

Career and Technical Education Highlights for December 2024

CTE Celebrations

Agri Culinary Tech Chef Challenge

Marshall Academy culinary arts students competed in the Agri Culinary Tech Chef Challenge at Virginia State University and won second place! Their winning menu included Burrata Salad drizzled with Balsamic Reduction, Prawns with butter and cumin sauce and a side of fall vegetables. Dessert was a pumpkin spice mousse topped with a chocolate ganache. This menu was featured for the Potomac Home Economists luncheon, hosted on November 6th at Marshall Academy.

Way to go STEAM and CS Team!

The Virginia Association for School Librarians (VAASL) honored the FCPS STEAM and CS Team with the "Friends of VAASL" Award, recognizing the benefit to students from the strong collaboration across FCPS Library Services, librarians, and STEAM and CS. From an FCPS Librarian: "The FCPS STEAM/CS team has played a pivotal role in empowering librarians to become leaders in fostering future-ready learning environments aligned with VDOE's computational thinking standards. They have facilitated collaboration between school librarians, STEAM/CS educators, and school staff, resulting in the development of innovative approaches to library instruction." Way to go STEAM & CS Team! We are so proud of you!

Congratulations Heather Sullivan!

Congratulations to Heather Sullivan, Family and Consumer Sciences teacher at Rachel Carson MS! Thanks to Heather, Carson MS was one of the awardees of King Arthur's Bake for Good! (https://www.kingarthurbaking.com/learn/bakeforgood) This program awards schools/programs free flour, yeast, dough scrapers, recipe booklets, and packaging materials. This year, each FCS student (360+) will receive a dough scraper and recipe booklet as part of the cooking lab supported by the flour grant. Carson MS will also receive eighty bags of King Arthur's flour! FCS students will make soft pretzels using everything they have received from King Arthur. All classes during both semesters will make two soft pretzels each; one to share with a staff/faculty member or non-FACS student and one to enjoy. The Cooking Club will benefit from King Arthur's generosity too. They plan to make bread loaves to have/share or pretzels as well! Amazing news Heather! We cannot wait to see the delicious pretzels!



Family and Consumer Science

Culinary Arts

Culinary arts students from Annandale HS visited Smith Meadow Farms in Berryville to learn about pasture fed livestock. Students learned about how farming techniques on this farm differ from commercial operations and why some restaurants choose to use grass fed meat.

Culinary Professional Development

Falls Church HS hosted a professional development for culinary students and teachers in November. Students were trained in butchering and chicken fabrication, pasta making and dessert creation. Teachers were updated on teaching strategies to motivate students, collaborative events involving Food and Nutrition Services, and other educational alternatives for students that are not able to attend a traditional culinary pathway at culinary colleges.

A banquet For Woodson HS Football Team!

Chef Payne and his Culinary Arts students at Falls Church HS catered a banquet for the Woodson HS football team. We love the collaboration across schools! Go Cavaliers and Jaguars!

Smithsonian National Zoo

Veterinary Science students from Chantilly Academy took a trip to the Smithsonian National Zoo in Washington, D.C. Students had the opportunity to gain experience about animal habitats and enclosures while also exploring career options. We love a good zoo trip!

Pajama Pants and Sweatshirts

Stone MS FCS students proudly modeled pajama pants and sweatshirts created in textiles classes. This project helped students learn that pattern making skills are essential to understanding special relationships.

FCS Nutrition Classes

Fairfax HS FCS Nutrition classes used their decorating skills to encourage community connections! Students decorated 130 cupcakes that were donated to the Lamb Center.

NATFCS Organization

Toshieba Ragland, Family & Consumer Sciences teacher at Lake Braddock SS, continues her leadership efforts as Programs Committee Chair in the National Association Teachers of Family and Consumer Sciences NATFCS (https://sites.google.com/view/natfcsonline) organization. Toshieba will manage the



Round Table sessions that will be held at the 2024 ACTE Career Tech VISION Conference in December! Good luck Toshieba!

JROTC

The AFJROTC Color Guard from Chantilly Academy presented the colors at the Chantilly HS Veterans Day program. Included in the program were Chantilly faculty members who served in the United States Armed Forces: Mr. Scott Smith and Mr. Bobby Edwards, who served in the U.S. Army, Mr. Chris Hathaway, who served in the U.S. Marine Corps, and the AFJROTC Instructor, Chief Al Clemmons, who served in the U.S. Air Force. Bobby Edwards, Marketing teacher at Chantilly HS, was one of the keynote speakers at Chantilly's Veteran's Day celebration. Bobby served in the military prior to becoming a Marketing teacher. You can listen to Bobby's speech (https://www.youtube.com/live/OTslsxqaNIM) Another fun fact about Bobby, Paul Wardinski, Marketing teacher from Lake Braddock SS, was his principal in a previous teaching position! Thank you for your military service, Bobby, and your continued commitment to our CTE students!

Trade and Industrial Education

Criminal Justice

Officers from the U.S. Marshals Service visited Chantilly Academy Criminal Justice classes this month to share about the work that they do. They brought along some of their equipment, including vests, shields, and helmets, for students to check out!

MWAA Expo

Criminal Justice students from West Potomac and Edison academies attended the Metro Washington Airports Authority (MWAA) Expo. This unique opportunity allowed them to witness firsthand the complex and vital operations that keep our airports running smoothly. Students delved into the heart of airport operations, from the critical role of Public Safety to the skilled work of apprentices. They gained insights into the diverse range of roles that contribute to the seamless functioning of the airport. A captivating panel discussion featuring experts from various operational departments provided further clarity on the intricacies of airport management. The most exciting moment of the day was the exclusive sneak peek into the Operations Control Room. This nerve center of airport activity offers a panoramic view of the airport's real-time operations, displaying the coordination and precision required to manage the constant flow of passengers and aircraft. By the end of the day, the students had a newfound appreciation for the immense effort and dedication that goes into ensuring the safety and efficiency of air travel. This experience not only broadened their horizons but also sparked their curiosity about potential career paths within the aviation industry.



Carpentry

A former Chantilly Academy Carpentry student began a full-time position as a Carpenter with FCPS! He took Carpentry during his sophomore, junior and senior years. While taking Carpentry 3 as a senior, He participated in the FCPS Trades for Tomorrow program where he worked as an apprentice and had the unique opportunity to gain experience from and work alongside FCPS Facilities technicians. The classroom instruction he received from the impressive Carpentry instructor, Mr. Godfrey, combined with the experience he gained in the T4T program prepared him for his new role as a Carpenter with FCPS. Congratulations! We are wishing you the best of luck with FCPS.

Health and Medical Science

Pharmacy Technician

West Potomac Academy Pharmacy Technician, level 2 seniors are completing the required 130 Clinical Hours through an Internship Program developed between West Potomac Academy and Giant Pharmacy (Ahold Corporation). This year 29 students have been placed at 11 local Giant Pharmacy locations. The Internship Program will run from November 2024 through April 2025. Students will be learning and demonstrating competency with pharmacy operations, processing prescriptions, and customer service. In the Spring, upon completing their 130 Clinical Hours, students will be able to take the National Pharmacy Technician Certification Exam to be licensed Pharmacy Technicians. Wishing all our seniors the best of luck on their internship and the certification exam!

Collaboration With ABA Coaches and Teachers

STEAM Resource Teachers participated in professional learning made possible through collaboration with Applied Behavior Analysis (ABA) coaches and teachers. Educators learned about providing STEAM and CS opportunities to students with diverse abilities with emphasis on elementary students in the *Enhanced Autism program*. Educators were able to make connections to use strategies with other groups.

STEAM and CS Team

Our STEAM + CS Team is offering personalized school support, and we cannot get enough of it! STEAM Lab Start-Up: FCPS STEAM and CS Resource Teacher, Lucas Cook, contacted sixty-seven elementary schools who had identified either a STEAM Resource Teacher or STEAM Leads to offer personalized support. Mentoring, Coaching, Co-planning, and Co-teaching: Eight schools with teacher trainees and/or educators new-to-STEAM requested more frequent (weekly / bi-monthly) support from Lucas. Example results: established trust with teachers requesting more coaching and principals expressing interest in long-term STEAM & CS programs. Additional examples: Whitman MS students and families gained access to coding with Ozobot robots during their Fall Festival in October.



STEM Challenges Program

Edison HS students in the Global STEM Challenges Program used AFOSR drones to create and prototype solutions to challenges like white-nosed syndrome in bats. Students applied derivatives from calculus to model physics concepts of position, velocity, and acceleration.

AFOSR

The Air Force Office of Scientific Research (AFOSR) and FCPS have established an MOA. This agreement will increase student and educator access to hands-on learning resources, STEAM and CS pathways exploration, and educator professional learning. It may also lead to expanded internships!

Technology and Engineering Education

Future Engineers Attend STEM for Her Day

On November 15, 2024, 17 future engineers from Robinson Secondary School participated in the STEM for Her Day at the International Monetary Fund headquarters in Washington, D.C. The event brought together over three hundred high school students from the DC Metro area to explore careers in science, technology, engineering, and math through interactive sessions, panel discussions, and networking opportunities. Participants chose from specialized tracks—science, technology, engineering, or math—each featuring hands-on workshops and talks from leading STEM professionals. Highlights included engaging discussions with industry experts and demonstrations of cutting-edge technologies. This empowering day fostered new aspirations and connections, celebrating the future of women in STEM. For more on the event, visit STEM for Her (https://stemforher.org/stemforherday2024/)

Girls Excelling in Math & Science

On October 24th, GEMS Club hosted MPR, an engineering firm that is partnered with the Technology and Engineering Program at West Potomac. 25 students were present for the presentation on nuclear science and real-world projects that MPR engineers are currently working on. The session was followed up with a lengthy Q&A dealing with everything from their projects, college experience and precollege prep.

Work-Based Learning

The K12 Quantum Workforce Development Project (https://www.gmu.edu/news/2022-05/mason-work-corporate-partners-k12-quantum-workforce-development-project) partnership with George Mason University (GMU) has increased student access to WBL opportunities in Quantum. FCPS students recently participated in the third annual Quantum World Congress (QWC) in Tysons, VA where they presented posters and met with the founders of BB84 quantum key distribution scheme: Charles Bennett and Gilles Brassard. Participating students were among the ten FCPS students from Fairfax HS,



Chantilly HS, Justice HS, South Lakes HS, and TJHSST who participated in the 2024 Quantum Immersion Summer Program with GMU and Connected DMV. Students engaged with industries and policy leaders, such as: NASA, MITRE, The White House Office of Science and Technology Policy, IonQ, and the Univ. of Maryland and gained access to micro internships.

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)

DECA

On Monday, October 11, 2024, approximately 1100 marketing students from Fairfax County Public Schools (FCPS) gathered at Oakton HS to compete in the DECA District Leadership Conference. Students participated in twenty-two events, displaying their knowledge and skills in a variety of business and marketing-related fields. Approximately 350 students emerged victorious, earning the opportunity to represent FCPS at the Virginia DECA State Leadership Conference in Virginia Beach in March 2025. Those who excel at the state level will advance to the prestigious DECA International Career Development Conference in Orlando, Florida in April 2025. DECA prepares emerging leaders and entrepreneurs in marketing, finance, hospitality, and management. The organization provides students with real-world experiences and opportunities to develop critical thinking, problem-solving, and communication skills.

HOSA

On November 4th, approximately 270 Health and Medical Science (HMS) students competed in the SY2024-25 FCPS HOSA District Leadership Conference. Students competed in eleven health career events, displaying their clinical and critical thinking skills. The event was supported by thirty-four healthcare professionals who volunteered as judges, along with HMS instructors who helped staff the event—all contributing to the development of the next generation of leaders in health and medical science careers.