

EDUCATION PLUS

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R. W. Alexander
Jesudasan

In the recent past, higher education in India has implemented numerous policies of reforms advocated by the National Education Policy (NEP) 2020. Notable among these are the National Credit Framework (NCF), online education, dual degrees, internationalisation of higher education, biannual admissions, off-campus centres, research enhancement, Professor of Practice, National Higher Education Qualifications Framework (NHEQF) and National Skill Qualification Framework (NSQF). These aim to take education to the masses without compromising on quality.

Many universities and colleges have revised their undergraduate and postgraduate programmes by introducing Honours and Minors courses and additional electives and specialisations, internships or industrial training, exposure to creative and performing arts, outcome-based education and more. Further, to facilitate mobility of students across institutions and to retrieve their academic credentials whenever needed, an Academic Bank of Credit has also come into being. The University Grants Commission (UGC) has also released

Recalibrate and reimagine

While many reforms have been introduced in higher education, a balanced approach is necessary for students to reach their full potential



particular, need to cultivate this habit of spending quality time in the resource centre.

In earlier times, higher education institutions used to provide skill-based training during periods of vacation. Today, we have polytechnic institutions that offer diploma and certificate programmes that enable students to find a suitable job upon completion. However, there needs to be longer exposure to skill-based training for all disciplines at both UG and PG levels. This approach needs to be tailored so that it does not take the student away from academic exploration. The structure needs to be such that the student gets equal opportunity to focus on academics and develop skills relevant to the discipline through training programmes and industry exposure.

What is required is a recalibration of learning ecosystems and a reimagining of learning environments that is in keeping with the changing sociological and technological trends. This will entail exploration of new terrains and provide students with a transformational experience and shape their futures into just and sustainable ones.

The writer is the Pro Vice-Chancellor, Hindustan Institute of Technology and Science Deemed-to-be University, Chennai. Email: provc@hindustanuniv.ac.in

SCHOLARSHIPS

GSK Scholars Programme

Aims to support deserving students from economically underserved backgrounds.

Eligibility: First-year MBBS students with at least 65% marks in Class 12 board exams. Annual family income must be below ₹6,00,000.

Rewards: Up to ₹1,00,000 per year

Application: Online

Deadline: November 18

www.b4s.in/edge/GSKP

KVB Scholarship Programme

An initiative from Karur Vysya Bank.

Eligibility: Open to first-year UG students in Medicine, Engineering, Agriculture, Arts and Science, Banking-related financial courses, and emerging fields such as AI and Machine Learning who are enrolled in government or government-aided colleges and are residents of Tamil Nadu, Andhra Pradesh, or Telangana and have secured at least 60% in their previous class. Annual family income should not exceed ₹6,00,000.

Rewards: ₹1,00,000 lakh per annum

Application: Online

Deadline: November 28

www.b4s.in/edge/KVBSPI

Nirankari Rajmata Scholarship Scheme

An initiative of the Sant Nirankari Charitable Foundation.

Eligibility: Open to students admitted in a government-recognised institution through a competitive written test and have secured at least 90% or above in Class 12 board exam. Annual family income should be less than ₹3,50,000.

Rewards: Up to ₹75,000 per annum

Application: Through post at: Education Department, Sant Nirankari Charitable Foundation, 80-A, Avtar Marg, Sant Nirankari Colony, Delhi - 110009 Phone Number: (+91 11) 47660380/47660200

Deadline: November 30

www.b4s.in/edge/NRSSI

Courtesy: buddy4study.com

draft guidelines for introduction of Apprentice-Embedded Degrees. Many institutions have embarked on systematic training sessions with special focus on interview etiquette that will make students employment ready or pursue research.

Skill development

Yet, we find that many students are either unemployed, underemployed or working in areas that are not connected to what they have studied. What is required is a balanced approach that focuses not just on academics but also on inculcating moral values and ethics and developing skills such as

team work, planning, time management, public speaking, negotiation tactics, conflict solving, empathy, friendliness, decision making, and so on. All this can be incorporated into the curriculum with credits for the benefit of students. With the advent of AI-mediated appropriate usage of AI, Machine Learning and Data Science should be encouraged so that the time spent on acquisition of basic information can be avoided and students can focus spent on prognosis, analysis, interpretation, and recommendations.

Earlier, the Information Resource Centre or

the library was considered an institution's brain. Today, with the advent of the digital library and global lending of books and journals, this facility is often under-utilised. Gone are the days when a large proportion of a student's time was spent in the library. Scholars, and young faculty in

Set daily targets

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



OFF THE EDGE

Nandini Raman
I have completed my B.Tech. CSE and have joined coaching for UPSC. But I procrastinate a lot and am unable study for long hours. Please help. Lisey

Dear Lisey,
It is common to struggle with procrastination and focus, especially when preparing for something as demanding as the UPSC exam. Set clear, achievable goals and break them into daily targets. This will make the portions less overwhelming and give you a sense of accomplishment. Identify and prioritise the most important or difficult subjects and cover them first. Create a schedule with short breaks after every 45-60 minutes of study to prevent burnout. Minimise distractions and put your phone away. Organise your study space and keep the area clean and clutter-free. Visualise your success and stay motivated by working on a vision board of why you want to crack the UPSC. Once you complete the set portions, reward yourself. Address mental blocks and engage in relaxation techniques like deep breathing, meditation, or yoga to manage stress and anxiety. If you feel overwhelmed, talk to a mentor, coach, or friend or seek professional help. Be willing to adjust your schedule and techniques as needed. Finally, incorporate physical exercise into your daily routine to boost your energy levels and improve concentration. Eat healthy and ensure a good night's rest.

I am doing B.A. (Hons) Sociology and am a UPSC aspirant. I don't have any extracurricular activities. What should I join to improve my profile? Also, what are my

CAREER OPTIONS AFTER THE DEGREE? Jyothi Lakshmi

Dear Jyothi Lakshmi,
To enhance your profile, join debating or public speaking clubs, volunteer and engage in social service, participate in Model United Nations (MUN) or youth parliaments, cultural or literary societies, start blogging and writing, or intern with NGOs, think tanks or research organisations.

Career after graduation could include roles in civil and defence services, academia and research, social work, human resources, market research, social welfare and community services.

I have a B.Sc. and B.Ed. and am wondering whether to pursue teaching positions in schools or work with NGOs. Which of these is more viable? Are there any other career options? Sweety

Dear Sweety,
Your decision depends on your interests, skills, career goals and what you enjoy. Teaching in a school is a stable career that will offer regular hours and an opportunity to make a significant impact on students' lives. With your B.Ed., you will have opportunities to advance into administrative roles or specialised teaching positions. Many schools also provide training and professional development opportunities. Working with NGOs allows you to address social issues, contribute to community development, and work on meaningful projects across various roles like programme management, community outreach, advocacy, and research. The work can be more dynamic and varied compared to traditional teaching roles.

Volunteer or intern with NGOs to understand the sector. Other options could include educational consultancy, corporate training, community development, social work, educational research,

higher education and so on.
I have completed B.Tech. CSE but have no interest in coding. I wonder whether I should look for a job in the banking or trading fields but it feels like I have wasted four years on my degree. I am confused and unable to understand myself. Maria R.

Dear Maria,
I understand that you are feeling uncertain about your career path, as your current interests don't align with your degree. Seek guidance from a career counsellor who can provide personalised advice based on your skills and interests. Evaluate them and take time to reflect on your strengths, aptitude, and values. With banking, you could consider roles like a financial analyst, loan officer, relationship manager, or credit analyst but you will need to enhance your resume with additional qualifications such as a CFA or CFP or a relevant MBA. With Trading, being a stockbroker or a trading analyst is possible but these roles require strong analytical skills and knowledge of financial markets and relevant certifications. You can also explore sales and marketing, management and consulting, operations and project management, education and training but may require specialised certifications and training to move up the corporate ladder. Look for internships or entry-level roles in your areas of interest to gain practical experience and validate your career choice.

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

Manu Kapur

The heavy weight of expectation is a peculiar thing; it can either serve as wings to soar or shackles that bind you to the ground. For Tanmay, a bright high-school student from a small city in India, it felt like the latter when he failed to clear the IIT entrance exams. The news was not only a blow to his self-esteem but also a disappointment to his friends and family who had sky-high expectations from him. The failure, coupled with the emotional turmoil of shame, suffocated him.

Tanmay found himself at a crossroads. He could either wallow in self-pity or channel those negative emotions into something constructive. He chose the latter. He embraced the discomfort he felt and channelled his negative emotions into engaging in meaningful projects. Over time, this led him to a doctoral degree at ETH Zurich, where he worked to explore, among other things, the role of emotions in learning from Productive Failure. And who better than Tanmay then to put the full force of science behind it to study emotions as they unfold in Productive Failure.

Recall that Productive Failure involves two phases: a problem-solving phase followed by an instruction phase. In 2022, Tanmay designed an experiment to study how emotions unfold as learners experience failure in the problem-solving phase of Productive Failure. He focused on the problem-solving phase, because this is the phase where learners experience failure in problem solving, making it a gold mine of



PIXABAY

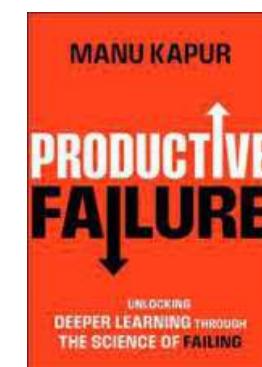
temporarily induced emotions like shame, anger, confusion, frustration, surprise, interest, happiness, and so on.

EMOTIONAL ROLLER-COASTER

As expected, he found that students went through an emotional roller-coaster during the problem-solving phase, experiencing complex and diverse sequences of positive and negative emotions. Emotions such as shame, anger and disgust were frequently present in the problem-solving phase, as were confusion, surprise, and happiness. The next question he asked was: how do these positive and negative emotions relate with the quality of solutions students produced during the problem-solving phase and also on three

learning outcomes: the How (procedural knowledge), the Why (conceptual understanding), and the Apply (transfer to novel problems)?

He found that shame was positively correlated with the quality of solutions students produced during the pro-



blem-solving phase. That is, the more shame they experienced, the better the quality of solutions they produced; a result that is surprising and counter-intuitive, but one has to remember that all of this is happening within the safe confines of Productive Failure. It turns out shame can propel students to work towards their problem-solving goals. The same goes for other emotions like anger, disgust, and confusion, which can serve as

triggers for persistence in problem-solving, and in turn, deep learning. Negative emotions such as shame, anger, disgust and confusion can be good for learning, provided they are designed for in a safe and supportive environment such as Productive Failure.

At the same time, Tanmay found that positive emotions such as happiness do not necessarily lead to better learning outcomes. Happiness was positively correlated only with the How problems. Recall that these are the kinds of problems where students had to remember the recipe or the steps or the procedure to solve it. They had learnt those procedures, and they used those procedures to solve the problems. However, happiness was negatively correlated with performance on the Why and Apply problems. In other words, happiness experienced during the problem-solving phase negatively influenced how well they understood the concepts (the Why) and their ability to transfer to novel contexts (the Apply). Again, a surprising and counter-intuitive finding. Positive emotions such as happiness can be bad for learning, even when experienced in a safe and supportive environment such as Productive Failure.

Sometimes in life, bad can come from good, and good can come from bad. As it is in life, it is in learning. Positive or negative emotions, when experienced safely and appraised appropriately, can result in better learning outcomes.

Excerpted with permission from *Productive Failure: Unlocking Deeper Learning Through the Science of Failing*; Manu Kapur, Jossey-Bass (Wiley), ₹2400

Subhakar Alapati

In response to growing environmental concerns, educational institutions worldwide are adapting to meet the demands of students passionate about sustainability. This trend is driven by a significant increase in interest in environmentally focused programmes. According to the QS International Student Survey 2023, 41% of students have actively researched environmental sustainability strategies or efforts of prospective institutions. As a result, universities are now offering innovative courses that address these evolving priorities. Here are some of the notable new courses in American institutions that have become popular.

UN Sustainable Development Goals (SDGs)

This covers various crucial topics, including poverty reduction, quality education, gender equality, clean water, and climate action. An interdisciplinary approach equips students with the knowledge and skills to tackle global

challenges comprehensively. Harvard University's SDG programme is known for its curriculum and the opportunity for students to engage with global leaders in sustainability, while Columbia University offers one that integrates fieldwork, allowing students to apply their learning in real-world settings.

Climate Change and Global Sustainability

As the urgency of climate change becomes more apparent, courses that integrate climate science with policy and economic strategies are in high demand. These programmes prepare students to address global sustainability challenges through a multifaceted lens. Stanford University's programme emphasises innovative solutions and includes collaborations with leading sustainability organisations. Yale University offers a curriculum that combines theoretical knowledge with practical applications in policy and economics.

Environmental Data Science

In the age of big data, the



FREEPIK

In the green way

With many students looking for courses on sustainability and environmental issues, here is a round up of some popular courses in American universities

intersection of environmental science and data analytics is creating new opportunities to solve complex environmental is-

sues by leveraging data to drive sustainable solutions. The University of California-Berkeley's programme is at the forefront

of environmental data science, offering students access to cutting-edge technology and research. The course at New York University (NYU) integrates data science with hands-on environmental projects, providing a unique learning experience.

Vandana Mahajan

In today's competitive job market, internships have become a critical stepping stone for students and recent graduates.

The value of internships extends beyond just the student experience; they also offer significant benefits to employers.

Paid internships are crucial for both parties as they contribute to a more effective and mutually beneficial internship experience.

For students

Financial support: This is essential for those balancing tuition, living expenses, and other financial commitments. Unlike unpaid internships, paid opportunities make it feasible for a broader range of students to gain valuable work experience without the added stress of financial strain.

Increased engagement: Financial remuneration can boost morale and incentivise interns to contribute more actively to their projects and responsibilities. When students feel valued and adequately compensated, they are more likely to invest time



Win-win

Paid internships benefit both students and employers, fostering professional growth and organisational success.

and effort, leading to higher productivity and better outcomes.

Relevant work experience:

Employers who offer paid internships are generally more committed to providing substantial learning opportunities, as they have invested financially in the intern's participation. This experience is invaluable for students, as it allows them to develop industry-specific skills, build professional net-

works, and enhance their resumes, ultimately improving their employability upon graduation.

Career exploration:

Paid internships give students a chance to explore different career paths and industries without the pressure of working for free. Students can assess whether a particular field or role aligns with their career goals and interests leading to more informed career decisions.

Transition to employment: Paid internships often lead to job offers from the same organisation, providing a smoother transition from education to the workforce. Employers who invest in their interns through paid opportunities are more likely to retain them as employees.

For employers

Attracting talent: Talented students and recent graduates are more likely to seek out opportunities that offer financial compensation. A paid internship can set a company apart from competitors and help it attract and retain ambitious, skilled individuals who are eager to contribute to the organisation.

Enhanced productivity:

Paid interns are generally more productive and motivated and likely to take on challenging tasks and contribute to the team. This can lead to higher quality work and better overall performance.

Positive brand image:

Companies that offer paid internships often enjoy a positive reputation as fair and supportive employers. This enhances the compa-

ny's attractiveness to potential employees and customers.

Sustainable Business Management

The business sector plays a crucial role in sustainability, and courses in Sustainable Business Management teach sustainable business practices, corporate social responsibility, and green marketing. Harvard Business School's programme is highly regarded for its blend of academic rigour and practical application. At the same time, the Stanford Graduate School of Business includes case studies and projects with leading sustainable businesses.

As the world grapples with pressing environmental issues, the demand for knowledgeable and skilled professionals in sustainability is growing. These innovative study-abroad options not only equip students with the expertise needed to address these challenges but also inspire them to become leaders in the quest for a sustainable future.

The writer is Founder Director, Global Tree Careers.

ny's attractiveness to potential employees and customers.

Diverse perspectives: Interns often come with up-to-date knowledge and new viewpoints that can benefit the organisation. By offering paid internships, employers gain access to diverse talent and can foster a culture of creativity and innovation.

Talent pipeline: Paid internships provide employers with an opportunity to develop a pipeline of future talent. By investing in interns and providing them with meaningful experiences, companies can identify and nurture potential future employees helping them build a skilled and reliable workforce, reducing the time and cost associated with recruiting and training new employees.

Paid internships are a win-win for both students and employers. By recognising and investing in the value of paid internships, both parties can enjoy a mutually beneficial arrangement that supports professional growth and organisational success.

The writer is Founder and Director, Futures Abroad.

to senior positions such as Director of Airport Services or Head of Airline Operations with experience.

Commercial Pilot License (CPL)

This programme trains aspiring pilots to operate commercial aircraft and includes theoretical knowledge and practical flying experience. A CPL is a mandatory requirement to fly commercial airplanes.

Prospects: With a CPL, graduates can work as commercial pilots for airlines, charter services, and cargo carriers. Experienced pilots can advance to roles like Senior Pilot, Chief Pilot, or Training Captain. Career progression often involves upgrading to larger aircraft and international routes.

Pilots can pursue additional careers such as Airline Transport Pilot Licence (ATPL) or Multi-Crew Pilot Licence (MPL), or transition into management roles by obtaining an aviation management degree.

Whether you're inclined towards the technical side, management, or flying, there's a course tailored to your aspirations. The fees vary depending on the programme's nature and institution, but the investment is worthwhile.

The writer is Aviation Career Consultation Center Director, BAA Training India.

Take to the skies

The aviation sector offers multiple promising career paths

B.Sc. in Aviation Management

Designed to provide students with a comprehensive understanding of the aviation industry's management and operational aspects, it covers airport management, airline operations, aviation safety, and regulatory issues.

Prospects: Graduates can pursue careers in airport management, airline management, aviation consultancy, and logistics. Job roles include Airport Manager, Airline Operations Manager, and Aviation Consultant.

The field offers growth opportunities to senior executive positions. Further education, such as an MBA in Aviation Management, can lead to higher-level strategic roles in the industry.

MBA in Aviation Management

A postgraduate programme that combines core business administration principles with aviation industry specifics. The curriculum includes airline marketing, financial management, human resource management, and air traffic control.

Prospects: Graduates can enter various management roles in airlines, airports, and other aviation-related businesses.

Graduates, focusing on strategic planning, operations management, and aviation economics.

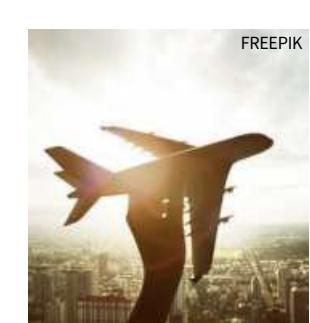
Prospects: Graduates can hold senior management positions in airlines, airports, and aviation consulting firms. Career opportunities include Airline Manager, Airport Director, and Aviation Project Manager.

Additionally, obtaining certifications like the International Air Transport Association (IATA) Diploma in Aviation Management can enhance expertise and career prospects in the global aviation sector.

BBA in Aviation

This undergraduate programme blends business management principles with aviation industry specifics. The curriculum includes airline marketing, financial management, human resource management, and air traffic control.

Prospects: Graduates can pursue careers in airline and airport management, ground services, and aviation logistics. Potential roles include Airport Operations Manager, Airline Ground Staff Manager, and Cargo Manager. Professionals can advance



Aviation Operations Manager, Airport Manager, and Airline Sales Manager.

With experience, professionals can advance to senior leadership roles such as Director of Airport Operations or Head of Airline Marketing.

B.Sc. in Airline and Airport Management

This course focuses on the operational aspects of airlines and airports, providing knowledge in areas like airport operations, airline ticketing, customer service, and cargo management.

Pilots can pursue additional careers such as Airline Transport Pilot Licence (ATPL) or Multi-Crew Pilot Licence (MPL), or transition into management roles by obtaining an aviation management degree.

Whether you're inclined towards the technical side, management, or flying, there's a course tailored to your aspirations. The fees vary depending on the programme's nature and institution, but the investment is worthwhile.

The writer is Aviation Career Consultation Center Director, BAA Training India.

FREEPIK



Shobhit Mathur is the Co-Founder and Vice Chancellor, and Kankana Trivedi is Public Policy Programme Consultant, Rishikesh University.

Concerns

While these programmes seek to train graduates to manage complex social problems in India by creating, implementing, and critiquing policies, there are certain constraints that block the full bloom of Public Policy education in India.

One major concern is the job market. Studies show a glaring gap between Public Policy educa-

Developments

While these are challenges, there have been some innovations in the last few years. State-supported initiatives like the National Education Policy (NEP) 2020 want to place India

possible positions are