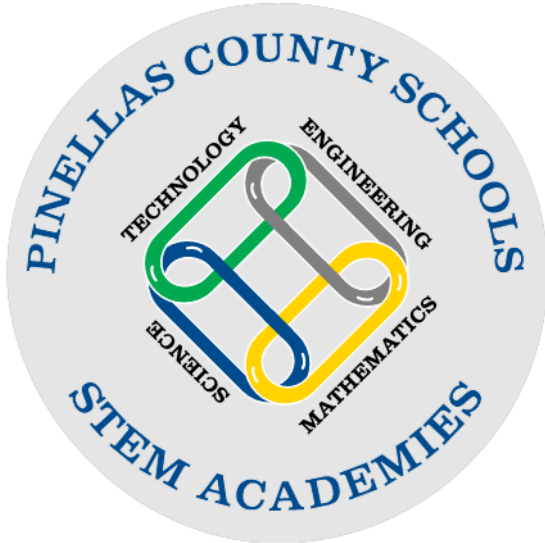


The STEM EFFECT

A PCS STEM Academy Newsletter



What is STEM?

STEM is an acronym for Science, Technology, Engineering, and Mathematics. The PCS STEM Academies offer rigorous programs for children grades 4th through 8th emphasizing:

- Student engagement in science, technology, engineering and mathematics in multiple ways in a supportive and engaging environment.
- Development of student knowledge and application of STEM content and processes.
- Collaboration and learning from other students and from STEM professionals.
- Promotion of academic success and higher education.
- Encouragement of student interest in additional STEM learning opportunities and careers.

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What is S.T.E.M.?

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Students used the engineering design loop to design and redesign Formula A remote control cars.



S.T.E.M. Academy students participate in Hour of Code

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Students discuss their experiences this year at Fuguitt S.T.E.M. Academy.

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Explore this page to learn more about PCS STEM Academy updates from a district perspective.

A thought from Dr. Bentley:

The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. Albert Einstein

What is S.T.E.M?

S.T.E.M. : Science, Technology, Engineering, and Math

S: Science. Study of the structure and behavior of the physical and natural world!

T: Technology. A terminology of an art, science, etc.

E: Engineering. The branch of science and technology concerned with the design, building and use of engines, machines and structures.

M: Math. Mathematics. –David and Jonathon.

I like STEM because:

I like doing the cool projects. Sean

You get to have a new learning experience and meet new people. Gabby

We did the egg drop and reached our goal. Nathan

It's fun and I get to learn. My mom loves that I get to learn engineering. I get to do cool activities and best of all I get

to hang out with my friends. By Chris

Remote Control Cars and Egg Drop

Our first project this year was to use the engineering design loop to create a better Formula One car. We all tested our different models.

Some of the cars were successful and some unsuccessful. Here is what some of the kids had to say.

Table 1- Micah, "It was hard, the instructions were confusing. It was better with our own ideas. I thought it was interesting".

Table 2- Gabby "It was very difficult. There were lots of ups and downs. It was fun building them because there were lots of good ideas".

Table 3- Tyler "It was successful some of the time. I think it was fun".

Table 4- Jaden "It was a bit frustrating because we couldn't get the car to run and it started to break

because it was too heavy". The car project was a combination of interesting and fun moments.

By Ariana

The egg drop was an activity that STEM Academy enjoyed. Some parts of this activity were bringing your own supplies, but the teacher helped us a lot by bringing some supplies like: balloons, bubble wrap, plastic bags, cloth, feathers, a box, and of course, an egg. We built and tested them and everyone was successful. One week later Mrs. Short gave us a new challenge. This challenge was trying to protect 2 eggs with a different case. One group failed their challenge, and everyone else made it.

By Gabby, Addilyn, Grace, Nate



Remote control cars.

Ready to roll!

Hour of Code

For Hour of Code, there are plenty of choices. You have Hour of Code Star Wars, Frozen, Minecraft, and a lot more. Each Hour of Code provides a program for you to learn how to code using block code. Block code can be a little hard, but once you get used to it, it gets quite easy. Hour of Code is very fun and can be challenging. Hour of Code taught me how to code. – Micah

Well of course the Hour of Code has history! The Hour of Code was made in January 2013 by Hadi and Ali Partovi. In late February 2013, the Hour of Code launched a video with Bill Gates, Mark Zuckerberg, Jack Dorsey, and other programmers. My experience with Hour of Code was fantastic! I did the Minecraft Hour of Code at S.T.E.M. and many other ones at home, like Flappy Bird and World of Gumball. You can also have an account at home and that's really fun! –Sean and Keegan

My experience in Hour of Code was awesome! We did the Minecraft one. Some of the levels were hard. To me Hour of Code was awesome, but very challenging. You have to make a TON of choices. I hope you can try it out yourself. –McKenzie



Hour of Code



Stem is Awesome!

We asked the students what they liked best about S.T.E.M.

Keegan: My favorite part about Stem is doing all of the experiments /hanging out with friends.
 Nate: My favorite experiment is the egg drop.
 Chris: My favorite part of stem is when we built the R.C. cars.
 Tyler: I was very fond of coding.
 Addie: My favorite part of stem is the egg drop.
 Madison: My favorite part about stem is using the paper airplanes.
 Jonathon: My favorite part of stem is the mathematics part (like coding).
 Jaden: My favorite experiment in stem was the car project.
 Grace: At stem the egg drop was my favorite experiment.
 Micah: My favorite part of stem was well everything!
 By Aidan and Tyler

Why did you join STEM? We interviewed some people in our STEM club and these are the answers we got.

David: "Because when I am older I want to be an engineer." Which is a good reason to join STEM.
 Jaden: "I wanted to look out into my future because I

want to be an engineer when I am older."
 Micah: "My sister said it was fun and that she enjoyed it a lot!!"
 Mackenzie: "I thought it would be fun."
 Sean: "I like science, technology, engineering, and math."
 Keegan: "I like science."
 Matthew: "I enjoyed STEM in 4th grade and liked tinkering with the projects that were given."
 Addie: "I joined STEM because I was interested in the activities."
 Jonathon: "I actually wanted to enjoy the activities."
 Kaley: "I joined Stem because I thought it would be very fun."
 Ashley: "I joined STEM because my sister was in it and said it was a lot of fun."
 Madison: "It was a lot of fun in 4th grade and I thought it was a good idea to do it again!! I learned a lot last year."
 By Ashley, Sierralyn and Kaley



Notes from the PCS K-12 STEM Specialist

Electronic Communication

The STEM Academies of Pinellas County are **GOING GREEN!**

Parent/Caregiver Email Update

With 178 STEM Academies impacting approximately 3,500 students and their families, we are using email as our main form of communication.

During the week of February 29, you will receive an electronic version of your child's STEM Academy newsletter that **their** Academy created. It is important that you keep your child's STEM Academy Facilitator up to date with any changes to your email address.

PCS STEM Website Update

I use this site to provide up-to-date information on STEM events, scholarship opportunities, videos, photographs, STEM Academy seat availability, STEM summer camps and current STEM trend data/articles/research. Please visit www.pcsb.org/STEM.

PCS STEM Apparel

PCS STEM Academy logo apparel is available to order! There are t-shirts, polo's, jackets and more for both male and females!
<http://www.logooutfitters.org/pinellas-county-schools>

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Community and Business Support

Volunteer's Needed

Are you someone who likes to work with their hands, has an interest in STEM content and wants to impact the future of PCS STEM Academy students? We are always looking for volunteers who are willing to donate their time. If you are interested in becoming a volunteer to help support the PCS STEM Academies, please email the PCS K-12 STEM Specialist, Laura Spence at Spencela@pcsb.org.

Business and Community Support

If you are a business or community agency that would like to become involved by: providing speakers, donating resources, offering on site teacher pd opportunities, and other opportunities not mentioned. Please contact the PCS K-12 STEM Specialist Laura Spence at Spencela@pcsb.org to learn more.

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STEM is all around us and with the national emphasis on STEM education, Pinellas County is engaging students to explore these areas of study. *Science Rocks Pinellas* is an educational television program produced with the K-12 STEM Department of Pinellas County Schools where the main focus of the program is STEM! With the unique opportunities that Tampa Bay offers us, we showcase our students and teachers interacting with components of natural science and STEM within our community; ranging from the waters and parks surrounding Tampa Bay to high-tech businesses and robotics --even theme parks! Our students and teachers go beyond the classroom to uncover the fascinating STEM content of the Tampa Bay area. K-12 STEM Specialist, Laura Spence is the host and WPDS-TV14 Station Manager Dave Cook is the producer of the program.

WPDS-TV14 is proud to announce that *Science Rocks Pinellas* is a 2x winner of the prestigious TELLY and Communicator awards for excellence in educational television programming.

Science Rocks Pinellas airs Monday and Friday evening at 7pm and can be viewed on Bright House Channel 635 or Verizon Channel 46 throughout the Tampa Bay area. Past episodes can be viewed on the WPDS-TV14 website www.wpds.tv/WPDSProgramVideos/Science_Rocks_Pinellas

and the WPDS TV14 You Tube Channel:

<https://www.youtube.com/channel/UCUazp3e15KHoxZkcEh2U6hQ>