

December 2023

MONTHLY NEWSLETTER

Vol 2 Issue 2





Skycrest Elementary's STEM Night was a great experience!
Students and families connected and engaged with STEM-enthusiasts from PCS STEM, PCS high school students who demonstrated their robotics skills, animals from the Suncoast Herpetological Society, and Philanthrolab to name a few!

Students dove into all sorts of STEM activities and were able to take what they made home. The students and families had a blast!





### What's In This Month's Issue:

- STEM Night @ Skyview ES
- Did You Know?
  - FIRST LEGO League
- Spotlight STEM
- Upcoming Events
  - Brick Battle: PCS FIRST LEGO Workshop
  - STEM Explorer Fest
- Career
   Connections
  - Smoke Jumper







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#### **DID YOU KNOW?**

We are inspiring innovative young minds with FIRST Robotics in Pinellas County Schools STEM. FIRST stands for (For Inspiration and Recognition of Science and Technology) was established in 1989 by Dean Kamen, the inventor of iBOT and Segway.

Children possess an innate curiosity, creativity, and an innate desire to explore. FIRST recognizes the potential of STEM (Science, Technology, Engineering, and Math) to inspire their young minds and promote self-assurance.

FIRST is a project-based, hands-on LEGO-based robotics program that provides students with an engaging, inclusive, and creative learning environment in schools and local communities. Students work together to solve annual themed challenges, introducing them to engineering and coding. This year, our Explorers have the opportunity to shine a light on the role of STEM in the arts, with the FIRST in Show -Masterpiece robotics challenge.

All students from kindergarten to grade 12 may participate in FIRST with the help of our curated programming through the STEM Explorer Club. FIRST programs are designed to help young people develop creative problem-solving, leadership, and communication skills. With the support of Pinellas County Schools K-12 STEM and our vast network of mentors, educators, volunteers, and parents, the FIRST experience provides students with lasting inspiration and confidence to create a better future for themselves and their communities.













- Ages 4-6
- · Currently in 21 pilot schools
- · Non-competitive (students may participate in a showcase at the . Students research a science end of the year)
- Exploratory students explore realworld themes
- Introduction of FIRST Core Values
- Expanding to more schools in 2023- | Expanding to more schools in 2024
- Grades 2-3
- Ages 6-10
- · Currently in 15 pilot schools
- Non-competitive
- topic, present their findings in a model that moves
- · Emphasis on FIRST Core Values
- 2023-2024
- Pinellas grades 4-8
- Ages 9-14
- · Currently in 30 schools
- · Competitive, includes robot game, innovation project, and FIRST Core Values
- team poster, and create a LEGO Currently competing in 2 schools; schools starting this year will | Mentors required have the opportunity to begin | • Middle schools: Students begin competing next year
  - . Expanding to more schools in 2023-2024
  - · Will be used in middle schools as a transition from elementary . Expanding to more schools in robotics to FIRST Tech Challenge; sites to be determined

- Pinellas grades 7-12
- 7 schools this year
- · Competitive, students design, build and program robots to solve the competition challenge; new challenge annually
- with FLL Challenge and progress to FTC competive robotics with advanced 7th and 8th graders
- 2023-24
- · Strong emphasis on FIRST Core Values and gracious professionalism







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Ready to see some epic chain reactions! The 5th grade STEM Explorer Club students at Sanderlin IB World School are on a mission to build a better mouse trap using the Rube Goldberg style type of machine. Named after American cartoonist Rube Goldberg, this wacky contraption performs a simple task in a complicated way. Carrie Kirkpatrick, Facilitator









Our youngest explorers at Anona Elementary have taken up the challenge of engineering three-dimensional structures! Karen McCord, Facilitator



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At **Lakeview Fundamental**, students are learning about coding and engineering in a new and exciting way using Vex Go, a unique construction system. Explorers are taught the fundamentals of STEM through hands-on building and programming. Not only is this approach promoting a positive perception of coding but is also encouraging creativity and cooperation. Beth Carter, Facilitator





The intrepid explorers at Lake St. George use the power of seed launchers to grow lush gardens in the most remote corners of the earth. Bernadette Lewis, Facilitator





### UPCOMING EVENTS

#### **WINTER BREAK**

December 22, 2023 - January 5, 2024

#### **BRICK BATTLE**

January 13, 2024 Boca Ciega Hlgh School 9a - 12p

DR. MARTIN LUTHER KING JR. DAY

No School for Students

### STEM EXPLORER FEST

January 20, 2024 Largo Central Park 10a - 2p









FOR MORE VISIT: https://www.pcsb.org/stem

# CAREER CONNECTIONS

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**Smoke Jumpers** 

Wildland firefighters also known as Smoke Jumpers are specially trained to control forest fires. Wildland firefighters frequently create fire lines—a swath of cutdown trees and dug-up grass in the path of a fire—to deprive a fire of fuel. They also use prescribed fires to burn potential fire fuel under controlled conditions. Smoke jumpers parachute from airplanes to reach otherwise inaccessible areas.

Firefighters control and put out fires and respond to emergencies involving life, property, or the environment.

Typical Firefighter Duties:

- Respond to emergencies
- Drive firetrucks and other emergency vehicles
- Put out fires using water hoses, fire extinguishers, and water pumps
- Find and rescue occupants of burning buildings or other emergency situations

Average Annual Salary: \$51,680



**U.S. BUREAU OF LABOR STATISTICS** 







FOR MORE VISIT: https://www.pcsb.org/stem