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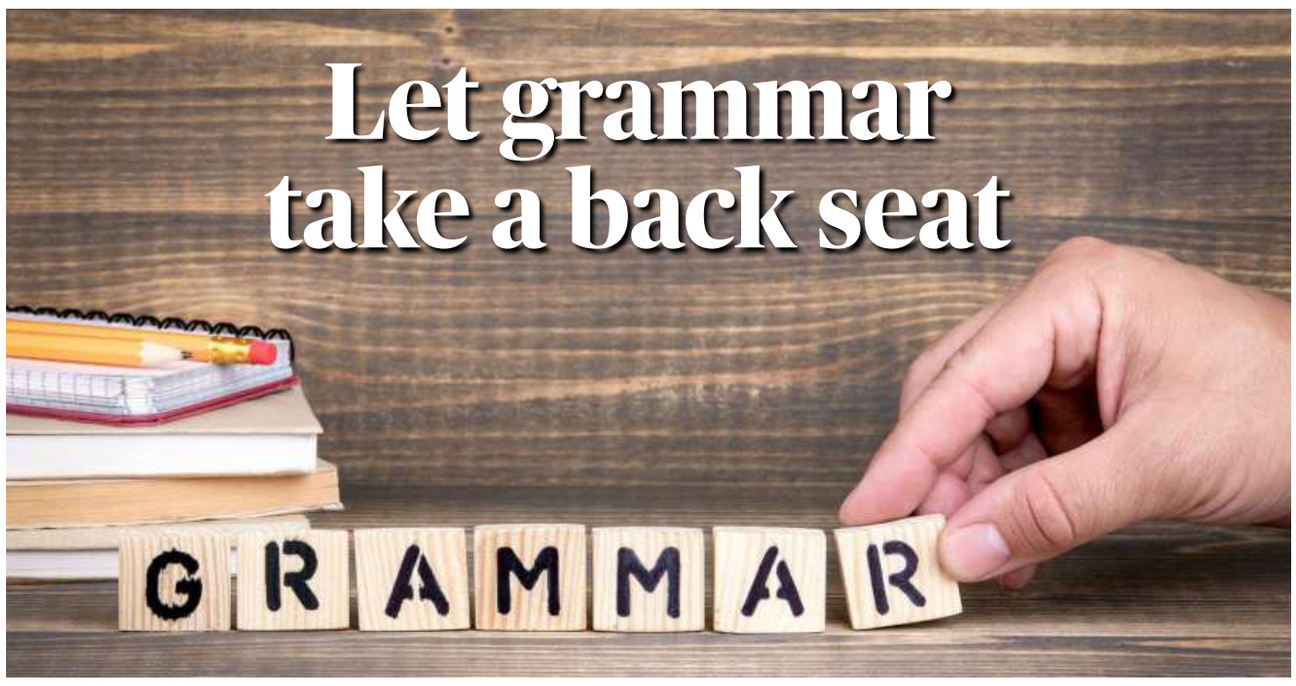
Let grammar take a back seat



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The undue emphasis given to grammatical rules when teaching English inhibits students from gaining linguistic competence

K. Elango

A revolutionary shift is required in the realm of English language teaching to empower learners in acquiring linguistic competence. The current approaches, methods, strategies, and techniques in practice have not yielded the desired results. English remains an aspirational language, despite our country's centuries-long acquaintance with it.

The theories and practices of the English language were predominately shaped by the British, especially the monolinguals who did not have much grip over the bi/tri/multilinguals' styles of acquiring languages. They laid undue emphasis on the peripherals of the language such as grammar and pronunciation and insisted on achieving a 'native-like fluency and accuracy'.

Obstacles to learning

Let us examine how the grammar of English is an obstacle to learning the language, grounded on the experiences of numerous teachers and learners, but which remain unarticulated, as we are treated as non-native speakers.

Drawing upon our experiential knowledge of mother tongues, we could affirm that we acquire them in 'immersive' contexts by watching, listening, imitating, and producing. The initial stages involve articulating sounds, gradually progressing to individual words, then expanding to chunks of words and ultimately maturing to produce simple sentences. Notably, grammar hardly figures in the scheme of learning. Polyglots vouch for this, as they constantly keep their antenna alive to pick up expressions from all possible sources and are least concerned about the grammatical correctness of their acquisition. A parallel can be drawn from migrant labourers, who focus on the 'survival language' in their place of residence and work. Even those who never stepped into schools can absorb the necessary language, unaware of their grammaticality.

In informal settings such as homes or any non-institutionalised contexts, grammar takes a back seat, facilitating smoother and quicker language acquisition. The insistence on grammar, particularly in institutionalised settings, reveals a distortion in the cognitive process, be it the mother tongue or other tongues. Recognising this, educational curriculums introduce the grammar of the mother tongue at a later stage; even then, learners are averse to its components.

In our pedagogy, contrary to real-life ecosystems, the introduction of the language and grammar of English occur almost simultaneously, as if learners could acquire the language through grammar. This ignores the truth that grammar is about the language, not the language.

Another misplacement significance lies in attributing equal weightage to all four skills – Listening, Speaking, Reading, and Writing (LSRW) – disregarding the natural order of acquisition. Speaking and listening inherently take precedence over the other two. Therefore, prioritising speaking over the other skills, particularly in the initial phases, is imperative.

Speaking and listening inherently take precedence over reading and writing. Therefore, prioritising speaking over the other skills, particularly in the initial phases, is imperative.

An often overlooked, yet crucial, distinction lies in the differences between the spoken and written forms. While written language adheres strictly to grammatical rules, spoken language provides leeway; a single word, a phrase, or an unfinished utterance can effectively convey the intended message. The additional advantage of the non-verbal elements such as gestures, postures, visual cues, and tonal variations can amplify meanings and keep the listeners captivated. Further, the spoken form could be imbued with emotions to sway the audience, but the written mode consistently maintains a formal tone, follows a linear progression, and 'distanced' from readers.

Regrettably, the grammar of written language is imposed onto the spoken mode, which acts as a stumbling block to gain speaking competence. Nevertheless, a liberating development is the acceptance of non-traditional grammar usage on social media, where code switching, and code mixing are liberally employed and embraced by all.

Reading helps

The most practical approach to gain grammatical sense is predominantly by reading, and this unconscious cognitive process seamlessly embeds grammar into long-term memory. In contrast, the conscious teaching of grammatical items may enable learners to comprehend, store, and recall but incapacitate them in application, serving little purpose. Leaning can occur consciously, subconsciously, and unconsciously, and for grammar sub/unconscious learning through reading may prove far more effective than conscious drilling.

Applied linguists emphatically state that the grammar of a language can be learnt without knowing the language and, conversely, a language can be learnt without knowing its grammar. For spoken communication grammar is not an absolute necessity; hence, we must cease to insist on it for the effective acquisition of English.

The writer is a retired Professor of English and National Secretary of English Language Teachers Association of India (ELTAI).

SCHOLARSHIPS

France Excellence Charpak Master's Programme
An opportunity offered by Campus France, India, (a government agency that operates under the French Ministry of External Affairs and the Ministry of Higher Education and Research).
Eligibility: Open to Indian nationals or an Overseas Citizen of India (OCI) card holder not older than 30 years and is enrolled or has studied in an Indian Institution of higher learning, and has applied for admission to a French institution.
Rewards: €860 per month and other benefits.
Deadline: March 20
Application: Online
www.b4s.in/edge/CMPI1

Inlaks Shivdasani Scholarships
A merit-based opportunity offered by the Inlaks Shivdasani Foundation.
Eligibility: Open to an Indian passport holders, pursuing postgraduate studies in universities in the U.K, the U.S and Europe who have a first-class or equivalent degree from recognised Indian universities and have scored 65% in Arts-related subjects and 70% in subjects related to Maths and Science. Applicants must be proficient in English and must have received a valid deferred offer letter for the current academic year.
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Application: Online
Deadline: March 22
www.b4s.in/edge/INLAKS1

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A national exam conducted by the NICE Foundation.
Eligibility: Open to students from Class 5 up to degree or diploma level in a recognised institution.
Rewards: Participation certificate and prizes
Application: Online
Deadline: March 31
www.b4s.in/edge/NITE1

Courtesy: Buddy4study.com

OFF THE EDGE
Nandini Raman

Career choices

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

I am in class 12 (Commerce stream with Maths). I want to become a lawyer and work abroad. What are my options? Aneena

Hi Aneena,

An LLB after Class 12 will help you reach your goal. To study in India, you must take entrance exams such as CLAT, AILET, LSAT, MH-CET, DU-LLB for admission into the specific law colleges. To study abroad, check the courses, curriculum, visa and documents required. In some cases, one can enter a law programme after high school, while in others you may need an undergraduate degree. The U.K., Australia, and Canada offer undergraduate programmes leading to a LLB degree. In the U.S., Canada, and some other countries, law is pursued via a Juris Doctor (JD) programme, which takes three years after completing a Bachelor's degree in any field. Some countries and institutions may require you to take specific entrance exams. Ensure that your law degree is recognised internationally. During your course, focus on areas of law that are in demand internationally. Gain relevant experience via internships, part-time jobs, or volunteering at law firms, legal aid clinics, and NGOs. You can also do a PG LLM from a reputed university abroad.

I love writing: creative, academic, or technical. But how does one make a lucrative and stable career out of writing in India, or globally? I have a degree in literature and law, with good grades. My writing has always taken a back seat because I come from a middle-class family where the idea of a dream/ stable job, is a bank, SSC and so on. But I feel I could do more. Is this attitude immature or impractical? Snehil

Dear Snehil,

Your passion for writing, along with your educational background can provide a strong foundation for a career in writing. It's not immature or impractical but may require strategic planning and perseverance, as it is an unconventional career path that may not feel stable till you get discovered or famous. Continue writing when you get inspired or find time but pursue a stable job. Identify your niche in writing; is it creative writing (fiction, poetry), academic writing (research papers, essays), technical writing (content creation, manuals), legal writing, or a combination? Once you do that, you can create a portfolio showcasing your best work via blogs, websites, and local publications to gain visibility. Consider being a freelance writer on online platforms like Upwork, Freelancer, and Fiverr. You could also network and market yourself on these platforms. Explore opportunities in content creation for businesses and industries for their' websites, social media, marketing materials, and so on.

If you enjoy creative writing, consider getting your work published. Self-publishing is not hard today. Have you considered certifications in creative writing, journalism, or technical writing? This could enhance your skills and credibility. Connect with other writers, editors, publishers, and professionals to land opportunities, collaborations, mentorship, and potential job offers.

Be patient, persistent, open to learning from setbacks or rejections and steer clear of naysayers!

I am a B.com graduate and want to pursue an MBA specialising in Financial Management. What are the career opportunities? Any additional skills I should develop? Guru Raj

Dear Guru,

A specialisation in Financial Management offers career opportunities in Corporate Finance, Investment Banking, Asset Management, Financial Analysis, Risk Management, and Consulting. Consider pursuing certifications like Chartered Financial Analyst (CFA), Financial Risk Manager (FRM), or Certified Management Accountant (CMA) to enhance your skills and credibility. Gain practical experience through internships in finance-related roles. Network with professionals by attending industry events, and seeking mentorships.

I'm currently pursuing an M.A. in General History and want to get the UGC JRF to support my research endeavours in either public universities or foreign institutions. How do I go about this? Salman

Dear Salman,

You need at least 55% marks in your PG degree first. For the UGC-JRF, you need to register for the UGC-NET exam and clear the history paper. Keep an eye on the official website of the National Testing Agency (NTA) for notifications about the exam. You will have to submit the relevant documents to the UGC and, if you get the award, it will support your research in public universities or institutions in India. For research abroad, the JRF can add weight to your applications.

Explore foreign universities or research institutions that offer opportunities in your field of history. Check for fellowships, grants, or specific research projects. Prepare a strong research proposal, highlight your academic achievements, and showcase your potential.

Look for scholarships or funding opportunities offered by international organisations, governments, or universities that support research in history or related fields.

Collaborations with professors, academicians or researchers in your field will demonstrate and showcase a clear agenda to secure research opportunities and positions in foreign institutions.

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

Teach them to innovate

Being innovative is essential to being a good scientist and an engineer. Our teaching of STEM subjects should integrate teaching innovation for all students.

Hemant Kanakia

A teacher stands in front of a classroom and draws formulae or sketches a solution to a problem on a whiteboard. Students are either scribbling notes or listening to the teacher. This is the most common teaching method in our schools and colleges. What is wrong with it?

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The problem is that there are more effective ways of teaching Science, Engineering, and Maths. Many have observed that most students taught this way forget memorised formulae soon after the exam is over and grades are assigned. In an interconnected, globalised world, a web-based search or AI application such as ChatGPT4 can supply the solution, provided one asks the correct queries. However, the students fail when deeper theoretical foundations are needed to solve challenging problems, particularly those with multiple possible solutions and where trade-offs are needed to choose, considering the proper context.

Learning by doing

Recent advances in learning Science have shown that a classroom-based lecture-and-examination teaching model is the worst form of learning. An alternative method – learning by doing – makes students absorb new knowledge deeper, and use it more effectively. This method asks students to observe or do an experiment. Then they are asked questions to get them to think critically about why things work the way they do.

Consider how students will learn about the nature of light and the laws of optics through this method. A teacher will begin by showing an experiment whereby one observes that objects underneath water seem nearer than they are. This is because the light rays bend their paths when entering the water from the air. A teacher could lead students to ask questions about this phenomenon, making them think about why these light rays bend, how much they bend, why different colours of light rays have different bending angles, why they do not ben smoothly but change path abruptly, as they enter the water and what property of the medium determines how much bending would occur. Making students think and search proactively for answers to such questions leads to a deep understanding of the nature of light.

Similarly, an experiment with floating objects in water could be used to explain Archimedes' law of floating objects. Critical thinking about that will lead to understanding the viscosity of fluid and surface tension.

Skills required

Skills learned to innovate are closely linked with this highly effective method of teaching STEM subjects. To innovate, one begins by observing a product, a process, or how products get used and must think critically about the observations and ask "what-if" questions. These habits of observation, curiosity, critical thinking, and generating alternatives are what students learn by doing in STEM education. Being innovative is essential to being a good scientist and an engineer. Our teaching of STEM subjects would be more firmly grounded if it also integrated teaching innovation for all students.

A facility like an innovation lab or hub can be used to teach the art of innovation to students. A typical facility would include space that allows small groups to meet and brainstorm ideas and mechanical and electronic equipment for building prototypes. A useful innovation frequently emerges from interdisciplinary work, thereby fostering teamwork. Many successful innovation labs provide for student visits to factories, urban surroundings, and rural areas, where they are likely to encounter real problems that need solutions.

Innovation hubs also end up being incubators for innovative start-ups. Currently, most of our start-ups tend to copy a business model or a product that has worked well abroad. The only innovation that is pursued is to indigenise it to suit local tastes or to reduce costs. Start-ups that emerge from innovation hubs are observed to be more innovative.

IIT-Bombay and IIT-Madras both have vibrant innovation hubs that have led to the building of several deep-tech start-ups and unicorns. With the help of alumni support, engineering institutes such many of the IITs and BITS Pilani have created innovation hubs that typically include Tinkerers' Labs, which are open to all students 24x7 and managed by students; courses teaching prototype building; courses using active learning methods; and classrooms that support those courses. Empirical evidence collected at these facilities supports the idea that a vibrant innovation ecosystem developed at these institutions has led to an increased number of innovative start-ups. Independent measurements of outcomes conducted over the years at these institutes also show the effectiveness of such programmes in imparting better education to students in STEM disciplines.

The writer is the Founder, Maker Bhavan Foundation

Let your story shine

Writing the college essay is all about being real, authentic, and unapologetically you.

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Ayush Bansal

A brilliant piece of storytelling that is sometimes lost in the chaos of college applications is the college essay. Yes, the scary essay that has to capture your spirit and aspirations in a specific number of words. But don't worry; the art of the college essay is all about using this obstacle as a chance for personal growth.

If your life were a book, the college essay would be the one chapter where you could tell your narrative in writing. It's not about showing off your accomplishments. Instead, the goal is to highlight the human behind the accomplishments; the resume's hidden personality.

Writing the college essay is not about sculpting the perfect superhero version of yourself. It's about being real, authentic, and unapologetically you. Remember, the people reading your essay aren't looking for flawless perfection. They're searching for genuine connections and stories that they relate to and that stay in their mind.

In the mission to write the perfect essay, many forget the magic that lies in vulnerability. Share the moments when you stumbled, the times when you doubted, and the instances when you emerged stronger. It's these raw, imperfect moments that make your narrative relatable and memorable.

Craft your story

Start with a bang! Your opening should hook the reader. Whether it's a personal anecdote or story, a powerful quote, or a vivid description, set the stage for your story. Remember, this is your chance to shine, so make that first impression count.

Show, don't tell: Instead of listing adjectives that describe you, show those qualities through personal stories and experiences. If you're claiming to be resilient, share a story that illustrates that. Let the reader see through your eyes, feel the emotions, and understand the lessons you've learned.

Themes that resonate: Your essay should have a a central theme that echoes throughout. It could be about resilience, curiosity, or the transformative power of a single moment. Whatever it is, let it be the compass guiding your narrative. A well-crafted theme adds depth and weight to your storytelling.

Accept the ordinary: You don't need to climb Everest or invent the next big thing to have a compelling story. Sometimes, it's the seemingly ordinary moments that carry the most weight. Reflect on experiences that might seem ordinary initially but hold a deeper significance in shaping you.

Importance of editing: Think of your first draft as a rough diamond; it has potential but needs polishing. Editing is where the magic happens. Trim the extra, refine your language, and ensure every word serves a purpose. Ask for feedback but, remember, the final product should still sound like you.

The journey matters

While the goal is undoubtedly getting into college, the college essay is also a journey of self-reflection. It's a chance to reflect on your past, acknowledge your present, and envision your future. Accept the process, enjoy the introspection, and let it be a stepping stone toward understanding yourself better.

The college essay is not about conforming to expectations but about standing out by being authentically you. So, when you sit down to pen that essay, remember, it's not just about the words on the page; it's about sharing a piece of yourself with the world. Let your story be the one that shines amid the vast sea of applications. After all, the most compelling tales often come from the heart.

The writer is Founder and CEO of iDreamCareer.com

Beyond the calculator

As the accounting industry adapts to a changing world, budding professionals need to look beyond traditional methods to be successful accountants

Md. Sajid Khan

In this era of rapid change, accountants are no longer just number-crunchers; they are architects of financial futures. As the industry redefines itself, aspiring accountants have to be equipped not only with technical expertise but also with a holistic skill set, ready to navigate the dynamic terrain of the financial world.

Tech-driven changes

Today, accounting education is embracing a tech-driven renaissance. The integration of Artificial Intelligence (AI) and emerging technologies has become a necessity. Students are no longer confined to traditional accounting methods; instead, they are navigating a digital realm where automation and algorithms are the new norm. Automation of routine tasks allows accountants to focus on strategic decision-making and analysis. This shift in the educational paradigm requires students to be tech-savvy professionals who can navigate an evolving industry.

ESG considerations

In the wake of Environmental, Social, and Governance (ESG) considerations taking centre-stage globally, accounting students are the custodians of corporate responsibility. The curriculum now integrates ESG principles, fostering a generation of accountants who understand the financial implications of sustainable business practices. Accounting education now involves understanding how financial choices affect the environment and society as a whole. This transformation not only aligns with global sustainability goals but also prepares accountants to navigate a future where responsible financial practices are non-negotiable.

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Global accounting principles

As businesses expand globally, the need for standardised financial reporting becomes paramount. Accounting education has to break down geographical barriers by integrating global accounting principles into its curriculum. Students should be exposed to diverse accounting standards, enabling them to navigate the intricacies of cross-border financial reporting. The emphasis on global principles not only fosters a deeper understanding of international business but also positions accountants as global financial architects. In an interconnected world where financial decisions resonate beyond borders, this educational evolution will ensure that accountants are equipped with the tools to navigate the complexities of the global marketplace.

Ethical compass

In an era where trust in business is fragile, ethics takes centre stage in accounting education. Ethical education in accounting goes beyond compliance; it becomes a fundamental aspect of the accountant's identity. As businesses increasingly rely on accountants for strategic guidance, the emphasis on ethics ensures that they not only safeguard financial interests but also uphold the integrity of the financial ecosystem.

Soft skills

Beyond the technicalities of debits and credits, today, accounting education places a premium on communication, critical thinking, and interpersonal skills. Accountants are not just calculators; they are communicators, collaborators, and leaders. The recognition of soft skills as a critical component of an accountant's toolkit ensures that graduates are well-rounded professionals. As the industry evolves, the ability to communicate complex financial information effectively and collaborate across disciplines becomes a defining factor.

Flexible learning

Recognising the diverse needs of modern students, flexible learning options, including remote and part-time learning, are becoming integral to the educational landscape. This not only accommodates the demands of a changing workforce but also opens up access to education for a broader demographic worldwide.

The writer is Director – India, Association of Chartered Certified Accountants (ACCA)

Innovative threads

Beyond the obvious, the textile industry is a treasure trove of unique professions

Pratik Gadia

The world of textiles extends far beyond the familiar images of spinning mills and fashion designers. In recent years, an array of lesser-known job opportunities has emerged, offering exciting and fulfilling career paths. From colour-matching specialists to textile conservationists, the textile industry is a treasure trove of unique professions waiting to be explored. However, the key lies in obtaining the right qualifications and skills to unlock these hidden gems. Here's how interested students can obtain the necessary credentials for these rewarding roles.

The first step is self-discovery. Identify your specific interests within the broad spectrum of textiles. Whether it's sustainable practices, technical innovation, or historical preservation, understanding your passion will guide your educational and professional choices. Attend industry events, as they provide a spectrum of opportunities and information that might spark new interests and bring clarity. These events not only offer valuable insights but also expose you to diverse facets of the textile world.

Education

Once you've pinpointed your interests, explore specialised fields in the textile industry such as technical textile engineering, colour science, and sustainability analysis. The textile industry presents diverse opportunities like fashion technologists, sustainability consultants, and technical textiles specialists that play pivotal roles in connecting design and production while guiding the industry toward eco-friendly practices.

Beyond traditional roles like textile designer and engineer, emerging positions reflect the industry's evolution toward innovative fabrics. Additionally, accessible short-term skill development courses like Machine Operator and Electronics and Instrumentation, some with eligibility criteria as low as Class 8 pass provide entry points without a graduate degree. Roles like textile buyers, merchandisers, and quality control inspectors necessitate a robust understanding of technical intricacies, emphasising the varied skill sets valued in the textile landscape.

While exploring higher education programmes, seek out universities and institutions offering courses tailored to your chosen niche. Look for renowned textile schools with a strong reputation in your area of interest, as this lays the foundation for a comprehensive understanding of the field. While choosing a programme, consider factors such as faculty expertise, industry connections, and the comprehensiveness of the curriculum. While traditional education is valuable, be open to alternative paths like online courses, workshops, and certifications. These offer flexibility and targeted learning, allowing you to create a well-rounded education that suits your needs and preferences.

Build a network

Establishing robust connections in the domain is pivotal for professional growth. Actively participating in industry events, seminars, and webinars is imperative to network with seasoned professionals. Seeking mentorship from experienced individuals provides invaluable guidance, fostering insights crucial for success. Internships further help bridge the gap between theoretical education and practical industry demands, challenging preconceived notions about textile education in India.

Looking ahead, the future of textile education is intertwined with technology and sustainability. Emerging fields like smart textiles and circular fashion demand specialised skills. Stay attuned to these trends and consider additional qualifications that align with the industry's trajectory.

The path to lesser-known but rewarding careers in textiles involves a thoughtful blend of education, exploration, networking, and practical experience. With the right qualifications and a proactive approach to learning, aspiring professionals can unlock the doors to a world of exciting possibilities within the vast landscape of the industry.

The writer is Founder and CEO, The Yarn Bazaar.

ON THE SHELF

The Spark That Lit The Revolution: Lenin in London and the Politics that Changed the World

Vladimir Ilyich Lenin visited London on six occasions at the beginning of the 20th century and it was in this city, where Marx wrote *Das Kapital*, that the roots of Lenin's political thought took shape.

This book, from a former curator of the Russian collections at the British Library, tells the story of Lenin's intriguing relationship with the enigmatic Apollinariya Yakubova, a revolutionary known to her comrades as the "primeval force of the Black Earth".

Based on a series of new archival discoveries from the British Library, as well as photographs and details of the Russian revolutionaries and indeed international police spies who congregated in the East End of London (known then as the Little Russian Island), this is an exploration of the formation of one of the leading political visionaries of his age.

Revealing Lenin's London-based accomplices and political rivals, and shedding new light on his world-view; one that would have such a crucial impact on the 20th century.

Author: Robert Henderson
Publisher: Bloomsbury
Price: ₹699

Connecting the web

As the invisible force driving the digital age, network engineering offers diverse career paths for students aiming to shape the future of digital connectivity

Shamik Sarkar

The Internet has seamlessly integrated into our lives, shaping how we connect, communicate, and consume information. At the heart of this digital ecosystem lies the often-underappreciated realm of Network Engineering. From the installation of everyday WiFi routers to the orchestration of colossal data centres, network engineers are the unsung architects of our interconnected world.

Network Engineering is a multifaceted discipline that encompasses the art and science of constructing, operating, and maintaining computer networks. At its core, it involves engineering the connectivity of various devices on the Internet, forming the foundation for the seamless operation of diverse network applications. Routers, switches, servers, and data centres collectively constitute this interconnected tapestry, enabling the functionality of distributed network applications that power our digital interactions.

Within this domain, various roles demand specialised skills and expertise. From crafting software for networking devices to designing and testing the hardware that powers them, each role is integral to the smooth functioning of the digital landscape. Network administrators ensure the health of live networks, while architects design networks optimised for specific applications. Wireless engineers plan and deploy WiFi infrastructures, and network security engineers safeguard the Internet from malicious attacks.

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Courses and jobs

Aspiring network engineers typically begin with a B.Tech. in Electronics and Communications Engineering or Computer Science. While foundational courses in computer networking are common, specialised certifications such as CCNA, CCNP, and CCIE hold significant value in the industry. Exposure to industry-relevant networking problems through UG/PG projects and research initiatives play a vital role. Pursuing a Ph.D. in network engineering is beneficial for those envisioning research roles with tech giants.

After graduation, entry-level roles include network software, hardware, or administrator engineer positions. Those versed in wireless networks or security may start as wireless engineers or network security engineers. With experience, professionals can ascend to become network architects, managing intricate designs, or transition into managerial roles overseeing teams of network engineers. A Ph.D. in Computer Networks opens doors to impactful research positions within the industry.

Opportunities

Network applications such as Netflix underscore the need for meticulous network architecture design to ensure cost-effectiveness and efficiency. Simultaneously, the costly precision of networking hardware emphasises the critical role of hardware engineers in maintaining optimal performance. Support services for proprietary software and the imperative of network security highlight the ongoing role of network engineers in safeguarding the functionality and integrity of digital systems.

The paradigm shift to software-defined programming introduces a new dimension to network engineering. Engineers equipped with these skills are increasingly valued for their ability to bring flexibility, scalability, and efficiency to managing complex network infrastructures.

Beyond practical applications, network engineering offers a rich terrain for research in India and abroad. Network engineering is the invisible force driving the digital age. At a time when the Internet is the backbone of societal operations, the demand for skilled network engineers is set to soar. The diverse career paths coupled with opportunities for specialisation and growth make it an enticing field for students aiming to shape the future of digital connectivity.

The writer is Assistant Professor (ECE), Indraprastha Institute of Information Technology (IIIT) Delhi.