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**DR JOSEPH EMMANUEL**
Chief Executive & Secretary, Council for the Indian School Certificate Examinations (CISCE)

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Contrary to popular belief, ICSE is not a board. It is in fact, an examination that is conducted by the CISCE (Council for the Indian School Certificate Examinations), a private board set up to provide high-quality education to Indian children. Dr Joseph Emmanuel has taken charge of CISCE. In an exclusive interview with Brainfeed; he shares his vision for this prominent national-level board of school education in India.

It administers the Indian Certificate of Secondary Education (ICSE) examination for Class 10 and the Indian School Certificate (ISC) examination for Class 12, governing approximately 2,891 schools across the nation.

Artificial Intelligence is something that educators across the world mull over. And it is never enough to speak about it. We have Andreas Schleicher, Director of Education & Skill and Special Advisor to OECD, Paris share his thoughts on AI, technology and education systems.

The academic year has just about started and we have an assortment of articles that are helpful for school leaders and teachers. In many schools, new teachers take guard. The story 'Onboarding new teachers' is a must read for both the teachers as well as the management as it is crucial that teachers become comfortable and gel with the new culture and the management ensures they stick to the school for a reasonable time.

**THE STORY ON BULLYING TOO SHOULD NOT BE MISSED. A BULLIED CHILD MAY BE JUST AROUND THE CORNER. THE ARTICLE EXPLAINS THE SIGNS TO LOOK OUT FOR.**

The story on Bullying too should not be missed. A bullied child may be just around the corner. The article explains the signs to look out for.

There is a lot happening in the educational firmament. The National Council of Educational Research and Training (NCERT) released the school textbooks with changes as part of the annual revision process. We bring to you what the new changes are in a concise manner.

India is changing and changing for the good. One can hear all positives be it the economy or in the sports arena. Individuals are making it count and punching above their weight like Durgam Charan Tej, a boy from a remote village who made it into IIT Kharagpur. His story is an inspiration for all students.

*Sunshine & Cheers*

**Brahmam K V**
Editor-in-Chief

# Q&A

# "WE NEED TO SEE AI EMPOWER LEARNERS & TEACHERS"

## Andreas Schleicher
**Director of Education and Skills &
Special Advisor on Education Policy to the Secretary-General
Organisation for Economic Co-operation & Development (OECD)
Paris**

*We know how to educate second-class robots, people who are good at repeating what we tell them. In this age of acceleration and artificial intelligence, we need to think harder about what makes us human.*

**Q. What is the most pressing challenge in education today, and how do you propose addressing it?**

**A.** There are many challenges, for a start, 128 million boys and 122 million girls cannot go to any school, and two-thirds or more of the world's children have not acquired even basic skills. But the challenge of providing better access to today's schooling must not cloud our view to the educational challenges of tomorrow.

The kind of things that are easy to teach and test have nowadays become easy to digitise and automate. We know how to educate second-class robots, people who are good at repeating what we tell them. In this age of acceleration and artificial intelligence, we need to think harder about what makes us human. The future is about pairing the artificial intelligence of computers with the cognitive, social and emotional skills and values of human beings. Better articulating these in our curricula and instructional systems and aligning assessment and examination with these will go a long way towards educating learners for their future, rather than our past.

A related challenge is how we can better leverage technology for learning. Technology is not

# ANDREAS
## SCHLEICHER

*The future is about pairing the artificial intelligence of computers with the cognitive, social and emotional skills and values of human beings. Better articulating these in our curricula and instructional systems and aligning assessment and examination with these will go a long way towards educating learners for their future.*

a magic power, but it is an amazing accelerator and an incredible amplifier. The problem is that can amplify good ideas and good educational practices in the same way it amplifies bad ideas and bad practices.

Technology can help us make education more inclusive by making learning much more accessible and better adaptive to the different needs of learners, but the pandemic has also shown how technology can amplify almost any form of inequity in education.

Technology can super-empower teachers as designers of innovative learning experiences. Or it can disempower them to become slaves of scripted lesson plans or algorithms, they no longer understand.

Technology can help to reduce bias through better data, but it can also amplify and entrench bias.

Technology can connect people across geographic, linguistic or cultural boundaries, but it can also sort them into echo chambers that amplify their own views and insulate them from divergent thinking.

The bottom line is that smart education is not just about technology, but about a radical reimagination of what teaching and learning can be, when powered by technology. We need to shift attention from learning technology to learning activity and better integrate individual, team and class-wide activities with digital environments. The hardware needs to evolve so that devices are more present but less visible and distractive. And we need smart systems that work for all, that have equity not bolted on but at their core. We need to see that AI empowers learners and teachers rather than disempower them.

**Q. Where would you place India with regard to the performance of the education system?**

**A.** India is not yet part of OECD's PISA programme so it is hard to compare education in India with other parts of the world. But from my own experience, you can find both the world's most advanced and the world's poorest educational experiences in India. The challenge seems to build greater coherence and alignment in the system and to build an exam culture that prioritises validity and relevance so that students, parents and teachers align their practices with tomorrow's world.

**Q. The role of technology is growing with each passing day. Does Social Science have a future? Will students who pursue the Arts stream get jobs?**

**A.** Absolutely, in our world today, education is no longer just about teaching students something, but about helping them to develop a reliable compass and the tools to navigate with confidence through an increasingly complex, volatile and uncertain world. Social Science is a big part of this equation. Success in education today is about identity, it is about agency and it is about purpose. It is about building curiosity – opening minds, it is about compassion –opening hearts, and it is about courage, mobilising our cognitive, social and emotional

resources to take action. And those are also our best weapon against the biggest threats of our times - ignorance – the closed mind, hate – the closed heart, and fear – the enemy of agency.

**Q. How can education systems better prepare students for the demands of the 21st-century workforce? How do you think India is faring in this regard?**

**A.** Even a construct as basic as literacy has fundamentally changed. In the 20th century, literacy was about extracting and processing pre-coded information; in the 21st century, it is about constructing and validating knowledge. In the past, teachers could tell students just to memorise what they find in their textbooks, because that textbook was carefully curated and authored. Nowadays, Google presents students with millions of answers, and nobody tells them what's right or wrong and true or not true. The more knowledge technology allows us to search and access, the more important becomes deep understanding and the capacity to navigate ambiguity, triangulate viewpoints, and to make sense out of content. Contrast that with the finding from the PISA assessment of reading literacy where, on average across OECD countries, less than half of 15-year-old students were able to distinguish facts from opinions when the cues were implicit. And we don't have data for India about this.

The fact that advancements in literacy skills have fallen sharply behind the evolution of the nature of information has profound consequences in a world where virality seems sometimes privileged over quality in the distribution of information. In the "post-truth" climate in which we now find ourselves, assertions that "feel right" but have no basis in fact become accepted. Algorithms that sort us into

groups of like-minded individuals, create social media echo chambers that amplify our views, and leave us insulated from opposing arguments that may alter our beliefs. These virtual bubbles homogenise opinions and polarise our societies; and they can have a significant – and adverse – impact on democratic processes. And don't think those algorithms are a design flaw; they are exactly how social media is designed to work. There is a scarcity of attention, but an abundance of information. We are living in this digital bazaar where anything that is not built for the network age is cracking apart under its pressure.

**Q. What are the most impactful policy changes that countries can implement to improve educational outcomes for all students, based on your extensive study of education systems worldwide?**

**A.** I think we need to think about the educational transformation on many dimensions, in addition to issues around technology that I have already outlined above. The conventional approach in school is often to break problems down into manageable

*Nowadays, Google presents students with millions of answers, and nobody tells them what's right or wrong and true or not true. The more knowledge technology allows us to search and access, the more important becomes deep understanding.*

*We strive to develop students who will build a better world through intercultural understanding and respect, alongside a healthy appetite for learning and excellence.*

bits and pieces and then to teach students how to solve these bits and pieces. But modern societies create value by synthesising different fields of knowledge, making connections between ideas that previously seemed unrelated, connecting the dots where the next innovation will come from.

In the past, schools were technological islands, with technology often limited to supporting and conserving existing practices, and students outpacing schools in their adoption of technology. Now, schools need to use the potential of technologies to liberate learning from past conventions and connect learners in new and powerful ways - with sources of knowledge, with innovative applications and with one another.

The past was also divided – with teachers and content divided by subjects and students separated by expectations of their future career prospects; with schools designed to keep students inside, and the rest of the world outside; with a lack of engagement with families and a reluctance to partner with other schools. The future needs to be integrated – with an emphasis on the inter-relation of subjects and the integration of students.

In today's schools, students typically learn individually and at the end of the school year, we certify their individual achievements. But the more interdependent the world becomes, the more we need great collaborators and orchestrators. We could see during this pandemic how the well-being of countries depends increasingly on people's capacity to take collective action. Schools need to help students learn to be autonomous in their thinking and develop an identity that is aware of the pluralism of modern living. This is important. At work, at home and in the community, people will need a broad understanding of how others live, in different cultures and traditions, and how others think, whether as scientists or as artists.

The foundations for this don't all come naturally. We are all born with "bonding social capital", a sense of belonging to our family or other people with shared experiences, common purposes or pursuits. But it requires deliberate and continuous efforts to create the kind of "bridging social capital" through which we can share experiences, ideas and innovation with others, and increase our radius of trust to strangers and institutions. 🅱🅵

# FOR KOREANS, **EDUCATION IS AKIN** TO RELIGION

# SUMIT **MISHRA**

**Country Director**
**Japan & South Korea**
**Global Schools Group**

shares his thoughts on the education system, technology and trends in South Korea & Japan.

**South Korea**    **Japan**
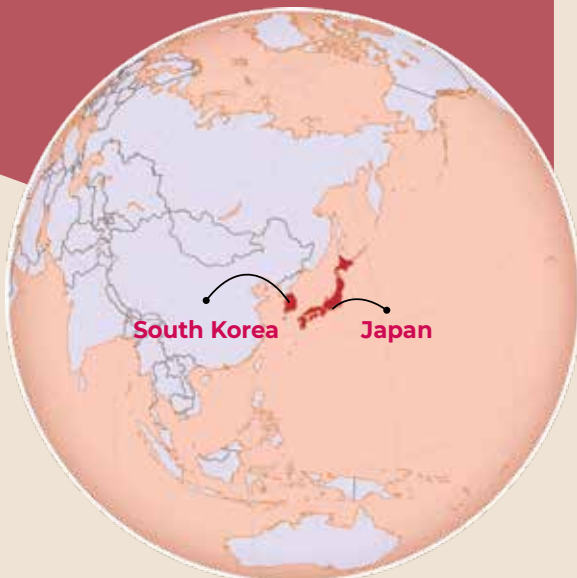
**Q. Could you share your journey and what led you to your current role?**

**A.** I have been in the K-12 education space for well over a decade, and have been instrumental in setting up and managing many schools across the geography of India. Before moving abroad, my last assignment was at Zee Learn as the Business Head of one of India's largest K-12 school chains. The current role is a sort of natural progression and I am now applying my skills and experience in more developed markets.

**Q. How do you see the role of technology evolving in education, particularly in Japan and South Korea?**

**A.** Both these countries – Japan and South Korea – have always been at the forefront of the technological revolution. Moreover, some of the biggest and best technology brands emanate from these two countries. At the same time, Japan is also a traditional society and some of the conservative traditions find a voice in the education system. Most children in Japan go to the public school system, which while among the best in the world, has not evolved that much to embrace technology. The conservative thought wants to keep schools as is with children being less exposed to comforts and technology. Technology in public

schools is limited to projectors and computer labs, and while hardware is available there is minimal training on IT and coding. International schools and private Japanese schools have done a relatively better job, integrating technology into the curriculum, with some providing individual devices to students.

**Q. What are the most significant trends in education that you have observed in Japan and South Korea in recent years?**

**A.** Till just a decade back, there was very limited interest in English education in Japan, and that's the reason most middle-aged Japanese know limited English. Most flagship courses, for example, medicine and engineering in Japanese universities are still taught in Japanese Language. In the last few years though things are changing rapidly. Many young Japanese are less conservative and are actively looking at International schools for their kids. The government has also realised the importance of English in a globalised world and is incentivising universities to establish full courses in English. IB courses have also started in some public schools. This has led to a ballooning of international schools and colleges, offering English medium courses.

**Q. What are the main challenges and opportunities you encounter while working in the education sector in these countries?**

**A.** The huge and growing opportunity is, of course, for education in the English language. In Japan, this is facilitated by the government which is quite welcoming towards international schools. An interesting feature of the Japanese system is that private companies are allowed to operate schools, and there are limited restrictions on buildings and land. This obviously makes it easier for foreign entities to operate schools there.

Korea is a far more complicated market. There are some parallels with the Indian system, where state governments at times try to enforce the local language in schools. Similarly, the Korean government lays some restrictions on children, wishing to attend international schools for example the family should have lived abroad for a minimum of three years, etc. There is a particular province in Korea that permits international education to Koreans without such restrictions, and this also has its complications as families and investments in international education move to a particular geography.

**Q. How do you perceive the current state of the Indian education system, and what are the key areas that require improvement?**

**A.** The Indian education system has made quite a few improvements over the years and the New Education Policy 2020 has the potential at least on paper to make the system on par with developed countries. Education Boards like CBSE are quite progressive and

have brought in a good mix of core and skill subjects. From the Board's viewpoint, there is no compulsory requirement of subjects for a so-called stream of education like science, commerce, etc. and students can choose subjects based on their interests. But these improvements are at a policy level and actual on-ground implementation is the tricky part. The wavelength of society does not really match the government's high thinking and there is undue focus on particular streams like engineering and medical. Change is happening especially in metros where more children are moving to non-traditional streams of education but it's a slow process of change in a vast country. More than the education system, I would say it is the mindset of Indian parents that needs to evolve.

**Q. How does the education system in India compare with those in Japan and South Korea? What strengths and weaknesses do you see in each?**

**A.** When it comes to education South Korea compares more closely to India. For Koreans, education is like a religion, and parents are ready to invest their money and time for the better education of their children. International education in English is sought after and Korean mothers at times move to live in another city/country with their children just for the sake of education. The Korean government, though prefers that children should study in Korean schools. Japan, on the other hand, is somewhat more evolved both at a policy

and social level. The Japanese government imposes no restrictions and parents are free to choose between Japanese and International schools. Relatively speaking, Japanese parents also do not push their children to that extent.

A direct comparison between India and these two countries would not be fair as India is still developing and plagued by issues like high dropout rates, poor quality of rural schools, etc. The Indian system also lacks seats in quality higher education leading to unnatural competition for a few good colleges, especially in professional education. In these countries, it is much more balanced, and the choice is between a good education in English or a good education in the local language. In India, for less affluent parents, it is actually at times a choice between good and bad education.

**Q. What innovations or changes do you anticipate in the future of education, and how is the Global Schools Group preparing to adapt to these changes?**

**A.** If you look back at the last few years, one key disruptor of the education system worldwide was the COVID-19 pandemic. Before the pandemic and the resultant lockdowns, there was not much seriousness among educators as to the potential of online education. All this changed overnight and online education has finally become mainstream. The Global Schools Group has always been at the forefront of technology in education, and this is one reason why all our schools could quickly move online and work during the pandemic. There has been continuous investment in technology and teacher training at GSG leading to a new learning management system. Another change is the rapid pace of globalisation; close to half a million students just from India go abroad to study. GSG which operates schools in over ten countries, ensures that there is good student interaction across countries leading to students developing a global mindset even if their primary school location is in India. **BF**

# CISCE
## FRAMEWORK REPRESENTS
### A TRANSFORMATIVE STEP TO MODERNISE EDUCATION IN INDIA:

# DR. JOSEPH EMMANUEL

**Chief Executive & Secretary,**
**Council for the Indian School Certificate Examinations** *(CISCE)*

**Q. What is the core educational philosophy of the CISCE board and how is it reflected in the daily practices of schools?**

**A.** The Council for the Indian School Certificate Examinations is committed to serving the nation's children through high-quality educational endeavours, empowering them to contribute towards a humane, just and pluralistic society, and promoting introspective living by creating exciting learning opportunities with a commitment to excellence.

The daily practices for the affiliated schools are driven by the ethos of CISCE, which allows schools to evolve their own niche while maintaining trust and fair play.

Schools are given the freedom to experiment with new ideas and practices to celebrate diversity and plurality, along with motivating all pupils towards the cultivation of excellence in learning and building constitutional and cultural values. The CISCE schools follow the holistic curriculum provided by the board that ensures inclusion and equity in classroom engagement through activity-based learning and multi- modal assessments.

**Q. What distinguishes the CISCE curriculum from other prevalent boards in India, such as CBSE, IB, and IGCSE?**

**A.** The curriculum emphasises the all-round development of students. A component of Internal Assessment (Project Work) is an integral part of all subjects at the ICSE level. In addition, at the ICSE level, students are required to compulsorily study a skill-based subject. This provides students with an opportunity to not only acquire knowledge but also learn other essential life skills such as creative thinking and analytical skills, teamwork, communication, public speaking, time management and critical thinking. The Council makes available a basket of subjects from which the students can select subjects of their choice across the boundaries of Humanities, Commerce and Science, in keeping with their aptitude and ability. The curriculum also focuses on enhancing language proficiency for effective communication, creative writing, and critical thinking.

*During the pandemic, CISCE conducted a virtual learning series for students and teachers rationalised the syllabus for examinations and used the internal assessment scores.*

**Q. How is CISCE integrating digital learning and enhancing its focus on STEM (Science, Technology, Engineering, and Mathematics) and STEAM (adding Arts to STEM) education?**

**A.** As part of the digital initiatives, CISCE offers several digital resources through its website. These resources are available for both teachers and students and range from a resource pack on Foundational Literacy and Numeracy (FLN), a Handbook on Financial Literacy, and Laboratory Requirements to a detailed syllabus, Analysis of Pupil Performance documents, resource materials on various innovative pedagogies and experiential learning, etc.

To facilitate interest and promote STEM education, the CISCE has recently introduced Robotics and AI as a subject at the ICSE level, which will soon also be introduced at the ISC level. To build readiness in schools towards this newly introduced subject, CISCE has also conducted hands-on teacher training programmes through its Centre of Excellence, Hyderabad.

Integrating multi-disciplinary concepts in project-based learning is actively advocated in the CISCE curriculum to enhance the focus on STEAM education.



Additionally, teacher training programmes on Art-Integrated Pedagogy for languages, mathematics and environmental science were also conducted for the Foundational and Preparatory stages.

**Q. What lessons has the ICSE board learned from the COVID-19 pandemic, and what measures have been taken to upskill teachers?**

**A.** Just like other school education boards, CISCE realised the pivotal role that technology has to play in ensuring access and engagement of learners during the COVID-19 pandemic. During the pandemic, CISCE conducted a virtual learning series for students and teachers rationalised the syllabus for examinations and used the internal assessment scores. A series of webinars were conducted on CISCE to build sensitisation and awareness of the relevance and future learning trajectories of newly introduced subjects. Online training for teachers has been an ongoing practice since then, a large number of teachers have been trained in competency-based assessments through the online medium.

**Q. In the present times, the emotional and psychological well-being of students is a major concern. What are your comments and what initiatives has ICSE taken in this regard?**

**A.** The well-being of the students has always been the focal point and of utmost importance to CISCE. In light of this, safety guidelines titled "School Safety Manual" were prepared as a management tool intended to offer guidance and practical advice to schools in planning, organising and managing a safe and healthy environment for staff, students, parents, visitors and all stakeholders.

CISCE is also committed to addressing school mental health concerns. In line with this, a number of awareness

programmes on School Mental Health: Interventions and Strategies are being planned in collaboration with various organisations including the National Institute of Mental Health & Neurosciences (NIMHANS), Bangalore. The school mental health and wellbeing programme aimed to equip various stakeholders with the necessary knowledge and strategies to address mental health concerns among students. The Heads of Schools, School Coordinators and School Counsellors of CISCE-affiliated schools will be benefitted from the program.

Additionally, a training programme on 'Interventions for Strengthening Child Mental Health & Protection in Schools' is also being planned for school counsellors in CISCE-affiliated schools in partnership with the National Institute of Mental Health & Neurosciences (NIMHANS).

**Q. There is a growing debate on assessment methods. Is CISCE exploring alternative evaluation techniques to ensure its curriculum remains globally competitive?**

**A.** CISCE offers multi-modal formative assessments at the school level. The Council has also introduced different kinds of questions to test the higher-order thinking skills in the board examinations. In order to prepare teachers for a strategic shift towards competency-based learning and assessment, CISCE trained a large number of teachers from the middle and secondary stages offline and online. As per the recommendations in the NEP 2020, CISCE had also issued an advisory to all its affiliated schools on introducing innovative pedagogy to build student competencies, along with the introduction of competency-focused questions in school-based assessments. CISCE is also looking at introducing core subjects with varied levels of difficulty.

**Q. What measures are being taken by the CISCE board to promote inclusivity and diversity within its schools, ensuring equal opportunities for all students?**

**A.** CISCE has been committed to ensuring equitable access to quality education for all students. For many years, the Council had offered various concessions and support measures to students with disabilities as mandated by the Rights of Persons with Disabilities Act (RPwD) of 2016.

In light of this, CISCE made a landmark decision to expand the scope of support measures to include learning needs associated with disability conditions not falling under benchmark disability status and Borderline Intellectual Functioning (BIF). Additionally, several other modifications were made to previously existing measures to ensure a more inclusive and supportive learning environment for all students. The advice of various national-level experts on disability-specific issues was sought, and their insights allowed us to carefully consider modifications and additions to existing measures, ensuring they remain relevant and effective.

**Q. Has CISCE formed any significant partnerships or collaborations with international educational institutions? If so, could you highlight some of these partnerships and their impact?**

*The school mental health and wellbeing programme aimed to equip various stakeholders with the necessary knowledge and strategies to address mental health concerns among students.*

*Project-based internal assessment also facilitates non-threatening formative assessments that allow students to perform at their individual levels and teachers to engage with the students as per their individual competencies.*

**A.** With the objective to enlarge the educational capacities and enhance the competencies of school leaders of CISCE-affiliated schools, CISCE collaborated with NIE, Singapore, for School Leadership Training Programmes for School Heads to develop visionary leadership, strategic management and leading innovation. As part of the post-training engagement, groups of schools have collaborated to initiate projects on school and community enrichment. In addition, the event served as a platform for the cross-fertilisation of ideas and promoting further collaborations between schools to enable networking and synergy of efforts.

**Q. How is CISCE incorporating the United Nations Sustainable Development Goals (SDGs) into its curriculum and school activities?**

**A.** Reflecting Sustainable Development Goals (SDGs) 4, CISCE encourages students with diverse learning needs to achieve the board examination with the support of various benefits and concessions. The excellent performance of the students with diverse learning needs in the ICSE and ISC board examinations 2024 has proven that CISCE-affiliated schools are providing a learner-friendly and inclusive environment.

The CISCE curriculum, being learner-centred, allows students to choose from a bucket of subjects both at the ICSE and ISC levels to ensure that we support students with different interests and aptitudes. The project-based internal assessment also facilitates non-threatening formative assessments that allow students to perform at their individual levels and teachers to engage with the students as per their individual competencies. Additionally, to build a formative and adaptive assessment culture reflecting inclusivity, CISCE & Comprehensive Measures for Diverse Learning Needs also include students with benchmark disabilities and students in disadvantaged conditions.

**Q. What is your vision for the CISCE board over the next decade? How do you see it evolving in response to global educational trends and challenges?**

**A.** By maintaining the unique curricular, pedagogical and assessment practices, CISCE will remain as a progressive, future-focused board and continue to produce capable citizens and global leaders from its affiliated institutions as per the global trends.

The adoption of the National Education Policy (NEP) 2020 and the National Curriculum Framework-School Education (NCF-SE) 2023 has necessitated systemic reforms within CISCE schools. This will include revisiting school infrastructure, classroom practices, resource allocation, and administrative policies to align with the framework & vision. Emphasis will be placed on promoting inclusive education, reducing learning disparities, and ensuring equitable access to quality education for all students.

The NEP-2020 emphasises a shift from rote learning to competency-based education and assessment. CISCE will continue to revise its assessment practices for all school levels to include a mix of formative and summative assessments that evaluate students' conceptual understanding, application skills, and critical thinking abilities. Continuous and comprehensive evaluation of all developmental domains will be integral to the assessment strategy, focusing on the holistic development of students. Adopting the NCF-SE 2023 within the CISCE framework represents a transformative step towards modernising education in India.

CISCE will contribute to nurturing competent, creative, and socially responsible citizens by building readiness towards international benchmarking for learning standards in students across India. **BF**

# NCERT TEXTBOOK REVISION:
## HERE'S WHAT HAS CHANGED

The National Council of Educational Research and Training (NCERT) released the school textbooks with changes as part of the annual revision process. The changes include modifications related to the Gujarat riots and Babri Masjid demolition.

The revised Class 12 political science textbook no longer mentions the Babri Masjid explicitly, referring to it instead as a "three-domed structure." The section on Ayodhya has been reduced from four pages to two, with a focus on the Supreme Court judgement that enabled the construction of a Ram temple at the site of the demolished structure.

NCERT director Dinesh Prasad Saklani said, "Why should we teach about riots in school textbooks? We want to create positive citizens, not violent and depressed individuals. Education should not foster offensiveness or hatred in society." Saklani said that the objective of the textbooks is to cultivate positive citizens and not to dwell on violent events. He added, "Hatred and violence should not be the focus of our textbooks.

The NCERT is revising school textbooks in line with the National Education Policy (NEP) 2020. Changes include the removal or alteration of significant historical topics, such as a two-page table detailing the achievements of Mughal emperors and discussions on ancient DNA studies from the Indus Valley site at Rakhigarhi. This marks the fourth round of revisions since 2014. Saklani noted that some changes were made because the subjects were deemed irrelevant, others to update information, and several topics were removed to reduce the burden on students due to the COVID-19 pandemic.



## "Why should we teach about riots in school textbooks?"

**Dinesh Prasad Saklani**
Director, NCERT

## NEW Changes

- Revised Class 12 political science textbook no longer mentions the Babri Masjid explicitly, referring to it instead as a "three-domed structure.

- The section on Ayodhya has been reduced from four pages to two, with a focus on the Supreme Court judgement that enabled the construction of a Ram temple at the site of the demolished structure.

- Among the latest deletions are references to BJP's 'rath yatra' from Somnath to Ayodhya, the role of kar sevaks, communal violence following the Babri Masjid demolition, President's rule in BJP-ruled states, and the BJP's expression of regret over the Ayodhya events.

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### *Indus International School, Bangalore*
## caters to *1,100 students* from more than *30 countries*



ndus International School's motto 'In Omnia Paratus', which means to be ready for all things, could not be more representative of this school that was established in the early 2000s. With 300 plus boarders from across the globe and 1,100 students studying in a clean and green campus spread over 40 acres with the underlying theme of lifelong learning, the management and the 160+ strong faculty believe that every child can learn.

Established on July 14, 2003 with 135 students, Indus, as an IB world school, rose steadily with the vision to create global citizens of tomorrow. It is the only school in India that has a formal Innovation curriculum for all grades to nurture and develop skills which focus on the curation of creativity and leadership in each child. Students are given ample opportunity to build expertise in co-curricular activities like sports , arts, and performing arts for all round development.

## Nurturing compassionate & lifelong learners

As an International Baccalaureate (IB) school, Indus embraces a comprehensive and holistic approach to education. Their core values focus on developing individuals who embody inquiry, curiosity, compassion, and a spirit of entrepreneurship. The school is envisioned as a microcosm of the world, where diversity is celebrated and used as a foundation for learning and growth. This approach ensures that our students are well-prepared to engage with the global community and equipped with the skills and perspectives necessary to thrive in an interconnected ecosystem.

Established on:
**July 14th, 2003**

Campus Size:
**40+ acres**

Student Strength:
**1100+**

Faculty Strength:
**160+**

Class Size:
**25 students**

### Vision

"To create global citizens and leaders of tomorrow, through traditional values of love, empathy, discipline and respect 21st century citizens who think globally and act locally."

### Mission

"To create life entrepreneurs through holistic education and lifelong learning."

# SHAPING LEADERS FOR A VUCA WORLD

Imagine a school where education ignites passion and transforms ambition into action. At Indus International School, this vision is our guiding principle. We believe, as John Dewey stated, "Education is not preparation for life; education is life itself." This philosophy fuels our commitment to fostering innovation, creativity, and critical thinking in our students.

Professional Development at Indus is a multifaceted approach aimed at enhancing educators' skills and competencies through various strategies. This enables them to effectively deliver the Collaborative Learning Model (CLM), which leverages human intelligence, artificial intelligence thereby harnessing innovative intelligence to create an immersive intellectual environment. This initiative aims to transform educators' and students' mind-sets by positioning AI as an equal partner in supporting student development, thereby integrating twenty-first century competencies within both students and teachers. CLM seeks to engage learners, stimulate curiosity, and inspire creativity, enhancing the learning experience by applying knowledge to solve real-world problems.

Design thinking and interdisciplinary teaching methods are incorporated through Innovation Curriculum which aims to cultivate an innovative mind-set in students by fostering leadership and real-life competencies essential

**Dr. Sarojini Rao**

**Principal**
Indus International School
Bangalore

for thriving in VUCA (Volatile, Uncertain, Complex, and Ambiguous) world they will inherit. Over the years, our innovation curriculum has achieved significant progress through student-led initiatives and projects at incubation and startup stages on community and global levels.

For twelve consecutive years, Indus International School has held the prestigious title of India's Number One International Day-cum-Boarding School. This achievement is a testament to our vision and the leadership of our MD & CEO, Lt. Gen. Arjun Ray (Retd.), who has been the driving force in getting us future ready. We also extend heartfelt gratitude to our dedicated faculty and the unwavering support of our parents. Their combined efforts empower us to shape the future with responsibility, renewed enthusiasm, and unwavering commitment.

## Helping students unlock their potential

Indus has launched its own Innovation Curriculum, a unique initiative designed to help our young eagles harness their innate talents. The entire focus is on developing competencies in various areas through student-led initiatives providing both students and teachers a platform to delve into academia, ethics and intensive reading as a means of self-guided learning.

### BE FUTURE READY

- Resilience
- Research
- Critical Thinking
- Experimentation
- Creative thinking
- Design
- Entrepreneurship
- Collaboration
- Risk Taking

### Teachers at Indus:

Teachers as mentors who teach and guide students through a personalized approach.

**Lt. Gen. Arjun Ray** (Retd.)

**MD & CEO**
Indus Trust

" The purpose of education has to be preparation for life. Apart from academic excellence, it is more important for the next generation to have an entrepreneurial mind, not strictly in the business sense but it is about initiative, risk taking, innovation, embracing failures, celebrating failures, and finding big opportunities in big problems. "

## Collaborative Learning Model

***Humanoid robots coexist with teachers:*** Indus introduced one of kind humanoid robots called Eagle 6.0. Indigenously designed collaborative learning model facilitates man machine learning. The collaborative learning model now allows the human teacher more time to focus on the child, provide individual support, and personalize learning.

While the robot takes over all the repetitive tasks of the teacher such as delivering content, clarifying misconceptions and conducting automated assessment. This now enables the teacher to teach the child and not the subject alone. The advantages of the collaborative learning model are as follows:

- Improve academic rigour
- Enhance the effectiveness of teaching and learning
- Optimize teacher workload



## StartupYou

StartupYou is the first of its kind within the K-12 education program focusing on developing competencies and enabling students to become Future Ready and life ! It is completely an online program, for students of Grades 6 – 12, alienged with Innovation Curriculum. The program directed on building creativity, critical thinking, communication and collaboration, along with empathy and risk-taking, thereby helping students design their own future.

Students collaborate in teams to develop competencies in the following avenues:

- Innovation
- Leadership
- Business

The curriculum aims at guiding students to become Life Entrepreneurs – where they will create a vision for themselves, cope with and manage failures, think to innovate, and make a change for themselves and others. A unique feature at StartupYou is the mentor support that students receive from Industry experts, opportunities for Virtual Internships, solving problems through design thinking projects and understanding of the Start-up ecosystem through business idea competitions. StartupYou highlights the change in thinking in 21stcentury education and its importance in unlocking the potential of a student.🅱🄵
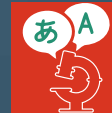
# INNOVATIONS IN STEM EDUCATION

## Stepping up STEM education with innovation



**Sanya Goenka Jain**
**Managing Director**
*GD Goenka Signature School*
*New Delhi, Delhi*



In today's rapidly evolving educational landscape, the convergence of Science, Technology, Engineering, and Math (STEM) is poised to be the cornerstone of innovation across various fields. STEM is a pillar in the modern innovation-based economy. The demand for STEM skills continues to rise, and job opportunities are expanding. Hence, a strong foundation in STEM is increasingly essential. Access to a high-quality STEM education is therefore crucial for achieving equity. As society becomes more digital and technology-oriented, people ought to develop the ability to understand, navigate, and leverage this new world. From a societal development standpoint, STEM teaching provides students with a better understanding of the world, at the physical, systemic, and operational levels, thus leading to better-informed citizens.

Before exploring recent advancements, understanding the present state of STEM is paramount. Technology now permeates every facet of our daily existence, shaping our interconnected world. From the ubiquity of smartphones to the advent of artificial intelligence, innovation is fueling our dependence on related solutions. The use of technology in various industries has opened new avenues for growth and development.

Advancements in STEM (Science, Technology, Engineering, and Mathematics) education have played a vital role in captivating students' interest, fostering critical thinking skills, and equipping them for the challenges of contemporary society.

**Below are some noteworthy innovations in this field:**

**Hands-on Learning:** STEM education is increasingly adopting interactive learning approaches, such as experiments, projects, simulations, and immersive activities thereby empowering students to translate theoretical concepts into real-world applications, fostering a deep understanding and passion for the subject matter.

**Integration of Technology:**
Leveraging technology such as Virtual Reality (VR), Augmented Reality (AR), and simulations breathes life into abstract concepts, offering immersive learning encounters. Online platforms and educational apps deliver interactive lessons and instant feedback, enriching engagement and tailoring the learning experience to individual needs.

**Project-Based Learning (PBL):** Project-based learning (PBL) prioritises student-led projects, dealing with real-world issues, fostering collaboration, problem-solving, and interdisciplinary engagement that reflects the dynamic characteristics of STEM disciplines.

**Gamification:** Gamifying STEM education through educational games, challenges, and competitions makes learning enjoyable and fosters healthy competition. It also promotes teamwork and resilience in the face of failure, crucial qualities in STEM fields.

**Inclusive and Diverse Curriculum:** Acknowledging the significance of diversity in STEM, the curriculum now incorporates a range of perspectives, role models, and real-world illustrations. This inclusive approach aims to inspire all students to pursue careers in STEM fields.

**Blended Learning Models:** Combining conventional classroom teaching with online resources facilitates personalized learning journeys. Flipped classrooms, where students study concepts online before participating in hands-on activities in class, maximise teaching time and accommodate diverse learning preferences.

**Experiential Learning Opportunities:** Internships, apprenticeships, and mentorship initiatives offer students invaluable exposure to STEM careers in real-world settings. By bridging the gap between academic learning and industry practices, these opportunities furnish students with hands-on skills and networking avenues.

**STEAM Integration:** Integrating the arts (STEAM: Science, Technology, Engineering, Arts, Mathematics) into STEM fosters creativity, innovation, and interdisciplinary thinking. It encourages students to approach problems from multiple perspectives and develop holistic solutions.

**Global Collaboration:** Technology empowers students to collaborate with peers and experts globally, fostering cultural exchange and exposure to diverse viewpoints. Collaborative projects and competitions promote teamwork, communication skills, and global awareness.

These innovations aim to inspire the next generation of scientists, engineers, and innovators, equipping them with the skills and mindset needed to tackle complex challenges and drive progress in STEM fields.

> STEM TEACHING PROVIDES STUDENTS WITH A BETTER UNDERSTANDING OF THE WORLD, AT THE PHYSICAL, SYSTEMIC, AND OPERATIONAL LEVELS, THUS LEADING TO BETTER-INFORMED CITIZENS.

# Q&A

**Q. Take us through your journey.**

**A.** My journey has been a fulfilling blend of experiences across education, technology, and military service spanning over 28 years. Beginning with a Bachelor's in Electronics Engineering from Mumbai University, my path led me to the Indian Navy, where I was honoured with the Sword of Honour for my dedication and service. Transitioning to education, I pursued an MBA and a B.Ed, coupled with a Digital Transformation Certification from Harvard.

Over the years, I've held various leadership roles in K-12 schools, driving initiatives to improve educational outcomes and foster thriving student environments. My tryst with education has spanned classroom instruction to administrative leadership. As the CEO of VIBGYOR Group of Schools under the Ampersand Group, I leverage my experience in education and technology to drive the organisation's strategic vision. I advocate for innovative teaching practices and holistic development, believing in the transformative power of education.

**Q. What does the VIBGYOR Group of Schools stand for? What are the core values?**

**A.** VIBGYOR Group of Schools is dedicated to fostering cognitive, artistic, and athletic development while instilling strong moral and cultural values. Our mission is to nurture responsible global citizens equipped to meet future challenges. Our educational approach was found on three core pillars: Enthuse, Enlighten, and Empower.

Through 'Enthuse,' we inspire a love

## 'OUR MISSION IS TO NURTURE GLOBAL CITIZENS'

# KIRANJIT
## PANNU
**CEO**
**VIBGYOR Group of Schools**

Havis Yerravalli

for learning using modern teaching methods, a variety of extracurricular activities, and top-notch facilities while celebrating cultural heritage and nurturing future leaders. 'Enlighten' emphasises holistic education, encouraging students to explore their interests and talents, fostering self-discovery and a well-rounded understanding of their strengths. Finally, 'Empower' creates a safe, nurturing environment that equips students with the skills necessary to become progressive thinkers and lifelong learners in an ever-evolving world.

**Q. How do you ensure that the educational programs at VIBGYOR Schools resonate with the evolving needs of the educational landscape?**

**A.** We proactively integrate cutting-edge pedagogical practices and a focus on experiential learning into our curriculum to prepare our students for the future. By collaborating with global educational experts and industry leaders, we stay at the forefront of educational excellence. With student-friendly classrooms, a focus on whole personality development, and strategic international collaborations, we provide a comprehensive and enriching educational experience.

**Q. The education sector has changed a lot since you made a foray. Your reactions?**

**A.** At VIBGYOR, we've embraced this evolution wholeheartedly, recognising that education is more than just academic success—it's about nurturing every facet of a child's development. Our approach revolves around the 5 Cs: Communication, Critical Thinking, Collaboration, Creativity, and Citizenship, essential skills for navigating today's interconnected world. We have integrated STEM education, project-based learning, soft skills cultivation, and career guidance to ensure holistic growth. Our focus on inclusivity, diversity, and community engagement fosters well-rounded individuals ready for tomorrow's challenges. Moreover, we encourage students to explore their passions, be it in arts, sports, or community service, instilling a deeper self-awareness.

*We have integrated STEM education, project-based learning, soft skills cultivation, and career guidance to ensure holistic growth. Our focus on inclusivity, diversity, and community engagement fosters well-rounded individuals ready for tomorrow's challenges.*

**Q. Can you share examples of innovative solutions you've implemented to address challenges in K-12 education?**

**A.** One such solution is our Global Curriculum Integration initiative. By offering a diverse array of curricula like CBSE, ICSE, and CIE, we not only adhere to national standards but also prepare our students for success in a globalised world.

Furthermore, our commitment to Holistic Development Programs goes beyond academics, embracing extracurricular activities, sports, arts, and community service projects. This comprehensive approach fosters intellectual, social, physical, and emotional growth, empowering students to excel in various facets of life.

Moreover, we leverage cutting-edge technology in our classrooms, including interactive smart boards and online platforms, ensuring our students are well-versed in the latest educational tools.

Lastly, our Specialised Support program provides tailored education plans and additional assistance for students with unique learning needs, guaranteeing that every child has the opportunity to thrive.

*The V-Embark program, breaks the barriers of traditional learning, igniting students' passion for knowledge through various educational clubs and programs beyond the classroom.*

**Q. How do you try to create an environment where every student thrives?**

**A.** We achieve this through a multifaceted approach tailored to individual needs. The VIBGYOR MUN program offers a unique platform for students to delve into international relations, honing critical skills like research and communication while fostering global citizenship. Our other initiative, the V-Embark program, breaks the barriers of traditional learning, igniting students' passion for knowledge through various educational clubs and programs beyond the classroom.

Our robust Sports & Performing Arts curriculum complements academic learning, promoting physical fitness and creative thinking. This balanced approach helps to identify each child's unique talents, builds confidence, and fosters personality development. By integrating academics, sports, and arts, we create well-rounded individuals ready to excel in all aspects of life.

Additionally, our comprehensive counselling and support services, including VC3 for career guidance, ensure students' mental, emotional, and academic well-being. From university applications to personal development, we're dedicated to nurturing each student's potential for success. **BF**

# ABANDONED BY MOTHER, BELLAMPALLI BOY WALKS INTO
# IIT–Kharagpur

**Durgam Charan Tej**

*Overcoming obstacles, he has become a beacon of hope for government school students striving for academic excellence.*

His mother abandoned him and he lost his father at the tender age of six. The antecedents do not show any chance of making it big but **Durgam Charan Tej** has beaten all odds and today has secured a place at the prestigious IIT-Kharagpur in West Bengal.

It was his father's elder brother, Durgam Venkati, and his wife, Pramila, who took the child under their care and nurtured him. He was admitted to a Christian hostel in Mancherial from where he completed his secondary schooling. The next step was studying Intermediate. Under the care and guidance of his uncle, Charan appeared for the TGSWR COE CET entrance exam and earned a spot at the Bellampalli CoE.

The turning point came during the years he spent at the Telangana Social Welfare Boys' Gurukulam Center of Excellence (CoE) in Bellampalli. Overcoming obstacles, he has become a beacon of hope for government school students striving for academic excellence. The moment people in the area came to know about him securing an all-India rank of 2,778 in the JEE Mains and Advanced exams, allowing him to claim a coveted spot at IIT Kharagpur, he literally became a hero.

Looking towards the future, Charan aims to establish a software company with a noble focus on providing opportunities to orphan and semi-orphan students, drawing from his personal experiences and empathetically acknowledging their challenges. Charan's story serves as a proud symbol for the Bellampalli CoE and the erstwhile Adilabad district, inspiring others with his tale of perseverance and victory over adversity. **BF**

**BY INVITE**

Prof. (Dr.) **Suresh C. Joshi**

**Executive Director**
Chandigarh University Online
Chandigarh University, Punjab, India

# MINDFULNESS IN THE FAST-CHANGING WORLD

*In a world marred by volatility, uncertainty, complexity and ambiguity embracing mindfulness is a given*

In the ever-accelerating pace of modern life, navigating the labyrinth of personal and professional development can feel like a daunting task. However, amidst the chaos, there exists a powerful antidote: mindfulness. Defined as the practice of paying attention to the present moment with openness, curiosity, and acceptance, mindfulness offers a roadmap to not only enhance productivity but also foster personal and professional growth.

This article will delve into the intertwining realms of mindfulness practices, productivity tips, and strategies for personal and professional advancement, tailored specifically for learners seeking to thrive in today's dynamic world.

## Understand Mindfulness

Mindfulness can be understood as something that helps us make a thoughtful decision. It is a kind of self-awareness that helps regulate emotions and provide cognitive clarity. Mindfulness serves as a foundational pillar for holistic growth. By grounding oneself in the present moment, individuals can cultivate a heightened sense of mindfulness. Contrary to common misconceptions, mindfulness is not synonymous with meditation alone. While meditation is indeed a potent tool for cultivating mindfulness, it encompasses a spectrum of practices that can be seamlessly integrated into daily life.

## Embark on the Journey

For learners eager to enter the realm of mindfulness, establishing a daily routine is a must. Firstly, begin by carving out dedicated time for mindfulness exercises, be it meditation, deep breathing, or mindful walking. Start with short intervals and gradually expand the duration as you warm up to the practice. Consistency is key. Just as muscles strengthen with regular exercise, the mind cultivates resilience through consistent mindfulness practice.

## Harness mindfulness for productivity

Mindfulness and productivity are symbiotic allies, each reinforcing the other. By fostering present-moment awareness, mindfulness mitigates distractions and enhances focus, thereby amplifying productivity. Incorporating mindfulness techniques into task management can yield

transformative results. Strictly follow the rule of thumb "One thing at a time."

Practice single-tasking, devote your full attention to one task at a time, and notice the surge in efficiency and quality of work. Additionally, leverage mindfulness combats procrastination by breaking daunting tasks into manageable chunks and approaching them with a beginner's mind, free from preconceived notions of difficulty.

### Nurture Personal/Professional Growth

Cultivate mindfulness in interpersonal interactions by practising active listening and empathetic communication. Acquire more skills. By attuning to the present moment without judgment, you forge deeper connections and foster harmonious relationships. Moreover, harness mindfulness cultivates resilience in the face of adversity. Embrace challenges as opportunities for growth, reframing setbacks as valuable lessons in resilience and perseverance.

### Cultivate Professional Advancement

In the realm of professional development, mindfulness emerges as a potent tool for honing leadership skills, fostering innovation, and nurturing a thriving

organisational culture. Aspiring leaders can leverage mindfulness to cultivate emotional intelligence, enhancing their ability to empathise with and inspire others. Furthermore, mindfulness fuels creativity by quieting the incessant chatter of the mind, thereby fostering a fertile ground for innovative thinking and problem-solving. Organisations committed to fostering a culture of mindfulness reap manifold benefits, from heightened employee engagement to enhanced collaboration and creativity.

### Integrate Mindfulness into Learning

For learners navigating the tumultuous landscape of education, mindfulness serves as a steadfast anchor amidst the storm. Incorporate mindfulness into study routines by practising focused attention during study sessions, anchoring your awareness to the task at hand. Integrate mindfulness into the learning process by approaching new concepts with a sense of curiosity and openness, free from the constraints of self-doubt or fear of failure. Moreover, harness mindfulness to mitigate exam anxiety by cultivating a sense of calm and equanimity, thereby optimising cognitive performance.

INCORPORATING MINDFULNESS TECHNIQUES INTO TASK MANAGEMENT CAN YIELD TRANSFORMATIVE RESULTS. STRICTLY FOLLOW THE RULE OF THUMB "ONE THING AT A TIME".

➡️ ▨ **Golden Rules**

- Establish a daily routine
- Set aside a time for mindfulness exercises
- Strictly follow the rule of thumb "one thing at a time."
- Break tasks into manageable chunks.
- Practice active listening and empathetic communication.
- Approaching new concepts with curiosity and openness.



### Embrace the Journey

In conclusion, the journey of mindfulness is a transformative odyssey, ripe with opportunities for growth and self-discovery. By cultivating present-moment awareness, learners can unlock the full spectrum of their potential, transcending perceived limitations and embracing a life of purpose and fulfilment. As you embark on this journey, remember that mindfulness is not a destination but a way of being—a profound shift in perspective that permeates every facet of life. Embrace the journey with open arms, and watch as the seeds of mindfulness blossom into a life of unparalleled vitality and meaning. 🅱️

# ART
## EDUCATION,
# A POWERFUL CATALYST

*When artistic expression combines with academic subjects, it turns into a powerful catalyst*

Havis Yerravalli
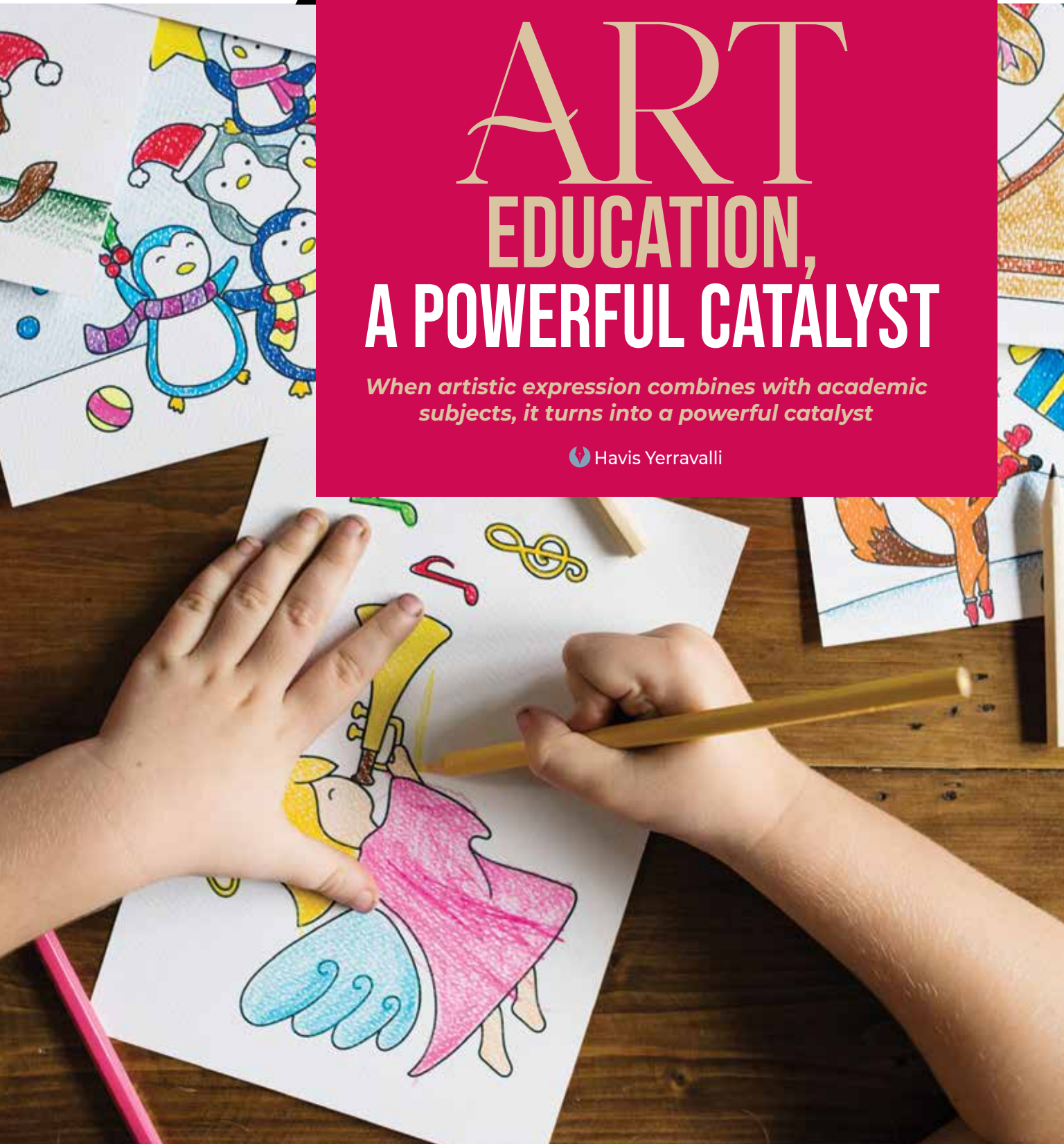
For a long time, Art education did not get its due but its time has come. There is a growing acceptance of the benefits. The teaching and learning of visual and performing arts spark creativity, critical thinking, and emotional expression. From the strokes of a paintbrush to the harmonies of music, art education enables students to appreciate diversity, refine motor skills, and explore different viewpoints. It fosters an environment where creativity is celebrated, empowering students to express themselves uniquely and gain a deeper understanding of the world.

Integrating art into various subjects not only enhances learning experiences but also helps students develop a deeper understanding of the material. Art education plays a crucial role in nurturing creativity and innovation. It encourages students to think outside the box, explore different perspectives, and develop unique solutions to problems.

Art education promotes cultural awareness and appreciation. By studying various art forms from different cultures and historical periods, students gain insights into the diverse ways in which people express themselves and their worldviews. This fosters empathy and a greater understanding of global cultures.

Art education is vital as it nurtures creativity, critical thinking, and emotional expression. It transcends traditional academic boundaries, fostering a well-rounded intellect and a profound appreciation for diverse perspectives. By engaging in the arts, students develop problem-solving skills and innovative mindsets, essential for thriving in a dynamic world. Moreover, art serves as a universal language, bridging cultural gaps and fostering empathy, ultimately contributing to a more harmonious and enlightened society."

### Dr. Jay Kumar Singh
**Director**
The Shri Ram Universal School, Greater Noida (West), U.P.



### Integration of Art into other subjects

Art can be used to enhance the study of **science** by helping students to visualize complex concepts. For instance, drawing diagrams of cells, ecosystems, or the human anatomy can make these topics more accessible and memorable. Creating models of the solar system or molecular structures allows students to understand spatial relationships and physical forms. In environmental science, students can create posters or multimedia presentations on topics such as climate change or conservation. This not only reinforces scientific concepts but also raises awareness about important issues.

**Mathematics** and art are closely linked through concepts such as symmetry, geometry, and patterns. Integrating art into math lessons can help students grasp abstract concepts. For example, exploring geometric shapes through drawing and sculpture helps students understand properties like angles and symmetry. Fractals and tessellations are excellent examples of mathematical

concepts that can be explored through art. Students can create their tessellation patterns or fractal designs, deepening their understanding of these mathematical phenomena.

Art is a powerful tool for bringing **history** to life. By studying historical artworks, students can gain insights into the cultural, social, and political contexts of different periods. Creating art projects based on historical events or figures allows students to engage with the material in a creative and meaningful way. For instance, students can create murals, depicting significant events in history, design costumes from different eras, or recreate famous artworks, using modern techniques. These activities help students develop a deeper connection to historical content.

Art and creative expression is one of the primary facets of human intellect and thus a natural part of education. It stimulates creativity and imagination, which are critical for problem-solving and innovative thinking. It also enhances cognitive abilities, including critical thinking, decision-making, and spatial-temporal skills.

Engaging in artistic activities allows individuals to express emotions and thoughts that might be difficult to articulate verbally. Studies have shown that students who participate in arts education tend to perform better academically.

**Shruti Sharma**
**Principal**
Delhi International School, Sector 23, Dwarka, Delhi

| | | |
|---|---|---|
| Hand-eye coordination | Spatial awareness | Dexterity & coordination |
| Improves fine motor skills | Self-Discovery | Insight into different cultures | Emotional expression |

# A BIG YES
## TO ART EDUCATION

Art can be integrated into **language** arts to enhance literacy skills and foster creative expression. Students can illustrate scenes from novels, create comic strips to summarise stories, or design book covers that capture the essence of a narrative. These activities encourage students to think critically about the texts they read and express their interpretations visually. Additionally, writing poetry or prose inspired by artworks can help students develop their descriptive and analytical writing skills. This form of interdisciplinary learning promotes a deeper engagement with both the visual and written forms of expression. **BF**

# HOW A BIRD CREATED A FLUTTER,
## DROVE A CHILD TO ENGLISH MEDIUM SCHOOL

Sai Saran, a 4-year-old boy till recently used to call the Paala Pitta (Blue Jay), the State bird of Telangana as 'Milk Bird'. Not his fault. His mother who studied in Telugu medium taught him so. 'Paalu' in Telugu means 'milk' and 'pitta' means 'bird'. She realised her mistake when a neighbour who is a teacher pointed out the mistake. What followed were intense discussions between parents and after three months, they decided to get an admission in LKG for the child in an English medium school.
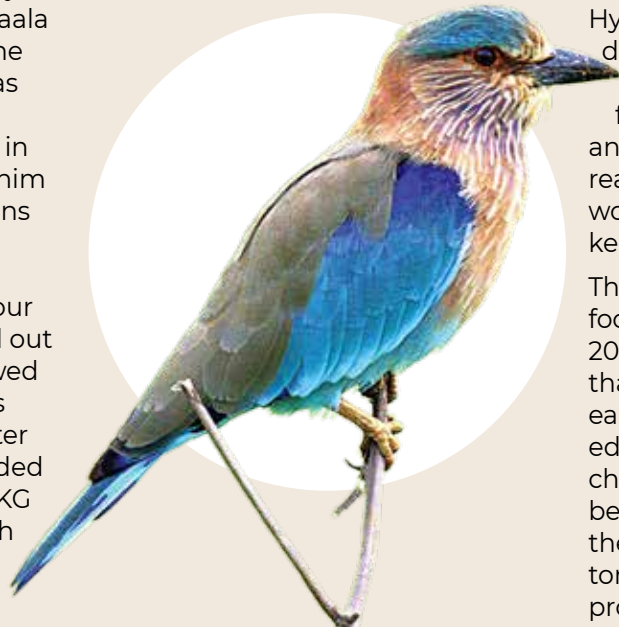
Raju, the father who runs a tea stall in Sainathpuram in Hyderabad said, "The school denied admission and told us to wait till the boy turned five but we were adamant and got him admitted as we realised how dangerous it would be for his future if we kept teaching him at home."

This brings to focus the NEP-2020 suggestion that emphasises early school education for children should be imparted in their mother tongue. It is proven that children have the ability to learn multiple languages till the age of seven. Experts say that English can be taught alongside vernacular languages. However, the ground reality is such that parents especially working in the unorganised sector as is the case with Raju are in a fix.

**Meherunissa,** a psychologist says, "Parents who studied in vernacular medium and who cannot afford tuitions and get their wards admitted in good schools, stand at a great disadvantage." There is a risk of cognitive dissonance in children. The environment that the child grows up in plays an important part in his or her growth.

> *Parents who studied in vernacular medium and who cannot afford tuitions and get their wards admitted in good schools stand at a great disadvantage.*

### The ENGLISH versus VERNACULAR MEDIUM debate

| *For Instruction in English* | *For Mother Tongue / Local Language* |
|---|---|
| • Communities believed that **English** is a gateway to a better quality of life. | • **Mother tongue** plays a central role in this cognitive development. |
| • When the majority of students come from affluent backgrounds and speak English at home, they understand concepts easily. | • A pre-primary or primary student would be able to relate with foreign content only on a superficial level. |
| • Command over the English language paves way for so many opportunities in the long run | • Equity pedagogy is one of the essential components of a multicultural education. |
| • If the future communication whether in a job or business would be in English, why not focus on it. | • Children make sense of the world around them and it's important that their language of expression and language of learning is the same. |

Every year hundreds of students in schools, colleges, universities, medical colleges and even in IITs fall prey to bullying. Awareness of the ill effects, if given at the school level, can nip the scourge of bullying in the bud.

Dr Malvika a psychologist and counsellor says a little kindness goes a long way in tackling the problem. If awareness programmes are conducted right in the beginning of an academic session, bullying if not completely stopped will at least be controlled. The next step would be to look out for any sign and immediate action to be taken.

Pep talks with the victim as well the bully will do wonders. As far as the bully is concerned, sensitisation and a 'carrot and stick' policy will help. Many a time, deficiencies in life can be fulfilled by altruism.

**Feel good emotions help**

Simple measures like carrying placards in the campus and declaring a bully-free campus or ragging free campus will give a strong message. Students in schools require a healthy dose of warmness which can come through words.

Kindness is best learned by feeling it so that they can reproduce it. Measures such as welcoming the freshers with flowers or gifts will do wonders to break the ice and also develop a sense of fraternal feeling.

STOP THE BIG B

BULLYING

## Types of bullying



**Physical:**
Usually happens in colleges.

**Verbal:**
Found to be common in schools.

**Cyber bullying:**
Happens via social media through WhatsApp groups and other platforms when the victim is bullied through comments online.

## Signs to Look Out for

- A bullied child will withdraw from his/her social circle including family & friends
- Refuses to go to school and wants to stay at home
- Show decline in academic performance
- Over time, victims face social isolation, loneliness
- Bullying leads to lower self-confidence and self-esteem
- Experience loss of control and helplessness
- Children whether bullied physically or verbally, often struggle forming and maintaining healthy relationships with peers
- If not dealt with initially, may lead to depression, anxiety, and substance abuse.

## Happiness and kindness have a connection

There is a strong connection with happiness and kindness. One leads to the other. Good feelings produce endorphins and activate the brain with pleasure. Good social relations ensure a happy place and in this case a happy school.

When the whole school believes and stands by the policy of no ragging, it fosters unity. It creates a lasting sense of pride, well-being, and belonging. When children know they are well liked, they willingly go to school. Peer acceptance plays an important role. It also results in good health.

Even small acts of kindness heighten our sense of well-being, increase energy, and give a wonderful feeling of optimism and self-worth.

### Benefits of kindness

Students who have a positive outlook tend to do better in school. Their concentration levels are good, so is their memory. This important chemical affects learning, memory, mood, sleep, health, and digestion.

**Dr. Wayne Dyer,** an Internationally renowned author and speaker says, "Kindness increases serotonin, a natural chemical responsible for improving mood." Concurring with the view, Dr Malvika states, "There are several studies on how an act of kindness improved student's health as well as personality."

Over a period of time, positive thoughts coupled with kindness and kind gestures lessens bullying. An environment of togetherness helps in reducing negativity.

Bullying can be tackled with tact, strategy, consistently keeping a watchful eye and spreading awareness against bullying. **BF**

In 2015, due to rising cases of bullying in schools, the **Central Board of Secondary Education** (CBSE), issued guidelines for the prevention of bullying which included the mandatory setting up of Anti-Bullying committees in schools.

A Primary School child is more likely to be bullied physically but a **Secondary school** student may be prone to more complex forms of bullying like bullying on the basis of race, religion, or sexual orientation.

Often, due to social stigma and fear of **physical** or **mental harm,** children who are victims of bullying do not easily open up about their experience and hide whatever they have gone through.

# EFFECTIVE FEEDBACK AS AN IMPETUS FOR STUDENT GROWTH

Feedback is instrumental in enhancing student learning and success. It serves to motivate students, build on their prior knowledge, and encourage them to reflect on their learning journey. Let's explore effective strategies for providing vital feedback that nurtures growth. Research emphasises the importance of specific feedback. For example, instead of simply saying "Great job!", it is more effective to provide specific information about what the student did well and areas for improvement. This specificity helps students understand their strengths and areas for improvement, leading to better learning outcomes. Consider a student who submits an essay on climate change. Rather than writing, "Great job on the essay!", a teacher could say, "Your introduction is compelling and clearly outlines the essay's purpose. However, the body paragraphs could benefit from more detailed evidence to support your arguments, particularly in the section about the impact of deforestation." This type of feedback highlights what the student did well (a strong introduction) and what needs improvement (more detailed evidence).

In addition, studies show that immediate feedback produces better results compared to delayed feedback. Immediate feedback allows students to make real-time connections between their actions and correct or incorrect outcomes, contributing to better comprehension and retention of the material. In a math class, when a student solves a problem incorrectly, immediate feedback can be given to help them understand their mistake right away. For instance, if a student incorrectly solves a fraction addition problem, the teacher can immediately point out where they went wrong in their calculations and guide them through the correct steps. This prompt intervention helps students grasp the correct method while the material is still fresh in their minds. In addition, it's important for feedback to be in line with specific learning objectives. By connecting feedback to their goals, students can better understand the importance of the feedback and how it contributes to their

*When students submit their drafts for a research paper, the teacher offers precise and immediate feedback that reflects the learning objectives of constructing a strong argument and citing sources correctly.*

overall progress. For example, let's consider a scenario in a high school English class where the teacher incorporates these strategies. When students submit their drafts for a research paper, the teacher offers precise and immediate feedback that reflects the learning objectives of constructing a strong argument and citing sources correctly. The feedback is delivered considerately to highlight growth, such as, "You've made a solid start with your thesis, but you need more diverse evidence to support your argument. Let's focus on locating those."

The way feedback is delivered

plays a crucial role in how it is received by students. Feedback should be framed as guidance for improvement and personal growth rather than a measure of comparison against peers. This approach focuses on personal development and avoids negative comparisons, fostering a positive learning environment. For example, in an art class, rather than saying, "Your painting isn't as good as Aditya's," which could discourage the student, a teacher might say, "Your use of colour is very expressive, but consider working on your brush technique to add more details to your work."

Lastly, involving students in the collection and analysis of performance-based data is crucial for fostering a deeper awareness of their learning.

When students have access to information about their performance and are actively involved in analysing their progress, they become more conscious of their learning habits and are better able to recognise and correct their mistakes. For example, in a history class, students might be asked to self-assess their essays using a rubric provided by the teacher. After self-assessment, they could discuss their evaluations in small groups, providing peer feedback and reflecting on their own and their peers' work.

In conclusion, the integration of these feedback strategies into the educational process could offer a robust means to enhance student motivation, learning, and achievement. The provision of specific, immediate, and goal-oriented feedback could yield a profound impact on students' learning outcomes and overall development. By presenting feedback as a guiding force for improvement and involving students in the assessment process, educators have the potential to instil a sense of ownership in students, empowering them to actively steer their learning journey. Ultimately, when wielded as a tool to guide and empower students, feedback could become an impetus for their continual growth and development. By employing these strategies, educators could cultivate a supportive and empowering environment, wherein students are spurred to realise their full potential.

# TIPS TO TACKLE
## SCHOOL AVOIDANCE

**The best way is to act early.**
**Read on to know how to go about...**

Soumili Biswas

R avi Bishnoi (name changed on request) a Grade 7 student from Bikaner would come up with excuses every day to avoid going to school. The parent informed the teacher which was followed by a visit by the teacher to Ravi's house. A few kind words and coaxing brought out the reason for Ravi avoiding school. It was bullying on his complexion and looks.

The next day, the teacher Shubra called the boy who was bullying Ravi and explained how his actions affected Ravi and that the consequences would be many including suicide. The talk made sense which resulted in a visit by the boy to Ravi's house and the problem solved. Today, both are friends and Ravi is regular to school. Timely action paid dividends but all students who avoid school are not as lucky as they wallow and keep the problem with themselves.

The reasons for students being unwilling to go to school are many, from not being able to adjust to the culture of the new school. (This happens when students take admission in a new school), anxiety



- Initiate discussions without getting angry.
- Listen properly and understand why the child does not want to go to school.
- Discuss with the class teacher, supervisor and school counsellor.
- Prepare a plan of action for gradual re-entry to school.

School avoidance or school refusal means children regularly refuse to go to school. This issue can arise due to emotional distress because of bullying, academic pressures, family problems, or mental health concerns like anxiety and depression. Addressing school avoidance requires a multi-faceted approach. One crucial aspect is building a supportive environment. In the worldwide context, school avoidance affects around 2-5% of students.

**Sonal Ravi Andrews**
**Director & Founder**
Integrated Preschool Teachers Training Academy (IPTTA)

about learning, not fitting in with peers, not being able to make a connection with teachers, apprehension about completing work and fear of competitiveness.

Absenteeism and school avoidance have significantly increased in recent years, wholly affecting academic performance. School avoidance frustrates parents, caregivers, and educators, often becoming a habitual cycle for some students. This avoidance results in missed assignments and social detachment, creating anxiety about returning to school and potentially leading to more absenteeism. Factors such as the rise in remote work for parents, increasing anxiety and mental health issues, and changes in attendance policies post-COVID, contribute to this problem.

Supporting students with anxiety begins with adults regulating their own emotions and approaching the student calmly. It is important to work with parents and caregivers before the student arrives at school to discuss the plan, inform the student when and how support will be available, and communicate this plan with classroom teachers and administrators. These steps can help ensure a consistent and supportive approach.

**Maintain Regular Communication:** Once a plan is established, it's crucial to communicate regularly with the student and their family. This ensures that everyone stays informed about the student's progress at school and allows for any necessary

Parents are giving gadgets and children want to go to coaching centres rather than go to a school where the emphasis is on discipline. To overcome this situation parents can play videos in front of them to show what happens when they are working with other students, what happens when more and students work together, collaboration is the key to success, with all that how it forms a network. With this network, alumni network can also be set up.

**Sapna Sukul**
**Founder**
Edustart Solutions,
New Delhi

adjustments to the plan.

In India, both urban and rural areas face challenges with absenteeism due to various factors like lack of infrastructure or family pressures. It's the responsibility of educators to create a supportive and understanding environment to help these children. If children feel protected and safe in a school, and are given an enriched

### Develop a Collaborative Return Plan

► Recognise that each student's experience with school refusal is unique. Work together with the student, their family, and other relevant professionals to devise a tailored plan.

► Start with half-day attendance before progressing to full days.

► It might also involve implementing a flexible learning program, which could include adjustments to the curriculum, reduced homework, or additional academic support.

approach to uplift their skills to evolve, school avoidance would be considerably reduced. School management must implement anti-bullying policies and provide mental health resources. Addressing school avoidance also includes creating a positive atmosphere, implementing mental health programs, encouraging parent involvement, and offering flexible learning options.

Avoiding going to school has become a highlighted issue post COVID. Students have involved themselves more to learning from online sources rather than attending classes physically. Learning only from online sources won't make a child disciplined and collaborative with others, however educators can overcome this issue with certain steps mentioned above.

# AUTOMATION
## IN EDUCATION GAINING TRACTION

*As we navigate through the ever-changing landscape of today's world, one topic that is triggering intense debate is the dynamic interplay between automation and school education*

🖊 Havis Yerravalli

Automation has revolutionised numerous industries, streamlining tasks and boosting efficiency. While this has undeniably positive effects on productivity, there is a growing concern about the long-term effects on job opportunities and the crucial role of education in equipping students for the workforce.

Automation offers the advantage of streamlining processes and increasing productivity. By incorporating advanced technologies like artificial intelligence and robotics, automation can automate routine tasks, allowing human resources to focus on more creative and strategic activities. In the context of school education, artificial intelligence (AI) has the potential to revolutionise the learning experience. AI can personalise education by providing tailored learning materials, adapting the learning pace to individual student needs, and identifying areas that require improvement. Additionally, AI can assist educators by automating administrative tasks, providing data-driven insights into a student's performance, and facilitating more targeted and effective teaching strategies. By incorporating AI into school

education, students can benefit from a more personalized and adaptive learning environment, providing them with the skills and knowledge necessary to thrive in a future where AI and automation play an increasingly prominent role.

However, despite its benefits, the rapid integration of automation also raises concerns about how it might disrupt traditional employment patterns and make certain skill sets obsolete. As automation continues to advance, some jobs are at risk of being automated, presenting a significant challenge to the current workforce. This shift must prompt a reassessment of the skills and knowledge required to succeed in an increasingly automated world, emphasising the crucial role of education in preparing students for future job prospects.

To address the evolving landscape shaped by automation, school education needs to adapt to equip students with the skills necessary to thrive in a technologically driven society. Rather than viewing automation as a threat, educational institutions can integrate technology and automation into their curricula. This involves emphasizing the development of skills that complement automated

## Scenarios for automation adoption, 2016–30

Under midpoint scenario, % of work hours with potential to be automated:

**Globally** 15%
**India** 9%
**China** 16%
**United States** 23%
**Germany** 24%

*Workers displaced under midpoint automation scenario:* **400m**

*Source: Manyika, J., Lund, S., Chui, M., Bughin, J., Woetzel, L., Batra, P., Ko, R., Sanghvi, S. (2017). Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages. In McKinsey & Company.*

processes, such as creativity, critical thinking, problem-solving, and adaptability – skills that are inherently human and difficult to replicate with automation.

Furthermore, with the increasing demand for technically proficient workers, there is a growing need for educational programs that focus on technical and vocational training. By offering specialised courses aligned with emerging technological trends, school education can bridge the gap between traditional education and the skills demanded by the job market. These initiatives could

prepare students for careers in technology-related fields and promote a harmonious relationship between automation and human skill development.

In conclusion, the coexistence of automation and school education presents both opportunities and challenges for future job prospects. While automation has the potential to enhance productivity and revolutionise industries, it also raises concerns about the future of work and the skills required to remain competitive. By adapting educational practices to complement automation and cultivating skill sets that are inherently human, educational institutions can play a crucial role in preparing students for the evolving job market. Striking a balance between automation and education is essential for creating a sustainable and prosperous future for the next generation. **BF**

IN CONCLUSION, THE COEXISTENCE OF AUTOMATION AND SCHOOL EDUCATION PRESENTS BOTH OPPORTUNITIES AND CHALLENGES FOR FUTURE JOB PROSPECTS.

# ONBOARDING NEW TEACHERS

*It is easier said than done. Here are a few tips that are a must to make them comfortable and ensure they remain with the school*

The new academic year has just begun and like students, many schools welcome new teachers, not necessarily new to the field. Whether it is a first time on the job or a seasoned veteran, a teacher joining a new school will have to get accustomed to the ideology, philosophy, rules & regulations and most importantly the culture of the school.

Every school has its own unique culture and dos and don'ts. A new teacher has to be given a briefing and

*A teacher joining a new school will have to get accustomed to the ideology, philosophy, rules & regulations and most importantly the culture of the school.*

- Take them on a tour of the school. Get them acquainted with the facilities, that way they would not have to ask each time. Preferably, a veteran teacher who has stayed with the school for a long time should accompany them.
- Explain the documents that the teacher needs to carry at all times, this is very important as there is a possibility that the teacher may be embarrassed at a later date.
- The phone and stocking personal belongings policy needs to be told.
- Teacher duties vary throughout the year, especially duties that are outside the classroom. Inform the teacher to get in touch with the respective coordinator who would help.
- Brief the new teacher on the communication policy. What are the rules of communication with the management, what is the process? Who to get in touch with and how? Is it through e-mail, message or formal letter?



handed over a sheet of the rules. Speaking to Brainfeed, **Debomitra Ganguly,** a teacher shares, "I was all at sea in the first week at a school I joined in Meerut last year. I was just given a timetable and asked to head straight to class. For everything right from who to submit my lesson plan to where the store room was, I had to ask others. It was a horrific experience."

"If managements think that teachers would get to know all the rules eventually, they are making a huge mistake.

Apart from the salary, a conducive atmosphere is a must for a teacher to work," adds Debomitra who has now shifted to another school in Jhansi.

## Remote onboarding

There are instances when new teachers are not in town or would be joining after a session gets underway. In such cases, remote onboarding comes in handy.

## Digital platform

Collecting documentation through an online onboarding platform saves valuable time

## Optimise video interview

Schedule video interviews and collect feedback. Teacher feedback helps in streamlining processes.

## Get them engaged

Get the new hires engaged and interested in the school with a video about the school and its facilities. Recorded videos of events can play an important part.

Automate communication is leading up to onboarding

Use automated workflows to make sure those tasks, forms, and checklists are completed on time.

While schools have a tight schedule and once a session begins, there is hardly any time, it is important to make new hires comfortable. It is important to maintain a human touch and not just dish out reams of paper to them but make a connection with them so that they know the management cares.

THE SOONER THE TEACHER BECOMES A PART OF THE FRATERNITY AND MINGLES WITH ALL STAFF, THE BETTER. NOTHING CAN BE MORE BORING AND PAINFUL THAN BEING THE 'ODD ONE OUT'.

# MATH CAN BE INTERESTING!

*When taught through the medium of stories, Math can become interesting*

Soumili Biswas



Mathematics has always been different from other subjects. However, it plays a crucial role in the cognitive and intellectual development of children, not every child has the ability to grasp it quickly. They struggle with calculations including doing silly mistakes while thinking they aren't good at math. In literature, children get to know about values and the real world through stories, so why can't the same approach be used in Math?

History is replete with extraordinary individuals who excelled in Math. One such story is about Aryabhata, an ancient Indian mathematician and astronomer who introduced the concept of zero and made pioneering contributions to the field, laying the foundation for algebra and influencing mathematical thought for centuries. Another compelling tale involves Brahmagupta, another Indian scholar, who extensively wrote about solving quadratic equations and worked on number systems. These historical narratives not only add depth to the subject but also inspire students by highlighting the profound impact of mathematical discoveries.

There is a notion that Mathematics is boring and difficult but when taught through stories one can make it interesting and learning can be more interactive. Besides fostering critical thinking in stories, it makes the subject less intimidating.

> Stories are powerful tools to teach a student. The procedure can be implemented by fishing out the actual stories of the mathematicians, case studies, going back to the grandma stories. Teaching mathematics through stories can improve a student's marks.

**Niti Mahendra**
**Director**
Academics & Operations, Edify Schools, Bengaluru, Karnataka

Teaching with stories is crucial as it makes learning more engaging and memorable. This approach caters to diverse learning styles, stimulating imagination and critical thinking. It also fosters emotional connections, making lessons more impactful. She further added, "By illustrating real-world applications, stories enhance relevance and interest in the subject. Stories provide context, making it easier for students to grasp and retain mathematical principles by turning numbers and equations into real-world problems that students can visualise and solve.

This method engages multiple learning styles, including auditory and visual learners, leading to enhancement of overall comprehension. It also fosters a love for learning by making math enjoyable and less intimidating.

Teachers can start by crafting stories that embed math problems, making age appropriate characters face challenges requiring math to solve. For example, a story about a baker who needs to double a recipe helps teach multiplication. Interactive storytelling, where students participate in problem solving within the story, enhances engagement. Using math-focused picture books or digital story platforms can also be effective. Additionally, encouraging students to create their own math stories nurtures creativity and reinforces their understanding. This approach makes math more relatable, enjoyable, and easier to grasp.

## Dr. Anju Chopra
**Principal**
Sri Sathya Sai Vidya Vihar
Indore, Madhya Pradesh

## LEARNING MATH THROUGH A NARRATIVE WAY

Teachers can enhance a student's engagement and understanding, as it can make the procedure interesting and obvious. Teachers can incorporate math stories into their lessons:

- **Create Math Stories –** Teachers or parents can create personalised math stories on their own or adapt the existing ones to match the needs of the students. Teachers can use models or props to make the learning process interactive and easy.

- **Choose age –** appropriate stories that will meet the mathematical concepts of the students. Use books that contain illustrative examples or pictures that embed math problems or concepts within narratives.

- **Initiate group Storytelling –** Suggest students to make groups to discuss, read and create stories to encourage critical thinking and make them understand the concepts comprehensively through peer collaboration.

- **Utilise Technology & Multimedia –** Use videos from apps and software to incorporate math problems and their solutions. This approach will help students to grasp concepts more swiftly by visualising the problem-solving process through stories & graphics.

- **Connect stories to real-world problems –** Create stories based on real world scenarios that students might go through every day, such as going for shopping or planning a party to show how math applies to everyday life. **BF**

# THE POWER OF COMMUNITY-BASED LEARNING

*Community-based learning in school education is an innovative pedagogical strategy that connects classroom learning with real-world experiences*

What a community can teach you, reams of literature cannot. The lives, culture, trials and tribulations of people are living museums for students. Connecting theories with real-world experiences in the local community creates a more immersive and meaningful educational experience. This method could be crucial because it makes learning more relevant and engaging, helping students develop a deeper understanding and appreciation of their subjects.

## Advantages of Community-Based Learning

One of the key benefits of community-based learning could be its ability to boost student engagement and interest in various subjects. When students see the direct application of their studies in their communities, they may find the content more relevant and inspiring. For instance, learning about local history through visits to historical sites or studying environmental science by exploring nearby ecosystems could make these subjects come alive. This relevance could foster a greater desire to learn and understand the material, as students can see the impact of their knowledge and efforts on the community.

For example, students engage in projects that require them to research local issues, conduct interviews, or participate in community service. These hands-on experiences could allow students to practice and refine their skills in a practical context, leading to a deeper and more lasting understanding of the material.

This approach could nurture well-rounded individuals prepared for adult life, as it values and develops diverse forms of intelligence. Students learn to collaborate with others, understand different perspectives, and tackle real-world challenges, making them more adaptable and resourceful.

## Integration of Community-Based Learning into School Classrooms

Integrating community-based learning into school classrooms could require a multifaceted approach. One effective strategy could be using the community as a classroom. This involves taking students out of the traditional classroom setting and allowing them to explore and learn from their local environment. Field trips to local businesses, cultural institutions, and natural sites can provide rich learning experiences. These excursions could help students connect their academic studies to the world around them, making learning more dynamic and relevant.

Teachers could also design integrated lessons that draw from the community's knowledge base. This might involve inviting

guest speakers from the community to share their expertise or incorporating local issues and resources into the curriculum. By doing so, educators could create lessons that are more relevant and engaging for students. For example, a science lesson might include a project on local environmental conservation efforts or a history lesson might focus on significant events in the community's past. These integrated lessons could develop a sense of ownership and relevance in students' learning.

Collaborative initiatives with community leaders, parents, administrators, and other stakeholders could prove essential for the successful implementation of community-based learning. Building partnerships with local organisations, businesses, and community groups can provide valuable resources and support for educational initiatives. Engaging parents and community members in the learning process could also help create a more inclusive and supportive educational environment. These collaborations could ensure that community-based learning is deeply ingrained in the educational experience and that students receive a well-rounded education.

Assessment and evaluation in community-based learning could prioritise creative and innovative measures. Traditional standardised tests may not fully capture the breadth of students' learning and development in this context. Instead, assessments could focus on diverse learning processes and intrinsic motivation. For example, project-based assessments, portfolios,

*Community-based learning could also enhance knowledge retention and skill acquisition. By providing students with opportunities to apply their learning in real-life settings, this approach may help them internalise and remember information more effectively.*

and reflective journals could provide a more comprehensive view of students' progress and achievements. These methods could allow educators to evaluate students' understanding, skills, and personal growth more effectively.

**Conclusion**

Community-based learning could present a transformative approach to education by creating meaningful connections between classroom instruction and real-world experiences. By using the rich educational resources present in local communities, students could develop a deeper understanding of academic content, cultivate essential skills, and become active contributors to their communities. As the educational landscape continues to evolve, integrating community-based learning into school classrooms could hold huge potential for empowering students and developing meaningful connections between education and the world around them. A collaborative and inclusive approach involving all stakeholders could prove crucial for enriching the educational experience and contributing to the holistic development of students as they prepare for their future roles as responsible citizens and lifelong learners.

| Traditional Education | Community-Based Learning |
|---|---|
| Focuses on academic achievement & standardised test scores | Focus on Interpersonal Relationships, Intrapersonal Development, & problem-solving skills |
| Local history is taught by reading texts | Learning about local history through visits to historical sites |
| Environmental Science is taught by reading books | Studying environmental science by exploring nearby ecosystems |

# MYTHS & TALES TOO COUNT

*Integrating mythology can make teaching more appealing*

Soumili Biswas

Mythology has become a part of our socio-political lives and the debate if we should depend on folklore, tales and grandma stories will never end. Mythology is history, or at best is very close to it. Integrating mythology can make teaching more appealing. Myths usually represent diverse cultures and beliefs through which children can encapsulate the values, beliefs, and traditions of different societies. When students get to know about myths through stories, and characters, they get engrossin the subject more while realising facts to be real.

Kingdoms, Gods, demons, rise and fall of dynasties, thrilling encounters between Gods and demons have been a part of every civilisation and continue to keep people spellbound. Introducing mythology to subjects will make it interesting.

## Some of the ways in which MYTHICAL LEARNING can be implemented in classrooms:

- **Through storytelling sessions**
  Teachers can narrate myths through stories, following a question and answer session, to make the lesson interactive. Students can retell myths in their own words, fostering creativity and a clear understanding of the subject.

- **Suggest movies & shows**
  To enhance a student's critical thinking skills a teacher can suggest movies or shows to watch, which represent old mythology, to get hold of authentic texts. Try to suggest movies or TV series that align with their age groups. For example – Students in 7th and 8th grades might read and watch Rick Riordan's Percy Jackson and the Olympians series. As a facilitator or educator, he or she can choose the authentic texts that match best with their students' interests and learning needs.
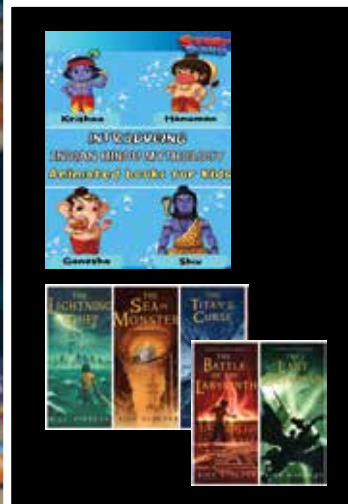
- **Connect with historical events**
  Set examples of myths which are connected to historical events and cultural practices. Bring out the facts on how myths have influenced visual arts, music, and literature throughout history.

- **Technology integration**
  Teachers can use videos, animations, and interactive videos to present myths in a visually engaging way. Encourage students to create digital stories or presentations using PowerPoint, Prezi or other editing tools.

By exploring timeless myths and legends, students gain deeper insights into human nature, ethics, and the complexities of life. Mythology serves as a powerful tool to illustrate scientific concepts, historical events, and literary themes, making learning engaging and relatable. Additionally, the heroic journeys and moral dilemmas faced by mythological characters provide valuable lessons in leadership, resilience, and decision-making.

**Lina Ashar**
**Founder**
Dreamtime Learning, and Kangaroo Kids Preschool & Billabong High International School, Mumbai

Through these stories, students learn the importance of empathy, courage, and integrity, fostering a holistic approach to education that nurtures both intellectual and emotional growth. This integration of mythology into the curriculum inspires students to connect ancient wisdom with modern knowledge, creating well-rounded individuals prepared to lead with wisdom and compassion.

For example, Indian mythology is interconnected with Quantum Physics. In Hindu philosophy, the concept of "Brahman" is central. Brahman is the ultimate, unchanging reality, composed of pure being and consciousness. It represents the unity of all existence. Similarly, the principle of quantum entanglement suggests that particles can be interconnected regardless of distance, hinting at an underlying oneness of the universe.

Ancient texts like the "Puranas" and "Vedas" mention multiple worlds and dimensions, suggesting a multiverse

Myths are powerful narratives that reflect the values, beliefs, and traditions of different cultures. By studying myths, students gain insights into the worldview of various societies, fostering an appreciation for diversity. These stories often address universal themes such as creation, morality, and heroism, helping students to connect with cultures that might initially seem distant or unfamiliar.

**Aisha Singh**
**Chairperson**
Creativekidz Group of Institutions, Bengaluru, & A Global Educator

concept. The multiverse theory in quantum mechanics posits the existence of multiple, parallel universes that coexist with our own.

The Bhagavad Gita discusses the importance of the observer and consciousness, suggesting that reality is deeply connected to perception and awareness. The observer effect in quantum mechanics indicates that the act of observation affects the state of the system being observed. Concepts such as "Shakti" and "Prana" emphasise the flow and transformation of energy within the universe. The law of conservation of energy states that energy cannot be created or destroyed only transformed from one form to another.

Integrating mythical learning into the classroom can be both engaging and educational. Teachers can use a multidisciplinary approach, incorporating myths into subjects like literature, history and art. Activities such as storytelling, role-playing, and creative writing can make myths come alive for students. Collaborating with local cultural organisations

**Business Management Schools take inspiration from mythology**

who has written over 25 books and 400 articles on various aspects of mythology once said: "The fact of the matter is that many of our management practices are drawn from the West, which derives from Biblical and Greek beliefs." Even in India, many organisations take inspiration from Indian mythology. There is a rich repository of knowledge contained in mythology to apply to defuse tense situations in personal, public and office space.

**Devdutt Patnaik**
**Mythologist & Writer**
Mumbai
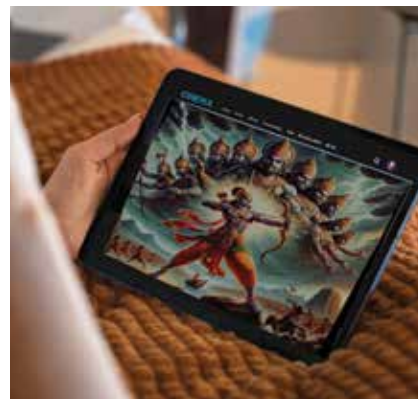


or inviting guest speakers can further enrich the learning experiences.

To make myths relevant to today's students, educators can draw parallels between ancient stories and contemporary issues. For instance, themes of resilience, justice, and ethical dilemmas in myths can be compared to modern-day challenges. Encouraging students to create their own modern myths allows them to express their understanding of the world while connecting ancient wisdom with current realities. Incorporating myths into education not only enriches students' cultural literacy but also enhances their critical thinking and empathy, making it a vital component of a holistic education.

Mythical learning represents various cultures, traditions and beliefs including values. Integrating myths into lessons can make them interesting while enhancing language skills through metaphors, allegories and archetypes. Besides, myths are interconnected with Science which links it more with reality. Teachers can implement the ways mentioned above to initiate mythical learning within the classrooms. **BF**

INTEGRATING MYTHS INTO LESSONS CAN MAKE THEM INTERESTING WHILE ENHANCING LANGUAGE SKILLS THROUGH METAPHORS, ALLEGORIES AND ARCHETYPES.

# CLASS 9 STUDENT DESIGNS EVM ON BLOCKCHAIN

*To develop the new EVM design Meedhansh Gupta completed a one-year course in blockchain technology from IIT Madras at the age of 12 and learned various other technologies*



Meedhansh Gupta is all of 14 but wears several feathers on his hat. A Pradhan Mantri Rashtriya Bal Puraskar recipient, the Class 9 student from Mumbai has developed a blockchain-based electronic voting machine (EVM) to establish a transparent voting mechanism, which includes verification and validation of votes cast in any election.

When the media asked why he developed an EVM, he said that there are trust issues with the present EVM used for elections and that is the reason which prompted him to embark on this journey.

> *"The system was designed to establish strong confidence in elections, election commission and general public."*



To do this, he enrolled in a one-year course in blockchain technology from IIT Madras.

The 14-year-old said, "The current EVM model and the ballot paper system do not allow anyone to identify who voted for whom and if their vote has been counted. The blockchain model EVM allows people to anonymously verify their votes." The teenager claimed that with this model, anyone can anonymously check their vote to know who they have voted for and also validate the total vote count with the convenience of the open ledger concept of blockchain and time stamp protocol.

"Though currently the EVM is a secure standalone device and technically tampering cannot be done... there are still trust issues. Therefore, to establish strong confidence in the elections and keeping in mind the interest of the government, opposition, the election commission and general public, this system has been designed," Meedhansh said.

Traditional databases rely on a centralised authority, making them susceptible to single points of failure and vulnerabilities. In contrast, a blockchain is a distributed ledger that operates on a peer-to-peer network. To put it succinctly, nobody owns blockchain technology, and yet, everybody owns it. That is one of the unique features of blockchain tech, and this collective ownership and accountability is what makes blockchains very secure, immutable, tamper proof and impossible to hack, he added. **BF**

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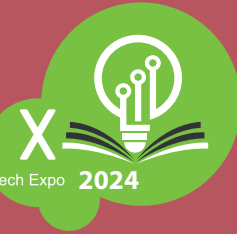
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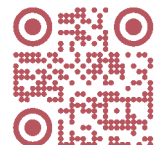
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