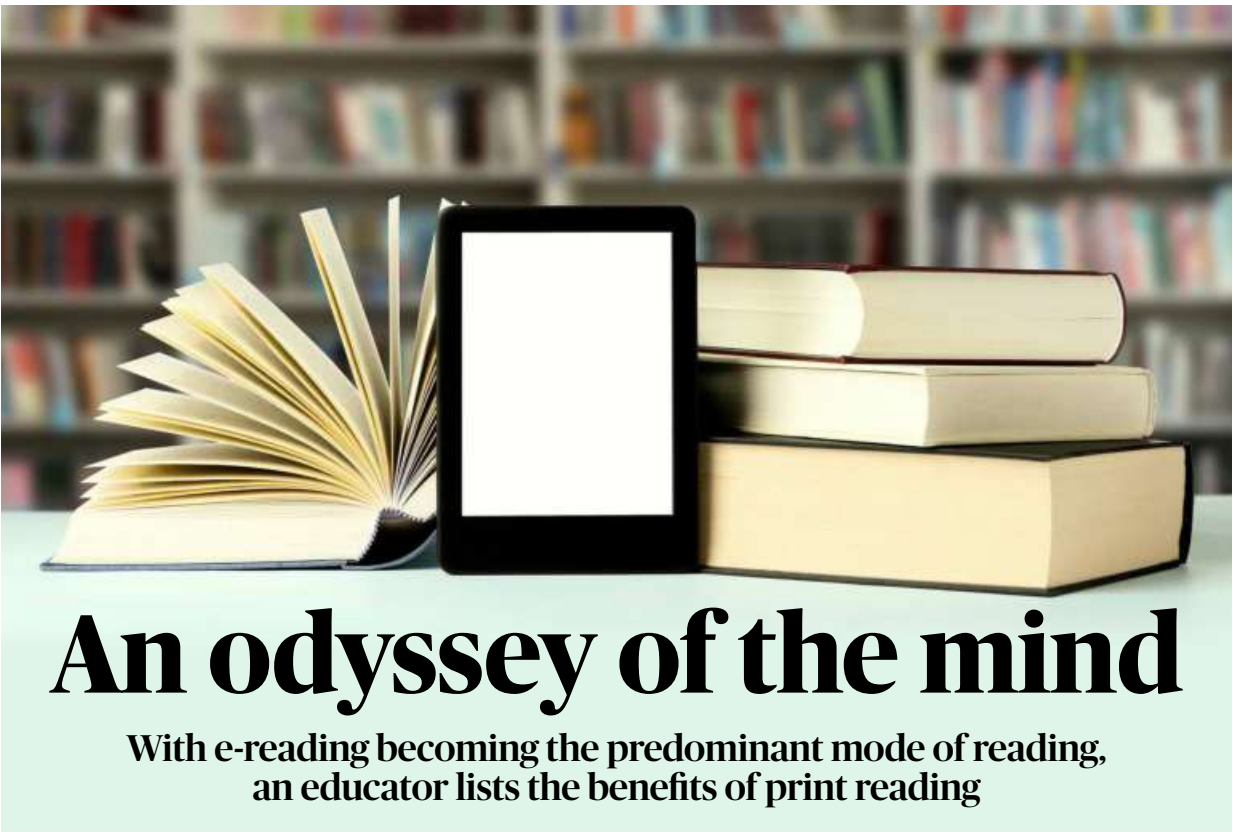**K. Elango**

In Homer's epic *Odyssey*, Zeus, the king of gods, laments, "Men are fools… They blame the gods for their misfortunes, ignoring our advice. They don't accept that their own foolish actions lead to their downfall." This exactly mirrors the plight of e-readers, whose psychic state resembles that of Odyssey's crew when their ship was tossed at the island of lotus eaters.

E-reading has rapidly emerged as the predominant mode of reading, subduing traditional print reading (p-reading) in less than two decades, facilitated by desktops, laptops, tablets and e-readers. More than these devices, smartphones have positioned themselves as the critical medium in this situation. It is rare to find someone's hands, pockets, or handbags free of them. In India alone, there were about 660 million users in 2024 and the number is projected to reach 1.2 billion by the end of the current year, due to the push towards digital literacy.

An odyssey of the mind

With e-reading becoming the predominant mode of reading, an educator lists the benefits of print reading

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Problems

However, paradoxically, excessive screen exposure has led to a decline in both physical and cognitive prowess. Researchers predict that, by 2050, about 40% of children and adolescents worldwide would be short-sighted and every hour they spend with screens exacerbates the ailment. In addition, innumerable problems related to every dimension of life have been identified: neck pain, back pain, sleep deficiency, lack of concentration, alienation, aggression, depression … the list is endless. These severely impact academic performances from a young age. Yet they are so intoxicated, any attempt at detoxification hardly produces any positive results.

Despite the necessity of smartphones, students mainly use them for entertainment, resulting in dopamine addiction. They scroll through social media at lightning speed, pause their eyes only for videos, pictures, images, and photos, and any effort of reading terminates with the first three or four lines. Given that each on-screen line contains about six words, even a brief write-up appears humongous and remains unread. Juggling an average of five platforms, the avalanche of information they encounter leads to overload, lack of focus, off-memory storage, and an impossibility of retrieval, almost amounting to non-reading.

Also, with social media being carriers of misinformation and disinformation, they often consume the news at face value, eventually leading to skewed perceptions, and creating a widening gap between real and the virtual reality.

E-readers have developed a disregard for books, dismissing them as 'boring' as they contain only a 'sea of words'. In contrast, e-texts are 'alluring' with their dynamic images, photographs, highlights, hyper-texts, appealing layouts, varying fonts and sizes, and real-time updates. These features often make them fixated. However, this phenomenon known as 'doomscrolling' certainly leads to 'brainrot'.

Benefits

P-reading, on the other hand, is a complex cognitive process, demanding a deep level of concentration. Decoding a text, namely, meaning-making, relies on prior knowledge (schema) a reader takes to it – inexperienced readers may be content with comprehending basic meaning, but they can graduate to advanced level through sustained effort. Reading involves multiple layers of interaction: at the end of a cline, readers can uncover hidden meanings, engage in inter-textuality to fathom similarities and differences, generate parallel texts, sift facts from opinions, and appreciate sophisticated linguistic elements such as metaphors, allusions, ambiguities.

For an enriched reader, p-reading is not a shallow experience of absorbing information but a creative and critical cognitive odyssey; one that transports them to other worlds and, at the same time, get under the skin of writers. It encompasses a broad spectrum of multiple sub-skills, which are untapped in e-reading. To celebrate reading as an immersive and intellectually rewarding experience, it must be uncluttered with push notifications, advertisements, and not compelling us for likes, shares, and comments.

A decisive evidence to establish the superiority of p-reading can be found among countries that have promoted tech-centric education but are now on reversal course. In 2009 Sweden 'went all-in on digital education, ditching textbooks for screens' but is now investing 104 million to bring back textbooks having realised the detrimental effects on learners' reading and comprehension skills.

Truly, the shift is a wake-up call for e-readers to either switch to p-reading or strike a balance.

Views expressed are personal

The writer is a retired Professor of English and Chief Executive Chair of the English Language Teachers' Association of India

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OFF THE EDGE
Nandini Raman

One step at a time
Uncertain about your career options? Low on self-confidence? This column may help

I am in the fourth year of Civil Engineering. I am not interested in this or coding. My goal is to secure a job with a good salary. Also my health has been affected since I joined college and this is interfering with my daily activities. I'm not in a good position, physically or mentally. What should I do? **Padma**

Dear Padma,
Your health is most important, so prioritise your physical and mental well-being before making any major decisions. Consult a doctor and a mental health professional who can diagnose and recommend appropriate treatment or coping strategies. Get enough sleep, eat nutritious food, and engage in regular physical exercise. Stress reduction and management techniques will also help.

Upgrade your software proficiency (non-coding) in areas connected to Civil Engineering such as AutoCAD, Revit, ETABS/SAP2000/STAAD.Pro, Primavera P6/MS Project. This will improve your job prospects. You can also consider construction management, quantity surveying, or applying for government jobs (PSUs) or doing M.Tech or an MBA, which will open doors to management roles in the construction industry. Also consider learning basic Python, which has applications in data analysis and automation and is helpful in Civil Engineering. Prioritise your well-being, and explore the options available to you.

I'm 16 and interested in Maths and creative writing. I chose PCM for Class 11 because of Maths and also enrolled in JEE coaching due to social pressure and my love for advanced Maths problems. I want to teach, but my parents feel that is unwise. I worry that my lack of extracurricular activities and strong recommendations might hinder my chances of admission. Would getting admission to IIT enhance my resume? Would working with NGOs as a mentor to underprivileged kids improve my chances of getting into MIT Boston? **Akshaya**

Dear Akshaya,
While JEE coaching and PCM seem like they lead directly to engineering, they don't have to define your entire future. If you genuinely enjoy the problem-solving aspects of advanced Maths, check out fields such as Pure Mathematics, Applied Mathematics, and Computer Science (with a strong mathematical foundation). Balance this with your love for creative writing. Join writing groups, attend online courses, or simply dedicate time to writing regularly.

Talk to your parents about your passion for teaching. Fulfilment and job satisfaction are key in a career choice beyond salary. Also, teaching has different paths (school teaching, university professorship, online tutoring), and each is a well-paid and very respectable option.

Extracurricular activities and recommendations play a huge role in college admissions for competitive institutions like MIT. Focus on activities that genuinely interest you. Quality over quantity matters. Working with NGOs and mentoring underprivileged kids can be a positive addition to your application.

While cracking the IIT enhances your resume, it's not the only path to success. MIT looks for well-rounded individuals with a strong passion for their chosen field, demonstrated through academic excellence, research experience, and impactful extracurricular activities. Reflect on what you enjoy the most and what makes you feel fulfilled. Talk to professionals in different fields, including teachers, writers, mathematicians, and engineers about their career paths.

I am doing B.A. (Hons) English from Delhi University. I have no dream job or futre plans f. How can I figure out what I want to do? **Palak**

Dear Palak,
Identify your interests and skills. What part of your English degree do you find most engaging? This can provide helpful clues about your potential career interests. Some career paths commonly pursued by English graduates include content or copy writing, journalism, publishing, editing, proofreading, public relations, marketing, advertising, social media management, teaching and tutoring, literary research, archival work, academic writing, translation and so on. Reach out to people working in fields that interest you and seek their guidance. Consider seeking the professional help of a career counsellor if you are still confused. Develop your skills in writing and digital communication. Look for internships or freelance opportunities in writing, editing, publishing, or marketing to build your portfolio and gain experience with clients.

I am 19. For two years after Class 12, I prepared for JEE but failed. My family wanted me to pursue government service but I convinced them to let me give JEE a shot. My father now wants me to join a private engineering college but I am planning to take the CUET. I am thinking of doing English Literature Honours but my parents feel that has no value. What should I do? **Chandrashekhar**

Dear Chandrashekhar,
While the two years you dedicated to JEE didn't give the desired result, it is not wasted time, as you have learnt and grown through the process. As far as talking to your parents goes, do not invalidate their interests, goals and aspirations. Be assertive about your goals while being respectful of their concerns.

Clarify your goals. Are you genuinely passionate about English Literature? Have an open and honest conversation with your parents about your interest in the subject. Explain that you understand their perspective and how this course aligns with your long-term goals. If this is hard, consider talking to a counsellor, teacher or an adult who can mediate. If your heart is set on English Literature, focusing on CUET is the right move rather than pursuing Engineering in a private college.

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

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CAREER CUES
Richa Dwivedi Saklani

So your Grade 10 boards are over and you don't have to bury yourself in books and count marks for a while now. What's more, you are moving into Class 11, the most fun time of all in school but also one that leads up to the most critical (and perhaps high-stakes) year of student life: Class 12. So, while having fun, remember that the pace of study is faster, the concepts are more complex and the expectations of self-study are greater. So here are a few things to keep in mind:

Academic jump: Your Class 11 scores will appear on every transcript sent to every college you apply to. The Great Indian Dip refers to the sudden drop in Class 11 marks typically after a super Class 10 score. Class 11 subjects are more complex and advanced and the same study routine won't yield the same results. So maintain consistency and don't treat Class 11 academics lightly.

Test prep: This is the ideal time to take a couple of attempts at standardised tests for college admissions. With SAT and ACT being accepted in India, starting test prep in summer means you have time for more than one attempt and can maximise your score. Also this means you can focus on school and applications in Class 12.

Advanced Placement Tests (APs): APs help strengthen your academic profile and are valued by some admission teams abroad, such as Oxford, Cambridge and elite American universities that require students from Indian school boards to also present AP results to be considered equivalent to students from international boards. So, if you are aiming for top universities in the U.S. and the U.K., research which AP's align with your intended major. Some universities allow students to skip basic programmes if they have high AP scores, saving tuition fee and time! Those aiming for Computer Science majors can consider AP Computer Science A, AP Calculus AB or BC, AP Physics C or AP Statistics.

For Economics majors, students can consider AP Microeconomics, AP Macroeconomics, AP Calculus AB or BC, or AP Statistics. Psychology majors can consider AP Psychology or AP Biology or understanding neuroscience, cognitive science, and the biological basis of behaviour. AP Statistics is also relevant for research, data analysis, and experimental psychology studies. Registration opens from September to mid-November and then up to mid March with late registration fee. Some schools are registered test centres too so check if your school is one.

Summer programmes: Starting now, you will have two summer breaks before your college applications. Use these to explore the area you intend to pursue. A summer course is a great way to build knowledge and vocabulary for your intended major. In-person summer programmes also give you a flavour of college life.

Aim for the most competitive summer programmes in the U.S. and in India if you are willing to spend money. In the U.S., consider programmes such as the Yale Young Global Scholars Programme, Promyss or SUMAC for Maths students, Management and Technology Summer Institute at UPenn, MET (Management, Entrepreneurship and Technology) at Berkeley or some highly selective science and research-based programmes like Summer Science Programme or the Research Science Institute at MIT. In India, you can consider the Young Technology Scholars programme at Plaksha, the Young Scholars Programme at Ashoka University or Promyss India for Maths students.

Internships: While you are still below 18, this will probably consist of shadowing someone but it still adds a lot of value to your CV. It shows you what kind of work you will be able to do in the future, adds credibility to your application, shows your passion and commitment and helps you build industry knowledge and soft skills.

Community engagement: If you are passionate about a social cause, build an engagement that actually adds value. Pick something close to your heart and your authenticity will shine through your applications. Be consistent in your work. Universities love to see a cause that you have worked on for a while. It shows your dedication and universities prefer depth over quantity.

Personal project: For those led by their own passions, now is the time to work on something that gives you results: start a blog or YouTube channel or podcast on something you like (reviews of books or movies, travel blog, fashion tips for teens, simple recipes, stock markets for teens...). Work on a research paper on a topic of your choice, learn a new skill – graphic design, video editing, coding – through an online course, or opt for an adventure camp or prepare for a marathon. Finally, read some books in the area of your major. Explore TED Talks, podcasts and online courses to build more academic depth.

If all this sounds like a lot, breathe and centre yourself. You'll be off to college soon, stepping into a new phase of your life and this is the time to build the skills of discipline and balance. Build a timeline and start one step at a time.

With inputs from Kritika Malhotra

The writer is Founder and CEO, Inomi Learning, a Gurugram-based career and college guidance firm. info@inomi.in

Beyond the boards

While Class 11 can be lot of fun, use the time to shape your academic journey

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Saras D. Sarasvathy
Aman Bhuwania

To ignite a new wave

Teaching the entrepreneurial method to all could help foster the creation of the much-needed middle class of business and empower individuals from all backgrounds

India's ambitious Vision India@2047 policy is ushering in a new era of entrepreneurial activity, marked by initiatives like the Startup India Action Plan and the Fund of Funds for Startups (FFS) Scheme. While these efforts have helped elevate India to second place in the Global Entrepreneurship Monitor's ranking of entrepreneurial environments, the country still faces significant challenges in nurturing resilient entrepreneurs and fostering the creation of enduring businesses. A recent survey by the National Sample Survey Office (NSSO) reveals that nearly 58% of India's workforce is self-employed, with 99% running micro-enterprises.

Driving innovation
Unfortunately, many of those small ventures lack the resources necessary for growth, creating a void where a robust "middle class of business" should exist. More importantly, their founders lack the skills necessary to build enduring ventures we call the middle class of business. What is the middle class of business? Unlike high-growth, high-tech ventures, companies in this category are charac-
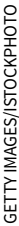
terised by stability and endurance rather than rapid expansion. They grow, but steadily over time. Such businesses are crucial to balance the risks associated with small start-ups and the monopolistic tendencies of large companies, driving innovation that can spur both technological and social advancements in a deliberate and sustainable manner.

How can we spur the creation of such businesses, which are the core of any robust economy? The answer lies in providing entrepreneurship education to everyone who has access to education. Much like teaching the scientific method to all students, not just potential scientists, revolutionised society and led to the creation of the middle class; teaching the entrepreneurial method to all, not just potential entrepreneurs, could help foster the creation of the much-needed middle class of business and empower individuals from all backgrounds with the skills to think and act entrepreneurially.

Before investing heavily in wide-scale entrepreneurship education, two vital steps must be implemented. First, a core integrative framework is needed to guide the development of content tailored for diverse educational levels and populations. Second, comprehensive teacher training programmes are essential for effective delivery.

CAVE Framework
The good news is that research has produced the CAVE framework, a structured approach to entrepreneurship education derived from studies of successful entrepreneurs. Both teachable and practical, it serves as a foundation to develop educational content aimed at all students, regardless of their major or educational background. It aligns with the scientific method, illustrating a unique relationship between prediction and control. In entrepreneurship, this relationship highlights how individuals can shape and co-create new futures without relying on accurate predictions.

CAVE stands for Causal, Adaptive, Visionary and Effectual. These represent four different strategic approaches that can help founders navigate the uncertainty inherent in new-venture creation:

Causal: Relies on prediction and planning
Adaptive: Focuses on pivoting and adapting to the environment
Visionary: Seeks to compel the world to follow
Effectual: Prioritises co-creative efforts among various stakeholders to shape and influence new outcomes and futures.

By embracing this framework and prioritising entrepreneurship education for all, India can build the foundation for a prosperous future, much like the advances brought about by science education in previous centuries.

Saras D. Sarasvathy is the Paul Hammaker Professor at the University of Virginia's Darden School of Business, the U.S., and the Jamuna Raghavan Chair in Entrepreneurship at IIM-Bangalore. Aman Bhuwania is an Assistant Professor at the Goa Institute of Management.

FREEPIK

FREEPIK

In harmony with Nature

By incorporating permaculture into classrooms, students can be empowered to become active participants in shaping a sustainable future.

Ashok Jayanthi

Climate change is an urgent reality that we can no longer ignore. Rising global temperatures, unpredictable weather patterns, and environmental degradation threaten our well-being and survival. But, amid these challenges lies a promising solution: permaculture.

First introduced in the 1970s by Australians Bill Mollison and David Holmgren, permaculture – a blend of "permanent" and "agriculture" – is not just a farming method but a holistic approach to life, guiding us towards resilience, sustainability, and environmental harmony. Its three core principles – Earth Care, People Care, and Fair Share – hold the key to addressing our environmental crises.

Three principles
The first centres on respecting and working with Nature. By mimicking natural ecosystems, permaculture fosters balance and resilience, ensuring that the Earth's resources are used wisely and regeneratively. In a world where environmental degradation is common, Earth Care invites us to collaborate with Nature, creating systems that restore and sustain rather than deplete.

Permaculture also emphasises human well-being, advocating for communities that thrive together. It recognises the universal need for food, shelter, and safety and emphasises a shared responsibility to provide them.

By focusing on collective well-being, it helps create communities that are not only self-sustaining but also connected through shared values of support and care.

The third encourages us to limit our consumption and redistribute surplus resources. Whether through sharing food, knowledge, or time, Fair Share aims to create a just and equitable system that serves not only people but also animals, insects, and even microbes. It involves sharing the produce and space, such as farmland with all living beings – allowing birds to pick grains, squirrels to enjoy fruits, and microbes to thrive in the soil, rather than harm them. It teaches us that sustainability is not just about abundance, but about mindful, responsible living.

In classrooms
Permaculture is not just a field of study; it is a transformative approach to education. By incorporating permaculture into classrooms, we can empower students to become active participants in shaping a sustainable future.
Fosters hands-on learning: Provides students with the opportunity to design and manage their own sustainable systems, whether through school gardens or water conservation projects. Students gain practical experience in applying sustainability principles.
Critical thinking: Students observe ecosystems, analyse problems, and create innovative solutions thus developing analytical and problem-solving abilities, which are transferable to other areas of life.
Inspire sustainability: As they learn about resource efficiency, waste reduction, and environmental care, students are inspired to adopt more eco-friendly practices in their own lives.
Promote collaboration: By working on pro-

jects like school gardens or local sustainability initiatives, students learn the value of collaboration, team work and the power of collective action.

The principles of permaculture can be brought to life through tangible, impactful projects. Here's how students can apply permaculture in their educational journey:
School gardens: Establish mini gardens that teach students about soil health, plant care, and ecosystems.
Composting projects: Set up composting programmes to recycle organic waste, enriching the soil and reducing landfill waste.
Community projects: Collaborate with local communities on sustainability initiatives like tree planting, clean-up drives, and food-sharing programs.
Workshops: Organise or participate in workshops to educate others about sustainable practices and environmental care.
Resource sharing: Encourage students to share surplus food, seeds, and resources within the school and the wider community.
Sustainability campaigns: Advocate for responsible consumption through school-led campaigns, promoting equity and environmental justice.

Permaculture gardens are more than just educational tools; they reflect how we, as individuals and communities, want to live in harmony with the planet. A permaculture garden is a resilient, diverse, healthy, and thriving system – and we too can be the individuals and communities that embrace it.

The writer is Chairman and Co-founder, Hosachiguru.

Vijayalakshmi Singh

Education without exclusion

By embracing diversity, inclusion and equity, we can create a classroom environment where students feel seen and heard.

In a diverse nation like India, development in terms of equity and inclusion is a necessity. With 1.4 billion people of different ethnicities, languages, and cultures, it is necessary that students feel seen and heard.

Recently, there have been problems in which students from marginalised communities and weaker sections and those with disabilities faced difficulties in their education. With the National Education Policy (NEP) 2020 emphasising inclusivity, multilingualism, and cultural sensitivity, an inclusive classroom will accommodate differences, leverage them as strengths, and foster a more empathetic learning environment. The NEP's focus on equity will reduce drop-out rates, increase academic engagement, and prepare students to thrive in a multicultural society.

Strategies
● A diverse representation in textbooks and learning material will help reflect India's cultural and linguistic heritage and ensure that all students see themselves in the curriculum. This means including regional authors, tribal histories, and stories that challenge stereotypes.
● Universal Design Learning (UDL) is a teaching method that uses a diverse set of learning styles. Adopting this will help ensure the use of digital tools for students with disabili-

ty, tailor multilingual regional needs, and integrate community-led workshops in teaching the local knowledge system.
● A culturally responsive pedagogy can be adopted by teachers. For instance, addressing regional environmental issues in Geography or exploring the contribution of marginalised groups in History.
● A classroom environment espousing pillars of anti-bias and critical thinking will encourage discussion that challenges stereotypes and biases related to caste, creed, gender, religion, socioeconomic status, and other demographic fault lines.
● Using inclusive assessments will also help capture the abilities of diverse learners. This can be done by incorporating them into projects, presentations, portfolios, and innovative evaluation strategies.
● Empowering educators

through training sessions to develop and enhance cultural competencies, diversity sensitisation, and the targeting of unconscious bias will improve classroom dynamics.
● Further, adopting practices such as collaborative and peer learning, indigenous inclusion, and utilisation of advanced technologies for accessibility can empower students and boost inclusion and equity. All this requires the participation of the government to offer guiding principles for equality in education, improve access to and quality or education and increase investments in teacher training. Combining all this with local initiatives like the Vidyanjali volunteer programme can help connect communities with schools. This will put India on the path to embracing diversity, inclusion and equity and creating a classroom environment where every student is empowered to learn and grow.

The writer is Associate Professor of Human Resource Management and Organisational Behaviour, Jaipuria Institute of Management.

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