DECEMBER
2024

NEWSLETTER

GOAL 10 : REDUCED INEQUALITIES

(Sustainable Development Goals)

JM International School
Dwarka, New Delhi

OVERVIEW OF SUSTAINABLE DEVELOPMENT GOALS

- The 70th Session of the UN General Assembly held on 25th September 2015 adopted the Sustainable Development Goals (SDGs) with 17 goals and 169 targets, under the official agenda "Transforming our world: the 2030 Agenda for Sustainable Development". India is a signatory to this landmark agreement.

70 Session of UN General Assembly, New York , 25th Sept. 2015

- Officially, the SDGs came into effect from 1st January 2016.
- Member Countries have the responsibility for follow-up and review the progress made in implementing the goals and targets.
- SDGs is an inter-governmentally agreed set of goals relating to international development which aims at meeting the needs of the present without compromising the ability of future generations to meet their own needs.

17 GOALS OF SDG

WHAT IS GOAL 10
REDUCED INEQUALITIES

Sustainable Development Goal 10 (SDG 10) focuses on reducing inequality within and among countries. This goal seeks to empower marginalized communities, close economic gaps, and ensure equal opportunities for all, irrespective of age, gender, race, ethnicity, disability, religion, or economic status.

WHY IT MATTERS?

Rising Inequality: Income disparities have grown, with the wealthiest 10% accumulating a significant share of global resources.
Impact on Growth: High inequality hampers economic progress and destabilizes societies.
Stronger Communities: Promoting equity fosters resilience, innovation, and collaboration.

KEY THEMES OF SDG 10?

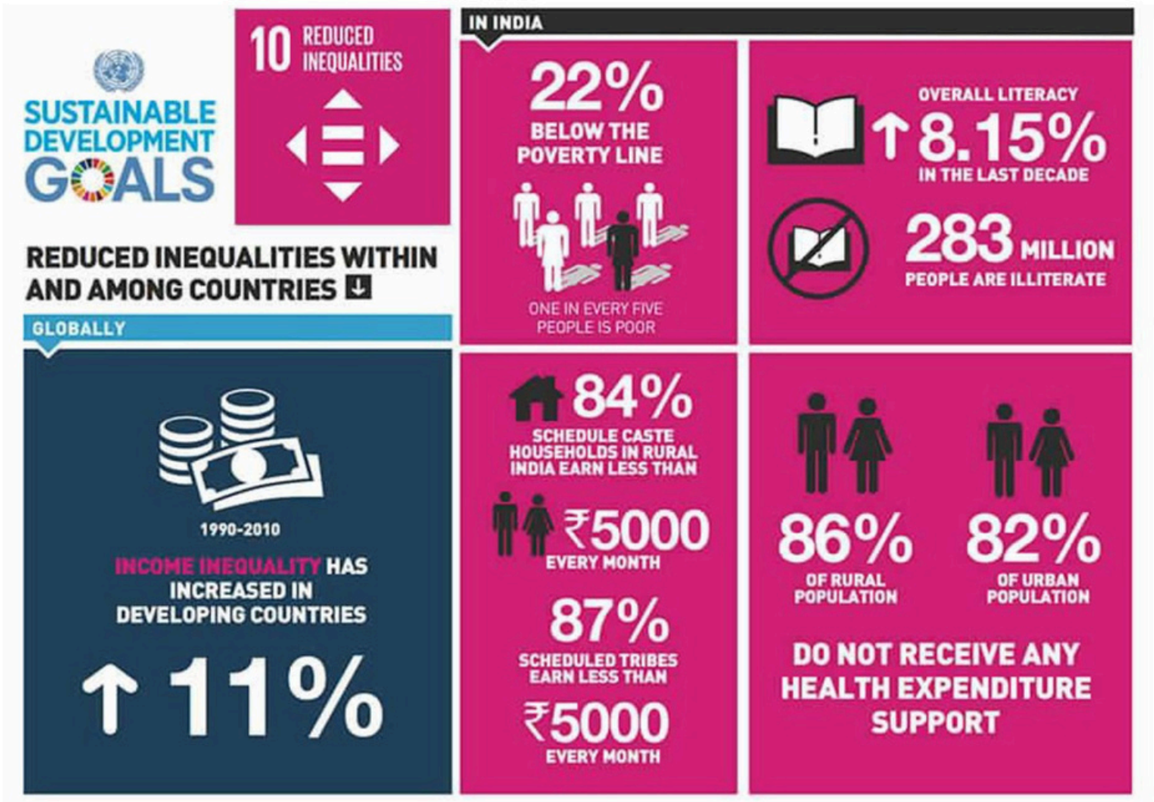
Income Inequality: The richest 1% earn more than twice as much as the bottom 50% of the global population combined.
Access Gaps: 1 in 5 people globally faces discrimination in access to essential services.
Gender Pay Gap: Women earn only 77 cents for every dollar earned by men globally.

SUCCESS STORIES

Rwanda's Gender-Inclusive Leadership: With over 60% of its parliament comprising women, Rwanda is setting an example for equitable representation.
Brazil's Bolsa Familia Program: This initiative has successfully lifted millions out of extreme poverty by providing financial support to low-income families.
Scandinavian Countries: Nations like Sweden and Norway lead in equality rankings due to progressive taxation and robust welfare systems.

WHAT ARE THE CHALLENGES FACED IN SDG 10?

Economic Barriers: Persistent gaps in income and wealth require stronger policy interventions.
Discrimination: Systemic biases still hinder equal opportunities for minorities and underrepresented groups.
Global Cooperation: Addressing inequality demands collaboration across nations to tackle trade imbalances and unfair labor practices.

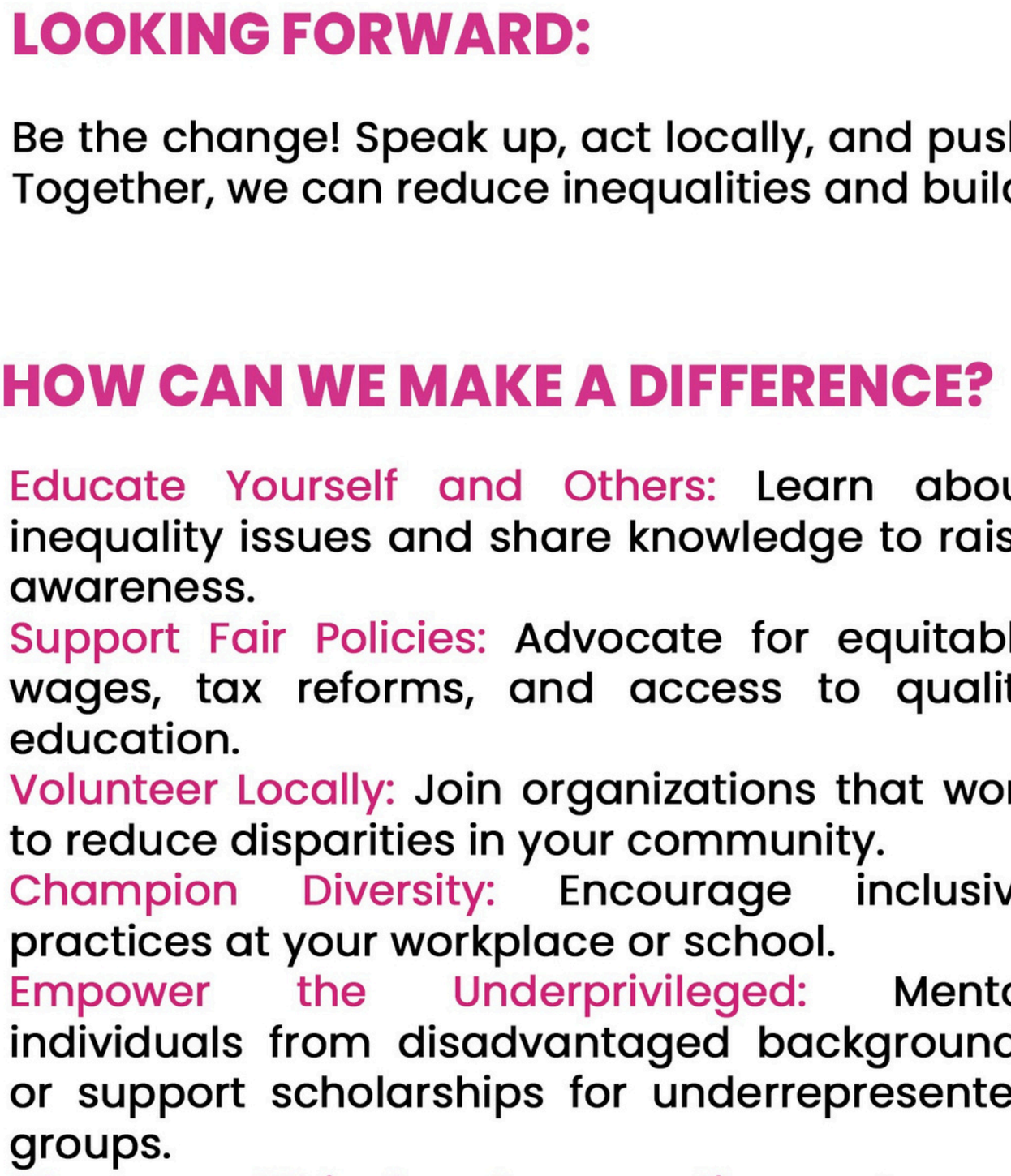


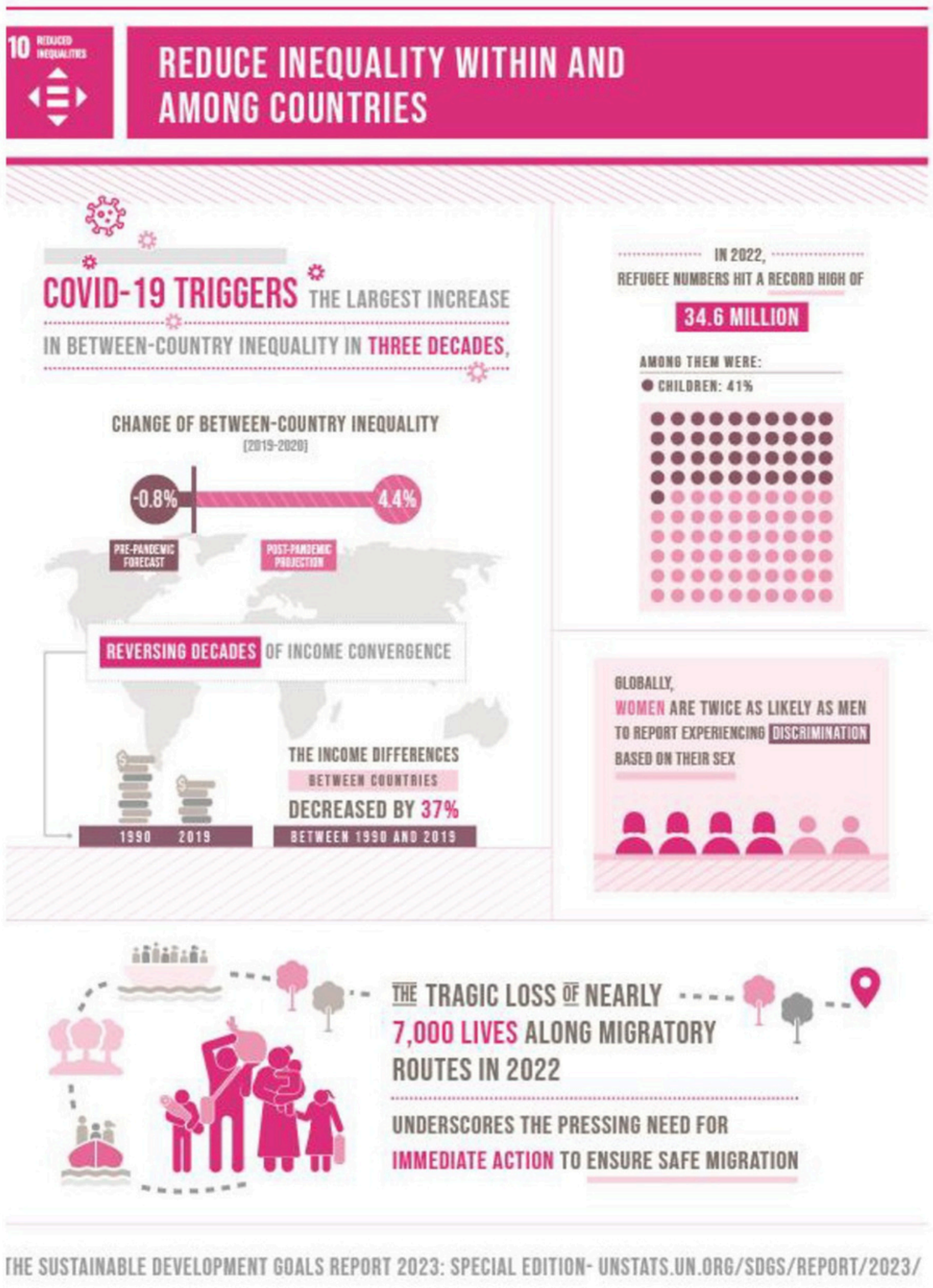
LOOKING FORWARD:

Be the change! Speak up, act locally, and push for policies that create an equitable future. Together, we can reduce inequalities and build a world where everyone thrives.

HOW CAN WE MAKE A DIFFERENCE?

Educate Yourself and Others: Learn about inequality issues and share knowledge to raise awareness.
Support Fair Policies: Advocate for equitable wages, tax reforms, and access to quality education.
Volunteer Locally: Join organizations that work to reduce disparities in your community.
Champion Diversity: Encourage inclusive practices at your workplace or school.
Empower the Underprivileged: Mentor individuals from disadvantaged backgrounds or support scholarships for underrepresented groups.
Choose Ethical Consumption: Support businesses that uphold fair labor practices and promote inclusivity.





THE SUSTAINABLE DEVELOPMENT GOALS REPORT 2023: SPECIAL EDITION- UNSTATS.UN.ORG/SDGS/REPORT/2023/

HOW TO
ACHIEVE SDGs

- A localized approach to address the unique challenges and opportunities present at the local level. By building a Local SDG Agenda tailored to gender equality, we can effectively target and implement initiatives that promote women's rights and empowerment.

- Creating an environment where multiple stakeholders—including civil society, private sector organizations, professional associations, and other agencies—actively participate in gender-focused initiatives is crucial. These collaborative efforts can drive meaningful change and ensure that diverse perspectives and resources contribute to gender equality.

- Conducting a situation assessment to identify development gaps and needs related to gender inequality is essential. By setting priorities at the local government and district levels, we can formulate targeted SDG-wise planning that addresses specific gender issues. Aligning existing budgets, schemes, and programs with relevant SDG 5 targets will further enhance our efforts to achieve gender equality in our state.

ABOUT

STEMROBO TECHNOLOGIES

STEMROBO provides 'End-To-End Solution to K-12 Schools' for 'Nurturing Innovation & 21st Century Skills' among young students of age 6-18 years across the globe. We offer young students an opportunity to explore, experience and bring innovation through a world class STEAM, Artificial Intelligence, Robotics & Coding curriculum integrated with our unique & affordable 'Technology Products and Solutions' delivered in an online or hybrid model; thereby enabling and empowering students to be able to become Creative - Thinkers and Problem - Solvers. Together, let's unlock the potential within each student, ignite a passion for Innovation, Creativity & Learning, and pave the way for a brighter tomorrow.

IMPORTANCE OF

STEM EDUCATION FOR KIDS

The term "STEM" typically refers to a group of academic disciplines that are focused on science, technology, engineering, and mathematics. it prepares them for the future by building problem-solving skills, encouraging curiosity and exploration, fostering collaboration and communication skills, and addressing global challenges that require STEM principles for their solution.

STEMROBO TECHNOLOGIES

Innovation, Creativity & Learning

STEMROBO provides **'End-To-End Solution to K-12 Schools'** for **'Nurturing Innovation & 21st Century Skills'** among young students of age 6-18 years across the globe. We offer young students an opportunity to explore, experience and bring innovation through a world class **STEAM, Artificial Intelligence, Robotics & Coding** curriculum integrated with our unique & affordable **'Technology Products and Solutions'** delivered in an online or hybrid model; thereby enabling and empowering students to be able to become **Creative - Thinkers and Problem - Solvers.**

Together, let's unlock the potential within each student, ignite a passion for Innovation, Creativity & Learning, and pave the way for a brighter tomorrow.

www.stemrobo.com

Mission

Our mission is to build an ecosystem focused on leveraging technology in education where **STEAM, Robotics, Coding, Artificial Intelligence & AR/VR** are utilized as crucial tools for kids to become smart in their academics and be able to solve modern world problems.

Vision

The company's vision is to nurture innovation and 21st century skills in K-12 students across the globe and prepare them for the future technological world. We are on a journey which will help every student to elevate core skills like **Logical Thinking, Creativity, Computational Thinking and Problem - Solving.**

About

Robotics Lab

The Robotics Lab at JM International School is a dedicated workspace where students can learn, experiment, and transform their ideas into prototypes. Designed to foster creativity beyond rote learning, the lab encourages students to explore futuristic skills such as design and computational thinking, adaptive learning, and artificial intelligence.

Equipped with state-of-the-art tools and equipment like 3D printers, robotics kits, and electronic components, the Robotics Lab at JM International School provides a hands-on learning experience in science, technology, engineering, and mathematics (STEM) fields. The primary goal is to cultivate problem-solving and critical thinking skills from an early age. By promoting experimentation and innovation, the lab aims to nurture the next generation of innovators and entrepreneurs, preparing them for future challenges and contributing to the overall development of India's technological landscape.

FUN FACT

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Universal Declaration of Human Rights: Adopted in 1948, it laid the groundwork for reducing inequalities worldwide.

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GLIMPSE OF ACTIVITIES

Grade I

Students explored the fundamentals of robotics and motion using the **Robotics Block Kit** or **Motion Discovery Kit**. They learned about basic mechanical and motion concepts, assembling components to create functional and imaginative designs.

Activities:

- **Basic Car**: A working model demonstrating the principles of wheels, axles, and motion, helping students understand the basics of mobility.
- **Giant Wheel:** A rotating structure showcasing circular motion and balance, inspiring creativity and engineering skills.

FUN FACT

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Economic Growth: Countries with less inequality often experience more sustainable economic growth.

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GLIMPSE OF ACTIVITIES

Grade II

Students explored the fundamentals of robotics and motion using the **Robotics Block Kit** or **Motion Discovery Kit**. They learned about basic mechanical and motion concepts, assembling components to create functional and imaginative designs.

Activities:

- **Basic Car**: A working model demonstrating the principles of wheels, axles, and motion, helping students understand the basics of mobility.
- **Giant Wheel:** A rotating structure showcasing circular motion and balance, inspiring creativity and engineering skills.

FUN FACT

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Historical Progress: Over the last 50 years, global life expectancy has increased by more than 20 years, thanks to reduced health disparities.

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GLIMPSE OF ACTIVITIES

Grade III

The **Paper Circuit kit** introduced students to basic electronics and circuits in a creative and hands-on way. Using simple materials like copper tape, LED lights, and batteries, students learned how circuits work and how to apply them in practical and artistic designs.

Activities:

Study Time Light Bulb: Students created a functional paper circuit that lit up a small bulb, symbolizing focus during study time. This activity helped them understand the flow of electricity and the concept of completing a circuit.

Rocket: A creative project where students designed a rocket and integrated a paper circuit to illuminate it, sparking their imagination while teaching circuit basics.

FUN FACT

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Women in Leadership: Companies with diverse leadership teams are 21% more likely to outperform their peers.

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GLIMPSE OF ACTIVITIES

Grade IV

Students explored the fundamentals of robotics, motion, coding, and electronics using the **Robotics Block Kit**, Motion Discovery Kit, and **Micro:bit.** These tools provided an engaging and hands-on introduction to mechanical design, programming, and creative problem-solving. Through assembling components and programming tasks, students developed their engineering and computational thinking skills.

Activities:

- **Basic Car**: A model demonstrated wheels, axles, and motion for understanding mobility.
- **Giant Wheel**: A rotating structure highlighted circular motion and balance.
- **Display Icons:** Students programmed fun icons on the Micro:bit's LED matrix.
- **Counter:** Students created a digital counter using loops and variables on the Micro:bit.

FUN FACT

"The first gasoline-powered car, the Benz Patent-Motorwagen, was built in 1885 by Karl Benz. It had a top speed of just 16 km/h (10 mph) and is considered the world's first true automobile.

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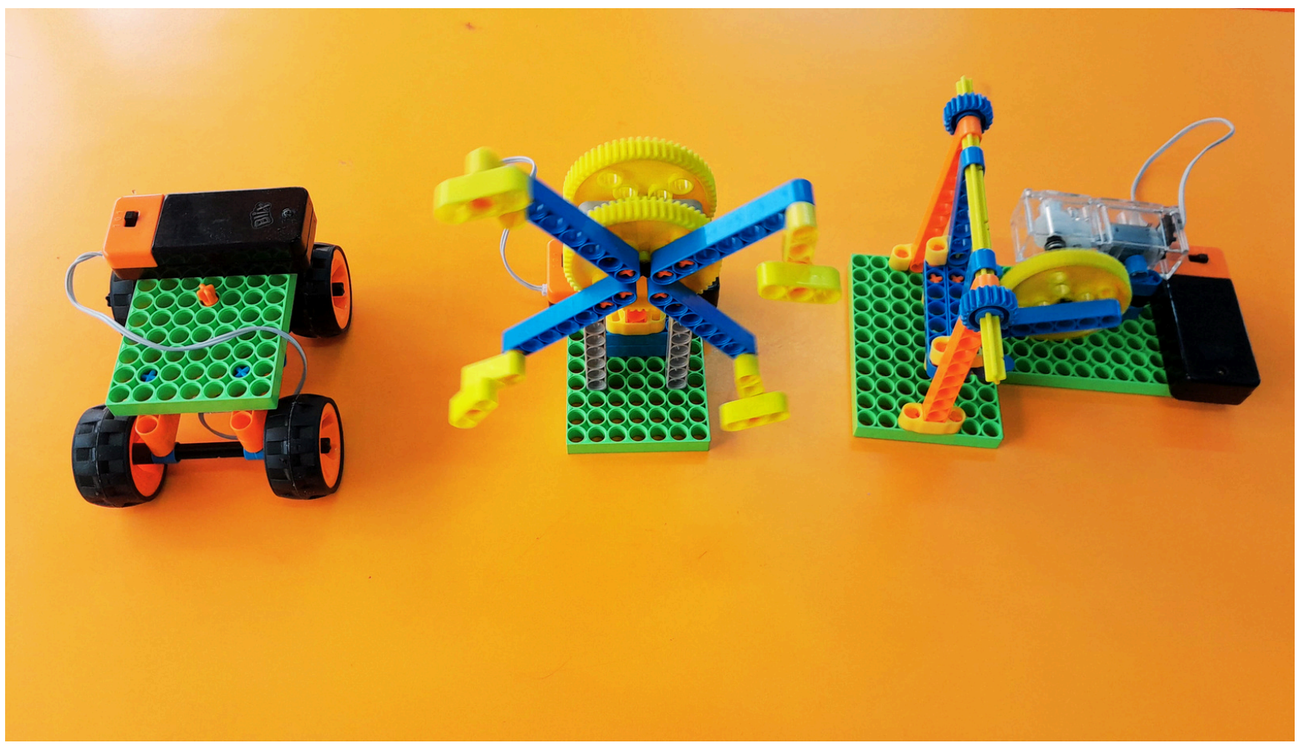
GLIMPSE OF ACTIVITIES

Grade V

Students explored the fundamentals of robotics and motion using the **Robotics Block Kit** or **Motion Discovery Kit**. They learned about basic mechanical and motion concepts, assembling components to create functional and imaginative designs.

Activities:

- **Basic Car:** A working model demonstrated the principles of wheels, axles, and motion, helping students understand the basics of mobility.
- **Giant Wheel:** A rotating structure showcased circular motion and balance, inspiring creativity and engineering skills.
- **Swing:** A model illustrated the principles of oscillatory motion and balance, encouraging hands-on learning and design creativity.



FUN FACT

"The first computer virus, called "Creeper," was created in 1971 by Bob Thomas. It was designed as an experimental program to test self-replicating software and would display the message, "I'm the Creeper, catch me if you can!"

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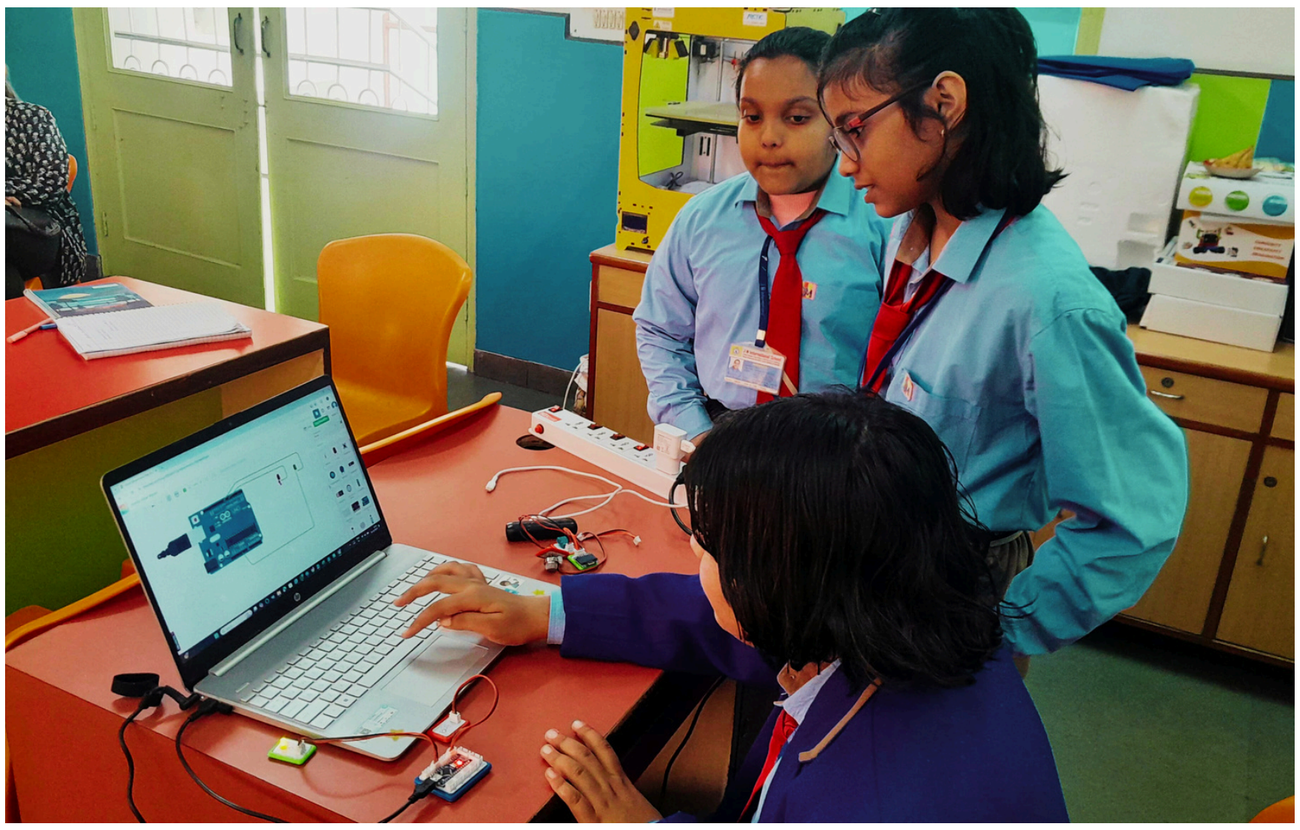
GLIMPSE OF ACTIVITIES

Grade VI

Students delved into the fundamentals of robotics and electronics using the **Arduino Uno** and explored the basics of drone technology. They learned to program and build circuits while gaining an understanding of flying forces and **Aerodynamics.**

Activities:

- **LED Blink:** Students programmed the Arduino Uno to make an LED blink, introducing them to basic coding and circuit-building concepts.
- **LED Control with Pushbutton:** Students created a circuit where a pushbutton controls the LED, teaching input-output interaction and programming logic.
- **Drone Basics:** Students learned about the forces involved in flying, such as lift, thrust, drag, and gravity, and explored the components and principles behind drone technology.



FUN FACT

"Drones were first used for military purposes in 1916 during World War I. Today, they are used for various commercial and recreational applications, including photography, delivery, and environmental monitoring.

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GLIMPSE OF ACTIVITIES

Grade VII

Students delved into the fundamentals of robotics and electronics using the **Arduino Uno** and explored the basics of drone technology. They learned to program and build circuits while gaining an understanding of flying forces and **Aerodynamics.**

Activities:

- **LED Blink:** Students programmed the Arduino Uno to make an LED blink, introducing them to basic coding and circuit-building concepts.
- **LED Control with Pushbutton:** Students created a circuit where a pushbutton controls the LED, teaching input-output interaction and programming logic.
- **Drone Basics:** Students learned about the forces involved in flying, such as lift, thrust, drag, and gravity, and explored the components and principles behind drone technology.

FUN FACT

"Arduino, an open-source electronics platform, was created in 2005 to make digital electronics more accessible. It allows users to build and program interactive projects using a simple microcontroller and easy-to-learn software.

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GLIMPSE OF ACTIVITIES

Grade VIII

Students delved into the fundamentals of robotics and electronics using the **Arduino Uno** and explored the basics of drone technology. They learned to program and build circuits while gaining an understanding of flying forces and **Aerodynamics.**

Activities:

- **LED Blink:** Students programmed the Arduino Uno to make an LED blink, introducing them to basic coding and circuit-building concepts.
- **LED Control with Pushbutton:** Students created a circuit where a pushbutton controls the LED, teaching input-output interaction and programming logic.
- **Drone Basics:** Students learned about the forces involved in flying, such as lift, thrust, drag, and gravity, and explored the components and principles behind drone technology.

FUN FACT

"The Intel 4004, released in 1971, was the first microcontroller. With just 4-bit processing power, it was initially used to control calculators but laid the foundation for today's microcontroller-driven technology.

GLIMPSE OF

PROJECTS

Project name - Giant Wheel

Impact:

- Students grasp circular motion and balance concepts.
- Encourages creativity, critical thinking, and real-world application of theories.
- Builds skills in problem-solving, teamwork, and mechanical engineering.

Solution:

- Students used the Robotics Block Kit or Motion Discovery Kit to build a Giant Wheel, exploring rotation and motion mechanics.
- The hands-on process helps students understand balance, rotation, and motorization.

FUN FACT

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Closing Digital Divides: Expanding internet access can help reduce educational and economic inequalities.

ACHIEVEMENTS
AT A GLANCE

- We have completed 80% of our robotics curriculum, keeping students engaged and excited throughout.
- Along with the curriculum, we've introduced activities that spark curiosity and enhance technical understanding, laying a solid foundation for future careers.
- Our focus is on building a strong base in robotics, with plans to introduce advanced concepts like AI and automation in the coming months.
- Kits like Robotics Block Kit, Paper Circuit Kit, Drone, Arduino Uno, and Micro:bit are boosting students' creativity, focus, and technical skills in electronics and programming.
- These hands-on tools and activities equip students with essential skills, preparing them to become innovators and stay ahead in the world of technology.

FUN FACT

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Community Impact: Grassroots initiatives, like microfinance, empower marginalized groups and reduce poverty.

THANK YOU

CONTACT US

STEMROBO TechnologiesPvt Ltd

B-32 Sector-63, Noida-201301

+91-7905087639

Visit our website– www.stemrobo.com