Career and Technical Education
Highlights for September 2019

Business and Information:

We had an outstanding showing at the FBLA National Leadership Conference in July. Almost 50 students traveled to San Antonio, TX to represent FCPS at the National Leadership Conference. FCPS had six students place in the top 10 in the nation, and three students were finalists. All students benefited from the skills applied in their competitive event and the knowledge gained by attending and participating in this conference.

Finalists (Top 14 in the Nation):
- Edison High School, Digital Video
- Hayfield Secondary School, Hospitality Management

Top 10:
- 5th Place - Fairfax High School, Agribusiness
- 5th Place - Woodson High School, Securities and Investments
- 6th Place - Robinson Secondary School, Political Science
- 8th Place - Robinson Secondary School, Computer Game and Simulation Programming
- 8th Place - Robinson Secondary School, Introduction to FBLA
- 9th Place - Marshall High School, Client Services

Governor Northam, joined by elected officials, business leaders, and community members, announced the Tech Pathways initiative this past Tuesday. The event was hosted at Chantilly HS. As part of a regional Tech Talent initiative supported by NVCC and all local jurisdictions and school districts, FCPS is participating in the promotion of a new, innovative website called Tech Pathways (mypathway.tech). This website will enable students to explore different career paths in technology.

Career Experience:

County-wide:

Tech Adventure Camp, hosted by the CTE office, welcomed 300 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 and tool usage; creating healthy foods in culinary arts; designing and printing using a 3D printer; forensics; assembly and maneuvering of a hover craft; design and building a solar car; and setting up a mini-computer. At the
conclusion of camp students went home with impressive projects, useful life skills, and enriching experiences!

Chantilly Academy:

As part of a large initiative in Northern Virginia, Chantilly HS and Chantilly Academy were selected as the location for the official kick-off of what is known as "Tech Pathways" for the Commonwealth. The initiative aims at making career pathways in IT and Tech more exciting and accessible for students across Northern Virginia. The event that included guests from other local school districts, Northern Virginia Community College (NOVA), business leaders, state, and local officials was a fantastic way to highlight the Career and Technical Education (CTE) and Academy courses at Chantilly HS and Academy. Governor Northam spoke to students and guests about the importance of finding a career that excites them and encouraging them to investigate at all the opportunities around them in the STEM and IT fields. During the discussions, business leaders agreed that students should be given opportunities to enter the workforce earlier.

As part of the visit, Governor Northam and guests toured both the Chantilly HS Innovation Lab and a handful of the CTE and STEM courses offered through Chantilly Academy and Chantilly HS. The governor spoke highly of the pathways for students in programming, data management, and cyber security through our courses. Several students had the opportunity to take part in the exciting day and showcase their courses and talk about their career interests and goals. It was a great day for all involved and we are proud of the professionalism of our students from AFJROTC, STEM Engineering, IT, and Entrepreneurship.

Edison Academy:

School Year Orientation

Edison Academy students gathered for beginning of year orientation assemblies during the first week of September. A Former State Officer for SkillsUSA who is now a current Career and Technical Education teacher in Fairfax County gave a motivational speech to the students at each assembly to encourage their participation in Career and Technical Education Student Organizations. Competitive events and scholarship opportunities were highlighted in his presentation.

Service Learning in the Trades

Students from the Edison Academy construction related programs of HVAC & Refrigeration and Electrical Construction & Engineering have been invited to participate in two days of service for SkillsUSA on September 11 and 12. The service project involves laying pavers for an outdoor fire pit, walkway, and gathering space on the campus of the SkillsUSA headquarters which is located outside of Leesburg, VA just north of Lucketts, VA.
Guest Speakers
Guest Speakers in September: Johnson and Wales University and Northern Virginia Community College visit with Culinary Arts students performing cooking demonstrations and sharing information about their college culinary and hospitality programs. A Detective from the Fairfax County Police Department’s Explorers Program visits with all Criminal Justice classes this month as well. The Explorers Program operates three posts for young people ages 14 – 20. Please visit the Fairfax County Police Department website to learn about careers in law enforcement.

Fairfax Academy:
Jin-A Chang Wins Creating Excellence Award
Fairfax Academy’s Fashion Careers instructor, Mrs. Jin-A Chang, won the region level for the Creating Excellence Award (for Exemplary Secondary Program) given by the Virginia Department of Education (VDOE).

After an in-depth application process and intense competition within both the local and regional levels; Mrs. Chang was selected as a local winner, and then additionally as a regional winner selected by the VDOE and the VA Community College system panel of judges. She attended a recognition luncheon in Richmond, VA which honored each winner at all levels within the state’s competition.

The Creating Excellence Awards promote best practices in education and recognize exemplary contributions that improve the quality of CTE programs. The goals of the Creating Excellence Awards are to promote improvement in academic achievement and technical skills attainment, strengthen connections between secondary and postsecondary education, prepare students for successful transition from high school to further education and careers, and to create partnerships that support, promote, and enhance Virginia’s workforce and economy.

Paper Dress Design
Level-1 students just completed their ‘paper dress project’, which is an annual project completed during which they use only paper to create an entire design on a half-scale dress form. Then each student presents their design to the entire class for a full critique on their personal work (which is also their very first individual project for the level-1 Fashion Careers class). The paper dress mannequins are then housed in the classroom on display for the school year and utilized for classroom visits, display cases within the school, and recruitment events.

Level 2 Fashion Design Students Create Design Boards
Level-2 students worked over the summer to create their design boards to include their collection designs for this year’s annual professional Fashion In Motion fashion show which will be held on May 2, 2020 at the Sherwood Center in Fairfax. The students presented their board as a classroom
presentation, and fellow level-2 students and the instructor gave constructive criticism regarding the collection as whole. Students then took all the feedback received and reworked their entire collection to suit it for a follow-up submission.

**Professional Photography Portfolios**
At the end of the 2019 school year all the Professional Photography level-2 students submitted/presented their portfolio to the instructor and a panel which includes fellow educators and industry professionals. This portfolio is the culminating project for their two years in this academy program. The judging is based on professionalism, creativity, artistic ability, overall effort, and collaborations (within the classroom and within Fairfax Academy as a whole). Each year, one student is selected from the submissions to be honored at the annual Academy Awards.

**Professional Television Production Students Create Short Films**
At the end of last school year, students worked on short films set in the Marvel Cinematic Universe. The lesson was understanding how to create something that can work within a larger pre-existing franchise.

For the first quarter project of the 2019-20 school year, the Professional Television Production students are producing short horror films to learn about story structure and conflict. The films are then presented to the class near Halloween. After watching each film all together, each group receives a full critique from fellow classmates and the instructor.

**Social Media Marketing Simulation Challenge**
To start off the 2019-20 school year, Social Media Marketing students are gearing up to partake in the “Students Social Media Simulation Challenge”, which is one of our nation’s largest digital marketing strategy simulations.

This simulation challenge will test the students’ social media skills by having them manage a $50,000 budget in simulated dollars for fictitious, global bag company marketing on Facebook, Instagram, Twitter, LinkedIn, YouTube, and Pinterest. They will learn and test different promotional strategies to create compelling social media ads across various social media platforms, and students will also gain experience in writing ad copy that increases engagement and conversions.

**Marshall Academy:**

**Marshall Academy hosts 8th Annual Cyber Security Summer Camp**
Marshall Academy hosted 60 high school students in a week-long cyber security camp held at Marshall High School June 24-28. The camp included two levels, basic and advanced sessions, industry speakers and introduced students to cyber security fundamentals and the vast number of career opportunities in the field.
Marshall Academy Hosted NOVA SySTEMic Camps
Marshall Academy hosted NOVA’s SySTEMic Summer Camps including: VEX Robotics, STEM Elementary, STEM High School and a Security+ Camp, which was funded by a grant through the Go VA Program.

Cyber IT Refurbish Laptops for Local Charity, Mary’s House
In June, Cyber IT students refurbished 15 laptops that were donated to a local charity, Mary’s House. This opportunity was provided by a grant funded by VA STAR. VA STAR a teaches students to refurbish surplus computer hardware from government agencies and private companies. The refurbished computers are donated to families, organizations, and school districts in need.

DECA Yankee Candle Fundraiser
Marshall DECA conducted their annual Yankee Candle Fundraiser September 3 – 20, 2019. All proceeds from the fundraiser will go towards funding a variety of activities for the Entrepreneurship students. Additionally, Level 2 students are working on getting Statesmen Supply up and running again. The target opening day was September 13, 2019!

Announcements
Marshall Academy Culinary will host a dinner for FCPS Librarians on Wednesday, October 30, 2019.

Family and Consumer Sciences (FACS):

FCPS Students Bring Home Awards from 2019 National FCCLA Conference held in Anaheim, CA
FCPS FCCLA chapters joined more than 7,500 FCCLA student leaders, members, and advisers met in Anaheim, California, June 30 – July 4 to participate in the annual FCCLA National Leadership Conference (NLC). The theme of this year’s conference was “Believe In Yourself”, which inspired attendees to make the right choices and commit themselves to making a positive impact within their families, schools, FCCLA, and communities.

Student Ranking in STAR (Students Taking Action with Recognition) Events:

- One Fairfax High School student earned a Gold Medal in Career Investigation, Jr.
- One Lake Braddock Secondary School student earned a Gold Medal, Ranking first in Entrepreneurship, Jr.
- One Lake Braddock Secondary School student earned a Gold Medal in Sports Nutrition, Jr.
- Three Carl Sandburg Middle School students earned a Silver medal in Focus on Children, Jr.
- Two Lanier Middle School students earned a Silver medal, in Focus on Children, Jr.
- Four West Potomac High School students earned a Bronze medal in Parliamentary Procedure, Sr.
**FACS In-service**

All FCPS Culinary Arts teachers attended sessions at Northern Virginia Community College to collaborate with other counties, share strategies, and receive current industry information. The other FACS content areas received instruction on Childhood Literacy from Shenandoah University. The latest trends on the hospitality industry were shared by the American Hospitality and Lodging Educators Institute.

**Health and Medical Sciences:**

HMS welcomed six new teachers in August! Our new teachers come to FCPS with a variety of healthcare experience and are teaching various HMS programs, to include our newly expanded Intro to Nursing.

Pharmacy Tech students are preparing for the National Drug Take Back day, scheduled for October 26.

**Marketing:**

The FCPS entrepreneurship program is expanding. This year 14 high schools and 2 academies are offering entrepreneurship classes. Both Entrepreneurship 1 and 2 are dual enrolled with Northern Virginia Community College. The entrepreneurship program introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles for successful operation.

The marketing students from South County High School are participating once again in the Vineyard Vines #WhalesforaCause in support of No Kid Hungry. For every whale they make and share, Vineyard Vines will donate $1 for No Kid Hungry to provide up to 10 nutritious meals to kids in need. No Kid Hungry connects children with effective food programs that provide them with three meals a day.

This year, Fairfax County Public Schools has three students serving on the Virginia DECA State Action Team.

President - Oakton High School

Vice-President - Oakton High School

Vice-President of Region 2 - James Madison High School

The Region 2 DECA District Competition will be held on Monday, November 4, 2019, at Chantilly Expo Center. Approximately 100 judges are needed for this event. For more information on how you can participate, please contact Amy Granahan at ALGranahan@fcps.edu.
Technology Education and Engineering:

Mount Vernon HS

With the help of a grant, STEM Design students at Mount Vernon HS learned valuable job skills as they constructed and designed electric guitars during a 6-week program. The students were challenged to assemble an entire guitar individually after receiving the separate parts. This program challenged students’ practical skills within technology, engineering and math as well as their creative skills within art design. Students kept their guitars at the end of the program.

Technology Student Association - Nationals

Many TSA members across the country believe the highlight of the school year is the National TSA Conference—packed with competitive events and challenging activities that foster personal growth and leadership development. This year’s conference was held at the National Harbor, MD:

Luther Jackson Middle School Results:

- Coding - 1st Place (click HERE to preview their game!)

Kilmer Middle School Results:

- Children's Stories - 1st Place
- Dragster - 4th Place and 9th Place
- Forensic Science - 1st Place

Mark Twain Middle School Results

- CAD Foundations - 3rd and 6th place
- Career Prep - 2nd Place
- Coding - 9th Place
- Construction Challenge - 10th Place
- Electrical Applications - 1st Place
- Forensic Technology - 9th Place
- Inventions and Innovations - 2nd Place
- Mechanical Engineering - 8th Place
- Medical Technology - 10th Place
- Microcontroller Design - 3rd Place
- Tech Bowl - 7th Place
Marshall HS Design and Technology Students Build Violin Bow Prosthetic for Elementary Student

Marshall High’s International Baccalaureate (IB) Design and Technology students designed a violin bow prosthetic for a fourth-grade student at Centre Ridge Elementary. Teachers from Centre Ridge initially approached the class with the idea of helping their student. The project team worked on and off for five months to complete the project. Some parts of the robotic arm were created using a 3D printer. Remarkably, the project team was able to work on the prosthesis virtually and has not met the Centre Ridge student but hopes to do so soon.