



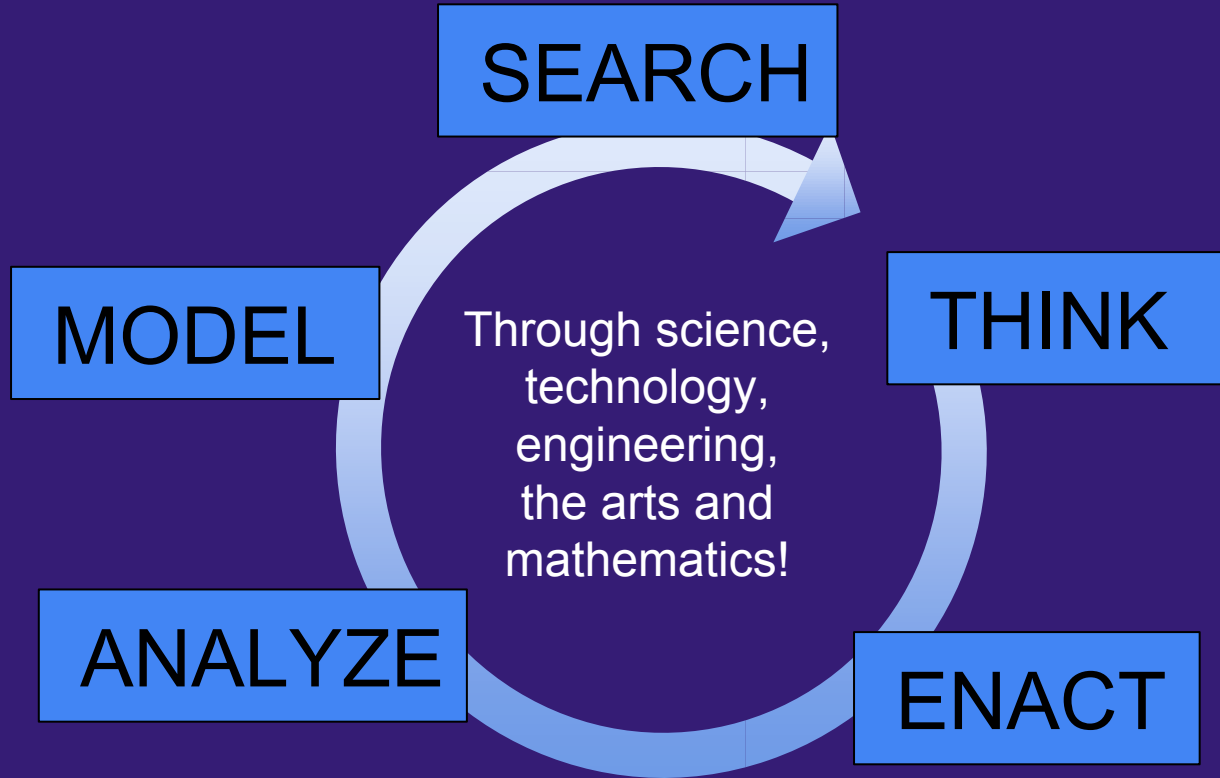
ACADEMY AT MAMBRINO

WONDER,  
EXPLORE,  
BECOME...

*“STEAM is an educational approach that uses **Science, Technology, Engineering, the Arts, and Mathematics** as access points for guiding student inquiry, dialogue, and critical thinking. The end results are students who take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process. These are the innovators, educators, leaders, and learners of the 21st century!”*

--Susan Riley, Educationcloset

# STEAM Inquiry Design Process



# How is STEAM different?

- Students are naturally curious. Integrating STEAM with the inquiry design process allows students to question and explore their world while breaking through standard disciplinary borders in current education settings.
- STEAM is an integrated approach to learning which requires intentional connections between standards, assessments, and lesson design/implementation.
- STEAM experiences involve two or more standards from Science, Technology, Engineering, the Arts and Math to be taught AND assessed in and through each other.
- STEAM programs place inquiry, collaboration, and an emphasis on process-based learning at the heart of their approach.

# What makes the STEAM Academy at Mambrino unique?

- Daily implementation of the inquiry design process
- Multiple, specialized curricula
  - *PLTW, EcoRise, Educationcloset, etc.*
- Extensive teacher training in the inquiry design process

# Curriculum/Materials

- Project Lead the Way Launch Program

- *The program empowers students to adopt a design-thinking mindset through compelling activities, projects, and problems that build upon each other and relate to the world around them. And as students engage in hands-on activities in computer science, engineering, and biomedical science, they become creative, collaborative problem solvers ready to take on any challenge.*

- [pltw.org](http://pltw.org)

- Education Closet

- *We serve classroom teachers, arts educators, and leaders by providing a space to work together and learn about Arts Integration and STEAM.*

- [educationcloset.com](http://educationcloset.com)

- EcoRise

- *EcoRise offers academically aligned sustainability and design innovation curriculum for elementary, middle, and high school teachers. WE are particularly well-suited to strengthen and compliment STEM (science, technology, engineering, & mathematics) and CTE (career and technical education) courses, by offering interactive opportunities to apply knowledge and skills to relevant, real-world problems.*

- [ecorise.org](http://ecorise.org)

# Sample Schedule

*(Monday - Thursday)*

7:30 - 8:15 : STEAM Time  
8:20 - 9:05 : Specials Rotation  
9:05 - 11:30 : Content Time  
11:30 - 12:15 : Lunch/Recess  
12:15 - 2:50 : Content Time

*(Friday)*

7:30 - 8:15 : STEAM Time  
8:20 - 9:05 : Specials Rotation  
9:05 - 11:30 : Content Time  
11:30 - 12:15 : Lunch/Recess  
12:15 - 1:30 : Content Time  
1:30 - 2:50 : School Wide STEAM  
Clubs



# Transportation

Work in progress

Anticipate a “hub” system at each campus

Parents will drop/pick up children at home campus

# Parent Meetings

February 5 - Emma/Brawner @ Brawner

February 12 - AES

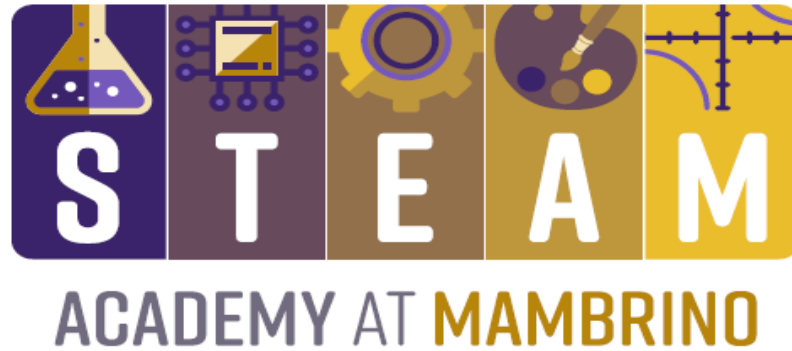
February 19 - Baccus

February 26 - Oak Woods

Saturday Meetings at Neighborhood Centers

February 3, 10, 17, & 24

# Training and Costs



# Teacher Training

- PLTW
  - All science and math teachers
  - Select SPED/Life Skills
  - Flex Days (May 24, 25)
  - Trainer comes to Mambrino
- Education Closet
  - All ELA and social studies teachers
  - Select SPED/Life Skills
  - Digital Training TBD
- Inquiry Design--Ft. Worth Museum of Science
  - *All Mambrino teachers and staff*
  - In-Service Days (May 29, 30)
  - Staff will ride GISD wrapped busses to the training

# Training Cont.

- All teachers will be trained on all required STEAM professional development before contracts end, allowing them to attend Teach for Greatness and complete requirements specified in contract addendums
- Site-Visits
  - Staff will visit either Stribling Academy, Burleson ISD or Round Rock ISD to see a STEAM Academy in action

# Costs: District Level

Curriculum and Materials	\$24,000
Professional Development	\$13,000
Staffing (STEAM Coordinator & PE)	Additional position and reallocation of current PE staff
Furniture	\$34,000
Facilities	
TOTAL	

# Costs: Current Campus Funds

Curriculum and Materials	\$12,000
Professional Development	\$3,000
Technology	\$3,500
TOTAL	\$18,500

# Recurring Costs

Curriculum and Training Year 2: \$15,000

Curriculum and Training Year 3 and after: \$10,000