Plantation Elementary

Sprouting STEM Museum Magnet School



Plantation Elementary became a **Sprouting STEM Museum Magnet School** in 2013. We were one of six schools that received the Magnet Schools Assistance Program (MSAP) grant, which enabled our school to provide a world---class education to our students. The grant ensures that our students receive a high---quality education that prepares them at an earlier age to meet the challenges of our global economy.

Our **Sprouting STEM Museum Magnet School** classrooms are designed to reflect the museum model of teaching and learning. As students engage in science, technology, engineering and mathematics (STEM) activities, their creative and inquisitive nature will broaden. They are encouraged to produce outcome--learning projects to showcase each quarter at our "Night at the Museum" events. Students will be the docents and museum curators who take the lead in presenting and explaining what they have learned. They will incorporate the following:

Museum Design Process:

- * Researching
- * Exploring
- * Experimenting
- * Explaining
- * Exhibiting

Engineering Design Model:

- * Asking
- * Imagining
- * Planning
- * Creating



STEM Science includes:

- Incorporating *Engineering is Elementary* (EiE) curriculum with District approved science curriculum
- Integrating STEM studies with science lessons
- Engaging students in hands---on investigations and inquiry
- Preparing students to pose questions, design experiments, control variables, collect data and analyze outcomes
- Encouraging students to discover concepts and dispel misconceptions as they investigate and explore
- Assisting students in creating outcome--based projects that utilizes graphs, diagrams and models
- Facilitating communication and collaboration among students so that they learn to present and explain



STEM Technology includes:

- Having Digital classrooms with laptops for every student in grades K-5 during blended learning instruction
- Equipping K---5 classrooms with various technology resources (Smartboards, Mimios, Elmos, laptops and ipads)
- Maintaining two Learning Innovation Labs (LIL) --- one fully equipped traveling mobile unit and one within the school's media center with interactive activities, technology tools, and engineering manipulatives to encourage creativity, research, and technology application (including interactive whiteboard, distance learning and TV productions)
- Utilizing technology as a resource (research, presentations, distance and interactive learning) for teaching and learning in all content areas
- Utilizing web--based programs as reinforcement and enrichment for inquiry and project--based learning



STEM Engineering includes:

- Incorporating a K --- 5 Engineering is Elementary (EiE) curriculum supported by the Museum of Science---Boston
- Integrating STEM studies that promote designing, constructing, and testing products such as boats, solar ovens, sea walls, rockets, alarm circuits, windmill generators, mouse trap cars, and Lego robotics
- Providing real--world problems and design challenges for students to solve in collaborative groups while researching and applying what they have learned
- Learning from guest speakers and presenters from various engineering fields

STEM Math includes:

- Solving real--world problems utilizing resources to analyze and graph data, create charts, calculate costs, examine trends, and construct models
- Working in small groups and centers with hands--on math manipulatives and technology (Reflex, and virtual manipulatives) support
- Spiraling review to remediate and deepen understanding of concepts previously taught
- Enriching skills through collaborative projects that showcase mastery of math concepts
- Encouraging friendly math competitions through Monthly Multiplication Challenge and through K --- 5 web--based programs such as Reflex
- Providing real--world saving and spending experiences through the school's token economy of earning Tiger Bucks



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Learning Labs

- Distance Learning Lab
- Hands--on Math Lab
- Learning Innovation Lab (LIL)
- Science Lab
- Technology Lab



Clubs and Activities (encouraging critical thinking and collaborative problem-solving skills)

- Chess
- Chorus
- Environmental Garden Club
- Lego Robotics Club (includes FLL competition)
- Math Club (includes BCCTM competition)
- Television Production Team
- Recycling Club
- School Leaders Group
- Drumline
- Step Team

STEM Support Members

Judith E. Pitter, Principal Dana Hurley , Assistant Principal Tiffani Morris , STEM Magnet Coordinator Tiffani Morris, STEM Instructional Facilitator Winston Watson , Science Coach Rosalyn Clarke, K-5 Reading Coach Beverly White, Math Coach



The School Board of Broward County, Florida

Vision: Educating today's students to succeed in tomorrow's world. Mission: Broward County Public Schools (BCPS) is committed to educating all students to reach their highest potential.

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Special thanks to the Magnet Schools Assistance Programs and the Innovative Programs T e a m

Special thanks to the

Collaborative Network Team (CNT): Broward Education Foundation (BEF), Broward County Cultural Division, Florida Atlantic University (FAU), Museum of Discovery & Science (MODS), Museum of Science in Boston, Nova Southeastern University (NSU), Young at Art Museum

Special recognition and acknowledgement of our Partners in Education:

Alpha Kappa Alpha Sorority, Inc., Axa Equitable, GFWC Plantation Woman's Club, Home Depot, Whole Foods Kids in Science Club, Lowe's, Metro Signs, Inc., Papa John's, Plantation Garden Club, Plantation General Hospital, Plantation Jr. Woman's Club, Publix, South Plantation High School, The Galleon Foundation, Walmart, TGI Fridays, WAWA and the YMCA of Broward County



To learn more about our Sprouting STEM Museum Magnet program, please contact Tiffani Morris, our Magnet Coordinator, or visit www.innovativeprograms.com.

Plantation Elementary Sprouting STEM Museum

Magnet School



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Judith E. Pitter Principal Dana Hurley Asst. Principal



Museum Magnet School

Mission Statement: Educating Responsible Citizens