

Career and Technical Education Highlights for September 2017

Business and Information:

We had an outstanding showing at the FBLA National Leadership Conference in July. Fifty-one students traveled to Anaheim, CA to represent FCPS at the National Leadership Conference. A total of 6 students from Marshall and Robinson placed in the top 10 in the nation in the following events:

Marshall HS:

- 1st Place – LifeSmarts

Robinson SS:

- 10th Place - CyberSecurity
- Honorable Mention - Local Chapter Annual Report

Career Experience:

County-wide:

Tech Adventure Camp, hosted by the CTE office, welcomed 350 students to a program designed to allow fifth through seventh graders the opportunity to explore technology and careers through eight classes over two weeks. The campers enjoyed: learning the basics of auto maintenance, creating healthy breakfast foods, designing and printing 3D gears, developing a business plan, wiring and programming microprocessors, soldering circuits and engraving acrylic, designing bottle rockets, and exploring the physics of motion. At the conclusion of camp students went home with impressive projects, useful life skills, and enriching experiences!

STEM Camp, also hosted by the CTE office, welcomed 440 students between two one-week sessions. During this program third through fifth graders explored the world of STEM by rotating through four courses: 3D printing, renewable energy, robotics, and aerospace. A sample of projects campers worked on include designing and printing 3D spinners, building and testing solar-powered cars, programming and completing robotics challenges, and constructing air-powered rockets and launchers. This year, a new course was added for eighth and ninth graders, in which they learned about microprocessors using an Arduino Kit. Campers started out with a bare circuit board and learned how to wire and then program the microprocessor to complete various projects (including a musical keyboard).

Chantilly Academy:

Chantilly Academy and Northrop Grumman Host Ninth Annual Cyber Security Camp

The ninth annual summer cyber security camp kicked off the week of July 31, 2017. This year the camp was held at George Mason University giving the students a unique learning experience on the college campus. The Academy was again sponsored by Northrop Grumman in partnership with the Volgenau School of Engineering at George Mason University. The students learned and reviewed online/computer ethics, basics of computer systems, and security threats. The highlight of the opening was the welcoming remarks from Dr. Michael Papay, Vice President and Chief Information Security Officer at Northrop Grumman. The message was exciting and motivated students to continue to pursue opportunities in STEM and discuss the high-need for trained cyber professionals for our nation's defense across all industries. He encouraged each of them to apply for a paid internship at Northrop Grumman when they enter high school.

The week-long camp welcomed 85 students in grades 7-12 from eighteen different middle and high schools in Fairfax County Public Schools. Instruction was provided by graduate level students from George Mason's cyber program. Additionally, many undergraduate students were on-hand to provide help and mentorship. The core curriculum and program design for this camp is from the Air Force Association Cyber Camp Program.

Edison Academy:

Job Interview Coaching Days

Fifty three Edison Academy students registered to participate in the Spring Job Interview Coaching Days held on March 22 and 23. Students interviewed with one or more of the eleven business and industry Human Resource professionals who visited for the two-day event.

Edison Academy Hosts Open House

Edison Academy hosted the first Open House of the school year on Wednesday September 13, 2017, from 5:00-6:00 p.m. followed by back-to-school night for our Edison students. Culinary Arts students provided hors de oeuvres for visitors while other student ambassadors conducted demonstrations in classrooms.

Edison Academy Students Earn College Credits

One hundred and twenty one Edison Academy students earned between 2 and 9 college credits in the Academy programs of HVAC-R, Automotive Technology, Culinary Arts, Teachers for Tomorrow, and Criminal Justice, through dual enrollment with Northern Virginia Community College or Shenandoah University.

Presentations on the NOVA dual enrollment opportunities for Culinary, Criminal Justice, and Automotive Technology got underway this month for the 2017-18 school year. We anticipate having almost 150 students or more to earn college credits this year.

“Understanding Your Paycheck”

American Payroll Association (APA) volunteers will conduct presentations for students on “Understanding Your Paycheck” on September 21 and October 3, 2017. For the past three years we have had Edison Academy or Edison High School students chosen to receive an APA scholarship after participating in this activity.

Our thanks to the APA volunteers many of whom work for Fairfax County Government and local corporations.

Fairfax Academy:

Designing for Mini Mannequins

The Fashion Careers class at Fairfax Academy is in the midst of designing a full outfit project on mini mannequins. The students use newspapers, magazines, construction papers, and various other materials and then crimp, fold, texturize and mend the supplies with bonding agents in order to create the final product.

The project culminates with a ‘mock customer appointment’ in which they describe specifics of their target customer and location of sales, the cost of actually producing the garment versus how much they would charge, and explain their entire customer profile as if they were pitching it for the retail market.

Branding Yourself

Social Media Marketing students at Fairfax Academy recently finished sharing “their own brand” on social media to the class (interest, hobbies, ‘most liked’ content, etc.). In addition, students are now beginning an exploratory research project into how various platforms (Twitter, Instagram, Snapchat, VSCO) got their start, and the organizational structure of these companies.

Falls Church Academy:

Donations collected for Disaster Victims by HOSA Students

Students in the Falls Church Academy HOSA organization have donated feminine hygiene products, diapers and wipes, as well as toiletry items to send to victims of Hurricane Harvey. A student from the Fire and EMS class said “we are here to learn to save lives and heal people. It’s important for us to support this drive because we can’t go to Texas to help, but we can donate these items to help make their lives better since they have been impacted by this disaster.” Fire and EMS instructor Penny Kelly said “I saw students dropping things off and not needing to be recognized. Such big hearts here. The

feel of the Academy is kind, giving and happy.” Donated items will be sent to the Red Cross once the drive is complete.

VDOT snow plows provide great educational experience for medical careers students

The Virginia Department of Transportation offered Falls Church Academy three snow plow blades for students in three Academy classes to paint with promotional information about their class. These students in Exploring Health Sciences, Fire & Emergency Medical Sciences, and Medical Assistants designed and painted the blades to build class comradery and learn medical concepts. VDOT picked up the blades to prepare them for use when the snow and ice fall this winter.

Be on the lookout for these blades that will make their appearance in the Falls Church High School/Academy area this winter when we all hope to see great amounts of snow!!!

[VDOT Snowplows for Falls Church Academy](#) (story with video)

Dental Careers students help athletes to “Guard Your Smile”

Dental Careers students will provide dental health education sessions to FCHS athletes on the need for mouth guards through various “Guard Your Smile” sessions in September. These sessions will occur during team practices and PE classes. The use of mouth guards will help prevent tooth injury due to trauma in sports. These sessions will serve as education and promotion of Dental Careers students who will make custom mouth guards for student athletes at a cost \$10 for a “Back to School” price and \$20 after September. The cost of custom mouth guards created in a private practice would be \$200, therefore purchasing a custom made guard through this course will provide a great savings to the student athletes and provide hands-on experience to the Dental Careers students.

Marshall Academy:

Marshall Academy hosts 6th Annual Cyber Security Summer Camp

Marshall Academy, in conjunction with Northern Virginia Community College’s SySTEMic Solutions and MITRE, hosted 70 high school students in a week-long cyber security camp held at Marshall High School June 26-30, 2017. The camp included two levels, basic and advanced sessions, and exposed students with knowledge and hands-on experience in cyber security and introduced them to career opportunities in the growing field.

Marshall Academy Hosted SySTEMic Solutions VEX Robotics

NOVA’s SySTEMic Solutions hosted a one week VEX Robotics Camps for rising 4th through 8th graders (VEX IQ) June 26-30 at Marshall Academy.

Marshall's Robotics Team Gryphons Collaborates with Iranian Team

The Marshall HS Gryphons Robotics Team lent a hand to a robotics team of Iranian high school students to prepare to compete in the inaugural FIRST Global Challenge. The FIRST Global Challenge is an international robotics competition with high school teams from nearly 160 participating nations, the Team Iran robot kit—containing robot parts provided by FIRST Global—was not approved for shipment to Iran due to sanctions on technology exports to the country.

FIRST Global recruited the Gryphons executive to help build and program the Team Iran robot, with directions from the Iranian team via video conference. Team Iran only had just a few days to interact with their robot and catch up with teams that had more time to prepare for the competition. The FIRST Global Challenge took place July 16-18, 2017, at DAR Constitution Hall in Washington, D.C., to address access to clean water, one of the 14 grand challenges for engineering identified by the national engineering academies of the U.S., U.K., and China. Each year, a different issue of global importance will be featured as the theme of that year's challenge, which will be held in a different nation across the world.

See the news article and photos, [First Global Challenge News Article](#)

Marshall Academy Hosts Drop-in Orientation

On Friday, August 25, 2017, Marshall Academy hosted an Academy Drop-in Orientation for academy students and their parents. Students picked up welcome packets, toured the academy, and met the instructors.

West Potomac Academy:

Dance students at West Potomac Academy are currently interning as dance teaching assistants at local studios.

West Potomac Academy Fire and EMS students are getting CPR certified.

Announcements:

Thursday, November 16, 2017, 11:00 a.m.-2:00 p.m. Apprenticeship and Skills Trades Career Fair hosted by Edison Academy.

Saturday, October 21, 2017, 9:30 a.m.-3:00 p.m. Cybersecurity Youth Conference at GMU.

Family and Consumer Sciences (FACS):

Professional Development

Teachers from Prince William County and Loudoun County joined Fairfax County in the professional development workshops offered by Stratford University. The culinary sessions enabled the teachers to hone their skills in Asian cuisine.

Scholarship Awards

The Sharron Glasscock Scholarship was awarded to Frances Peterson, Liberty Middle School Family & Consumer Sciences teacher. Frances will use the scholarship to renew her National Board Certification in Career and Technical Education. This process will allow her to reflect and improve her teaching skills to ensure student success in her classes and to meet the ever-changing needs of students.

Business and Industry Award

The Real Food for Kids organization, business partner of Family & Consumer Sciences, received the Outstanding Business and Industry Award from the Virginia Association for Family & Consumer Sciences, Inc. The Real Food for Kids Organization has supported the culinary challenge and wellness exhibition that is focused on relaying the importance of students making healthier choices in their diets and creating healthy menu options for the school lunch programs.

FCPS Students Bring Home Awards from the 2017 National FCCLA Conference, Nashville, TN

FCCLA is a dynamic and effective national student organization that helps young men and women become leaders and address important personal, family, work, and societal issues through Family and Consumer Sciences Education. The organization has involved more than ten million youth since its founding in 1945.

Students from Lake Braddock Secondary School, Fairfax High School, and Lanier Middle School attended the FCCLA 2017 National Leadership Competition (NLC) in Nashville, Tennessee. All students competed in Star Event categories that strengthen leadership skills used to unify people through communication, collaboration, and conflict management. Of the six students that attended national conference five of the students won gold medals and one student won silver medal.

The newly elected Virginia FCCLA State Executive Council officer from Carl Sandburg MS attended the National Conference and will serve as the Vice President of Programs during the 2017 school year.

The students represented Fairfax County proudly. Their teamwork demonstrated focus, leadership, and determination that creates an atmosphere of success.

Skills USA

Skills USA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. Skills USA provides educational programs, events and competitions that support career and technical education (CTE) in the nation's classrooms. This past summer students from Chantilly Academy placed 5th in Commercial Baking and 13th in Culinary Arts. Edison Academy placed 6th in Restaurant Service. The competition this year was held in Louisville Kentucky.

Health and Medical Sciences:

HOSA Kick-Off!

Each month HOSA students will focus on bringing awareness to the health concern of the month. Members will participate in educational activities in each health and medical science class, focusing on the health concern of the month. This month students will focus on Leukemia/ Lymphoma.

For more information regarding Falls Church Academy's HMS program, please see the Career Experience section above.

Marketing:

Sarah Hinkhouse a marketing teacher at South County High School was named the Virginia Association of Marketing Educators (VAME) Teacher of the Year. Sarah has been a teacher in Fairfax County Public Schools (FCPS) for the past 12 year. This year, Sarah will serve as president elect for the VAME organization. [VAME Teacher of the Year](#)

The entrepreneurship classes at Chantilly Academy will be traveling to Virginia Tech this month to visit the entrepreneurship program. Students will explore the entrepreneurship opportunities that Virginia Tech has to offer. [Virginia Tech Entrepreneurship Program](#)

The Region 2 DECA District Leadership Conference will be held on Monday, November 6, 2017, at Dulles Expo Center in Chantilly. Approximately 100 judges are needed to make this event successful. If you are interested in judging, please register by going to [DECA District Conference Registration Form for Judges](#) or contact Amy Granahan at algranahan@fcps.edu.

Technology Education and Engineering:

Marshall Academy Auto Sales

Marshall Academy Automotive program had over \$50,000 for auto sales last year.

Cosmetology VA State Boards

Marshall Academy Cosmetology students received their cosmetology license in July with 11 out of 16 Level II students passing both the theory and practical portions of the Virginia State Board Examination.

Falls Church High School Automotive Technology

On September 19, 2017, News Channel 7 will be visiting the Falls Church High School Auto Technology program to do a story on the importance of vocational automotive programs. The auto tech teacher, Mike Blondin, will be interviewed.