

REPORT: STEMPLIFY EVENT

DATE: February 6 and 7 2026 (Friday and Saturday)

CONDUCTED BY: STEMPLIFY TEAM

VENUE: Classrooms and Stilt Area

ATTENDED BY: Parents and Students

EVENT REPORT

Executive Summary

The two-day STEM Day extravaganza held on 6th and 7th February at GD Goenka Public School, Sarita Vihar, emerged as a resounding triumph, captivating the imaginations of students from Grades 3 through 8 with an extraordinary fusion of cutting-edge technology, hands-on experiential learning, and collaborative innovation. The event, meticulously orchestrated by STEMplify, transcended conventional educational boundaries by immersing young minds in the exhilarating realms of robotics, drone technology, 3D designing, and engineering principles. The Goenkan community witnessed an unprecedented display of creativity and technical prowess as students transformed theoretical concepts into tangible prototypes, demonstrating exceptional design thinking and problem-solving capabilities that left educators, parents, and school leadership profoundly impressed.

Event Vision and Objectives

The event was conceptualized with a transformative vision to revolutionize STEM education through immersive, experiential learning methodologies. The primary objectives encompassed promoting hands-on engagement with emerging technologies, fostering collaborative teamwork through role-based assignments including Design Engineers, Graphics Designers, Presenters, and Team Coordinators, enhancing critical thinking and problem-solving competencies, introducing students to futuristic technological innovations, and building confidence through professional presentations and demonstrations. Each student was empowered to assume specialized roles within their teams, mirroring real-world project dynamics and professional workflows, thereby cultivating essential 21st-century skills that extend far beyond traditional classroom pedagogy.

The Spectacular Showcase: A Journey Through Innovation

The event unfolded as a magnificent tapestry of technological exploration, with each grade level embarking on uniquely designed learning journeys that showcased the remarkable versatility and ingenuity of our young Goenkans. The atmosphere throughout both days was electrified with enthusiasm, curiosity, and the palpable excitement of discovery. Students from **Grade 3** initiated their technological odyssey with drone flying activities on specialized drone pads, where they not only mastered the fundamentals of aerial navigation but also demonstrated profound understanding through comprehensive presentations identifying drone components and articulating basic aeronautical concepts with remarkable clarity and confidence that belied their tender years.

Grade 4 students unleashed their architectural imagination through sophisticated 3D designing activities centered around urban city planning, coupled with innovative structural design projects utilizing ice-cream sticks. Their creations reflected exceptional spatial reasoning and aesthetic sensibility, transforming simple materials into intricate models that demonstrated advanced understanding of load distribution, structural integrity, and urban design principles. The **Grade 5** cohort channelled their passion into automotive design, creating impressive car models that showcased meticulous attention to detail, aerodynamic considerations, and engineering fundamentals. Their pit displays resembled miniature automotive exhibitions, with each student eloquently explaining their design philosophy, materials selection, and functional features with the expertise of seasoned engineers.

The **Grade 6** students ventured into the captivating world of robotics and computational thinking, engaging with sophisticated robotics kits that introduced them to creative coding, basic programming paradigms, logical sequencing, and algorithmic problem-solving. Their hands-on experience with programmable systems illuminated the fundamental principles of automation and artificial intelligence, igniting passions that may well shape future career trajectories in technology and innovation. **Grade 7** participants experienced a comprehensive multidisciplinary curriculum combining drone technology, 3D modeling using industry-standard Fusion 360 software, and practical aerial demonstrations. Their presentations revealed impressive technical literacy and the ability to synthesize complex concepts across multiple technological domains, particularly evident in their masterful integration of physical drone operations with digital design workflows.

The **Grade 8** students represented the pinnacle of engineering excellence during the event, presenting car models that were nothing short of extraordinary. Their **Formula 1**-inspired prototypes demonstrated exceptional sophistication in design thinking, incorporating

advanced concepts of aerodynamics, chassis engineering, and performance optimization. The level of technical detail, from suspension systems to bodywork aesthetics, reflected a profound comprehension of automotive engineering principles. Their presentations were delivered with professional polish, articulating complex engineering rationale with clarity and conviction. The 3D digital models created using **Fusion 360** showcased their proficiency in computer-aided design, seamlessly bridging the gap between conceptual innovation and digital realization. The pit displays resembled professional automotive showcases, with students fielding technical questions with remarkable expertise and enthusiasm.

Leadership Engagement and Recognition

The Principal graced the event with her inspiring presence, personally engaging with the Day 1 winners in meaningful interactions that validated their efforts and encouraged continued excellence. Her insightful observations, thoughtful questions, and genuine appreciation for the students' innovative work created memorable moments that will undoubtedly motivate these young innovators for years to come. The formal felicitation ceremony witnessed the Principal Madam bestowing medals upon outstanding performers, recognizing their dedication, creativity, and technical achievement. These moments of recognition served not merely as awards but as affirmations of the school's commitment to nurturing excellence, innovation, and the pioneering spirit that defines the Goenkan identity.

Parental Involvement and Community Celebration

In a heartwarming demonstration of community engagement, parents were cordially invited to witness their wards' performances firsthand, transforming the event into a collective celebration of achievement and potential. The parental presence added an invaluable dimension to the proceedings, as families observed their children navigate complex technological challenges, articulate sophisticated concepts, and demonstrate competencies that often exceeded parental expectations. The pride evident on parents' faces as they watched their young ones explain intricate engineering principles, demonstrate coding logic, or pilot drones with precision was truly moving. This inclusive approach fostered stronger home-school partnerships and provided parents with tangible evidence of the transformative educational experiences being cultivated within the Goenkan ecosystem.

The Atmosphere of Innovation and Joy

Throughout the two-day celebration of STEM excellence, the atmosphere resonated with unbridled enthusiasm, intellectual curiosity, and collaborative spirit. The Goenkan community—students, faculty, parents, and administrators—collectively reveled in the

spectacular displays of futuristic projects that seemed to leap from the pages of science fiction into tangible reality. The hands-on learning approach proved transformative, with students actively constructing knowledge rather than passively receiving information. The visible delight on students' faces as they successfully programmed a robot, executed a perfect drone maneuver, or watched their 3D model materialize in digital space encapsulated the profound joy of discovery that lies at the heart of authentic education. The car racing theme, particularly the Formula 1 prototypes, generated exceptional excitement, with students displaying not just technical competence but genuine passion for automotive innovation.

Learning Outcomes and Competency Development

The comprehensive learning outcomes achieved through this immersive STEM experience were truly remarkable. Students developed profound understanding of fundamental STEM and engineering concepts, translating abstract theoretical knowledge into practical application. Their presentation and communication skills flourished as they articulated complex technical information to diverse audiences including peers, teachers, parents, and school leadership. The collaborative team structures fostered essential interpersonal competencies including negotiation, task delegation, constructive feedback, and collective problem-solving. Students gained invaluable exposure to cutting-edge technologies including robotics systems, drone piloting and engineering, and professional-grade 3D design software such as Fusion 360. Perhaps most significantly, the event cultivated critical thinking, analytical reasoning, and creative innovation—competencies that transcend specific technologies and will serve students across all future academic and professional endeavours.

Culmination and Future Pathways

The grand finale on 7th February witnessed comprehensive final presentations and demonstrations where students synthesized their learning, showcased their refined prototypes, and articulated their design evolution with impressive sophistication. The selection of overall winners, who were subsequently invited to participate in advanced-level events and competitions, provided students with exciting pathways for continued growth and recognition beyond the school environment. These opportunities for external validation and further challenge ensure that the momentum generated during these two remarkable days will continue to propel student interest and achievement in STEM fields.

Conclusion

The STEM Day event conducted stands as a landmark achievement in experiential education, technological literacy, and student empowerment. The overwhelming success of the event, evidenced by extraordinary student engagement, exceptional project quality, enthusiastic parental participation, and strong leadership support, has established a new benchmark for STEM education within the institution. The Goenkan students demonstrated not merely technical competence but genuine passion, creativity, and innovative thinking that augurs exceptionally well for their future academic and professional trajectories. The visible happiness of the Goenkan community, the impressive sophistication of the futuristic projects, the transformative power of hands-on learning, and the exceptional quality of the Formula 1 prototypes collectively transformed these two days into a celebration of human potential, technological possibility, and educational excellence. This event has irrevocably reinforced GD Goenka Public School's commitment to preparing students not merely for examinations but for meaningful contribution to an increasingly technological world, ensuring that today's young Goenkans become tomorrow's innovators, engineers, and problem-solvers who will shape our collective future.

GLIMPSES



