# UT AND BOUT A STUDENT LED-QUART ERLY JOUR

VOL 2 ISSUE 1

a l

BH

### Prepping up



















18





# Out and About Vol.2 Issue.1

### A Student Led Quarterly Journal



Manava Bharati International School (MBIS) Patna (Bihar, India)

## **ACKNOWLEDGEMENT**

### **CO-ORDINATOR**

Hansika Anand (XII'Commerce)

### **MANAGING EDITORS**

Surbhi Anand(XII'Commerce), Mukul Anand(X), Nandini Kumari(IX), Yashita Kumari(IX)

### **REPORTING EDITORS**

Bhavya Singh(X), Hansika Anand(XII'Commerce)

### **PHOTOGRAPHY & VISUALS**

Shubham Sharma(VIII)

### **PUBLICATION, OUTREACH & DISTRIBUTION**

Shivesh Kumar(XII'Commerce), Hansika Anand(XII'Commerce)

### **EDITORIAL ADVISOR**

Mr. Amit Kumar Sarkar(Faculty-Social Studies)

### ADVISORS

Mr. Amit Kumar Sarkar •Mr. Anupam Mishra •Ms. Suprita Sinha •Mrs. Akansha Anni •Mr. Panchanand Pandey •Mr. Manish Kumar Roushan

### **BOOK DESIGN**

Shivesh Kumar(XII'Commerce)

### **COVER DESIGN**

Saksham Veer(IX)

# **TO OUR READERS**

Dear readers,

We are thrilled to unveil the latest installment of our student-driven quarterly publication, "OUT AND ABOUT," from Manava Bharti International School, Patna. Our objective remains unchanged: to provide you with a captivating and enjoyable reading experience that showcases the diverse talents and interests within our student community.

Within the pages of this issue, you will discover a wide array of articles. From thoughtprovoking pieces on social issues and current events to enjoyable features on sports, music, and entertainment, we've assembled a collection and we trust that will engage and entertain you. Our dedicated team of writers and editors has invested considerable effort and determination into crafting this magazine, and we hope you find reading it as pleasurable as we found creating it.

We wish to extend our heartfelt thanks to our principal, teachers, and dedicated staff for their enduring support and guidance throughout the production process. Moreover, we express our deep appreciation to our cherished readers for their unwavering support and encouragement.

In this edition of "Out and About," we aim to spark your inspiration, inform you, and bring a smile on your face. We eagerly anticipate your feedback and suggestions, which will play a pivotal role in our continuous journey of growth and improvement with each subsequent issue.

With warm regards and a heartfelt wish for enjoyable reading!

The Out and About team

# FROM PRINCIPAL'S DESK

Dear Parents, Stakeholders, and Esteemed Readers,

I extend my warmest welcome to each one of you as we proudly present this year's edition of 'Out and About magazine'. The pages within encapsulate the hard work, creativity, and intellectual vigor of our students, and I am delighted to introduce this diverse collection of articles, each addressing intriguing topics that span the spectrum of knowledge.

The theme of this year's magazine revolves around exploring the world around us. From vital issues such as the Women Reservation Bill to our role in tackling Climate Change, from the impact of artificial intelligence to the allure of music's history in India, our students have dived into a wide array of subjects. These articles are not only the product of dedicated research but also a testament to the intellectual curiosity and engagement of our student body.

The journey of crafting this magazine has been a learning experience for our students, allowing them to express their thoughts, insights, and creativity. We, as a school community, are committed to nurturing inquisitive minds and encouraging our students to become lifelong learners.

As parents and stakeholders, your unwavering support plays a pivotal role in the growth and development of our students. You have witnessed their dedication, and I encourage you to explore the fruits of their labor within these pages.

To all our readers, I implore you to delve into the articles, to contemplate the various aspects of our world that they address, and to embrace the knowledge they offer. Our students' work exemplifies their drive to make a difference, to influence positive change, and to share their discoveries with the world.

In the pages of this magazine, you will find not only the pulse of our school but also a vision of the future, where young minds are enlightened, engaged, and ready to confront the challenges and wonders of our ever-evolving world.

Thank you for being part of this journey with us. Your continued support is a cornerstone of our success.

*God Bless* Francis Xavier Principal

# **CONTENTS**

Editorial		9
1.	MBIS Journalism	11
2.	The Rise Of AI: Navigating the Ethical & Social Implications	13
3.	Exploring the Possibilities: Life on the Moon	17
4.	G-20	19
5.	Women Reservation Bill	22
6.	Schemes for Girls in Bihar	24
7.	History of Music in India	26
8.	Spic Macay	28
9.	Vande Bharat Express	29
10.	Transferring responsibilities	32
11.	Empowering Voices	33
12.	"Festival of Science and Scientific Temper"	36
13.	Science Exhibition 'EUREKA'	38
14.	Allow them a free space- they are ready to explore, discover and excel!	40
15.	Make mathematics learning joyful	43
16.	Deflation: When Falling Prices Raise Concerns	45
INV	/ITATION TO FUTURE CONTRIBUTORS	48

----

"Learning is not attained by chance; it must be sought for with ardor and diligence."– **Abigail Adams.** 

•••

-----

"Education is the most powerful weapon which you can use to change the world." - **Nelson Mandela** 

-----

### **Editorial** Hansika Anand<sup>1</sup> and Bhavya Singh<sup>2</sup>

In a world that is increasingly interconnected and culturally diverse, students are the torchbearers of knowledge and innovation. As we unveil another issue of our student -led journal, we celebrate the wealth of topics it covers. So, Welcome to the latest issue of "Out and About," Manava Bharati International School's student-led journal. With topics as diverse and eminent as cultural significance, G20, government schemes and bills, SPIC MACAY, AI advancements and beyond, we set out on a journey in these pages to investigate the contemporary issues that have an impact on our planet through these pages. We want to boost reader's awareness and get them thinking, and motivate them to take action.

The articles within these pages are not just letters and words; they are the catalysts for discussions, action and movements that can transform our communities. We want to take this opportunity to thank our mentor and advisor from the bottom of our hearts. The platform that "Out and About" now is, is a direct result of their constant support and direction. Their commitment for encouraging our development as young writers is incredible, and their mentoring empowers us to take on hard problems with confidence. "We appreciate you being our guidance."

As activists for change in "Out and About," we the students of Manava Bharati International School take on this responsibility. Our goal is to increase awareness of global concerns, promote intellectual discussion, and inspire action at all levels. Through our articles, we hope to motivate you to actively contribute to the change we want to see. We know that our generation has the key to a more just and sustainable society.

We cordially encourage you to look through the journal's pages and interact with your peers and instructors. Let your curiosity help you learn more about these contemporary challenges, and let that knowledge steer your opinions and actions. We hope that "Out and About" will continue to be a source of inspiration, knowledge, and empowerment for our readers as we progress together on this path of exploration and growth.

Success is the result of a collective effort, creative mind an artist inside us. And when it all comes altogether an exceptional piece gets created. I am overwhelmed with gratitude for the incredible support and dedication of our dynamic 'Out And About' team. Our mentor, Dr. Rajeshwar Mishra, has been the guiding light of this journal, offering valuable insights and unwavering support. Our catalyst to the forum Mr. Amit Kumar Sarkar, has been the pillars of knowledge, offering his expertise and encouragement throughout. The editorial team worked tirelessly, ensuring that each article met the highest standards. Our talented writers' dedication, their words and creativity is featured into this journal.

Last but not least, the 'Out And About' team enriched our editorial with engaging visuals, stunning photography, and an adventurous spirit. Thank you for being the heart and soul of this project!

----

OUT AND ABOUT

# **MBIS Journalism**

Shubham Sharma<sup>1</sup> and Yagya Srivastava<sup>2</sup>

Journalism is a field which is chosen by 9 per cent of the people from our country (India), as profession and they are known as journalist.

We MBIS, have published 3 journals yet and it's our  $4^{th}$  journal which is written by the ingenious journalist which will be beneficial in our future.

So, let us know more about it.

### THE VITAL ROLE OF JOURNALISM IN SOCIETY

Journalism is one of the most important pillars of democracy, and a watchdog of society. It helps in making sure that those in higher position are answerable for their action and decision. In addition it also helps in informing the society very important facts and some burning issues. In this age of rapid technological advancement and digital media, the role of journalism remains as vital as ever.

### WHAT IS JOURNALISM?

At its core, journalism is the practice of collecting, verifying, and serving information to the public. It acts as a bridge between events, issues, and the people who need to know about them. Journalists are tasked with reporting news, analysing events, and presenting stories in a fair, accurate, and balanced manner. They are also called social workers as they work for a nation by using their knowledge.

### **KEY FUNCTIONS OF JOURNALISM**

- **INFORMING THE PUBLIC:** Journalism's primary function is to provide the public with information regarding current events such as government actions, social issues, and more. It helps people stay informed about what's happening in the world and their communities.
- **MONITORING POWER:** Journalists serve as watchdogs by investigating and reporting on the actions of government officials, corporations, and other institutions. This accountability role helps to prevent misuse of power and corruption.
- **FOSTERING TRANSPARENCY:** Transparency is essential for a functioning democracy. Journalism uncovers hidden truths and promotes transparency by

Shubham Sharma (VIII A)1: loves challenging maths and chess problems

Yagya Srivastava (VIII A)<sup>2</sup>: "tech enthusiast" loves singing and is a guitarist (Musicophile)

exposing wrongdoing and unethical behaviour.

- **PROVIDING A PLATFORM FOR VOICES:** Journalism amplifies the voices of marginalized communities, allowing them to share their stories and concerns with a wider audience. It plays a role in promoting diversity and inclusivity in public discourse.
- **SHAPING PUBLIC OPINION:** Through reporting and analysis ,journalism helps shape public opinion on important issues. It can encourage public discourse and decision-making.

### CHALLENGES FACING JOURNALISM TODAY

While journalism is indispensable to society, it faces numerous challenges in the modern era:

- **DIGITAL TRANSFORMATION:** The shift from traditional print media to digital platforms has disrupted the business model of journalism. Many news organizations struggle to adapt to new revenue models and maintain quality journalism.
- **FAKE NEWS AND MISINFORMATION:** The rise of social media has made it easier for false information to spread rapidly. Journalists must contend with the challenge of combating misinformation.
- **PRESS FREEDOM:** In some parts of the world, journalists face threats, censorship, and violence. Protecting press freedom remains an on-going challenge.
- **ETHICAL DILEMMAS:** Journalists often grapple with ethical dilemmas, such as maintaining objectivity, protecting sources, and balancing the public's right to know with privacy concerns.

In a world where information is power, journalism stands as a crucial pillar of democracy. It informs, educates, and empowers citizens, holding those in power accountable and shaping public discourse. While it faces challenges in the digital age, the importance of quality journalism remains undiminished, and its role in society remains indispensable. As responsible consumers of news, we should support credible journalism and stay vigilant against misinformation.

-....

# The Rise Of AI: Navigating the Ethical & Social Implications

Md. Maroof Hussain<sup>1</sup>and Md. Aayan<sup>2</sup>

### WHAT IS ARTIFICIAL INTELLIGENCE?

AI is a concept that has been around, formally, since the 1950s, when it was defined as a machine's ability to perform a task that would've previously required human intelligence. This is quite a broad definition and one that has been modified over decades of research and technological advancements.

When we consider assigning intelligence to a machine, such as a computer, it makes sense to start by defining the term 'intelligence' -- especially when we want to determine if an artificial system is truly deserving of it. Our level of intelligence sets us apart from other living beings and is essential to the human experience. Some experts define intelligence as the ability to adapt, solve problems, plan and learn new things.

### HOW CAN I USE AI?

AI comes in different forms that have become widely available in everyday life. The smart speakers like Alexa or Google voice assistant built-in are two great examples of AI. Other good examples are popular AI chatbots, such as ChatGPT, the new Bing Chat, and Google Bard. When we ask ChatGPT for the capital of a country or we ask Alexa to give us an update on the weather, we will get responses that are the result of machine-learning algorithms.

### WHAT ARE THE DIFFERENT TYPES OF AI?

Artificial intelligence can be divided into three types: narrow AI, general AI, and super AI.

### • NARROW AI

Artificial narrow intelligence (ANI) is crucial to voice assistants, such as Siri, Alexa, and Google Assistant. This category includes intelligent systems that have been designed or trained to carry out specific tasks or solve particular problems.ANI might often be referred to as weak AI, as it doesn't possess general intelligence, but some examples of the power of narrow AI include the above voice assistants, and also image-recognition systems, technologies that respond to simple customer service requests.

**Md. Maroof Hussain<sup>1</sup>**: Best Writing and speaking skill **Md. Aayan<sup>2</sup>**: Good thinker and helping person

Mu. Aayan- : Good thinker and helping perso

### • GENERAL AI

Artificial general intelligence (AGI), also known as strong AI, is still a hypothetical concept as it involves a machine understanding and performing vastly different tasks based on its acquired experience. This type of intelligence is more on the level of human intellect, as AGI systems would be able to reason and think like a human. Like a human, AGI would potentially be able to understand any intellectual task, think abstractly, learn from its experiences, and use that knowledge to solve new problems. Essentially, we're talking about a system or machine capable of common sense, which is currently not achievable with any form of available AI.

### • SUPER AI

Artificial super intelligence (ASI) is a system where the intelligence of a machine surpasses all forms of human intelligence, in all aspects, and outperforms humans in every function. An intelligent system that can learn and continuously improve itself is still a hypothetical concept. However, it's a system that, if applied effectively and ethically, could lead to extraordinary progress and achievements in medicine, technology, and more.

### WHAT ARE SOME RECENT EXAMPLES OF AI?

### • CHATGPT (AND THE GPTs)

ChatGPT is an AI chatbot capable of natural language generation, translation, and answering questions. Though it's arguably the most popular AI tool, thanks to its common availability. OpenAI made significant waves in the world of artificial intelligence with the creation of GPTs 1, 2, and 3.GPT stands for Generative Pre-trained Transformer, and GPT-3 was the largest language model in existence at the time of its 2020 launch, with 175 billion parameters. The latest version, GPT-4, accessible through ChatGPT Plus or Bing Chat, has one trillion parameters.

### • SELF-DRIVING CARS

Though the safety of self-driving cars is a top concern of prospective users, the technology continues to advance and improve with development in AI. These vehicles use machine-learning algorithms to combine data from sensors and cameras to recognize their surroundings and determine the best course of action. Tesla's autopilot feature in its electric vehicles is probably what most people think of when considering self-driving cars, but Waymo, from Google's parent company, Alphabet, makes autonomous rides, like a taxi without a taxi driver, in San Francisco, CA, and Phoenix, AZ. Cruise is another robot taxi service, and auto companies like Apple,Audi, GM, and Ford are also seemingly working on self-driving vehicle technology.

### ROBOTICS

The achievements of Boston Dynamics stand out in the area of AI and robotics. Though we're still a long way away from creating AI at the level of technology seen in the movie Terminator, watching Boston Dynamics robots use AI to navigate.

### • DEEPMIND

Google sister company DeepMind is an AI pioneer making step toward the ultimate goal of artificial general intelligence (AGI). Though not there yet, the company initially made headlines in 2016 with AlphaGo, a system that beat a human professional Go player. Since then, DeepMind has created a protein-folding prediction system, which can predict the complex 3D shapes of proteins, and its developed programs that can diagnose eye diseases as effectively as the top doctors around the world.

### WHAT IS MACHINE LEARNING?

The biggest quality that sets AI aside from other computer science topics is the ability to easily automate tasks by employing machine learning, which lets computers learn from different experiences rather than being absolutely programmed to perform each task. This capability is what many refer to as AI, but machine learning is actually a subset of artificial intelligence. Machine learning involves a system being trained on large amounts of data, so it can learn from mistakes, and recognize patterns in order to accurately make predictions and decisions, whether they've been exposed to the specific data or not.

*Examples of Machine Learning* include image and speech recognition, fraud protection, and more. One specific example is the image recognition system when users upload a photo to Facebook. The social media network can analyze the image and recognize faces, which leads to recommendations to tag different friends. With time and practice, the system make sharper this skill and learns to make more accurate recommendations.

### WHAT IS CONVERSATIONAL AI?

Conversational AI includes systems that are programmed to have conversations with a user: trained to listen (input), and respond (output) in a conversational manner. Conversational AI uses natural language processing to understand and respond in a natural way. **Some EXAMPLES OF CONVERSATIONAL AI** are chatbots like Google Bard, smart speakers with a voice assistant like Amazon Alexa, or virtual assistants on your smartphone like Siri.

### SOME COMMON EXAMPLES OF ARTIFICIAL INTELLIGENCE:

- **VOICE ASSISTANTS:** Amazon Alexa sitting in that Echo device on our shelf or Apple's Siri in our iPhone and Google Assistant all use natural language processing to understand and respond to our questions or commands.
- **CHATBOTS:** AI chatbots are another form of virtual assistants that can interact with people and, in some cases, hold human-like conversations.
- **LANGUAGE TRANSLATION:** Machine learning reaches far and wide, and services like Google Translate, Microsoft Translator, Amazon Translate, and ChatGPT all use it to translate text.
- **IMAGE AND VIDEO RECOGNITION:** Different programs use AI to find information about the content in images and videos, such as the faces, text, and objects within them.

• **BUILDING A BUSINESS:** Aside from an everyday user helping themselves of artificial intelligence around them, there are services offering AI tools for businesses, including OpenAI's GPT-4 AP to build applications and services using the LLM; or Amazon Bedrock, a suite of cloud-based AI tools for developers.

# Exploring the Possibilities: Life on the Moon

Anika Jha<sup>1</sup>

#### "LOOK UP AT THE MOON, FOR IT REFLECTS OUR DREAMS AND INSPIRES OUR ASPIRATIONS."

For centuries, the Moon has captivated human imagination and curiosity. As we continue to push the boundaries of space exploration, questions arise about the potential for life on our celestial neighbour. While the Moon may seem so unwelcoming and barren, recent scientific discoveries and technological advancements have shed light on the possibility of life existing beyond Earth.

### THE LUNAR ENVIRONMENT:

The Moon's surface conditions are vastly different from the Earth's. It lacks a breathable atmosphere, experiences extreme temperature fluctuations, and is bombarded by radiation. However, recent studies have revealed the presence of water ice in the permanently shadowed areas of the Moon's poles. This discovery opens up new opportunities for potential life as water is essential for sustaining life and we know it.

### **MICROBIAL LIFE:**

Microorganisms known as extremophiles have demonstrated the ability to survive in extreme conditions on Earth, such as in the depths of the ocean or in the scorching deserts. Scientists speculate that similar microbial life forms could exist on the Moon, adapting to the harsh lunar environment. Research is ongoing to determine if these extremophiles could withstand the lunar conditions and potentially thrive.

### **PANSPERMIA:**

The theory of panspermia suggests that life on Earth may have originated from elsewhere in the universe, transported via comets, asteroids, or other celestial bodies. This theory raises the possibility that life could have been transferred to the Moon from Earth or vice versa. Scientists are investigating whether the building blocks of life, such as amino acids, could have arrived on the Moon through impacts or other mechanisms

### HUMAN COLONIZATION AND TERRAFORMING:

As we visualize future human colonization of the Moon, the prospect of terraforming

becomes relevant. By manipulating the lunar environment, humans could potentially create habitable conditions for life. Terraforming techniques, such as the introduction of artificial atmospheres or altering the lunar landscape, could pave the way for sustainable ecosystems to develop.

### **FUTURE EXPLORATION:**

The future holds exciting prospects for further exploration of the Moon. Upcoming missions, such as NASA's Artemis program and other international collaborations, aim not only to study the Moon's geological and astronomical aspects but also to search for signs of life. These missions will utilize advanced technology and scientific instruments to analyze the Moon's surface and subsurface, providing us with valuable insights into the possibilities of life on our celestial companion.

While the Moon may appear lonely and empty at first glance, ongoing research and technological advancements have opened up the potential for life to exist beyond Earth. The future holds great promise for uncovering the mysteries of life on the Moon, marking a significant milestone in our understanding of the universe and our place within it.

### **G-20** Bhavya Singh<sup>1</sup> and Hansika Anand<sup>2</sup>

G20 is an association of nations and unions that account for 80% of the world's Gross World Product (GWP), 75% of its trade, two-thirds of its population, and 60% of its land area. It was established with the intention of attaining world stability in a number of ways, including economically, environmentally, etc. It envisions a world where nations and unions are stable and self-sufficient.

India received a rare opportunity to hold the presidency from 1 December, 2022, to November 30, 2023, during the sought year 2023. The G20 presidency of India is a significant event. India's capital, New Delhi, has made an effort to use the G20 to highlight domestic policy issues for which it has made notable progress.

Sustainability is a growing concern in India's objectives and policies. Thus it is known as the "Green Summit." India supports the International Biofuels Alliance, Mission Life, Green Financing, and green hydrogen standards through these programmes.

India, a significant G20 member, is situated in the centre of a global stage brimming with business opportunities. The G20 offers enormous potential for itself as well as advantages for other nations. The G20, which brings together the biggest economies of the globe, provides India with a platform to improve its economic prospects in a number of ways. India has an important consumer market and a rising economy, which makes it attractive to foreign investors. India may draw in global firms, gaining access to their technology, knowledge, and resources. Additionally, it will enhance the business climate and encourage more foreign direct investment (FDI), making it a desirable location for commerce and business. India could pursue different Green initiatives to play a crucial role in addressing global concerns.

The G20 is a forum for the leading economies of the world to meet and talk about issues impacting the global economy.

India can use the G20 forum to establish deeper economic relations and collaborate more closely with other developed nations. This can include collaboration on international economic issues, investment opportunities, and bilateral trade agreements. International companies and investors frequently attend G20 summits. With the use of these occasions, India may promote its economic strength and attract international capital, which will spur job growth and economic expansion.

As a G20 member, India is able to influence international economic policies. This may be particularly significant in areas where India can promote its interests, such as trade, taxation, and financial regulation. As a way to promote economic growth, the

**Bhavya Singh<sup>1</sup>:** Erudite , Diligent and Responsible **Hansika Anand<sup>2</sup>:** Art aficionado

G20 frequently considers infrastructure development. India's infrastructure projects, which are essential for economic development, may seek assistance from other G20 countries in the form of funds and expertise. Energy and environmental concerns are frequently discussed during G20 summits. India can use this forum to talk about its energy requirements and its commitment to combating climate change, as well as to ask for cooperation from other countries for sustainable energy initiatives. India might profit from its G20 membership by encouraging cooperation in technology and innovation. Partnerships in the digital economy, artificial intelligence, and biotechnology are examples of this. G20 summits offer chances for diplomatic interaction and the promotion of India's geopolitical interests. It can collaborate with other powerful nations to address regional and international security issues. India may use the G20 platform to talk about equitable economic growth and policies for reducing poverty. It can share its own projects while simultaneously benefiting from other G20 nations' experiences.

The G20 functions under the principle of multilateral cooperation, in which nations collaborate to address common problems. An important component of India's foreign policy, international cooperation and collaborative diplomacy, have been strengthened by its participation in the G20. India has pushed for reforms in organisations involved in global governance, such as the International Monetary Fund (IMF) and the United Nations, using the G20 platform as a platform. In line with its foreign policy objectives of playing a bigger part in global decision-making, it has urged for a more equal and inclusive global governance structure. Trade and investment policies are frequently discussed at G20 summits. Due to its desire to align its economic interests with those of other major economies, India's involvement has influenced its trade policy and discussions. Global issues like sustainability and climate change are addressed by the G20. As India strives to balance economic progress with environmental concerns and commits to international climate agreements, its engagement has led to a growing emphasis on environmental issues in its foreign policy. G20 gatherings offer chances for side-by-side negotiations and bilateral meetings. India has taken use of these opportunities to deepen its bilateral ties with important nations including the United States, China, Russia, and others, which has had an impact on the direction of its foreign policy. The G20 offers a forum for debates on geopolitical issues, even though its primary concentration is on economic issues. India has discussed regional security and geopolitical concerns with other member nations, affecting their foreign policy choices in certain areas.

The G20 Summit that India hosted in 2023 is a significant occasion that highlighted India's emergence as a world leader. India highlighted its commitment to address urgent global concerns throughout the summit, concentrating on economic resilience, sustainable development, combating climate change, and international cooperation. The discussions included supporting the post-pandemic economic recovery, encouraging global trade and investment in vital industries including technology and sustainable businesses, and affirming India's commitment to fighting climate change through renewable energy and environmental protection measures. The summit also gave a lot of attention to inclusive growth, reducing poverty, and ensuring access to healthcare. India participated in critical bilateral engagements on the sidelines, establishing diplomatic ties with significant international players and regional allies. The summit addressed the value of multilateralism and pushed for changes to international organisations to achieve more equal participation. India had the chance to strengthen present an appealing global image as a powerful and responsible nation by hosting the G20 conference. The meeting also showed that the world is prepared to deal with crises, whether they are economic or environmental, highlighting the value of international cooperation in difficult circumstances. In a nutshell the India-hosted G20 Summit in 2023 proved significant in demonstrating India's leadership on important international issues, advancing sustainable development, and strengthening global alliances—all of which helped create a more peaceful and wealthy world.

-080

# **Women Reservation Bill**

Preet<sup>1</sup> and Raziya<sup>2</sup>

The Constitution (one hundred and eighth amendment) bill, 2008 seeks to reserve onethird of all seats for women in both the Lok Sabha and the state legislative assemblies. The allocation of reserved seats shall be determined by such authority as prescribed by Parliament. This bill was passed unanimously on 21 September 2023 in the upper house after an 11-hour debate , a day after it was passed in the lower house

### HIGHLIGHTS OF THE BILL

- According to this bill one third of the total number of seats reserved for scheduled castes and scheduled tribes shall be reserved for women of those groups in the Lok Sabha and the Legislative assemblies.
- Reserved seats may be allotted by rotation to different constituencies in the state or union territory.
- Reservation of seats for women shall cease to exist 15 years after the commencement of this amendment act.

### KEY ISSUES AND ANALYSIS OF THE WOMEN'S RESERVATION BILL

- Reservation policy is contested. Proponents say affirmative action is needed to help women. Recent panchayat research suggests that reservation empowers women and allocates resources.
- Opponents say it would prolong women's inequality since they wouldn't compete on merit. They say this tactic distracts from election reform concerns like the criminalization of politics and inner-party democracy.
- The reservation of Parliament seats limits voter choice to women. Thus, some analysts recommend political party reservation and dual-member seats.
- Rotating reserved seats every election may weaken an MP's motivation to work for his constituency since he may not be re-elected.

• After the Constitution was altered to enable the OBC quota, the 1996 Women's Reservation Bill report advocated reservation for OBC women. Reservation was also suggested for the Rajya Sabha and Legislative Councils. The Bill does not include either suggestion.

**Preet**<sup>1</sup>: Helping Person **Raziya**<sup>2</sup>: Nice Speaking Skill

### WHY IS BILL HARD TO PASS ?

The current electoral system, which employs the single transferable vote technique, is one of the main obstacles to the implementation of the Women's Reservation Bill in the Rajya Sabha. Votes are allocated to favored candidates under this method, making it difficult to reserve seats for certain groups.

There are now no reservations for SCs and STs in the Rajya Sabha, and any move to add them would need to change the voting process under the constitution.

### WHY IS WOMEN RESERVATION BILL IMPORTANT ?

Historically, societal restrictions and discrimination have harmed women.

- **CASTE GROUPS** Any plan for women's reservation must adhere to constitutional principles and take caste diversity into consideration.
- **GENDER QUOTA** Women's representation would remain minimal without a gender quota, severely undermining our democracy.
- **PANCHAYATS** Recent research on panchayats has shown the beneficial impact of reservation on the distribution of resources and the empowerment of women.
- **VOTE SHARE** Despite an increase in the percentage of women voting, there are still not enough women in positions of authority.

# Schemes For Girls in Bihar

Srishti<sup>1</sup> and Uzma<sup>2</sup>

### WHAT DOES THE TERM 'SCHEME' MEAN?

Generally, the meaning of scheme is a plan, design, or program of action involving many people which is formulated by the government. A union government scheme means a scheme formulated by the Government of India. The different Ministries of the Government of India have launched variousgovernment programmes known as schemes or Yojana.

### WHY SCHEMES?

When people actually realize that India is a country where equality between sexes is not approached. This realization was only in talks of politicians and society but no one actually believed on this difference of Gender. This was the cheapest way to achieve trust from voters and society, but in 20s, government found the way to show importance towards women and also to show them respect. India has several government schemes aimed at empowering and supporting girls in various aspects of their lives, including education, health, and overall development. Here are some schemes and their benefits.

### **FOLLOWING SCHEMES:-**

### • 50 PERCENT RESERVATION TO WOMEN IN PANCHAYATI RAJ INSTITUTIONS:

In India, 50 percent of seats in Panchayati Raj Institutions (PRIs) are reserved for women, including leadership roles. This constitutional mandate promotes women's participation and empowerment in local governance

### • SUKANYA SAMRIDDHI YOJANA:

This is a savings scheme designed for the benefit of the girl child. Parents or guardians can open an account in the name of a girl child, and it provides a high rate of interest and tax benefits.

### • JANANI SURAKSHA YOJANA:

Janani Suraksha Yojana (JSY) is an Indian government program aiming to reduce maternal and neonatal mortality. It provides cash incentives to encourage pregnant women, especially from economically disadvantaged backgrounds, to give birth in

Srishti1: Embracing my flaws and loving myself; Dance is the therapy
Uzma2: Passionate about dancing

healthcare facilities, ensuring safer deliveries and postnatal care.

### • BETI BACHAO BETI PADHAO(BBBP):

This is a flagship scheme launched by the Indian government to promote the survival, protection, and education of the girl child. It aims to address issues like female foeticide , gender bias and encourages the education of girls.

### • MUKHYAMANTRI BALIKA CYCLE YOJANA:

Mukhyamantri Balika Cycle Yojana is a government scheme in some Indian states, providing bicycles to schoolgirls to improve their access to education. It aims to reduce dropout rates and promote girls' education by facilitating transportation to schools.

### And many more schemes like that are in force for the betterment of the nation...

-----

### History of Music in India Yashita Kumari<sup>1</sup>

India, a land of diverse cultures and traditions, boasts a rich and vibrant musical heritage that spans thousands of years. Music has always held a significant place in the hearts of Indians, playing a crucial role in religious, cultural, and social contexts. Join us on a journey as we explore the captivating history of music in India, from its ancient roots to its modern manifestations.

### THE ORIGINS

The history of Indian music is deeply rooted in divine tradition. According to Hindu mythology, it is believed that the revered sage Narada brought the art of music from heaven to Earth, marking its inception. In this mythological context, the Om mantra, known as Naadbrahma, is considered the first sound in the universe, representing the purest manifestation of divine power (Brahma). Musicians aspire to attain this purity in their dedicated pursuit, or 'sadhana.' Initially, Indian music was primarily devotional and reserved for religious rituals within temples. However, it gradually evolved, incorporating elements from folk and various regional musical forms, ultimately developing its distinctive musical characteristics.

### **MUSIC IN ANCIENT INDIA**

Indian music has ancient roots dating back to Vedic times, with the concept of Naadbrahma prevalent. The Sam Veda contains early organized music, giving rise to the first ragas. In the late Vedic Period, Samgana involved chanting verses in musical patterns. Around 2nd to 7th century AD, 'Prabandh Sangeet' in Sanskrit gained popularity, evolving into simpler Dhruvapad in Hindi. Notable milestones include Panini's reference to music in 500 BC, 'Rikpratisakhya' (400 BC) who introduced musical theory, and Bharata's Natyashastra (4th century AD) categorized music into octaves and keys. Works like 'Brihaddesi' (9th century) awnd 'Sangeeta Makaranda' (11th century) by Matanga and Narada respectively, further enriched musical understanding.

### **MUSIC IN MEDIEVAL INDIA**

In the medieval period of Indian music history, the Bhakti and Sufi movements left an indelible mark on the musical landscape. These devotional movements encouraged the use of music to connect with the divine, with Bhakti saints like Kabir and Meera Bai composing devotional songs, and Sufi mystics integrating music into their spiritual practices, giving rise to qawwalis and Sufi music. This period also saw the flourishing of

classical music in both Hindustani and Carnatic traditions, with notable composers and performers leaving a lasting legacy.

### **MUSIC IN MODERN INDIA**

The history of Indian music continues to evolve into the modern era, reflecting the vibrant cultural tapestry of contemporary India. In the 20th and 21st centuries, Indian music witnessed a fusion of traditional and western elements. This fusion gave rise to various popular genres, such as bollywood music, which combines Indian classical and folk elements with western instrumentation. Renowned artists like A.R. Rahman and Lata Mangeshkar have achieved international acclaim for their contributions to Indian music. Additionally, India has seen the emergence of independent music scenes spanning various genres, from classical and folk to electronic and hip-hop.

In summary, the history of music in India is a captivating odyssey that reflects the nation's diverse culture and spiritual heritage. From its mythical beginnings with sage Narada to the emergence of Hindustani and Carnatic traditions, Indian music has evolved over centuries, blending influences from various eras. It has adapted to changing times, notably through the fusion of traditional and Western elements in the modern era, resulting in a dynamic musical landscape encompassing bollywood, classical, folk, electronic, and hip-hop genres. This musical legacy continues to inspire and resonate, embodying India's rich cultural tapestry and enduring artistic expression.



As we dive into the culture of India, we examine a lot of things be it music, dance or folks. But do we ever think of how they are still revived? The main reason behind this is the bond we share with our culture and traditions, people are still connected to it and are promoting their culture.

SPIC MACAY Or Society for the Promotion of Indian Classical Music and Culture Amongst Youth is a non-political, nationwide, involuntary movement founded in 1977 by Dr. Kiran Seth. Manava Bharati International School often organizes the events by SPIC MACAY and this time we were beholden to witness an enthralled performance by Pt. Praveen Godkhindi(flutist) who is a national award holder and one of the top artists in Hindustani bansuri by Akashwani and his accompanist Pt. Mithilesh Jha (tabla player) who is a very prominent Tabla player of recent times who has accompanied with stalwarts of musicians in the country. They were welcomed by the students with great honour and pride and were filled with such a zeal and enthusiasm that was so invulnerable and stellar.

The program unfolded beautifully over two days, with the first day dedicated to students and teachers. The classical notes cast a spell on the students, igniting a newfound passion for classical music. As day 2 arrived, parents joined the event and were captivated by the artists' optimistic performances, which left them feeling truly inspired and energized. The harmonious blend of music and community spirit made this program a truly enchanting experience.We, in order to save our rich culture, need to promote and thus extricate it.

The SPIC MACAY community which is working from more than 40 years and organizing more than 3000 programs in different schools and colleges for the promotion of our opulent and diverse culture. It was a perplexing experience witnessing this event and we Indians are really lucky to have such a glorified and a culture full of abundance. So this is our foremost duty to protect, promote and practice our culture and traditions.

Nandini (IX)<sup>1</sup>: Lectiophile

# Vande Bharat Express: India's Leap into Modern Rail Travel

Ragini Priyam<sup>1</sup>

India's railway system has long been the backbone of the country's transportation infrastructure, connecting cities and towns across vast distances. In recent years, a significant transformation took place in the Indian Railways with the introduction of the indigenously developed semi-high-speed train, the Vande Bharat Express. It is also known as 'Train 18', stands as a symbol of India's commitment to innovation and modernization in the world of train travel. This high-speed train has redefined passenger rail travel in India, offering a blend of cutting-edge technology, energy efficiency, and comfort.

### THE BIRTH OF THE VANDE BHARAT EXPRESS

The idea of the Vande Bharat Express, also known as Train 18, was conceptualized to revolutionize rail travel in India. This train was designed to be faster, more energy-efficient, and technologically advanced than its predecessors. It was intended to set new standards for passenger comfort and safety.

Sudhanshu Mani played a pivotal role in turning this ambitious vision into reality. He was the unsung hero during this whole operation. He was appointed as the general manager of the Integral Coach Factory (ICF) in Chennai, where the Vande Bharat Express was developed. Under his leadership, a dedicated team of engineers and designers worked tirelessly to design and manufacture this innovative train.

### **CHALLENGES OVERCOMED!**

The journey of creating the Vande Bharat Express was fraught with challenges, including securing the necessary sanctions and funding. Sudhanshu Mani's expertise in navigating the bureaucratic hurdles of the Indian Railways was instrumental in obtaining the green light for the project. His persuasive abilities and the compelling case he made for the train's potential benefits, played a crucial role in securing the necessary funds. From sourcing the right materials to ensuring safety standards were met, Sudhanshu Mani and his team faced numerous obstacles. However, their determination and innovative solutions made them win the race.

### ACHIEVMENTS

One of the key achievements of Sudhanshu Mani and his team was the successful

indigenous production of the train's components, reducing dependency on imports which would have costed more then the budget if it was not made in our country and rather exported from foreign countries. This promoted the 'Make in India' initiative. This not only saved costs but also showcased India's engineering prowess on a global scale. Their dedication to pushing the boundaries of what was possible within the constraints of India's railways showcased the immense potential for indigenous technological advancements. This also inspired a new generation of engineers and innovators. The team's relentless pursuit of excellence and commitment to the betterment of India's transportation infrastructure have left an indelible mark on the nation

### **INNAUGRATION**

In February 2019, the Vande Bharat Express was inaugurated by Prime Minister Narendra Modi. The train's maiden journey from New Delhi to Varanasi marked a significant moment in India's railway history. With its cutting-edge technology, the train significantly reduced travel time and set new standards for passenger comfort.

### **KEY FEATURES**

- **SLEEK DESIGN:** The Vande Bharat Express boasts a sleek and aerodynamic design, setting it apart from conventional Indian trains. Its exterior design reduces air resistance, enhancing speed and energy efficiency.
- **HIGH SPEED:** With a top speed of 180 km/h (112 mph), the Vande Bharat Express significantly reduces travel time on select routes, making it a preferred choice for passengers looking to save time on their journeys.
- **ENERGY EFFICIENCY:** The train is equipped with regenerative braking systems and energy-efficient equipment, which reduces energy consumption and minimizes carbon emissions.
- **SPACIOUS INTERIORS:** The train features spacious and comfortable interiors with ergonomic seating, large windows, and ample legroom. It offers a pleasant travel experience for passengers.
- **ONBOARD SERVICES:** Passengers can enjoy onboard Wi-Fi, infotainment systems, and GPS-based information displays. The train also features automatic doors and modular toilets for convenience.

The Vande Bharat Express represents a significant leap in India's efforts to modernize its railway infrastructure. With its state-of-the-art features, energy efficiency, and focus on passenger comfort, it has set new standards for train travel in the country. The journey from conception to manufacturing and operation showcases India's capability to innovate and excel in the field of rail transportation. As the Indian Railways continues to invest in such projects, the Vande Bharat Express serves as a shining example of a brighter future for rail travel in India.

BIBLIOGRAPHY: YOUTUBE:TEDX TALKS BY SUDHANSHU MANI, THE PRINT: INDIA'S FIRST INDIGENOUS TRAIN

-----

# **Transferring Responsibilities**

Yogaja Aasti<sup>1</sup>

Being a council member has been an invaluable journey, offering us numerous life lessons that have left an indelible mark on our personalities. One of the most profound realizations during our tenure is the ability to gracefully handle love, respect, and responsibilities. We didn't just assume responsibilities; we earned respect and cultivated love from our peers and the community we served. This enduring respect and affection have become the bedrock of our identities. Our time in these leadership roles has ingrained in us the core values of empathy and compassion. Looking back, we can confidently assert that we are not the same people we were a year ago. Through the hands-on experience, we learned the values of ethics, problem-solving, decision-making, and the art of effective teamwork. This form of learning, derived from real-world situations, holds a weight that surpasses what we typically glean from classroom settings. Ten years from now, we might not remember the intricate chemistry lessons, but we will undoubtedly cherish the vivid memories of our team's unwavering support and how we, in turn, stood by our team. Formulas and equations may fade from memory, but the profound joy of juniors running to us, brimming with enthusiasm and gratitude, will remain etched in our hearts. From the exhilaration of receiving our badges to the fulfillment of passing them on to the new council, our journey has been a transformative one. We have walked this path hand in hand, side by side, nurturing a strong sense of camaraderie and unity. As we bid farewell to our roles, I, on behalf of my dedicated team, extend our heartfelt congratulations to the incoming council. We pass on the torch with immense pride, knowing that they will carry it forward and keep the flag held high. In conclusion, our time as council members has been an enriching and enlightening experience that has taught us to balance love, respect, and responsibility. It has equipped us with invaluable life skills and instilled in us the significance of empathy, compassion, and teamwork. These experiences have become the cornerstone of our personalities and will remain with us for a lifetime

Yogaja Aasti<sup>1</sup>: School Captain

# "Empowering Voices: Reflections on Student Council Elections 2023"

Ayush Raj Shandilya<sup>1</sup>

The heartbeat of any educational institution lies in its students, and the Student Council serves as the vital voice of the student body. The recently conducted elections for the Student Council posts were a memorable event, filled with diverse perspectives, impassioned debates regarding the eligibilities, and a palpable sense of democratic fervor.

### THE ELECTION COMMISSION:

The establishment of an election commission for the formation of a school council is a democratic process that ensures transparency, fairness, and student representation. I Ayush Raj Shandilya with my mates Saksham Kumar and Yogja Asti were the members of the election commission. We dedicated our time to plan and tireless effort was invested in designing the school council elections. As a team, we diligently coordinated with students, designed an inclusive election process, and collected votes. Countless meetings were convened to outline candidate eligibility, voting procedures, and campaign guidelines, ensuring no unfair means were promoted. Our collective dedication to transparency and fairness fuelled the creation of a well-organized electoral framework. On election day, we seamlessly executed our plan, overseeing the balloting process and guaranteeing that every student's voice was heard.

### A DEBATE?

The debate surrounding the eligibility criteria for the school election, particularly the exclusion of Class 11 students from running for the supreme post-school CAPTAIN, generated substantial discussion among the students. The focal point of contention centered on the ethical and practical considerations of this decision. Seniors argued that allowing only Class 12 students to vie for the supreme post was ethically sound, given that it is their final year in the school. This viewpoint posited that Class 12 students, being in their last year, would bring a heightened sense of responsibility and dedication to the role, understanding the significance of their potential impact on the school's legacy. While acknowledging the potential for outstanding leaders in Class 11, supporters of the decision believed that reserving the highest position for the outgoing class would ensure a smooth transition and effective leadership in the critical year ahead. Ultimately, the

Ayush Raj Shandilya (XI)1: Melophile

debate highlighted the delicate balance between fairness and practicality in establishing election criteria by the Election commission.

### **SELECTION CRITERIA:**

The process of selecting members for the school council is a crucial and considered task that hinges on both academic excellence and active participation. Aiming to create a representative body that not only excels in scholastic achievements but also actively engages in the school curricular activities, We assessed candidates based on their academic records and demonstrated commitment to extracurricular and meetings involvement. Academic ability ensures a foundation of knowledge and responsibility, while active participation demonstrates a candidate's dedication to contributing positively to the school environment. By combining these two criteria, the school council can be comprised of individuals who not only excel academically but are also enthusiastic and committed contributors to the overall well-being and growth of the school community. But for the higher posts only these things were not enough we had to check their social skills and critical thinking too so we did some more processes for the selection of the higher posts as they are going to lead the whole council.

### THE PROCESS:

The process began with the unveiling of spirited candidates who showcased their leadership potential through their experiences and manifestos. However, what truly set this election apart was the inclusion of personal interviews with each contestant for the post of Captain. These interviews offered a unique glimpse into the personalities, aspirations, and leadership styles of the individuals vying for the coveted positions.During the interviews, candidates eloquently shared their visions for the student community, addressing issues ranging from academic concerns to extracurricular enhancements. It was heartening to witness the passion and dedication these young leaders exhibited, showcasing not only their desire for personal growth but also their commitment to bettering the student and entire school.

### THE VOTING:

The voting process was designed to be inclusive, transparent, and reflective of the democratic values as we are a part of the great democratic country. The Election Commission members made the ballet boxes which were carried in every class from 6 to 12 and in that, the votes were cast. I could see the happiness in the eyes of the voters as they felt they were a part of the voting and they knew that their choice matters and that each and every vote matters.

### **MANUAL VOTE COUNTING:**

In an era dominated by digital technologies, the decision to manually count the votes might seem unconventional. However, this decision was intentional, aimed at involving students directly in the electoral process and instilling a sense of responsibility. The counting was a collective effort, with students from different grades collaborating in the spirit of fellowship. The manual counting process not only fostered a sense of community but also served as a valuable lesson in teamwork and attention to detail. It was an exercise in responsibility and trust, where the students took charge of ensuring the integrity of the electoral outcome.

### **REFLECTIONS AND MOVING FORWARD:**

As we reflect on the elections, it is clear that the process went beyond, just selection of student leaders. It was a demonstration of the vitality of our student body, a celebration of diverse voices, and a testament to the commitment of our students to actively shape their educational experience.

Looking ahead, the elected Student Council members carry a weighty responsibility. They are not just representatives but factors of the collective aspirations of their peers. The challenges they will face are significant, but so are the opportunities to make a lasting impact.

In conclusion, the 2023 Student Council elections were a beacon of democracy, participation, and shared responsibility. It is our hope that this experience will inspire a continued sense of engagement and empowerment among our students, fostering a culture where every voice is heard, and valued, and actively contributes to the growth of our educational community.

# "Festival of Science and Scientific Temper"

Amit Kumar Sarkar<sup>1</sup>

At Manava Bharati International School, Patna, we believe in developing future ready citizen by offering school education for holistic development of the children focused around their creative abilities, self-efficacy and psychological and emotional wellbeing.

Classrooms and laboratory alone cannot offer learning for life. To nurture the unique scientific temperament of our students school organized a Science Exhibition "EUREKA" on 26.08.2023(Saturday). The exhibition was inaugurated by Dr.Ashok Rastogi (AIIMS, Patna) and Mr. Ashish Kumar (Scientists, Meteorological Department, Patna).

It wasn't just any regular exhibition, it was like a carnival where we celebrated science in a fun and festive way. The school corridors were all dressed up in bright colors and decorations. It felt like a big celebration! There were banners with science pictures, and decoration with balloons, model of an astronaut and Chandrayaan made the place look magical.

It was a day filled with curiosity, creativity, and discovery as young minds showcased their scientific explorations and innovations.

Walking through the exhibition felt like strolling through a carnival midway. Each exhibit was not just informative but also designed to captivate the senses. The fusion of science and celebration was evident in every corner.

### **HIGHLIGHTS OF THE EXHIBITION:**

Robotics and Artificial Intelligence: At the AI booth, students and parents talked to a virtual assistant. It was mind-boggling how the computer could understand what they were saying and reply in human-like ways. It was like having a chat with a clever machine.

**Games and Puzzles:** Along with the scientific displays there was a corner of fun science games and puzzles, providing the audience a playtime and also taught them new things. Some of them won little prizes also.

Amit Kumar Sarkar<sup>1</sup>: Faculty Social Science, Manava Bharati International School,Patna

**Different Zones:** Class rooms were split into special areas, each showing a different part of science. It was like exploring different lands but with cool science stuff. Each area had its own decorations that matched the theme.

**Exciting Experiments:** Some displays had real science experiments happening! Some exhibits featured live demonstrations. Students conducted chemistry experiments with colorful reactions that looked like fireworks, while physics demonstrations showcased principles in action.

**Arts and Science:** Some displays showed that art and science can be friends too. We saw paintings and drawings that had science hiding inside them. It was like seeing two things we love coming together.

**Happy Faces Everywhere:**The best part was seeing everyone smile and enjoy themselves. Kids were excitedly talking about the creative things they saw, parents were having fun with the games, and teachers were proud of all the hard work they put in. Besides the amazing things, the most important part of the exhibition was all about working together and finding solutions to problems. It felt like the center of the exhibition was filled with the energy of people working together and figuring things out.

A child was struggling with his project because his model was not working; it required complicated calibration that the child couldn't do at that time. He was in the computer lab, desperately trying to solve his problem, but nothing was working. Seeing him in trouble, his friends also came to help him, but they couldn't find the solution either. They were losing hope, and then suddenly, one of them suggested seeking help from a junior who had the knowledge to solve their problem. They called him, and here is the most beautiful part: by overcoming the barrier of different grades, they worked together and managed to identify the issue. It was a great achievement for them. Although the problem wasn't fully resolved due to the unavailability of certain components, the effort of the children to tackle the problem with empathy, collaboration, and by breaking down the barrier of class hierarchy was noteworthy.

In essence, the School Science Exhibition was much more than a showcase of scientific concepts, it was a celebration of the human spirit's unyielding quest for knowledge and progress. The "EUREKA" event will undoubtedly leave an indelible mark on the memories of all those who attended.

# **Science Exhibition 'EUREKA'**

Sunita Saxena<sup>1</sup>

### A Bridge Between Theoretical and Practical Application

The primary objective of organizing the Science Exhibition, 'EUREKA,' was to promote the proliferation of scientific knowledge and provide students with a platform to apply various scientific theories and methods through a variety of projects and models. The event also aimed to foster teamwork and cooperation among students.

On the 26th of August 2023, Manava Bharati International School in Patna successfully hosted the Science Exhibition, 'EUREKA.' Approximately 350 students from classes 3 to 12 enthusiastically participated in this event.

The exhibition officially commenced at 9:30 a.m. with the ribbon-cutting ceremony, led by the esteemed chief guest, Dr. Ashok Rastogi from the All India Institute of Medical Sciences, Patna. He was accompanied by Director Mr. Pradeep Mishra, Principal Mr. Francis Xavier, and Vice Principal Mr. Anupam Mishra. The Guest of Honor for the event was Scientist Mr. Ashish Kumar, Head & Scientist C, India Meteorological Department, Patna.

The exhibition served as a wonderful educational tool, offering students an exciting and hands-on approach to learning. It inspired students to explore beyond their textbooks, and their enthusiasm was evident in their presentations, which were accompanied by informative charts. They covered various topics spanning physics, chemistry, biology, computer science, and business studies. Importantly, the students patiently and effectively communicated their projects and ideas to parents and visitors.

The students showcased a wide array of projects and models, ranging from Robotics and Solar Energy to Cancer Awareness, Financial Market Models, Biogas Plants, Hydroelectricity, Space Exploration (Chandrayan -3), Healthcare (Haemodialysis), Biology (Excretory System), and even Games & Puzzles. These displays served as eye-openers, highlighting the students' diverse interests and innovative thinking.

The exhibition provided students with opportunities to develop their social and moral skills while enhancing their problem-solving abilities. It encouraged them to inquire, acquire knowledge, clarify their conceptual understanding of scientific contexts, and explore applications in their daily lives. It also nurtured a spirit of curiosity, encouraging students to question, explore, and rediscover the fundamentals of scientific concepts.

Sunita Saxena<sup>1</sup>: Faculty Science, Manava Bharati International School,Patna

Some parents shared their remarks on the event:

- Ashutosh Verma: "I see a Nobel Prize winner in every child."
- Md. Khuram: "Amazing effort. I liked the way children are expressing themselves."
- Aastha Gupta: "Very creative minds in all children."
- Parent of Sanghvi: "Great effort by the students. A real showcase of hidden talents. I truly appreciate these kinds of exhibitions organized by the school, as they help our kids' talents flourish."

Parents expressed happiness and satisfaction due to the active participation of their children. They appreciated the students' individual and group engagement in the exhibition.

Towards the end of the exhibition, judges meticulously assessed the different models and projects and selected the three best projects from each age group: Group 1 (class 3 to 5), Group 2 (class 6 to 8), and Group 3 (class 9 to 12). These students were honoured with Certificates of Excellence and medals. Every student who participated in the exhibition received a Certificate of Appreciation. Additionally, students displaying a strong scientific temperament were also awarded certificates.

Overall, the 'EUREKA' Science Exhibition effectively bridged the gap between theoretical knowledge and practical application, offering students an exceptional platform to showcase their scientific talents and innovations. It simultaneously encouraged critical thinking and problem-solving skills while garnering praise and recognition from parents and visitors. Such events play a pivotal role in nurturing young talents and instilling a profound appreciation for science.

.....

## Allow them a free space- they are ready to explore, discover and excel!

Rajeshwar Mishra<sup>1</sup>

### UNDERSTANDING THE CONCEPTUAL MOSAIC

A wise educator, from a reputed public school, once dropped a whispering caution- 'don't allow freedom to children-this will make them unruly, disrupt discipline and spoil them in the long run-this is my experience of the last two decades of heading an institution'! My curiosity grew especially because the gentleman had two decades of experience of 'running the school' which, for the parents has been, a hot choice. I asked him furtherwhat do you consider as 'unruly and undisciplined' behavior? He fumbled for a while and resumed -'they should behave properly, be respectful to the teachers and elders and should never speak lie and try to mislead'! I requested him to elaborate - behave properly', being unruly' and 'not being respectful'. The gentleman had difficulty in responding to the questions tried to evade the question! This was not unexpected as most of the prominent educators from similar schools maintain similar positions about how a child in a school be dealt with! They extend their explanation and would invariably settle for-'at least a line between freedom and autonomy must be there'. So where do we go from here? 'Should we allow freedom or maintain at least a thin line' as a regulator of behavior. There are important theories underlining role of rewards and punishments in shaping people's behavior. But what behavior to reward and what to punish is not very clear. Should a child maintaining a low profile - 'being obedient and submissive' be rewarded for his/her extra politeness? Should a child not speaking out his/ her views be treated as somebody having socially desirable behavior? I would prefer to get out of these conceptual complexities and try to see, in practice, how a free space can aid to the development of the children.

Freedom allows unleashing of his/her energy and explore options. Freedom may lead to some random actions, sometimes even seemingly undesirable actions. But this also allows judgement on various options and in fact developing authenticity of his/her options. The authenticated options are probably outcome of his/her explorations and actions. In this process the student consolidates his/ her determination and conviction about strategies and actions which have resulted into plausible outcome which he/she has reason to celebrate. The celebration helps develop self-efficacy and elan so much important for human development.

Rajeshwar Mishra1: Social Psychologist and Mentor, MBIS

### **GROUNDED EVIDENCES**

A from becoming judgmental in assessing a student. The teacher is also not accommodative to students' perspectives and world views -there exists a hierarchical consideration to accommodate and not to accommodate their views. A sense of continued comparison goes on and appreciation is carefully expressed not to land into a lower position in the hierarchy. This is an outcome of a complex socialization process. While the teacher is considered as somebody who cannot be wrong a student is considered as childish and immature always in need of guidance, coaching and mentoring. The truth is that students have their own virtues, independent world views and a frame of thinking and doing. They should be acknowledged and appreciated. This acknowledgement and appreciation reinforce belief in their own self. The belief demands freedom to explore and unravel. Lack of freedom is disabling and blocks expression and initiative and action.

### ENABLING ENVIRONMENT FOR CREATIVE EXPRESSION AND ACTION

We, at Manava Bharati International School (MBIS) Patna, believe in and practice freedom in all our spheres of functioning. To lay an ideological ground there has been reflective sessions where the students and the teachers have engaged themselves in understanding facets of 'freedom and unfreedom'. This helped us develop nuanced understanding of freedom and various misconceptions. Freedom is often referred as a precursor to irresponsibility. Our reflective sessions led us to understand that freedom without accountability and responsibility may take one's action into disarray. Freedom needs to be used proactively to act in the right direction and unleash one's potentials. With this understanding relevant actions and initiatives are planned which lead to creative initiatives with positive outcome.

The freedom is reflected in the teachers and students joining hands of collaborationfreedom of choosing right partners and mutually agreeable tasks and goals. Be it organization of various programs or undertaking creative projects. Collaboration leads to positive outcome and is celebrated jointly. This celebration leads to surge of positive impulses aiding to creativity.

On a more subtle plank we have observed children are able to deliberate and reflect around issues and subjects usually considered as adult domain. Gender relations, stereotypes, co-options, deprivation and misappropriation of rights and entitlements are so well explained and analyzed by them. A class sixth student analyzing sources of discrimination and exploitation is well understood in the backdrop of freedom of space allowed to them. In-depth analysis only suggests the magic of freedom.

### FREEDOM TO TRY HANDS ON LEADS TO BETTER LEARNING OUTCOME

Research and analysis is often considered as intricate adult world of scholarship and academic prowess. Students, at MBIS, are undertaking interdisciplinary researches in both the physical and social science domain. Identifying research issues, literature review, research design and tools, data collection and analysis are remarkably attempted and accomplished by them. The teachers and the students together conduct field work and become partner in analysis and writing.

### THE EXAMPLES CONFIRM OUR CONVICTION IN THE ENABLING IMPACT OF FREEDOM

The joint activities and projects and their execution suggests that the adult academic roles are effectively played by the students and the teachers. The freedom allows the teachers to break barriers of hierarchies and power associated with them. The freedom helps students to jointly picking up courage to develop and practice partnership and collaboration.

# Make mathematics learning joyful

Md. Sageer<sup>1</sup>

"The first thing to understand is that mathematics is an art"

- Paul Lockhart<sup>2</sup>

The word mathematics came from a Greek word " $\mu\dot{\alpha}\theta\eta\mu\alpha$ " (máthēma)<sup>3</sup> which means science or study. Mathematics is, "the branch of human enquiry involving the study of numbers, quantities, data, shape and space and their relationships, especially their generalizations and abstractions and their application to situations in the real world".

### THREE REASONS FOR CHILDREN NOT LOVING MATHEMATICS

#### **1. BORING MATHEMATICS**

The problem is usually that Math is never taught in an interesting way. One says that Math is too "abstract". On the contrary. Math is entirely concrete. And to most people concrete is, well, boring. It's a lot of formulas and applications. Everything in Math must be done the same way every time to get the desired results. There is little room for intuitive thinking in Math. That's why it doesn't appeal to most.

Children should be given a chance to discover something on their own. Something to discuss and learn from each other. Something to trace and feel. Something connected and relevant to their daily life. Owing to the lack of these implementations, Math stands boring all the time.

#### 2. MATHEMATICS IS MEANINGLESS

The stream of meaningless mathematics kills the children's curiosity to learn. Maths is an art. The essence of the art is killed by teaching only the methods and formulas to solve a problem. There is nothing wrong in learning the techniques in solving mathematical problems. But if we remove the "why" part of mathematics and just focus on "what" to do, we make mathematics meaningless for children.

Md. Sageer1:- Mathematics Faculty

### 3. FEAR

Math anxiety is the feeling of tension and fear that many people experience when called on to work out a sum. For children, it can lead to behavioural problems in class, as well as physical symptoms such as butterflies in the stomach and a racing heart. They can feel anxiety about not getting the answers right and not understanding what is being taught. They may feel frustrated and upset about not doing well in math and may develop a dislike for the subject, making the development of math skills even more difficult. Parents and even teachers can help a child overcome math anxiety by offering reassurance, practical assistance, and by making it fun.

The ultimate goal of mathematics is understanding the material presented, applying the skills, and recalling the concepts in the future. Therefore, it is essential to understand the concepts rather than memorizing the procedures of mathematics.Mathematics is a subject that requires constant practice and revision. If this is not done, students tend to forget the concepts. Some students find it interesting while others find it difficult. This is because of the strategies applied by the teacher regarding how to teach maths. As it is such a different subject, the teachers have to apply a whole different set of strategies while teaching mathematics.

# Deflation: When Falling Prices Raise Concerns...

Mukul Anand<sup>1</sup>

For those embarking on an economic journey, you've likely come across conversations about the drawbacks of inflation. But what about its lesser-discussed counterpart, deflation? The following article acts as your gateway to understanding the intricacies of deflation, a complex economic phenomenon often misunderstood as a mere opposite of inflation. In this article, we'll be explore the idea of deflation, distinguish it from disinflation, and analyze its impact on economies. Our focus centers on the real-world case of China, investigating the root causes of its deflationary challenges. We'll conclude by examining how deflation can influence a nation's socio-political and economic landscape, and propose strategies to address it.

### WHAT IS DEFLATION?

Unlike Disinflation which refers to a decline in the rate of inflation, meaning prices are still rising, but at a slower pace, Deflation is an economic situation characterized by a sustained decrease in the general price level of goods and services within an economy. It is often described as negative inflation, where the purchasing power of money increases over time. This means that the same amount of money can buy more goods and services as prices fall.

### IS IT A BOON OR BANE FOR AN ECONOMY?

While some might think that falling prices are beneficial for consumers, deflation can be a significant concern for an economy. Deflationary spirals can lead to reduced consumer spending, lower business investment, and ultimately, economic stagnation. When people expect prices to keep falling, they postpone purchases, which can lead to a decrease in demand and a downward economic spiral. In extreme cases, prolonged deflation can even lead to a full-blown economic depression, marked by widespread unemployment and severe economic hardship.

### THE LIVE CASE OF CHINA

China's economy has entered deflation, with a 0.3% drop in the consumer price index (CPI) as well as in the producer price index (PPI) in July 2023, marking the first such

Mukul Anand<sup>1</sup>: A free-spirited, inquisitive saadhak

decline in over two year's, since February 2021. This decline reflects subdued demand, a sentiment reinforced by official data revealing a 14.5 percent year-on-year drop in China's exports and a 12.4 percent dip in imports for July.

### WHAT FACTORS CONTRIBUTED TO CHINA'S DEFLATING ECONOMY?

- **REAL ESTATE TURMOIL:** China's real estate sector, a key driver of its growth, has suffered due to government debt crackdown and a global economic slowdown. This has caused a significant drop in property prices, negatively affecting consumer spending.
- **WEAK GLOBAL ECONOMY:** Declining overseas demand for Chinese exports has hit Beijing's revenue. Consequently, China experienced reduced production, investment, and increased deflationary pressures. The post-COVID impacts on production have further strained the country's economic conditions, contributing to deflationary tendencies.

### **REPERCUSSIONS OF THE CHINA'S DEFLATING ECONOMY**

Deflation, similar to its long-term impact in Japan, tends to erode household net worth, making it hard for borrowers to repay their loans.

Deflation can led to a vicious cycle of declining economic activity and slowdown of economic growth, and increased unemployment rate among the country's working age population.

It would also promote the delayed consumer spending, as individuals may hold back for further price reductions and thus hampering the demand-supply equilibrium.

Since China remains one of the largest producer of goods sold around the world, it would curb the rising prices in other parts of the world, if the deflation persists.

The reduced foreign investments in the Chinese economy due to deflation could open the door for new players to potentially become the manufacturing hub for developed economies, thereby eliminating China's monopoly in the manufacturing sector.

### WHAT CAN BE DONE?

Addressing deflation in China requires a multifaceted approach to stabilize the economy. Here are some key strategies:

- **DEVALUATION OF CURRENCY:** One approach is to devalue the national currency. A lower exchange rate can make Chinese exports more competitive, potentially increasing demand for their products in the global market.
- **SUPPORT FOR EXISTING COMPANIES:** Providing better tax policies and other incentives to existing companies can help them weather the deflationary storm. This may include reduced tax burdens and access to low-interest loans to maintain operations and employment.
- **PROMOTING NEW COMPANIES:** Encouraging the emergence of new businesses is vital. Reducing the cost of production through streamlined regulations and subsidies

can stimulate entrepreneurship and create new economic drivers.

- **INCREASED MONEY SUPPLY:** The government can inject more money into the economy through monetary policies, such as lowering interest rates and engaging in quantitative easing. This can encourage borrowing and investment, boosting economic activity.
- **GOVERNMENT POLICIES:** The government can enact policies that boost domestic demand, such as infrastructure projects or incentives for consumer spending. Effective regulation and oversight of key industries, like real estate, can also prevent asset bubbles and excessive deflation.

A combination of these measures can help China combat deflation, restore economic growth, and maintain its position as a global economic powerhouse.

In conclusion, deflation emerges out as a multi-dimensional economic quandary with profound and wide-ranging repercussions, as vividly illustrated by China's present predicaments. Grasping the underlying origins and far-reaching effects of deflation becomes a fundamental imperative for policymakers and economists alike as they chart their economic courses towards enduring prosperity within an ever-shifting global tableau.

-----

# INVITATION TO FUTURE CONTRIBUTORS

So, wasn't all the articles interesting enough to provoke a reader to read more? Do you too have something interesting to share to the zestful scholars? Out and About always looks for the contributors to add fresh outlook to it's publication.

We embrace articles on themes and subjects that is suitable for the young minds, be it personal experiences or sharing perspectives on innumerous topics you're fervent about . Articles should not exceed more than 1,000 words and can include references, graphs, statistics and stories to illustrate your points.

By joining us as a creative altruist, you can help us achieve our collective goal of providing a platform for student voices to be heard by sharing your personal opinions and articles on different topics and be a part of something special.

To submit an article or for more information, please contact us at the contact details mentioned below. We can't wait to read your contributions.

Please send your articles to the:

Editorial Team, Out and About C/o Manava Bharati International School Near AIIMS Patna, NH-98, Nawada More Gosai Math, P. O. Mubarakpur, Patna- 801505 Email: <u>info@mbispatna.org</u>

Please mark your emails as 'Sub: Out and About'.

Thank you

OUT AND ABOUT

### "Children are not things to be molded, but are people to be unfolded." - Jess Lair

Manava Bharati International School, Patna firmly believes in this! We focus on nurturing the unique potential and individuality of each child. With our 'Child-Centric Approach', we aspire to create a learning environment where they can grow and flourish, allowing their true selves to unfold. Our approach is rooted in the belief that children are not blank slates, but rather, they resemble delicate flowers waiting to bloom. With our endeavour we try for fuelling a fervent interest for learning that transcends the classroom, cultivating an enduring affection for gaining/acquiring wisdom and abilities.

You are cordially invited to join us on this odyssey.

Please Connect us at

Manava Bharati International School

Manava Bharati International School Near AIIMS Patna, NH-98, Nawada More Gosai Math, P.O. Mubarakpur, Patna -801505 (Bihar) Email: info@mbispatna.org

Thank you





### **Prepping up**



aam









cccccc.











### Out and About :: Vol 2, Issue 1

All the knowledge in the world is yours to take. You just have to reach out and grab it. ~ Swami Vivekananda

K

 $\star$ 

K

の日本

Manava Bharati International Sch

A AA



C

P