

## Career and Technical Education Highlights for February 2025

### Family and Consumer Science

#### *Guest Cycle Experience*

West Potomac HS Food and Hospitality classes have been learning about the Guest Cycle Experience. As an application of their knowledge, FCS students made gingerbread houses from scratch.

#### *Shark Tank*

FCS students at Lake Braddock SS provided a Shark Tank presentation for one highlighted product off their menu to be sold on a Food Truck. Students created and researched their food truck vehicle, location, product, developed marketing strategy and business plan, advertisement & design, completed a cost analysis to fulfil the requirements of becoming an entrepreneur, and crowned the Food Truck B.E.A.S.T. (Best Ever Acclaimed Street Threat Champions)! The food and presentations were outstanding. There were two classes, sixty students, totaling twelve food trucks presentations. This was a remarkable project-based learning experience for the students. The project satisfied 20 + workplace readiness and curriculum standards and integrated the required FCCLA correlation. The food trucks presented, and their highlighted food items were:

- Funnel Cake Fantasy | Item: Strawberry Cheesecake
- Shoreline Sandwiches | Item: Coconut Brownie Cookie
- Royal Beignets | Item: Nutella filled Beignets
- Magic Cupcake | Item: Genie Cupcake with Biscoff & Funfetti mix
- Around the World | Item: Pique Macho inspired from Bolivia
- Killer Kabobs | Item: Steak N' Slay wit Angus Beep Top Sirloin
- Sweet Stacks | Item: Sundae Waffle
- Safari Sweets | Item: 2-Pk Bundle Animal Donuts
- Let It Go | Item: Olaf Snowman Scoop
- Crazy Cakes | Item: Pizza Cupcakes
- Smoothie Moves | Item: Tropical Tango Smoothie with edible Gold Glitter
- Pop Stacks | Item: Triple Cake Stack

***Shout Out!***

A shoutout to the Fairfax Academy Ambassadors who provided hot chocolate and other treats to the shuttle drivers. We appreciate your demonstration of appreciation!

***Malaysian cooking classes in Kuala Lumpur***

FCPS Food and Nutrition along with South County HS and Madison HS FCS instructors attended Malaysian cooking classes in Kuala Lumpur through the Education First Tours. This organization facilitates student and adult travel. Recipes available upon request.

**Health and Medical Science**

Edison Academy Veterinary Science students visited the Virginia Tech Marion duPont Scott Equine Medical Center in Leesburg. They observed horses in a medical setting, explored large animal medicine careers, and gained a deeper understanding of veterinary medicine in action. They also toured the EMC laboratory and saw a CT machine for horses.

***Inova Day is here!***

West Potomac Academy in partnership with Inova hosted "Inova Day," a Professional Guest Speaker Conference, January 30th, during their Academy Class time. Students participated in two sessions of their choice.

Inova Day Sessions:

<p>Room 166 Ron Martin Alisa Zamudio</p>	<p>Healthcare Takes a Team – There’s more than Nurses and Doctors on your care team! Join this session to learn a little more about the 1000+ unique clinical roles that Inova employs and compete for prizes! <i>(Students will need their laptops to participate)</i></p>
<p>Room 165 Iris Lara Mary Conklu</p>	<p>Inova Scavenger Hunt – There’s a lot more to Inova than meets the eye; come dig a little deeper to see if you find enough to earn a prize! <i>(Students will need their laptops to participate)</i></p>

Room 158 Rene Guerrero	Lights, Camera, Imaging! – X-rays are cool, but did you know that’s just the tip of the Diagnostic Imaging iceberg? Come learn about MRI, CT, Sonograms, and all the ways you can look inside the human body!
Room 159 Leo Teller	Breathe In, Breathe Out – If you or someone you know has asthma, odds are you were cared for by a Respiratory Therapist. See what it is a Respiratory Therapist does and get a chance to see real pig lungs in action!
Room 160 Aiman Shaikh	Volunteer Services – Volunteer experiences can be the gateway to new careers; learn from Inova’s Volunteer Services team how to maximize a volunteer experience to set yourself up for success!

## Technology and Engineering Education

### ***STEAM Engineering***

Chantilly Academy STEM Engineering classes designed and constructed solar-powered racecars. Students were required to work in teams and use their engineering skills to build the cars. Students constructed their cars with the goal of having the fastest vehicle. To add an extra challenge, each car was required to carry a payload, two ping pong balls, which would stay in place the entire length of the racetrack.

### ***Women Engineering Day!***

A group of Centreville HS students embarked on a field trip to Lockheed Martin as part of Women in Engineering Day. Students toured the cutting-edge facility and gained valuable insights into the diverse world of engineering careers at the aerospace giant. The day included interactive sessions where students had the opportunity to engage with Lockheed Martin engineers, learn about their roles, and participate in hands-on engineering challenges!

### ***Robotics Club Teams***

Congratulations to our Hughes Middle School Panther Robotics Club Teams:

- The Nerdy Narwhals Team 14052 won the Judges Choice Award!
- The Technosaurus Rex Team 6633 won the 2<sup>nd</sup> Place Design Award!

- Technosaurus Rex also made it all the way to the FIRST FTC Playoff Rounds and placed eighth among thirty-five teams, thirty-two of which were high school teams!

Most impressive is that these rotoeers clearly created these robots on their own, and thus learned so much through many iterations of the engineering design process!

## **Business and Information Technology**

### ***Microsoft Garage***

Cyber students from Marshall Academy visited Microsoft Garage in Reston, Virginia for an exciting career exploration day. This was made possible by the Northern Virginia Technology Council's Aim High Program. Students dove into hands-on activities, including:

- A warm welcome and introduction to the Microsoft Garage and maker space
- An overview of AI fundamentals and real-world use cases
- Fascinating lessons on Cybersecurity and AI and Social Engineering, highlighting real-world applications related to Social Engineering.

Another amazing work-based learning experience for our students!

### ***SiriusXM performance***

Music and Computer Technology students from Fairfax Academy visited the SiriusXM performance studios. Students learned more about tools and equipment used in industry.

## **Trade and Industrial Education**

### ***Heat Pump!***

Heating, Ventilation, AC & Refrigeration students at Edison Academy completed a major milestone by installing, starting up, and running a Daikin ductless mini-split heat pump! The heat pump was donated from Argent Air Conditioning last year.

## **FATE**

A HUGE thank you to the Foundation for Applied Technical Education, Inc.!! FATE is an amazing partner and huge support for our CTE programs. They recently announced the recipients of their CTE Program Enhancement Grant:

Jamie Carfang FCS, West Potomac Academy	Field Trip. This project aims to provide Hospitality, Tourism & Recreation students with hands-on experience in the lodging and food/beverage industries. The grant will fund a field trip to explore lodging operations and fine dining, connecting classroom learning with real-world practice to enhance students' skills for future.
Al Clemmons AFJROTC, Chantilly Academy	Field Trip. i-Fly STEM Experience offers an exciting way for students to explore STEM through iFLY's vertical wind tunnel. This interactive presentation features hands-on physics demonstrations, making STEM fun and engaging.
Nora Covert T & I, West Potomac	Field Trip. Funding will support the welding students field trip to Steamfitters Local 602 Campus in Manassas to tour their facilities and learn more about apprenticeship opportunities.
Aaron King BIT, Edison HS	Project. The Arcade Project gives students hands-on experience in designing, building, and managing an arcade, teaching them computer science, business, and critical thinking skills for future
Michael Phillip T & I, West Potomac Academy	Project. Funding to purchase consumable supplies for the new Welding program (24/25), including wire, rods, steel, nozzles, and gases. A sufficient budget will ensure they have the materials needed to prepare students for the SkillsUSA competition and industry
Heather Sullivan FCS, Rachel Carson MS	Project. Funding to purchase small wares (mixers/food processors) to support each student kitchen and teacher demonstration station.
Douglas Thayer TEE, Centreville HS	The Electric Guitar project provides hands-on learning by having students design and build functional electric guitars, integrating math and science. It fosters critical thinking, problem-solving, and technical skills, with a final presentation.

In addition to the program grants, FATE has also graciously donated scholarship funds to send ten students to our CTE summer enrichment camps! We cannot thank you enough FATE!

### **Career and Technical Student Organization:**

CTSO stands for Career and Technical Student Organization. They help students extend their learning by offering competitive events in CTE program areas. FCPS participates in the following CTSOs:

- DECA (Marketing)
- FBLA (Business and Information Technology)
- FCCLA (Family and Consumer Sciences)

- FFA (Veterinary Science/Agriculture)
- Educators Rising (Teachers for Tomorrow and Early Childhood)
- HOSA (Health and Medical Sciences)
- SkillsUSA (Trade and Industrial)
- TSA (Technology and Engineering)

### ***FBLA***

The FBLA Spring Conference was held this month at Edison HS. We had an amazing representation from across the district. More information about the results of the competition events will be included next month.

### ***FCCLA***

The FCCLA club at Thoreau MS completed their annual gingerbread house competition. It lasted the entire three weeks of December. The first week the students made dough from scratch and cut out shapes. The next week they built the house with a solid base. The third and final week they decorated. The school supplies M&Ms, Hershey bars, candy canes, marshmallows and the ingredients needed to make royal icing. The students bring in anything else they want. As a fun addition, some teams brought in edible glitter this year. A shoutout to Josh Yalowitz, Technology and Engineering Teacher at Thoreau who 3D printed the shapes for the students!

### ***SkillsUSA***

The SkillsUSA District Competition was held this month at Edison HS and Chantilly HS. More information about the results of the competition events will be included next month.