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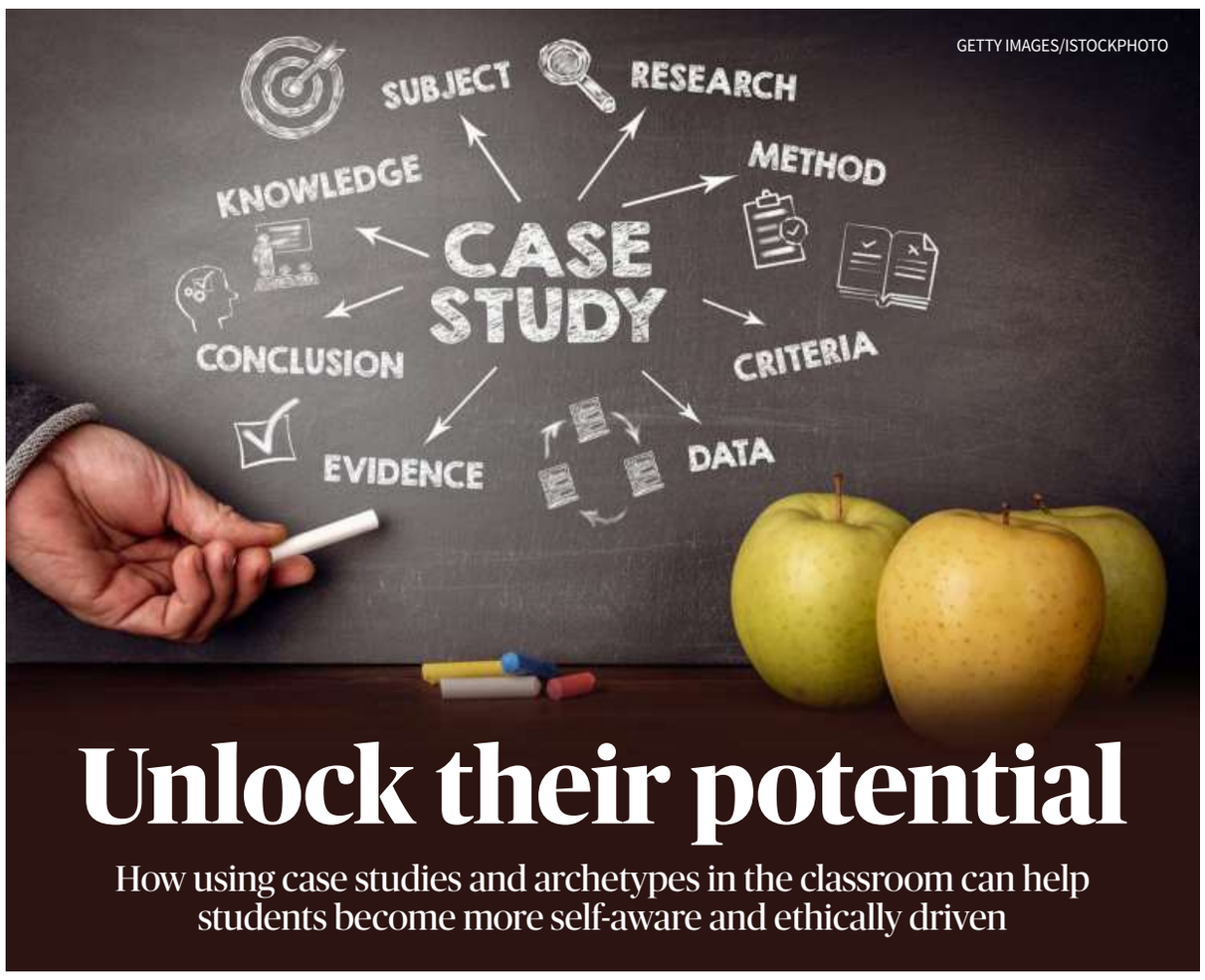
Valerie Mendonca



Unlock their potential

How using case studies and archetypes in the classroom can help students become more self-aware and ethically driven

At higher education levels, students need to grasp advanced concepts and skills. The transition from theoretical learning to practical application can be challenging, and top educational institutes recognise the value of teaching through case studies. Cases, based on real-world situations, present dilemmas that require students to make decisions, fostering critical thinking and problem-solving.

In a case session, students read the case and analyse the facts and data to justify their decisions in class discussions. A well-executed session is charged with energy and differing viewpoints. The role of the educator is crucial in facilitating this dynamic environment, ensuring discussions are productive and insightful. Educators can elevate learning outcomes by unlocking archetypes within students as they navigate these discussions.

World of archetypes

According to Carl Jung, all humans are born with social blueprints of archetypes such as Father-Mother, Child, Man-Woman, Wise Old Man-Woman, Jester, Hero-Heroine, and others. These archetypes influence behaviour and thoughts, shaping the psyche. Over millennia, archetypes evolved and became ingrained in human civilisation, with each representing different aspects of the human experience.

Tapping into these archetypes allows individuals to access parts of themselves that influence their thinking and behaviour. The highest calling of a teacher is to guide students toward "Deep Knowing," helping them explore and activate these archetypal energies. In today's rapidly changing world, educators must constantly adapt to meet evolving student needs and remain effective facilitators of knowledge.

The **Hero-Heroine archetype** represents an inner journey of initiation, transformation, and return. This process, much like in Disney's Moana, involves facing challenges, gaining wisdom, and achieving self-realisation. In case-based learning, students face a call to action, navigate challenges, and synthesise complex information. The educator's role is to activate the archetype and guide students toward personal growth, as they tackle these challenges. By the end of the session, students return to the class with knowledge that benefits the entire group.

The **Sage archetype** represents the pursuit of knowledge and truth. Educators can activate this archetype by encouraging students to ask probing questions, challenge assumptions, and engage in thoughtful dialogue. The Socratic method is a powerful tool in this process, pushing students to seek deeper understanding.

The **Creator archetype** symbolises creativity and innovation. In a university setting, it is activated when students are asked to think outside the box or come up with novel solutions. Educators can foster this archetype by assigning tasks such as designing experiments, creating business plans, or exploring new ideas. This is often seen in entrepreneurial and STEM courses, where students are encouraged to develop innovative models.

The **Explorer archetype** values freedom of expression and thought and drives individuals to seek autonomy and growth through self-discovery. In the classroom, educators can nudge students to explore parts of themselves through reflections, allowing them to uncover hidden facets of their identity.

Many educators encounter students who embody the **Jester archetype**; the "class clown" who disrupts learning with humour. While this may seem unproductive, it serves an important function in breaking the monotony of learning and challenging authority in a light-hearted way. Recognising the value of this archetype allows educators to reflect on their teaching methods and the structure of their lessons.

The purpose of education is to move students from ignorance to understanding, and case discussions provide a powerful platform for educators to unlock student potential. By tapping into archetypes, educators can create learning experiences that are not only educational but transformational, preparing students to become more self-aware and ethically driven in their future careers.

The writer is Manager-Insights, IIMA Ventures, a start-up incubator established by IIM-Ahmedabad

SCHOLARSHIPS

HDFC Bank Parivartan's ECSS Programme
HDFC Bank aims to support meritorious students belonging to underprivileged sections of society.
Eligibility: Open to Indian nationals studying in school (Classes 1-12), or pursuing diploma, ITI, polytechnic, undergraduate or postgraduate (including general and professional) course and have passed their previous qualifying examination with at least 55%. Annual family income must be less than or equal to ₹2.5 lakhs. Preference will be given to those who have experienced personal or family crises in the past three years that puts them at risk of dropping out.
Rewards: Up to ₹75,000
Deadline: October 31
Application: Online
www.b4s.in/edge/HDFC54

Sensodyne IDA Shining Star Scholarship
Haleon India aims to to support underprivileged BDS students.
Eligibility: Open to students who have scored minimum 60% in Higher Secondary and are pursuing their first year of the Bachelor of Dental Surgery (BDS) programme from government and government-funded colleges only. Annual family income must not be more than ₹8 lakhs.
Rewards: ₹105,000 per year
Deadline: October 31
Application: Online
www.b4s.in/edge/SSPPS4

SBIF Asha Scholarship
An initiative of the SBI Foundation to provide financial assistance to meritorious students from low-income families.
Eligibility: Open to students from Classes 6 to 12 and UG and PG students from the top 100 NIRF institutions, UG students from IITs, and students pursuing MBA/PGDM courses from IIMs. who have scored minimum 75% in the previous academic year. Annual family income must be upto ₹3 lakhs for school students and up to ₹6 lakhs for others.
Rewards: ₹15,000 for school students; ₹50,000 for UG students; ₹70,000 for PG students; up to ₹2 lakhs for UG students from IITs, and up to ₹7.5 lakhs for MBA students from IIMs.
Deadline: October 31
Application: Online
www.b4s.in/edge/SBIFS7

Courtesy: buddy4study.com

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OFF THE EDGE
Nandini Raman

Showcase your abilities

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

I am in the final year of an MBA in the Concentration of Human Resource and Finance. I want to join the Finance field. What other certifications should I take? What skills will I need? Saba

Dear Saba,

Certifications to consider are Chartered Financial Analyst (CFA), Financial Risk Management (FRM), Certified Public Accountant (CPA), Financial Modelling Certification (e.g., FMVA) and Certified Treasury Professional (CTP). Focus on developing specific skills like financial analysis, investment and portfolio management, risk management, corporate finance and quantitative skills in using financial tools and software for data analysis. Build professional relationships through networking events, conferences, and online platforms to explore job opportunities and stay updated with industry trends. Highlight the transferable skills from your HR and Finance background that are relevant and essential to the finance role, such as analytical thinking, problem-solving, and understanding organisational dynamics.

After my B.E., I worked in data visualisation at a market research company. I quit to take government exams but have not made any progress in four years. How do I explain the gap if I want to rejoin in data visualisation? Ashok

Dear Ashok,

Be transparent about your career journey during interviews. Explain that you took a break to pursue government exams and highlight your commitment to personal and professional growth. Emphasise the skills and experience gained during your previous role in data visualisation. Discuss and showcase projects you worked on, tools you used and outcomes achieved. Mention courses, certifications, or self-study that you pursued during the gap period to update your skills. Build and update your portfolio with recent projects or case studies demonstrating your proficiency. Include visual examples of your work and describe the insights derived. Frame the gap as a period of reflection and preparation for your career goals. Discuss how your experience has reinforced your passion for data visualisation and readiness to re-enter the field. Update your knowledge and skills in data visualisation tools and techniques. Take online courses, participate in workshops, or work on personal projects to showcase your abilities. Reconnect with professionals in the field through LinkedIn, industry events, and local meet ups, as networking can lead to job opportunities and provide insights into current trends.

I completed Class 12 (Biology with Maths) with good marks. But I am not interested in Engineering or Medicine. I want to be an IPS officer. Is it true that a degree in Economics or History will help? Are these tough subjects for Science students? Akshay

Dear Akshay,

Transitioning to the Humanities from a Science background is feasible with dedication and interest. Both Economics and History are suitable choices for your undergraduate degree and can help you with your dream of joining the IPS. Economics provides insights into economic policies, governance, and public administration, which are crucial for the civil services. It will also improve your analytical and problem-solving abilities, which are valuable in decision-making and policy formulation.

History, on the other hand, offers perspectives on governance, political systems, and historical precedents that influence modern-day administration and policy-making. It helps develop critical thinking, research skills, and the ability to analyse complex historical events and their implications.

Choose the subject that aligns with your interests and strengths, and dedicate yourself to thorough preparation for the UPSC Civil Services Exam. Stay committed with consistent study habits, practise writing essays, and solve previous years' papers to gauge your preparation level. Develop skills in current affairs, logical reasoning, and communication.

I have a PG degree in Maths and am doing my B.Ed. More than teaching, I am interested in policy-making and governance. How can I find a job in these sectors? Abhishek

Dear Abhishek,

Consider further education and pursue additional courses or certifications in public policy, governance, public administration, or related fields to enhance your knowledge and credentials. Look for internships or fellowships in government departments, research institutions, or NGOs that focus on policy issues. Develop skills in policy analysis, including understanding policy frameworks, evaluating policy effectiveness, and proposing policy recommendations. Research the qualifications and skills required for roles in policy-making and governance. Typically, these positions may require expertise in areas such as public policy, administration, economics, law, or social sciences. Connect with professionals working in government agencies, think tanks, research organisations, and NGOs involved in policy research and advocacy. Attend seminars, workshops, and conferences related to public policy and governance to expand your network. Stay updated with current affairs, policy developments, and emerging trends in governance through newspapers, journals, and online platforms. Strengthen your communication skills, both written and verbal, to effectively articulate policy recommendations and engage with stakeholders. Consider preparing for competitive exams conducted by government bodies for roles in civil services, policy analysis, or administrative services.

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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Dance of numbers

Collaboration, exploration and problem solving ... this is what the Bengaluru-based ICTS-RRI Maths Circle hopes to trigger in children

Maths has always been Shloka Suraj's favourite subject. But, in school, she says, it is often taught in a boring way. "They start saying that it is complex, and they make it complex," says the precocious 10-year-old, a member of the ICTS-RRI Maths Circle, a Bengaluru-based initiative for secondary school students by the International Centre for Theoretical Sciences (ICTS) and Raman Research Institute (RRI).

According to her, teachers don't always explain the reasoning behind complex concepts. "They make us memorise things. But when we start understanding the why of things, we remember better," says the home-schooled student.

For gifted children

The ICTS-RRI Maths Circle is part of a larger initiative launched by ICTS to identify exceptionally gifted children early and expose them to problem-solving and thinking about Maths in an open-ended way, according to the institute's website.

"There are very talented children in the country but, often, the process kills creativity," says theoretical physicist Rajesh Gopakumar, Director of ICTS.

The idea of a Maths circle is something Gopakumar has felt passionate about for a long time. "The philosophy that we have been nurturing at ICTS differs from the ones we usually have in these Maths Olympiads or other competition-based events." The focus (here) is on collaboration, not competition, and is based on open-ended exploration and problem solving rather than on speed solving.

Beginnings

Maths circles came into being in Bulgaria in the early 1900s, soon spreading to the Soviet Union, says Joseph Samuel, ICTS Endowed Visiting Professor, who has been involved with these sessions. "ICTS is trying to popularise this in India," he says.

According to Roshini George, who coordinates the sessions, ICTS launched the initiative in 2019 in collaboration with the National Institute of Advanced Studies (NIAS). The sessions were held at the National Institute of Advanced Studies and run by Pranav Pandit, a professor at ICTS. Once they understood where they wanted to go, they identified talented students and started conducting pilot sessions.

Then, the pandemic started, and things came to a halt. In-person sessions gave way to online sessions. Once the worst was over, ICTS considered restarting in-person sessions in addition to online ones.

In January 2023, ICTS began conducting sessions at RRI on second and fourth Saturdays. "We advertised widely and got a lot of responses," says George, adding that the selection process was based on evaluating an online Maths challenge. "By end of December, we selected about 25 to 30 students."

The ICTS-RRI Maths Circle started in January of 2023 with a session involving games and puzzles. Some later sessions dealt with modular arithmetic, cryptography, divisibility, optimisation, the pigeon hole principle, Platonic Solids, and so on.

This activity was initially nurtured by Samuel and Supurna Sinha (both retired professors of Theoretical Physics from RRI). Over time, they have been bringing in more experts and areas to diversify the character and scope of the activity. "The focus is more on how the children go about solving a challenge than arriving at the answer," explains Samuel.

Scope and beyond

On a pleasant Saturday afternoon, groups of young people huddle around tables on the terrace of the library building at the densely wooded RRI in Sadashivanagar. Heads bent over exercise sheets and a couple of Rubik's Cubes lie around while the green board on the wall in front of them lists the various rights of this gathering: to be wrong, to be different, to question. This session, which is being handled by Maths educator and author Ashwin Guha, is focused on Group Theory, a branch of Maths that studies algebraic structures known as groups. Sinha points out that hands-on activities help children understand Maths better and adds that Guha has conducted a series of Maths Circle sessions introducing Group Theory through hands-on explorations using the Rubik's cube.

ICTS seeks to take this movement beyond Bengaluru, hoping to catalyse its spread across the country. "ICTS is just one institution, and we are trying to take the lead in creating a network of institutions," says Gopakumar, adding that ICTS is willing to act as a repository for the resources for all the Maths explorations and handhold any institution or group interested in starting their own circle. "We invite people to come and join our online monthly meetings if they're interested in how to start a Maths circle."

There are already Maths circles, both independent of and in collaboration with ICTS in Chennai, Kolkata, Bhopal, Mumbai, and Palakkad. Gopakumar firmly believes that there is scope to scale up. "I think it can be a real national movement," he says. He dreams that these Maths circles will someday be the analogue of the chess clubs: filled with bright kids who will come to one of the many circles, hang out and do exciting things together.

"I see no reason it can't be because you do it in the same spirit as these people who play chess; you're just having fun with your mind."

Chase your campus dreams

A guide on navigating common application platforms for students applying to foreign universities

CAREER CUES
Richa Dwivedi Saklani

It's mid-October and early deadlines for most universities in India and abroad are approaching. Now is the time to start filling out applications. Each platform – whether it's the Common App (used by American universities), UCAS (U.K. universities), or country-specific portals like OUAC (Canada) or Studielink (Netherlands) – comes with its own requirements, timelines, and processes. Here is a checklist of what you should keep ready, as each country and university has specific requirements.

Application forms: Does the university have its own specific application portal or use a common platform?

Documentation: Transcripts from school, letters of recommendation, English (IELTS, TOEFL, Duolingo) and other test scores (SAT, ACT, specific U.K. exams for Oxbridge) and personal essays.

Common Application

An application system for more than a thousand colleges and universities, mostly in the U.S. but also for those in Canada, Australia, China, Japan and some European countries, it allows application only to 20 universities at a time.

Activities section: Allows you to fill up to 10 activities. Do so in order of importance to you. If you have more than 10, try to combine two similar activities together.

Common app essay: This is the trickiest bit: a 650-word essay from one of the given prompts. Try and make this unique to you; write your personal story and offer an insight into what makes you, you.

Recommender and FERPA: You'll be asked to submit details of your counsellor as well as two teachers for most universities. Identify and speak to the teachers you want to approach beforehand. If your school uses a brag sheet, use it to write specific things that you want your teachers to mention. If not, write an email to your teachers with specific things you want him/her to mention. Some universities have an optional additional recommendation. So, if you have interned somewhere, ask your mentor/ guide to write one.

Testing: Check if your universities require standardised testing and plan for this in advance.

Check all supplementary essays for your universities beforehand so you don't miss anything.

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UCAS

An application system for most U.K. universities, it allows applications to only five universities.

College list: First, check all grade requirements for your courses for a realistic perspective on where you can get in. Choose two dream universities, two target universities where you safely meet the grade requirement, and one super-safe university.

Buzz word: If your school provides a buzz word option, link your application to your school. If not, apply as an individual.

Personal essay: In the U.K., this is basically a place to mention your achievements, why you want to apply to this particular course and why you would be a good fit. Try to mention all your academic and non-academic engagements with the subject so far without listing things down like in a resume.

Testing: Many courses and colleges have their own admission test that require a different registration. Check all these requirements beforehand so you do not miss out.

Remember, the deadline in most U.K. universities is mid-January. However, most medicine, dentistry and Oxbridge programmes have earlier deadlines. So apply early to more competitive programmes.

OUAC

The Ontario Universities Application Center is mainly for Canadian universities based in Ontario region. There is no limit to the number of universities you can apply to and you can apply to multiple programmes at the same institute.

Tip: While the OUAC requires your basic details, each university you apply to will send you a supplementary application through email. Keep an eye open, as they have separate deadlines and tend to require a lot of documentation.

Studielink

This is the common application system for The Netherlands. You can apply to a maximum of four programmes, with certain limits for popular courses like medicine.

Language proficiency: Proof of English proficiency through tests like IELTS or TOEFL is mandatory for most programmes. Most Dutch universities will also send a supplementary application with a separate deadline so check your email and spam. Some also have their own testing requirements, so check on that as well.

General tips

- Draft and revise all essays to ensure they are within the word limit. Ask for feedback from parents, mentors and friends.
- Request recommendations from teachers/ counsellors/ mentors, as people take time to write these.
- Know the costs of all your applications.
- Whether it's your SAT, ACT, IELTS, TOEFL ... login to their website and send these scores officially to all your universities. It is not enough to self report them.
- Keep a calendar or list to keep track of all deadlines.

With inputs from Kritika Malhotra

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

Where numbers rule

Featuring six new-age careers that require a blend of mathematical expertise and industry-specific skills.

Neelakantha Bhanu Prakash

In an era where technology and data analytics are transforming every sector of the economy, Maths has emerged as a critical pillar in driving innovation and efficiency. From Artificial Intelligence and Machine Learning to financial markets and autonomous systems, the application of mathematical principles is pivotal in developing cutting-edge solutions and making informed decisions. Here are six career options that blend mathematical expertise with industry-specific skills

Algorithmic Trader: Algorithmic trading has revolutionised the finance industry by using sophisticated mathematical models and computer algorithms to execute trades at unprecedented speeds. These models help predict market movements and capitalise on fluctuations in milliseconds. This role requires a deep understanding of both Maths and Finance to create algorithms that can consistently outperform the market under various conditions. An algorithmic trader uses advanced calculus and statistics to model and predict market behaviour and understand the intricacies of different financial markets and instruments, guided by mathematical principles such as probability and risk analysis.

AI Ethics Officer: ensures that AI systems are developed and deployed in a manner that adheres to ethical standards and societal norms. They employ Maths to identify and reduce biases in AI algorithms, ensuring machine-made decisions are fair and transparent. They create frameworks using statistical models and ethical algorithms to detect and correct biases, and utilise mathematical reasoning to align AI practices with global data protection and privacy standards.

Autonomous Vehicle System Analyst: Also known as self-driving cars, autonomous vehicles use a complex mix of Maths, Computer Science, and Engineering to navigate safely and efficiently without human intervention. An Autonomous Vehicle Systems Analyst develops and refines the algorithms that allow these cars to "see" and "decide". They apply principles of linear algebra and differential equations to design systems that can predict and adapt to dynamic environments and enhance autonomous algorithms with machine learning techniques, requiring strong statistical analysis and optimisation skills.

Cryptocurrency Analyst: uses mathematical models to evaluate the stability and potential of various digital currencies, assess market trends, and advise on investment strategies. They use probability and statistical inference to assess the chances of different outcomes and employ statistical analysis and predictive modelling to study market trends and make informed investment decisions based on data.

Digital Twin Engineer: creates digital versions (or twins) of physical systems ranging from a car engine, a building, a manufacturing line, or even a city's water supply network. Using these digital twins, they predict what will happen in the real world under different conditions without ever touching the actual system. These engineers use Maths to describe every aspect of the digital twin, from geometry to simulate shapes and sizes of physical objects, to calculus and algebra to model how things change over time.

Operations Research Analyst: Vital in industries ranging from logistics and transportation to healthcare and defence, they use mathematical models and algorithms to optimise operational efficiency, reduce costs, and improve service delivery. Their work involves solving some of the most complex decision-making by applying a mix of mathematical, statistical, and computational techniques.

The integration of Maths into these high-demand roles is not just about applying known formulas to solve equations; it's about using Maths to innovate, predict, and optimise in a rapidly changing world.

The writer is the founder and CEO of Bhanzu, a Maths education platform.

FREEPIK

Build for the future

Experiential learning in architecture education fosters a connection with the built environment and prepares students to tackle the profession's demands.

Anand Achari

The importance of design and spatial problem-solving in Architecture education is undeniable. While traditional methods like lectures and textbooks offer a valuable foundation, practical experience plays a crucial role in developing true proficiency. This is where experiential learning steps in.

Key concepts

Architecture demands the ability to translate abstract ideas into functional spaces that meet real-world needs. Textbooks have limitations and can't replicate the complexities of building codes, the behaviour of materials under varying conditions, or the subtle nuances of user experience within a built environment. Experiential learning bridges this gap by immersing students in practical challenges, preparing them to tackle the profession's real-world demands. The four key components of learning in architecture are:

Experiential learning: This involves immersing students in hands-on experiences that simulate real-world situations. Through site visits, workshops, and simulations, students gain first-hand knowledge of construction processes, material behaviours, and the intricacies of architectural design.

FREEPIK

Informative learning: This focuses on the acquisition of fundamental knowledge and facts including historical context, theoretical frameworks, and technical skills and provides a solid foundation for further exploration and analysis.

Analytical learning: This encourages students to think critically and approach problems with a logical and methodical mindset. By dissecting and analysing existing structures, assessing design efficiency, and exploring innovative solutions, students develop the ability to evaluate and improve architectural designs.

Application learning: This involves practical implementation of theoretical concepts, where students engage in real-world projects and apply their knowledge and skills to create tangible architectural solutions. It enables students to integrate the understanding of architectural principles, technical skills, and critical thinking to produce functional and effective designs.

Hands-on workshops are a prime example of experiential learning. Here, students grapple with the realities of sustainable construction, exploring how material selection impacts energy efficiency. They might test mock-ups to understand the thermal performance or participate in site visits or real-world construction projects to observe first-hand the impact of design decisions on a building's ecological footprint and also interacting with practising architects and builders.

Shift in approach

India is witnessing a growing movement to transform architectural education from theory-heavy to active and experiential. Institutes and embracing innovative approaches like live project studios where students collaborate with real clients on projects like community centres to gain invaluable experience in stakeholder engagement and navigating the complexities of construction.

Design-build courses offer an even deeper dive into experiential learning. Students not only design but also construct a small structure, learning about materials, construction techniques, and the crucial communication between architects and builders.

Another key area is industry-academia collaboration. By working together, institutions and industry professionals can bridge the gap between academic knowledge and industry demands.

Further, with the mainstream adoption of green building concepts, sustainability principles are becoming an integral part of architectural practice. By incorporating sustainable design challenges and projects into the curriculum, students can explore innovative solutions and develop a strong understanding of eco-friendly construction methods. By leveraging cutting-edge tools like AI, AR, and VR alongside principles rooted in Indian heritage, architects can create spaces that seamlessly blend innovation with tradition.

The shift from passive learning to active engagement marks a significant evolution in architectural education. With experiential learning at its core, students will be equipped to tackle real-world challenges with creativity and innovation.

The writer is the Principal, VES College of Architecture.

Prompt it right

The role of Prompt Engineers is integral to shaping how we interact with and derive value from Artificial Intelligence technologies

K. Kiruthika
A.M. Venkatachalam

With Artificial Intelligence (AI) gaining ground, Prompt Engineering is emerging as a crucial discipline and is gaining considerable attention within the community. This is the process of writing instructions (text prompts) to Generative AI models to produce the desired output such as text, images, videos, or audio. These models are trained extensively on vast datasets and can produce tailored outputs based on the prompts provided.

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What they do

Prompt engineers design and craft effective Prompts for large language models (LLMs) to generate text, translate languages, write different kinds of creative content and answer questions in an informative way like ChatGPT, Google's Bard, Stable Diffusion and DALL-E. Several tools streamline Prompt Engineering, providing functionalities designed to simplify prompt creation to achieve specific outcomes. These are particularly valuable for users aiming to leverage AI models effectively without deep expertise in Natural Language Processing. Some tools, such as Spellbook, FusionAI and PromptPerfectm, provide libraries with predefined prompts tailored for specific applications, which users can customise further.

This rapidly expanding field offers a variety of career paths with roles such as Prompt Engineering Consultant, Prompt Engineer, Prompt Engineering Researcher and Prompt Engineering Product Manager. A Prompt Engineer designs, develops, and refines prompts for AI models and further analyses and optimises prompt performance. They are in high demand across diverse industries, including technology, healthcare, finance and education because businesses and organisations of all sectors rely on LLMs for a variety of tasks and need Prompt Engineers to design and craft effective prompts for these models.

Prompt Engineering is a highly competitive field where skilled professionals are sought after and offered attractive salary packages. Opportunities abound in companies utilising AI for tasks such as customer service or data analysis as well as in organisations involved in developing or customising AI models.

Education

Typically, Prompt Engineers require a Bachelor's or Master's degree in Computer Science, Computer Engineering, Statistics, Applied Mathematics, Artificial Intelligence or related disciplines. Proficiency and certification in programming languages like Python, along with extensive knowledge of Machine Learning and Data Science libraries, a solid grasp of Natural Language Processing concepts, techniques, frameworks and familiarity with Language Models and their applications in data extraction and text generation, will provide an added edge.

As a student, taking courses in Machine Learning, Natural Language Processing, and Artificial Intelligence, gaining practical experience with Large Language Models through hackathons, personal projects or internships and establishing connections within the Prompt Engineering community via industry events, online communities, and networking with professionals will be of great value.

With increasing demand across industries and lucrative opportunities for skilled professionals, Prompt Engineers play a vital role in harnessing the capabilities of large language models for diverse applications.

K. Kiruthika is a Technical Trainer at the Training and Placement Cell and A.M. Venkatachalam is the Director (Library and Student Affairs) at K.S. Rangasamy College of Technology (Autonomous), Tiruchengode.