revolutionise the working of the business and finance sector. But one critical question often goes unasked: How are business schools and finance training programmes changing to meet this new world? While it may seem like there is a tech-driven revolution in schools, the problem is not with the technology. It is with how we prepare and teach.

Fundamental gaps

First, the true gap in AI is between deans and their instructors. Leaders of institutions aim to do completely different things from what their teachers are already doing daily. A recent AACSB survey illustrates how significant this disparity really is. According to 85% of deans, their institution encourages teachers to employ AI in the class. However, only 63% of teachers agree. The disparity is much wider when it comes to using AI in the classroom: 80% of deans feel that faculty should use it, but just 55% of faculty agree. This demonstrates that the desire to do something is much higher than the ability to do it. Faculty can't assist students to go beyond the most fundamental uses of AI since there isn't enough support from the bottom up to match this top-down vision.

Second, it is meaningless to argue about whether students should utilise AI because they already do. A poll by the Digital Education Council (DEC) found that 86% of pupils already use AI in their academics. However, they are not doing so to come up with new ideas or do complicated and strategic analysis but are using it for small tasks that help them do things more quickly. The most common uses are to find information, verify their grammar, or compose the initial draft. These results are very important. Students know how to use the technology, but there is a tremendous difference between knowing how to use it well and using it sensibly. It's evident that 58% of students feel they don't know enough about AI for the workplace, even if they use it a lot. This is exactly what cutting-edge schools are seeking to remedy by shifting the focus from basic tool use to a more advanced skill: co-creation.

Co-creator

Third, the most essential new talent is not coding; it's using AI to produce things. Programming and data science have been the most talked-about AI talents for years. But the focus is shifting from the technical talent of building AI to the strategic skill of employing AI to think. The best new skill is learning how to think about challenges, ask smart questions, and engage with AI as a creative and strategic collaborator. This "mindset before toolset" way of thinking is vital to educate leaders these days. "AI is only as good as the person who uses it." That's why one needs to know how to ask better questions, make challenges transparent, and conceive of AI as a collaborator in thinking.

This method is already being used by people. Students at Queen Mary University of London are "co-creating with AI" in a business simulation by coming up with and critically evaluating a number of strategic options. Nanyang Business School teaches students how to work together to come up with GenAI prompts and then discuss the different outputs. This helps individuals question the AI's logic and prejudices instead of just taking what it says at face value. But teachers believe they don't have the time or money to teach this new style of thinking.

Fourth, AI is slowly becoming a co-pilot for teachers instead of just a tutor for kids. People have talked a lot about AI as a tailored tutor, but some top schools are now employing it to support teachers. ESMT Berlin built its own AI tool that can be used in two different ways. One helps students learn in a way that makes sense to them. The other is only for teachers and is dubbed a "course-level assistant and development partner". It helps teachers figure out where courses overlap and where they don't, come up with innovative ways to make the curriculum better, and even educate new teaching assistants by answering their questions about what they're studying. This is a true game changer because it addresses the two most popular reasons that teachers say keep them from engaging with AI: no time and not getting support. These solutions use AI to alleviate the less interesting and more administrative aspects of teaching; let instructors spend more time coaching, having important conversations, or just interacting with students.

Incorporating AI in business and finance education is more than just a technology up-grade; it involves mindset and behaviour change. As AI becomes increasingly widespread, the most important thing for leaders to know will not be how to use it, but how to master the human strategy of collaboration, critical thinking, and vision that is needed to drive it.

The writer is Associate Professor , Information Systems and Analytics, T.A. Pai Management Institute, MAHE, Manipal

GETTY IMAGES/ISTOCKPHOTO

Money matters

Why financial literacy is essential for students

Andrews Samraj

In a world dominated by digital payments, easy access to credit, and rising education costs, financial wellness has become a vital life skill for students. Many young people enter higher education lacking basic financial knowledge, often unprepared to manage expenses, loans, or savings. This knowledge gap can lead to poor money management, resulting in stress, long-term debt, and a decline in academic performance. For students, gaining financial literacy is an investment in self-reliance and stability, creating opportunities for independence and career readiness.

For many students, university is their first experience managing money on their own. Expenses such as tuition, hostel fees, transportation, digital services, and daily living accumulate quickly. Without structured financial planning, students may develop poor habits such as impulsive spending, overusing credit cards, or relying on high-interest loans and peer dependence. These habits can trap them in cycles of financial stress, impacting their studies, mental health, and even social standing among friends and family.

A structured financial wellness programme can address these concerns directly. Students benefit from practical guidance on budgeting, saving, responsible debt use, and digital finance. Skills like expense tracking, setting clear financial goals, and comprehending loan agreements empower students to stay in control. Importantly, these habits build confidence and resilience, preparing them for future responsibilities such as rent, investments, and family obligations.

Essential life skill

Financial wellness is not just about balancing a budget, it's about equipping students with essential life skills. When educational institutions invest in financial literacy, they create holistic support systems where students thrive both academically and personally. Integrating financial literacy into the curriculum or as part of regular workshops often leads to reduced dropout rates, less financial stress, and improved student engagement.

Students who are less burdened by financial worries can focus more effectively on their studies. By fostering financial independence, universities fulfil their broader mission: producing graduates able to make informed decisions in every aspect of life.

To maximise impact, financial literacy should be woven across various academic programmes, not just offered as an elective. In management programmes, it can be aligned with business economics or entrepreneurship. Engineering and Science curricula can include project budgeting or grant management, while Humanities and Social Sciences can explore financial wellness through consumer behaviour, public policy, or ethics.

Beyond lectures, engaging methods like workshops, simulations, and interactive sessions led by bankers, industry professionals, or fintech experts bring practical insights. The use of digital tools such as budgeting apps, mock trading platforms, or gamified challenges makes learning both relevant and engaging for today's tech savvy students.

In real life

To truly embed financial literacy, universities can introduce foundational skills during first-year orientation, setting the tone for students' academic journeys. Regular workshops and short courses on digital payments, borrowing, basic investing, and taxation offer continued practical support. Such content can also be included within discipline-specific courses to enhance relevance.

Peer-led initiatives, such as student clubs or mentoring programmes, further promote hands-on, relatable learning. Collaborations with banks, fintech startups, or NGOs can enrich these efforts by providing expertise and developing tailored resources, creating a holistic ecosystem where financial wellness becomes a natural part of student life.

Financial independence is increasingly recognised as a marker of resilience. Students with robust money management skills are better able to handle unexpected costs, evaluate job offers wisely, and plan for long term aspirations like advanced education, travel, or entrepreneurship. Financially confident graduates are more stable personally, supporting their professional growth.

For educators, embedding financial wellness in higher education is both a responsibility and an opportunity. Teaching practical financial skills alongside academic content ensures that students graduate not just career-ready, but life-ready as well.

The writer is Professor, Department of Computer Science and Engineering, School of Engineering and Technology, CMR University, Bengaluru.

GETTY IMAGES/ISTOCKPHOTO

The resident chapter

How communal life of hostels can be a form of Liberal Arts learning

Swathi Priya D.

Having been a day scholar and a hosteller during my college years, I have seen students thriving in their hostel lives alongside their peers. Yet we are also haunted by tragic stories of living on-campus; sometimes a broken promise rendered by the collective systems of education, expectations, and pressures that warp psychological wellbeing, trap students in despair and tragically end in suicide.

Consider another story: "My residential high school, though a small, isolated bubble, opened access to the world outside, inside, and in the interstices. Taking charge of my own space, sharing clothes, the interwoven academics and co-curricular, the intentional distance from family. It's been eight years now. This synergistic atmosphere continues to influence the way I think and sync."

A Humanities student and eventually a theatre artist cognisant of her privileged education at Rishi Valley, she believes her communal life – the combined sentiments of classrooms, grounds, dorms and corridors – broadened her world views. As a psychology educator, I recognise the synthesis of cognitive and psychosocial growth, raising a pivotal question: what constitutes residential learning in higher education?

More than place to stay

Of the social institutions – family, culture, media, community – classrooms and hostels profoundly transform an adolescent's sense of self. But residential education plays a particularly important role in Liberal Arts and Science Education and extends beyond offering a place to stay for out-of-town students. The communal living is an extension of the classroom and is essential to education itself, as opposed to hostels in Engineering and Medical college where on-campus living is optional rather than required for education. The burgeoning Liberal Arts and Science universities in India that champion residential undergraduate studies serve as fertile context for student's cohesive selfhood.

Multidisciplinary deliberations in the classroom come together with co-curricular engagements integrated with on-campus living constitute a learning nexus devised to catalyse this development. These co-curriculars are not peripheral. Rather, they encompass a deliberate milieu designed to accentuate the interface of intellectual partnerships, social learning, and emotional maturity, creating an entirely new dimension of knowledge for learners. This learning nexus is structured to encourage what the developmental psychologist James Marcia establishes in Ego-Identity Status Theory (1966) as foundational for identity formation in adolescents: Exploration (trying out different beliefs, goals) and Commitment (psychological investment in the path explored).

For instance, a student at Ashoka University studies courses ranging from Sustainability to Indian Civilisations to Mind and Behaviour to Mathematical Thinking in her foundational year. This multidisciplinary learning extends into evenings through co-curricular courses such as performing arts, visual arts, and languages. Student councils and community engagements – a co-curricular model adopted by similar universities across India – offer a striking pathway to reflection and action. Even as these contemporary pedagogies model after American liberal arts colleges, particular aspects mirror India's notable and oldest residential college education. In Tagore's Viswa Bharathi, student councils, village visits, and literary meetings seamlessly intertwine with academics fostering what Tagore called, 'the whole being'. Alternatively, Kumaraguru College of Liberal Arts and Science in Coimbatore, Tamil Nadu, blends rigorous community projects with academics for non-residential students to forge their social consciousness.

Continuity

For some, their intelligence is best realised in classroom intellectual debates. For others, it is in expressions, beats, hues, and service. For many, it is where such contemplations and actions intersect. This whirlpool of events transforms abstract classroom concepts into concrete experiences, fusing theory and practice. Through all this, students share lifestyles, collaborate on presentations, discuss entrepreneurial pitches, heal from traumas, form lasting friendships, and experience myriad forms of kindness, differences, and disturbances. Weaving them together, this intimate communal life enables an exploration of the full spectrum of their personality. Therefore, the defining difference between the residential and non-residential programme is the living-learning continuity that the former offers.

As higher education's trajectory moves towards the knowledge economy, there is greater emphasis on holistic education; one that prepares students to engage critically in an increasingly volatile and complex world. Within this space, the integrated approach is a compelling opportunity. Yet, given the student-resource proportion required in this kind of residential education, this model tends to be high-priced and largely accessible only to higher-income populations. As we look to democratise high-quality education in India, this question becomes critical: how can these institutions make this transformative route to self-making socially inclusive?

The writer is a Ph.D. scholar at the International Institute of Higher Education Research and Capacity Building, O.P. Jindal Global University.

GETTY IMAGES/ISTOCKPHOTO

Ask questions

Why curiosity is your greatest asset when studying abroad

Matthew Jaskol

When Indian students prepare to study abroad, much of the effort goes into cracking competitive exams, chasing high marks, and collecting impressive transcripts. But, once they land in a global classroom, they often discover that grades alone are not what set them apart.

What truly matters is the ability to think differently, ask good questions, and challenge ideas. Curiosity acts like a muscle: the more it's exercised, the stronger it becomes. This is especially relevant today, when employers and universities are searching for students who can not only learn, but also connect the dots, question assumptions, and create new possibilities.

The World Economic Forum's Future of Jobs Report 2025 highlights curiosity and lifelong learning as core skills for the future workforce, alongside analytical thinking and technological literacy. In an era where AI can perform calculations and process knowledge faster than humans, qualities like curiosity, creativity, and adaptability become crucial differentiators.

Global setting

For many Indian students, the transition from a rote-heavy schooling system to a discussion-driven international classroom is a cultural shift. Abroad, classes often value diverse perspectives and critical conversations as much as factual knowledge. In this environment, curiosity is welcomed as well as rewarded.

In colleges, curious students engage more actively with professors and get more opportunities. They are seen as contributors, not just participants, which builds their confidence and reputation. Professors are more likely to collaborate with students who probe deeper, wider and master high level research skills.

The benefits of curiosity also extend beyond the classroom. Global education is often seen as a stepping stone to international careers. Yet success abroad is increasingly measured by more than GPA or degrees. According to LinkedIn's Workplace Learning Report, nearly 70% of the skills required for most jobs are evolving. Critical thinking, adaptability, and curiosity are among the few "future-proof" skills that stand out across industries.

Employers today recognise initiative, creativity, and perspective-taking over just technical expertise. A student who leads a project, asks tough questions in group work, or takes the initiative to explore new solutions often leaves a stronger impression than one with a perfect grade sheet. When students step outside the textbooks and tackle meaningful real-world questions, they develop a mindset of asking, experimenting and learning that shapes tomorrow's innovators.

In practice

The good news is that curiosity is not an innate talent reserved for a few; it can be cultivated. Here are practical ways to exercise it daily:

Ask questions in class: A single conversation with a professor can reveal insights that no textbook can. Don't be afraid to raise a hand, even if it feels uncomfortable.

Engage across cultures: Studying abroad places students in diverse classrooms. Conversations with peers from different backgrounds spark new perspectives.

Step outside your major: Join clubs, hackathons, or interdisciplinary projects. Curiosity grows when students connect ideas across fields.

Say yes to opportunities: Volunteering, research assistance, and real-world projects build resilience, time management, and leadership skills.

Pursue hands-on experiences: Internships, fieldwork, and community projects allow students to test ideas and learn from mistakes in a safe but real-world setting.

Grades may open the first door, but curiosity is what keeps it open. For Indian students, studying abroad is more than just an expensive degree; it's a chance to cultivate habits of inquiry, exploration, and adaptability that will last a lifetime. Curiosity ensures that their education isn't only about securing marks, but about building a mindset that thrives in uncertainty and fuels growth in any career path.

The writer is Co-founder, Pioneer Academics.

Bring in the girls

STEM education in India needs to embrace gender diversity and allow young minds to see themselves in roles they may not typically consider

Girija Kolagada

FREEPIK

Classrooms are more than places of instruction; they are formative spaces that shape identities, nurture ambitions, and help students make career choices and learn to value perspectives different from their own. When a classroom embraces gender diversity, it promotes and normalises more inclusive conversations and allows young minds to see themselves in roles they might not typically consider.

Preconceived notions

The challenge is that, even today, women make up only about one-third of students in Engineering and Technology programmes in India, according to *Fast Facts India 2025* by Society of Women Engineers (SWE). This imbalance continues due to cultural biases that start early in life. Girls often absorb the stereotype that science and technology are meant for boys. 'Exploring Gender Bias Across Science Classrooms in India', a May 2025 post on SWE's blog, talks about an experiment conducted across Indian schools, in which 5,000 students were asked to draw a scientist. The depictions were overwhelmingly of men. Such gendered preconceptions, bolstered by a dominant masculine culture in many engineering schools, create an unsupportive atmosphere for young women. This is why building gender-diverse classrooms is essential to India's innovation story. The question is: What would a supportive, future-ready STEM education model look like?

Men and women often bring different perspectives shaped by varied life experiences, leading to more effective problem-solving with unconventional insights.

A 2023 McKinsey research shows that diverse teams are better able to radically innovate and anticipate shifts in consumer needs. In classrooms, this means a mix of ideas from design concepts to practical solutions with better collaboration and inventive outcomes. Gender-diverse STEM education isn't just a social good, but also an economic catalyst. A 2015 McKinsey study projected that advancing women's equality in India could add $700 billion to the GDP by 2025. Much of this growth would result from getting more women into STEM jobs. Additionally, diversity in R&D leads to more inclusive design in technology and avoiding biases that often arise in male-dominated teams.

Specific strategies

However, women remain under-represented among mentors and faculty. For instance, the SWE 2025 research shows that only about 8% of engineering faculty in India are women. Exposure to women mentors and peers in STEM significantly increases girls' interest and success in these fields. To create gender-diverse classrooms, India needs specific strategies at the institutional level. These include introducing ICT and technology workshops paired with programmes that build girls' confidence in Maths and Science and help counter stereotypes before they take root; expanding access to formal technical education through scholarships, bridge programmes, and supernumerary seats; adopting gender-inclusive teaching and AI literacy so that classrooms prepare all students equally for the future of work; establishing safe spaces for female students to share experiences, collaborate on projects; strengthening mentorship and role-model programmes by connecting female students with alumni and industry leaders; developing curricula focused on social impact, linking STEM to real-world issues; and institutionalising inclusive recruitment by partnering with industry to ensure gender-neutral hiring during campus placements, supported by policy incentives. By committing to inclusivity in education policy, teaching methods, and campus culture, India can nurture innovators who can design solutions for an equitable future.

The writer is Vice President Engineering, Progress Software.