

STEM Forward: **Advancing STEM Across** **Our District**



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2025-2026

District STEM Goal

Identify, develop, and implement plans to enrich STEM learning in all four schools by enhancing facilities, resources, curricula, and experiences outside of the classroom aligned to a clearly-defined district vision.

STEM Vision

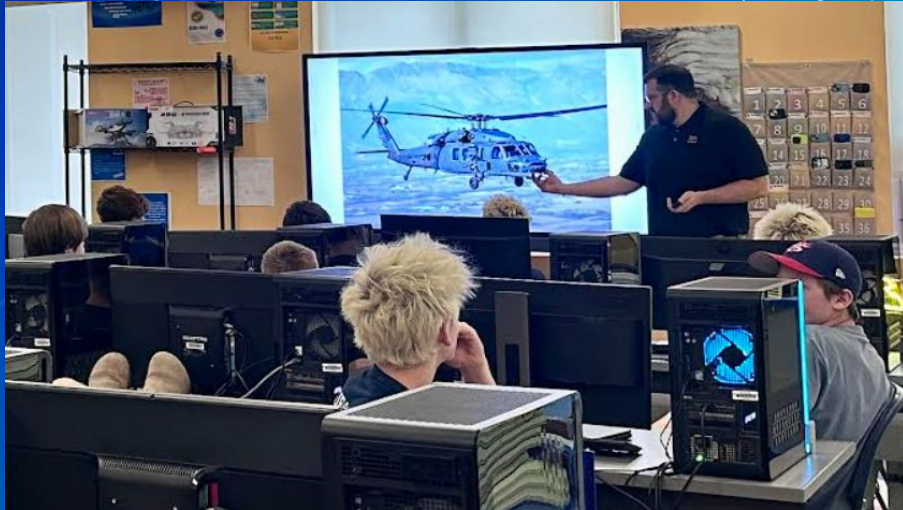
To create a cohesive culture of STEM learning where students explore, design, innovate, and solve authentic problems while developing the habits of mind needed to thrive in a complex and evolving world.

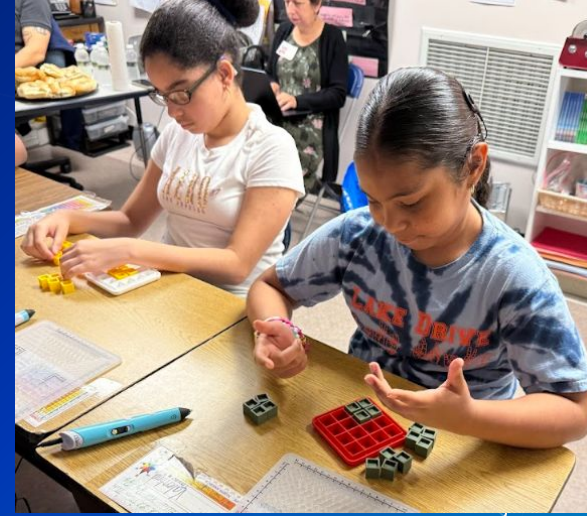
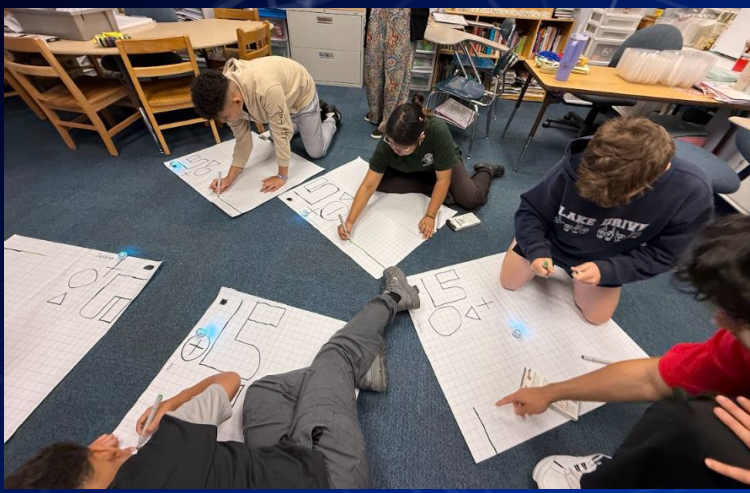
Infusing STEM Across the District

- Students interacting with real-world problems...
 - Developing **problem-solvers, collaborators, visionaries**
- Expanding opportunities for students through:
 - **Project-based learning** experiences
 - **Student-driven** inquiry and outcomes
 - **Interdisciplinary** connections
 - **Authentic** problem-solving

Collaboration & Partnerships

- PRISM (Montclair State University)
 - Professional Resources in Science and Math
 - KIBObots, OZObots, 3D Pens, Math manipulatives
- Guest Speakers





Building Momentum Across the District

- Curriculum
 - Articulation with WW, RVS, BC, and MLHS science programs
 - Focus on skill progression



- Briarcliff - STEM inspired 9th period classes



Building Momentum Across the District

- Extra-Curricular Opportunities
 - Wildwood STEM Nights
 - Approx. 40 students (K-2) & 30 students (3-5)
 - Positive feedback from attendees

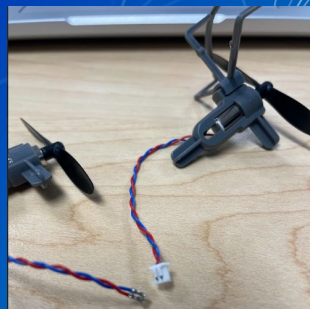




Building Momentum Across the District

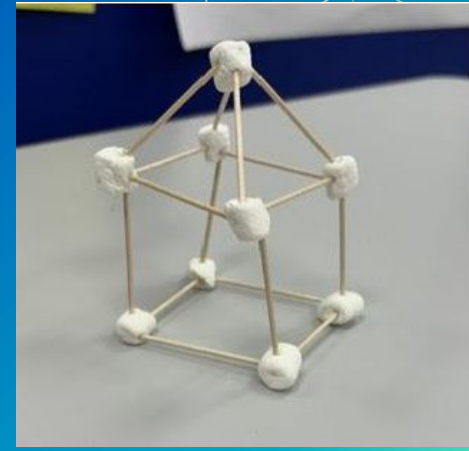
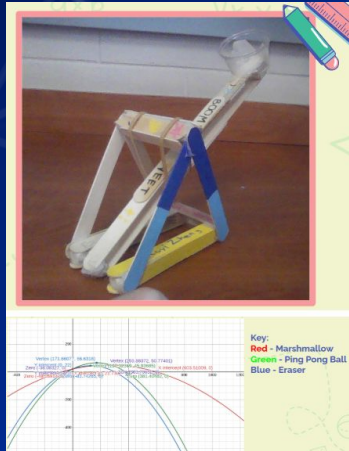
- Briarcliff & RVS Aviation/Drone Club
 - Successful first year
 - Approx. 10-15 students per meeting





Building Momentum Across the District

- STEM in our classes
 - Measuring propulsion
 - Measuring surface area & volume
 - Fluid dynamics and mechanics
 - Discovering geometric shapes



Building Momentum Across the District

- Native American village



Building Momentum Across the District

- MLHS Aviation
 - Student requests have doubled
 - All eligible students signed up for year 3
 - 90% retention from year 1 to year 2
 - Our students won **1st, 2nd, & 3rd** place in “Roxbury’s Aviation Day” (drone obstacle challenges)



Building Momentum Across the District

- MLHS Engineering
 - Engineering & Design student requests have doubled
 - New collaborative furniture





The background is a blue gradient with a complex network of white lines and dots, resembling a molecular or network structure. The lines connect various points, creating a series of interconnected polygons and triangles. The dots are placed at the vertices of these shapes. The overall effect is a sense of depth and connectivity.

LOOKING AHEAD

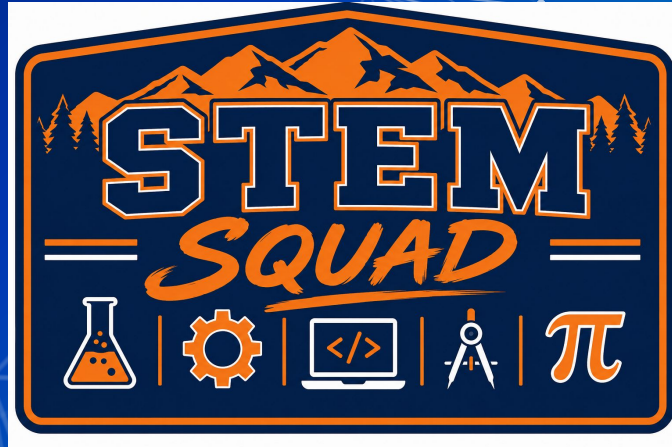
Bolstering STEM

- Curriculum Connections
 - Enhancing STEM opportunities in all classrooms
 - Building consistent frameworks for inquiry across all grades
 - Leverage teacher talents to build capacity
 - Lead PD sessions



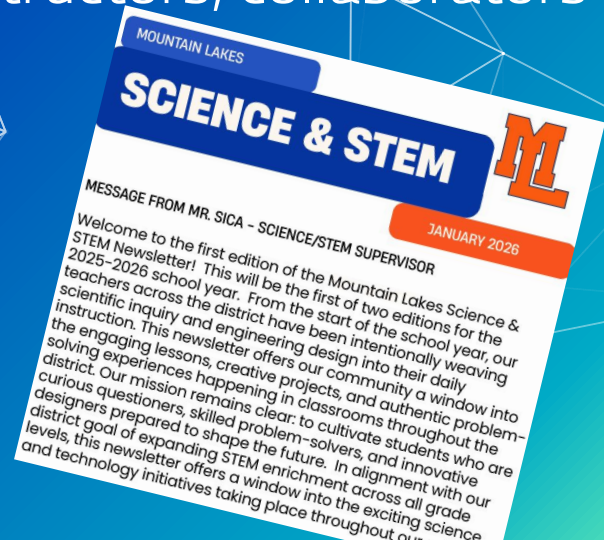
Bolstering STEM

- STEM Squad
 - Team of teachers to explore and drive STEM initiatives
 - Building-based curriculum review for STEM opportunities
 - Create interdisciplinary connections



Expanding Partnerships & Opportunities

- Community Partnerships & Outreach
 - Interest survey for community members to share their expertise
 - Increase guest speakers, guest instructors, collaborators
 - Universities & local businesses
 - STEM Newsletters



Curriculum, Learning Spaces, & Resources

- Wildwood
 - Pilot science program(s) in K-2 and 5th grade
 - Increase STEM integration
 - STEM class expansion into 3rd & 4th grades



Curriculum, Learning Spaces, & Resources

- Media Center Upgrades
 - Collaboration Centers



Increasing Opportunity

- Competition Possibilities
 - Math Olympiads (K-12)
 - Science Olympiad
 - 3M Young Scientists Competition
 - National Science Bowl
 - David Good Bridge Building Competition (9-12)
 - Toshiba Exploravision Contest (K-12)
- High School Courses
 - Dual enrollment, STEM Capstone, Internships...



Thank you!
Questions?