

EDUCATION PLUS

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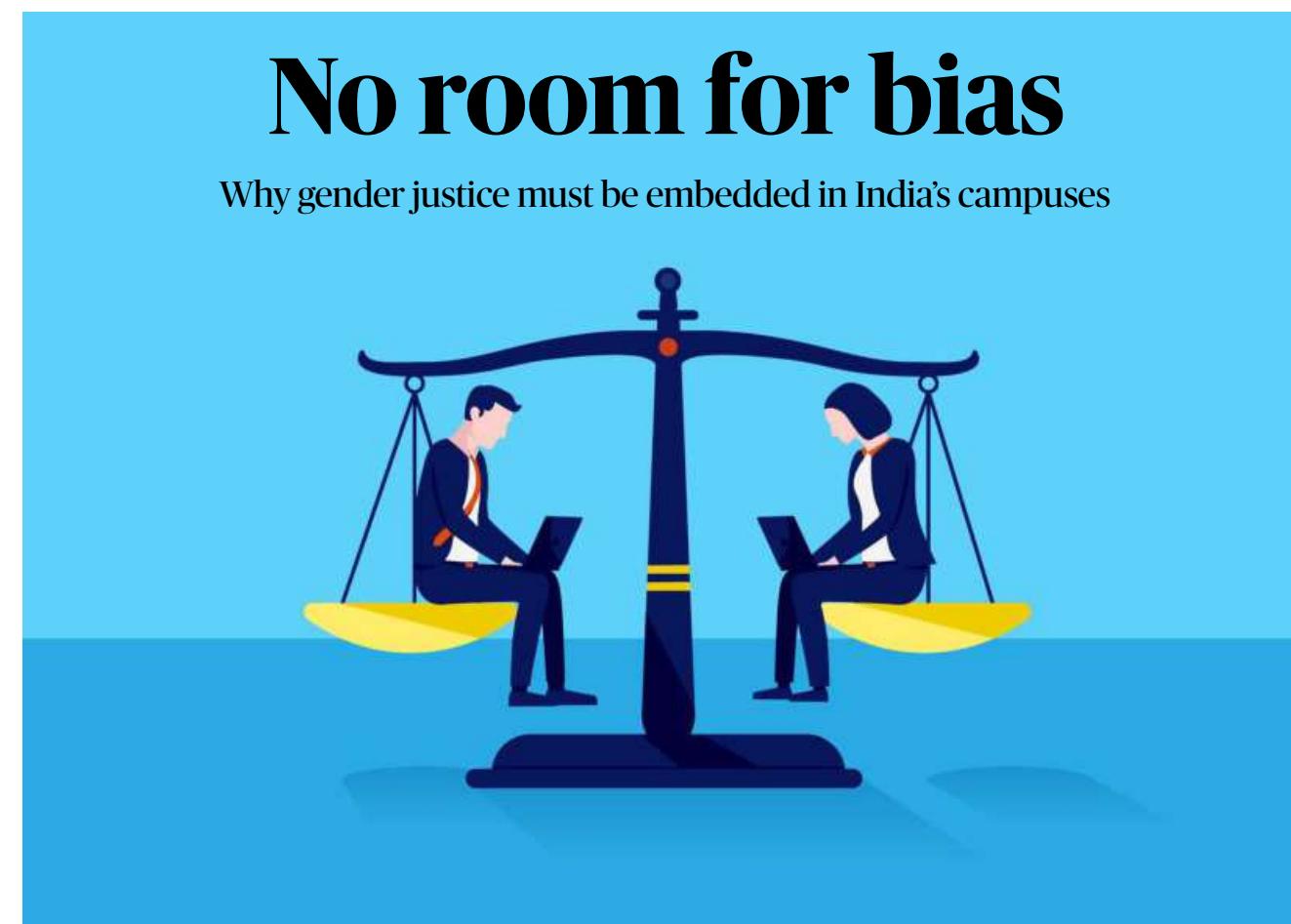
Pavithra M.B.

In an academic campus, one hopes to see equality sitting as an honoured guest in every classroom, and liberty walking without fear along every corridor. Education should be the great equaliser. Yet, in our campuses, who speaks, who is silenced, and who is invisibilised is still decided by prejudice – sometimes wearing the old mask of tradition, sometimes the new mask of "concern".

Early beginnings

The seeds of exclusion are sown early. At school, a girl may be applauded in class, yet denied a chance at the sports meet; not because of lack of skill but because someone has ruled "it's not for her". By the time she reaches college, another invisible wall rises: that of "appropriate" choices. Certain courses – those promising professional advancement – are branded unsuitable, not by syllabus, but by parental caution masquerading as care. The lofty phrase "self-determination", recited in Civics lessons, bends before the imagined ledger of marriage prospects.

Even after admission, the terrain is uneven. Opportunities for internships, research, and cultural work vanish with the early home-in hour for women. Meanwhile, the guardians of safety – the security personnel and CCTV in isolated spaces and ill-lit paths – are either absent or unreliable. Cameras stand vigilant in crowded quadrangles but blink blind in lonely stretches.



What needs to be done

Intent must be matched by infrastructure: well-lit walkways, functioning CCTV in vulnerable zones, equitable hostel facilities. "Inclusive space audits", routine in Oxford and Melbourne, can be adapted here.

Language, too, must be cleansed of bias. Official notices, recruitment ads, and learning materials should speak the language of equality. Sensitisation cannot be a one-time event; it must be recurring, engaging, and campus-wide. Peer-led ambassador programmes can serve as the first door on which the students can knock on, often before they dare approach formal authorities.

Accountability must not be reduced to the ritual of an annual report. ICC findings must be reviewed independently, and violations met with corrective – not cosmetic – action. The worth of a university lies not merely in its stone facades or its placement statistics but in the citizens it shapes. A degree may certify learning; the courage to challenge injustice certifies leadership.

True gender justice is not sentimental charity; it is a constitutional duty. In a society as plural as ours, campuses are rehearsal halls for democracy itself. If those who walk out of our gates carry with them fairness, empathy, respect and gender justice, then the institution has not only educated it has civilised.

The writer is Associate Professor, PG Department of Human Rights and Duties Education, Ethiraj College for Women, Chennai.

SCHOLARSHIPS

Legrand Empowering Scholarship

An initiative from Legrand

Eligibility: Meritorious girls, students who are differently-abled, LGBTQ+, COVID-affected, orphans or have single parents and have scored 70% or above in Class 10 and 12 and have secured admission in B.Tech., B.E., B.Arch., B.B.A., B.Com., or B.Sc. courses whose annual family income does not exceed ₹500,000.

Rewards: Variable depending on category of students

Application: Online

Deadline: September 8

www.b4s.in/edge/LFLS12

Teach for India Fellowship

An initiative from Teach for India

Eligibility: Indian citizens or Overseas Citizens of India (OCI), who will graduate by June or July 2026 and are applying for the first time for the 2026 cohort.

Rewards: ₹25,344 a month plus benefits.

Application: Online

Deadline: September 7

www.b4s.in/edge/TFIF6

Kotak Life Insurance Scholarship

An initiative by Kotak Life Insurance Company Ltd.

Eligibility: Students from Tamil Nadu and Maharashtra who have got 60% or more in Classes 10 and 12 and are in the first year of B.Com and have an annual family income not exceeding ₹360,000 or less.

Rewards: Up to ₹30,000 a year

Application: Online

Deadline: September 7

www.b4s.in/edge/KLISP3

Courtesy: Buddy4study.com

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Gear up for a challenge

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



OFF THE EDGE

Nandini Raman
I'm pursuing a PhD at a reputed institute after clearing UGC-JRF. But prolonged mental health struggles, growing misalignment with the academic path, and persistent issues with my research guide have led me to consider dropping out, though I've been warned that this could damage my career. My family is also against the idea. Will quitting affect my career across all field? Are there meaningful alternatives outside the academic world? Anjali

Dear Anjali,

I am sorry that you are going through such a hard time! Please get the help you need to feel better and focus on what before you commit to anything else. Quitting your Ph.D. does close some doors in traditional academic research and teaching but opens others in policy, development, research, consulting, writing, and the corporate world. Your skills of problem-solving, writing, communication, and analytical thinking are sought after and the UGC-NET + JRF credentials are highly valued.

Meaningful alternatives outside the academic world lie in the development sector, think tanks and policy research bodies, media and communications, government service, and so on. Explore options such as being a research associate, policy analyst, programme manager, research journalist, curriculum

designer, content developer and so on.

After UG in Biomedical Engineering, I am doing a Master's in Medical Electronics. My current programme doesn't offer any core company placements in healthcare. I'm not interested in IT. Should I pursue a Ph.D. abroad? What are the other options? Mageshwari

Dear Mageshwari,
Consider a Ph.D. abroad if you are interested in research and innovation in medical devices, biomedical signal processing, bioinstrumentation, neuro-engineering; are aiming for R&D roles in medical tech companies; or if you want academic or scientific roles in research labs, private companies or the government. Most roles in the medical device industry, clinical research, health technology, and digital health do not require a PhD. They value your technical background, adaptability, and healthcare focus.

Given your background, you are highly employable in the medical devices sector, healthcare technology, health tech start-ups, medical imaging, health informatics and so on. You can consider roles in NGOs and global health organisations such as WHO, PATH and MSF. You could also consider a Master's in Health Informatics, Biomedical Innovation, or Medical Device Design or specialised Diplomas in Clinical Engineering, Regulatory Affairs, or Quality Systems or focus on short-term courses in AI in Healthcare, Health Data Science, and Clinical Trials.

As far as fitness, acting and modelling goes, keep training, lookout for opportunities to showcase your skills. Success in this field is all about visibility and consistency. It doesn't happen overnight. Test the waters first.

Use the 80/20 principle: 80% focus should be on your job and getting a degree while you earn; 20% can go into fitness and modelling. Over time, you can work out a new balance.

I am 23. While I scored well in school, I got distracted in college and didn't complete my degree. But through self-learning and internships, I got a job as an SEO analyst in the digital marketing field, which I enjoy. I've also focused on my fitness and am considering participating in gym competitions or exploring modelling/acting. I would also like to pursue a PG degree as a way of redeeming my academic record. However, people say 'prioritise one goal', but all these aspirations feel important. My current job helps support my family. But if I chase my dreams, I risk losing that stability. How can I move forward? Suryan

Dear Suryan,
You do not have to pick one thing forever. You have to pick one to focus on right now while keeping the others alive at a sustainable pace. You enjoy your current job and it is your financial base. Do not shake this safety net for now. Try to do your PG on the side, as it seems to be that which is making you feel stuck. Validate your intellectual side. Look for an online course that is globally recognised and offers part-time study options such as remote or flexible MBAs or Master's in Digital Marketing.

As far as fitness, acting and modelling goes, keep training, lookout for opportunities to showcase your skills. Success in this field is all about visibility and consistency. It doesn't happen overnight. Test the waters first.

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 edplus.thehindu@gmail.com with the subject line Off the Edge



Seeds of success

Early exposure to business and tech can help shape a generation that's confident, capable, and career ready.

Abhijit Dasgupta

In an era defined by rapid technological change and economic dynamism, success in one's career is no longer simply about academic scores or degrees. Today, early exposure to business and technology plays a crucial role in shaping young minds into future-ready professionals, innovators, and entrepreneurs.

Whether it's launching start-ups as teenagers, building apps to solve real-life problems, or learning financial literacy at an early age, success can begin much earlier than expected.

Small starts

Early interaction with business and technology doesn't necessarily mean jumping straight into startups or coding languages. It can begin with something as simple as helping parents with small business-

es, building a blog, participating in school hackathons, or playing financial simulation games. These help develop critical life skills such as decision-making, strategic thinking, innovation, collaboration, and a comfort with ambiguity.

Take the examples of 13-year-old Tilak Mehta, founder of Paper N Parcels, and Trishneet Arora, founder of TAC Security. The former, frustrated by the delay in getting his school books delivered, built a same-day intra-city courier using Mumbai's *dabbawala* network. By integrating a mobile app with logistics, Mehta merged traditional delivery methods with digital convenience. Despite struggling academically and dropping out of school, Arora taught himself ethical hacking and, at 19, founded a cybersecurity firm.

India's education ecosystem is recognising the importance of nurturing entrepreneurial and technological skills early. With initiatives like Startup India, Digital India, Atal Innovation Mission and Tinkering Labs, and CBSE's introduction of subjects like Artificial Intelligence, Financial Literacy, and Entrepreneurship in schools, pathways for young people to explore tech and business early on are available.

Edtech platforms also offer specialised programmes on coding, finance, and entrepreneurial thinking to teenagers that help build skills beyond textbooks.

Benefits

Builds confidence: When students are exposed to real-world challenges early, they learn to navigate uncertainty and trust their decisions.

Encourages experimentation: Early access to technology and business tools allows young minds to build prototypes, launch

side hustles, or create content and teaches them to fail fast and learn faster.

Promotes lifelong learning: A head start helps young individuals discover their interests early and pursue them deeply, creating a stronger foundation for career specialisation.

Expands opportunities: Whether through internships, mentorships, or building a portfolio before college, early exposure often leads to a richer, more competitive career path.

As India moves toward a knowledge- and innovation-driven economy, equipping children with real-world skills from an early age is a necessity. By encouraging curiosity in business and tech, parents, educators, and policymakers can shape a generation that's confident, capable, and career-ready.

Be it launching a start-up in a hostel room, managing finances in high school, or building a tech product that solves social problems, these experiences provide the edge that traditional education alone cannot offer. The seeds of career success are often planted early – when a child is encouraged to sell handmade crafts online, create a basic website, or pitch a business idea at a school event. When nurtured with the right guidance, these seeds grow into trees of ambition, skill, and success. Age is no barrier when exposure, education, and encouragement are on your side.

The writer is Director, Bachelor of Data Science, SP Jain School of Global Management.

SAVE THE DATE

ICBP 2025-26

HSBC India has launched the 12th edition of its India Business Case Programme (IBCP) 2025-26, which aims to bring together academic knowledge with practical learning through

business case studies.
Eligibility: UG students in the penultimate or final year of any stream

<https://surveys.sattva.co.in/zs/kmDp5l>

Admissions

The University of Sheffield, the U.K., invites applications for its

B.A. Global Sustainable Development programme.
Eligibility: 80% in Class 12 (all Indian boards); overall IELTS score of 6.5 with at least 6.0 in each component

<https://t.ly/vd7m8>

Symbiosis International (Deemed University) invites

applications for the Symbiosis National Aptitude (SNAP) Test for MBA aspirants.
Eligibility: Minimum 50% in Bachelor's degree from a recognised institution

Deadline: November 20
Test dates: December 6, 14 and 20

www.snaptest.org

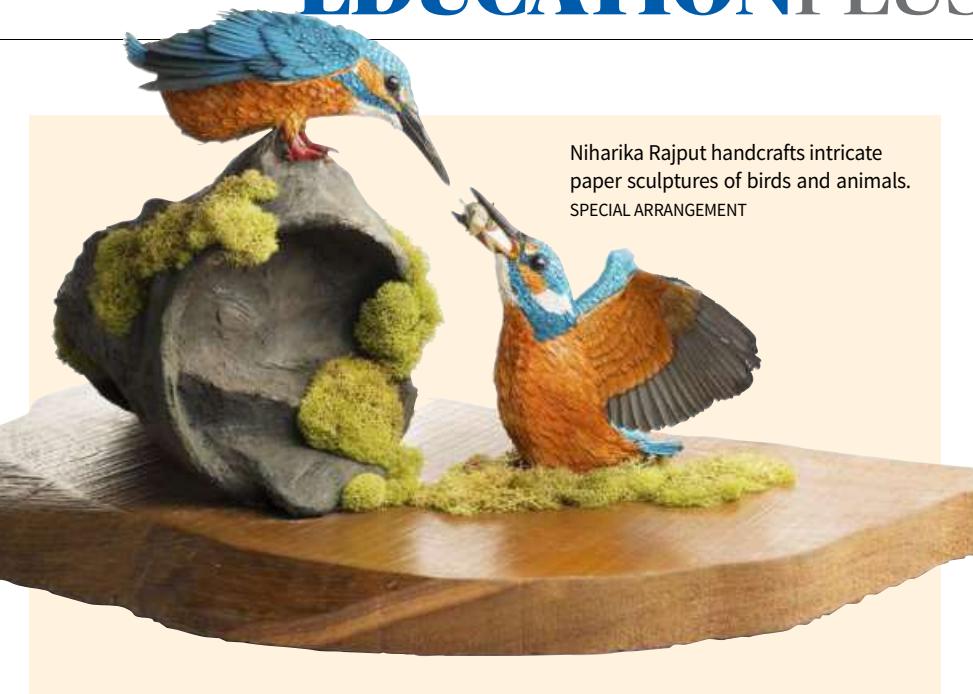
The next in the monthly series by WWF-India that highlights niche and unconventional green careers through the stories of well-known personalities from the field of environment and conservation

I have always been a Nature-loving child. My happiest hours were spent outdoors observing insects and watching birds. Over time, art also became my refuge. I loved creating three-dimensional objects, not realising then that my love for Nature and art would one day merge into a full-fledged career.

My journey took shape through many mentors and experiences that expanded my work in unexpected directions. While in college, I joined People Tree, a craft boutique where I worked with bamboo, rope, and other materials to create 3D objects, including my first basic bird models in epoxy. But I wanted to make my creations more realistic. In 2015, I saw a flock of red-billed blue magpies take off from a pine tree in Himachal Pradesh. That mo-

ment was when I knew that I wanted to replicate birds realistically in life-size.

Experimentation led me to the process I use today. Soon after I honed this skill, I began to combine it with education. I used multiple pedagogical approaches to engage children through workshops, permanent exhibits, animation films, and outdoor sessions. Beginning with Ladakh, my work since taken me to places as diverse as British Columbia, Papua New Guinea, the Galápagos Islands, Andhra Pradesh, Kodaikanal, Delhi, Bengaluru, and Kutch. Along the way, I have worked with organisations such as National Geographic Society, Lindblad Expeditions, WWF-India, Wildlife Trust of India (WTI), Nature Conserva-



Niharika Rajput handcrafts intricate paper sculptures of birds and animals.
SPECIAL ARRANGEMENT

GREEN CAREER HUB

Giving wings to conservation

Wildlife artist Niharika Rajput on how she blends art and wildlife conservation



tion Foundation (NCF), among others.

The turning point came from two powerful encounters: a post on X (formerly Twitter) by Birders Against Wildlife Crime U.K. about hen harriers, and a documentary on birds of paradise by Tim Laman and Ed Scholes. These shifted my focus from abstract, nature-inspired sculptures to hyper-realistic recreations of birds and animals. As a wildlife artist and informal educator, my aim became to create immersive experiences that communities could use as springboards for deeper exploration.

Once, in Valparai, a boy approached me after a workshop and gave me a piece of paper

with his signature. "Akka, one day I'll be a famous wildlife photographer and you'll need this to prove you taught me." The conviction in his voice reminded me why I do what I do.

Patience and observational skills are my strongest tools. Creating hyperrealism – especially through repetitive processes such as cutting and layering paper feathers – demands precision and endurance. Fieldwork requires flexibility and listening, especially when collaborating with local people.

To young people considering a green career, my advice is align your work with your values. Build relevant skills early, seek real-world experience, network actively, and stay informed. Use social media and AI tools to amplify your work. A green career is not just about sustainability; it is about making your passion your profession, and your profession, a part of the planet's future.

Fieldwork in unfamiliar terrains carries its risks, but strong partnerships make the process smoother.

Interacting with mycologists, marine biologists, filmmakers, science photographers, and educators has broadened my scope and I now want to move beyond avifauna to other species, explore upcycling and recycling materials, and work closely with artisan communities worldwide to create sustainable, marketable products that benefit both nature and people.

To young people considering a green career, my advice is align your work with your values. Build relevant skills early, seek real-world experience, network actively, and stay informed. Use social media and AI tools to amplify your work. A green career is not just about sustainability; it is about making your passion your profession, and your profession, a part of the planet's future.



WIDE ANGLE
Albert P' Rayan

Recently, the Central Board of Secondary Education (CBSE) announced plans to introduce open-book assessments in Std. IX from the 2026-27 academic year. This raises some questions that need careful consideration: what are the actual benefits of OBEs? How feasible will their implementation be at the secondary level? What challenges will teachers and students encounter?

Benefits
Research across countries has highlighted the reduced burden of memorisation, which allows students to focus on understanding, analysis, and application, and strengthens long-term retention. By fostering critical thinking, research skills, and real-world problem-solving, OBEs not only lower test anxiety but also promote deeper, more meaningful learning.

OBEs should not be treated as a one-off experiment in our education system; they are a necessity, particularly at the tertiary level. The rationale is straightforward: in the real world, professionals are rarely expected to recall every detail from memory. Instead, they must know how to locate, interpret,

and apply information – precisely the skills that OBEs cultivate.

The challenge, however, lies in preparation. Are Std. IX students ready for this shift? The honest answer is 'no'. Many still struggle with analytical thinking. They can recall facts but falter when asked to dissect, interpret, or connect ideas. This is because the system has not made 'learning how to think' a central part of education.

It is also important to recognise that OBEs are not an easier alternative. They demand higher-order thinking, problem-solving, and the ability to apply concepts in new contexts. Many teachers lack the training to design such assessments or to guide students in developing these skills. Rote learning without genuine understanding remains widespread in the Indian education system and continues to dominate classrooms. Many teachers see it as a quick way to de-

liver information, particularly in subjects that demand recall, and as the most effective strategy to prepare students for exams that reward memory rather than understanding.

Its persistence can be attributed to several factors: a culture that glorifies students' ability to recall information; an exam system and standardised tests that emphasise memorisation; pressure on teachers to rush through the syllabus, often relying on repetitive testing to raise scores; parents' expectations that their children must outperform peers in marks; and a shortage of well-trained teachers capable of adopting more effective teaching methods.

Training the teacher
As a teacher trainer, I have observed many teachers across the country struggling to design exam papers that assess higher order thinking skills. Preparing

teachers to design effective open-book assessments is, therefore, just as important as training students to attempt them. Training teachers to not only frame higher-order questions but also to evaluate students' responses effectively is essential before introducing OBEs at the secondary level.

OBEs are not a one-size-fits-all solution and should be used in conjunction with other assessment methods. Although Bloom's Taxonomy is often considered a cliché, it remains highly relevant in the education system. Reformers envision one that nurtures creativity, critical thinking, and advanced skills such as analysis, problem-solving, and application.

Open-ended questions that use words such as what, why, and how, along with verbs like analyse, evaluate, create, justify, and compare encourage students to explain their reasoning rather than simply provide an answer. Engaging them in solving real-life problems helps them weigh alternatives, defend their choices, and apply knowledge meaningfully. For instance, students can be asked to propose solutions to social issues or address environmental challenges in their

community.
Shifting from a teacher-centred to a learner-centred approach through activities such as classroom debates enables students to reflect, consider multiple perspectives, and refine their ideas. Similarly, collaborative learning encourages critical thinking as students explain concepts to peers, negotiate meaning, and build knowledge collectively.

Creating an environment that supports OBEs is far more important than merely introducing them in schools. In Finland, for instance, OBEs are not a dominant feature. Yet, the education system emphasises critical-thinking, problem-solving, and the application of knowledge. In the U.S., and Singapore, OBEs are more common at the tertiary level than at the secondary level.

While introducing OBEs at the secondary level is welcome, both teachers and students must be adequately prepared. In India, where in-service training and professional development opportunities for teachers remain limited, there is a risk that open-book exams may become a hollow concept rather than an effective practice unless serious efforts are made to evaluate teacher competence and strengthen their professional skills. In short, before opening the book, we must first open the minds of teachers and students.

The writer is an ELT resource person and education columnist. Email rayanal@yahoo.co.uk

Greening the Web

Eco web skills combine coding, creativity, and climate responsibility and offer a range of career options

Sumit Ghosh

Eco web skills refer to the knowledge and practices used to design, develop, and manage websites and digital content in ways that minimise environmental impact. They combine web development with sustainability principles and aim to reduce the carbon footprint of websites and digital services through efficient coding to reduce page load times and energy use, green hosting (servers powered by renewable energy), optimised media files (images, videos, fonts), minimalist and user-friendly design that reduces resource use and accessibility and device efficiency (less energy needed to view).

The importance of these skills is growing daily, as the Internet has a carbon footprint. Data centres, networks, and devices consume huge amounts of electricity. The web emits millions of tons of CO₂ annually. Every e-mail, search, and web view adds up, as more people online means more energy used. Streaming, AI, and cloud services increase server loads and energy demand. Eco-web skills offer a practical solution to contribute to sustainability. Every optimised site helps reduce digital pollution. Eco-conscious design improves a brand's reputation.

Educational requirements

While the National Education Policy (NEP) 2020 doesn't explicitly mention "eco web skills", its pillars – digital fluency, sustainability education, experiential learning, virtual

labs, and industry tie-ups – create an optimal ecosystem to learn and apply eco-friendly web development at scale. While the minimum requirement is high school education with a focus on Science, Computers or Environmental Studies, a Bachelor's degree in Computer Science, IT/Web Development, Digital Media, or Environmental Science and Sustainability is preferable. One should develop strong capabilities in Web Development (HTML, CSS, JavaScript), and responsive and lightweight design CMS platforms (WordPress, Joomla, and so on).

Other crucial aspects are knowledge of optimisation and performance including image and code optimisation, lazy loading and caching techniques, clean, semantic coding for accessibility along with sustainability basics of digital carbon emissions, energy-efficient UX and UI principles and life-cycle thinking for digital products.

Specific UG and PG courses that one can consider include B.Sc. in Computer Science or IT, B.Tech/ B.E. in Computer Science (Green Tech or Sustainable Computing Track), B.Des. in Communication Design or Web and UI Design, B.Sc. in Environmental Science with a minor in Computer Applications, Integrated B.Sc.-M.Sc. in Sustainable Computing or Green IT, M.Tech/ M.E. in Green Computing or Sustainable IT, M.Sc. in Web Technologies or Digital Media with focus on Sustainability, MBA/ PGDM in Sustainability Management with focus on Digital Market-

The writer is the director and chief mentor, Sankalp Micro Association.

Career options

All of the above open up new career options such as green web developer, sustainable UX/UI designer, digital sustainability analyst, green IT consultant, sustainable digital marketing specialist, eco web educator and green tech entrepreneur. Cross-sector demand is growing for green tech professionals in tech, education, healthcare, environment, e-commerce, and government sectors.

Countries in the EU, the U.K., and North America are advancing digital sustainability policies, creating international demand for eco-skilled tech professionals. Eco web practices contribute to an organisation's ESG performance, opening doors to corporate sustainability teams.

Global trends such as the EU Green Deal and Digital Sustainability Regulations, carbon-neutral commitments by major tech firms, rise in green digital entrepreneurship and focus on eco-friendly web design and ethical tech circles are driving the demand for eco web practitioners.

Choose an early career entry point by starting with online courses (Web Dev + Green Web Design), work on projects for NGOs or sustainability blogs, add green hosting, low-carbon tools to your portfolio and contribute to open-source sustainable web initiative.

Shampa Nandi

The role of analytics in business decision-making is indispensable. However, a significant gap exists between the skills taught in many MBA Analytics programmes and those required at the workplace. As organisations increasingly depend on data-driven insights, academic curricula must evolve to better prepare graduates for the practical challenges they will encounter.

Areas of concern

Many current Analytics curricula emphasise foundational tools such as Excel and traditional statistical methods like hypothesis testing, which fall short in equipping students to handle large-scale, complex datasets or develop scalable analytics solutions and also limit exposure to more versatile programming languages such as Python and R.

Additionally, the focus on SQL training often leads to lack of sufficient attention to database performance optimisation and the growing use of alterna-

GETTY IMAGES/ISTOCKPHOTO



Learning curve

Why the MBA Analytics curriculum needs to be redesigned to bridge the industry-academia gap

tive database systems such as NoSQL and MongoDB. Emerging areas such as cybersecurity fundamentals and the analysis of diverse data types like voice and images are frequently underrepresented or introduced too late in the programme.

Another area requiring attention is the sequencing of courses that develop practical skills. Storytelling with data, the ability to translate analytics into actionable business insights is often taught late and project management skills are

frequently marginalised or absent. There is also a growing demand for specialisation within analytics, particularly in applying analytical techniques to specific business functions such as marketing and human resources.

Recommendations
Certification-oriented learning: Replace basic Excel training with certification courses covering data privacy, governance, and simulation tools to build recognised practical skills.

Programming and visualisation: Introduce Python and R early supplemented by brief overviews of visualisation tools such as Tableau and Power BI.

Modern database technologies: Reduce traditional SQL hours while increasing focus on performance tuning and alternative database systems.

Relevant specialisations: Rename and refocus the Data Analytics specialisation to include practical business applications, integrating marketing and HR analytics.

Cybersecurity fundamentals: Replace outdated regulatory content with practical modules on ethical data handling and cybersecurity basics.

Expanded analytics domains: Broaden the curriculum to include analysis of diverse data types such as voice and images.

Early emphasis on storytelling and project management: Schedule storytelling and data-driven decision-making courses earlier to reinforce practical application. Make project management a core course.

Sustainability and

communication: Mandate Environment, Society, and Governance (ESG) education to reflect its growing importance. Replace generic communication modules with focused courses on data-driven decision-making and design thinking.

Streamlined managerial skills: Break down broad managerial skills courses into focused modules on current affairs, group discussions, aptitude, and leadership.

Curricular rebalancing: Adjust course sequencing to optimise student workload and learning outcomes, such as moving Business Research Methods to an earlier term and offering Project Management as an elective alternative to International Business.

Analytics education must adapt swiftly and thoughtfully to the evolving industry, so that graduates are not only skilled analysts but also strategic thinkers and ethical professionals.

The writer is Principal, PG Programme, International School of Management Excellence (ISME), Bengaluru.