

## CLEVELAND CITY SCHOOLS CAREER & TECHNICAL **EDUCATION**

December 2020 - January 2021

## NEWSLETTER

## The Value of Our CTE Advisory Committees

An important part of the development and ongoing support for CTE programs is the use of advisory committees. Advisory committees include representation from business and industry, secondary school/career center partners, adult education, postsecondary faculty and administration and four-year institutions. Business and industry are critical partners because they can review the curriculum and inform faculty about the current knowledge, skills and abilities that students need to be successful in the workplace. Development/changes to curriculum are substantiated through this critical form of feedback ensuring graduates can meet the needs of employers. In addition, members provide valuable input in areas such as



student recruitment and placement, staff development, equipment and software recommendations. By working closely with the business and labor communities, we continue to provide high quality workforce training and education to our students so they will succeed in today's job market.

Our partners help prepare our future workforce by sharing their expertise, time and resources through:

- Internships & Job Shadowing
- Classroom Guest Speakers
- Mock Interviews
- Curriculum Review

- CTE Advisory Council Membership
- Student Competition Judging
- Mentorship
- Donations for Program Equipment, Certifications, Scholarships, & Registration Fees

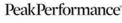
#### CLEVELAND CITY SCHOOLS CAREER AND TECHNICAL EDUCATION ADVISORY COMMITTEE



BelFlex MARS WRIGLEY Snap-on.























































## Setting Up New Equipment and Working Toward 5S Organization

Advanced Automotive Students still working toward setting up new equipment and working towards 5S Shop Organization. 5S stands for the 5 steps of this methodology: Sort, Set in Order, Shine, Standardize, Sustain. These steps involve putting things in order, cleaning, and setting up procedures for performing these tasks on a regular basis.

#### Virtual Automotive Class

Automotive students have knocked going virtual out of the park. They took and passed four tests, all while being virtual.

#### Students Take Safety Exam

During the first minutes of class for the new semester, entry level students and advanced students alike take the Automotive Safety Exam. Students are required to pass the Safety Test before they can enter the Automotive Shop.



#### Class Debate

Aviation 3 students debate which stall (power off or power on) is more difficult to control. When an airplane stalls, it's no longer able to produce lift. As a result, the airplane will drop, thereby reducing its altitude, until the angle of attack is correctly adjusted.



#### Senior Capstone Project

Senior Aviation student took on a senior capstone project to create a wind tunnel, then tested several airfoils that he made with a 3D printer. His ultimate goal was to make a 3D printed plane that could fly.



#### **Dropping Supplies on Mars**

Aviation 1 students had the opportunity to try out their parachute rigs for a supply run to Mars. They used eggs to test their rigs to ensure a safe landing.



#### YouScience

What do you want to be when you grow up? Students finding possible future careers! Doctors? Scientists? Carpenters? YouScience is helping students find the perfect fit for their personal strengths!



#### Exploring the Raider Trader

CHS Business Academy welcomed Stuart Bulldogs to experience and explore the Raider Trader in December.



#### **Power Point**

Students know how PowerPoint can help them succeed in the world of business. Businesses use Microsoft PowerPoint to streamline their presentation creation efforts, but the software can help with a variety of other tasks as well. From getting ready to perform a new hire training, reporting financials to conducting an end of the year summary, students learn the benefits of PowerPoint.



#### Scalp Care

Cosmetologists should study and have a thorough understanding of scalp care, shampooing, and conditioning. CHS Students gain an understanding of scalp care; including proper brushing, shampooing and conditioning.



#### **Professional Manicures**

Students learning to give a professional manicure. A lot is involved in a professional manicure. It's not just about getting your nails looking tip top. There's techniques and products that take place like filing, deep cuticle work, exfoliation, and buffing, all of which bring huge health benefits to your hands and nails.



#### Hair Color Retouch

Students demonstrate how to complete a hair color retouch. A color retouch is when a stylist applies a single color to your root area where the natural hair growth starts.



#### **Community Policing**

Students hand out candy and positive messages in the hallways at Cleveland High School! Students send messages that focus on building self-esteem, resisting peer pressure, and making responsible decisions.



#### **Criminal Justice System**

CHS Criminal Justice reviewed the Criminal Justice System. Three main components make up the criminal justice system: law enforcement, courts, and corrections. They work together to prevent and punish deviant behavior.



#### **Evidence Review**

In this hands-on class, students learn basic forensic techniques to analyze criminal evidence, such as fingerprints, blood, DNA, handwriting, hair, fibers, footprints and tire tracks. Students develop a thorough understanding of all parts of the crime scene and learn the importance of preserve and protect.



#### **Learning Sanitation**

Culinary Arts students study sanitation for the Raider Cafe. Students use ICEV internet learning program to learn the cause of and steps required for the prevention of foodborne illness. Students learn how to prevent the growth and spread of harmful bacteria which cause foodborne illness.



#### **OSHA Standards**

Students take their safety quiz to prepare for OSHA standards for production in the CHS Raider Cafe. OSHA's purpose is to promote workplace safety and health.

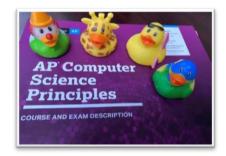


#### Making Gingerbread House.

Culinary Arts III & IV constructed Gingerbread Houses from their homemade dough and decorated as they wished. The students did an amazing job decorating them!



## #cyberfacts



#### Class ThinkSpace

Dr. Saez created a ThinkSpace for students to work or brainstorm for class. ThinkSpace is a place where students can get out of the typical school atmosphere and think outside the box while learning to code on their laptops.

#### Meeting the Needs of the Local Job Market

In Computer Science and Cyber, students look at local job market needs. Employment of information security analysts is projected to grow 31 percent from 2019 to 2029, much faster than the average for all occupations.

#### Google Doodles

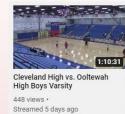
Did you know rubber ducks have a significant meaning in programming? If you know, you need to take Computer Science AP. If you don't, ask students why they are required to have one while in class and consider joining the fun!





#### CHS Live

CHS Live has been busy shooting many sporting events. The Cleveland vs. Bradley Central Varsity Basketball game currently has over 5.2K views! In the past few years, live streaming has proven to be a great alternative to traditional TV broadcasts. We're seeing media networks, big brands, and even NASA use live streaming to reach audiences all around the world. On a smaller scale, live events, churches, schools and many other groups are all joining the streaming game to get their content in front of viewers. Live streaming allows our students, our school and our county to go outside of the building. It takes Cleveland High School to the world stage and gives our students the recognition that they deserve. It means that parents and families who can't attend can tune in and see our kids succeed.





Cleveland vs.Bradley Central Varsity Basketball 5.2K views

Streamed 6 days ago



Cleveland vs. Providence Academy Varsity Basketball 733 views •



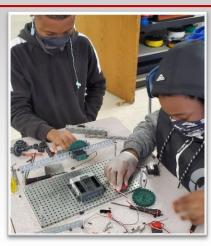












#### **Building Robots**

Robotics 1 students are utilizing the knowledge they've learned this semester by designing, building, programming and refining a robotics design for their final project!



#### Mr. Gluckner Ready for Virtual Class

Teachers, including Mr. Gluckner, held class virtually the first week back for the spring semester. Teachers met with students on Google Meet and had great participation.



#### **Sketching Skills**

Our Engineering students are starting the semester learning about sketching skills! Who thought being an engineer means you need to relay information through drawings?



#### CHS Health Science Welcomes Ann Krepps

Cleveland High School Health Science welcomes Ann Krepps as the new Nursing Services teacher. Mrs. Krepps brings with her a plethora of knowledge. She is a licensed pharmacist and has worked in the medical industry for over 20 years.



#### **Maintaining Homeostasis**

Anatomy and Physiology students having to work together to maintain homeostasis for Homer Simpson. Homeostasis is the ability to maintain constant internal conditions when outside conditions change. Maintaining homeostasis keeps the internal environment in the body functioning properly. Many organ systems work together and maintain energy homeostasis.



#### EMS Students are Ready to Save Lives!

EMS students are learning Basic Life Support (BLS) for health care providers. Skills include adult and infant CPR, using a bag valve mask, and defibrillation with an AED. This group is ready to save lives!



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#### **Robotics Club**

Cleveland High School Robotics Club is starting their robotic build for the First® Robotics Competition. FIRST® Robotics Competition teams design, program, and build a robot starting with a standard kit of parts and common set of rules to play in a themed head-to-head challenge.

#### Hal Taylor Speaks to Robotics Students

Hal Taylor, Cleveland City Schools Director of Operations, took time to speak to the Robotics 1 class. Mr. Taylor spoke to the class about the importance of having the knowledge to be successful in industry.

#### New Samsung Flip Monitors

The Robotics Academy would like to give a big shout-out to Samsung for their new Samsung Flip Monitors. These have substantially enhanced the robotics program and we are excited to see what future possibilities are to come.

#### Cadets Serve at Empty Stocking Fund

Cadets serving their community early on a Saturday morning in December. The Mix 104.1 WCLE 45th Annual Empty Stocking Fund is a pledge drive started by Cleveland Mayor Tom Rowland, Sandra Rowland, and Bobby Taylor to help children in need for Christmas.



#### Cadets Assist with Operation Christmas Child

Cleveland High School's Air Force JROTC Blue Raider Corps recently assisted with Operation Christmas Child shoebox packing party at First Baptist Cleveland. 2235 shoeboxes were packed, exceeding the goal.



#### Presentation of Colors

Color Guard proudly supporting Cleveland Middle School basketball.





#### RaiderTV

CMS Broadcasting students were introduced to the RaiderTV studios! Students are so excited to finish their training and broadcast shows soon. RaiderTV is a daily news show lasting 5-8 minutes. Over 1,200 students see the show every school day and numerous families watch the show on demand in their homes to stay current with the latest events and updates.



#### Showing off Their Knowledge

CMS Medical Science students showing off their knowledge on the circulatory system with their presentations.



#### Learning Basic Medical Skills

Students are learning the basic medical skills. Having a knowledge of basic first aid skills could save someone's life. These skills are easy to learn and recall in emergency situations. Basic skills like CPR, setting a splint, stopping bleeding in dire situations, are important life skills.



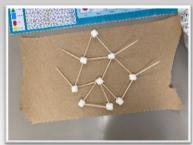
#### Flight Simulation at Cleveland Middle School

Students experience the flight simulator in Engineering. The Redbird TD2 represents a generic single engine piston aircraft. The TD2 has been FAA approved as a Basic Aviation Training Device.



#### House Plans

Students made a house plan and built a model to scale. Building a model house develops interactive, creative thinking in students.















#### **Arnold Elementary School**

First graders at Arnold Elementary construct a constellation model of the stars using marshmallows and toothpicks!
Students use a marshmallow for each of the stars and connect them with toothpicks so they resemble the outline of the star group.

#### Bylthe-Bower Elementary

Students were challenged to build a trap to "Catch an Elf." Students were given time to plan out their designs individually and as a team. Then, students were able to build their elf traps. This activity is always a huge hit with students during the Christmas season!

#### Candy's Creek Cherokee Elementary School

CCCES students compete in the tallest snowman challenge. For this winter themed STEM challenge, students build the tallest snowman out of marshmallows and toothpicks.

#### George R. Stuart Elementary

Stuart Elementary working on a STEAM activity in which they explore the differences between 2D and 3D shapes.

#### Mayfield Elementary

Second grade students at Mayfield Elementary learn how to color code with Ozobot. Color Codes, made with markers on paper, teach basic STEAM skills, critical thinking and debugging.

#### **Ross Elementary**

E.L. Ross 4th grade students use Makey Makey Kits. Students first learned about circuits and connectivity by making a circuit on paper with aluminum foil, battery and LED. Then, they investigated how Makey Makeys work with conductive objects. Finally, students drew a musical instrument on paper and used the conductivity of graphite to play an online piano and other online instruments.

#### Yates Primary

K-2 students learn about Snowflake Bentley and how he loved snow so much that he used a camera with a built in microscope to photograph thousands of snowflakes. The students enjoyed creating their own snowflakes!



#### Scott Campbell, Air Force Junior ROTC

Mr. Campbell graduated from United States Air Force Academy in 1986 with a Bachelor of Science Degree in Electrical Engineering. He served for 26 years as a pilot, instructing and evaluating in both the KC-135R air refueling plane and the C-5B airlift plane. He was fortunate to lead airman as both a squadron commander

and group commander. Mr. Campbell has flown in every major modern-day U.S. military conflict to include Operations Just Cause, Desert Storm, Somalia, Enduring Freedom and Iraqi Freedom. During his service he was also fortunate to work at the Pentagon for the Air Force Director of Operations, Chief of Staff of the Air Force and Secretary of the Air Force. After retiring in June 2012, he moved to Cleveland, TN, and took a position with Amazon Fulfillment as a Senior Manager at the Charleston, TN, facility. When he began working with Amazon, they had only 40 fulfillment centers and focused on delivering customer promise during the peak shopping season around Christmas. When he departed four years later in 2016, the company had grown to over 100 fulfillment and sortation centers and started providing one day and, in some areas, same day service to customers year-round. After nearly four years with Amazon, Mr. Campbell was informed about an open teaching position as a Junior ROTC instructor. In August 2016, he left Amazon and began his teaching career at Hixson High School in Hixson, TN, as the Senior Air Force Junior ROTC instructor. In 2018, the Air Force offered Cleveland High School the opportunity to open a new Air Force Junior ROTC program. Living here in Cleveland, TN, and desiring to serve his local community, he applied for the position, was hired and Mr. Campbell helped start the new Air Force Junior ROTC program. He is in his third year with Cleveland High School and expanding the program with extra-curricular activities for our cadets which include; Raiders, Drill, Marksmanship, CyberPatriot and soon a Drone Club.



#### Timothy Hughes, Air Force Junior ROTC

Chief Master Sergeant Tim Hughes is an Air Force Junior ROTC teacher at Cleveland High School (CHS). This is his third year at CHS, and he is the first Aerospace Science Instructor for the JROTC program. Prior to joining CHS, Chief Hughes was a Senior Area Manager at the distribution center for a

designer online retailer in Louisville, Kentucky. He had been in that position since retiring from the United States Air Force at the end of 2011. Chief Hughes served 27 ½ years in the Air Force as an Air Transportation Manager, working in a variety of logistics positions in air terminal operations, passenger service, and cargo operations. He had assignments in Spain, Virginia, Turkey, Illinois, Italy, and Kentucky, serving over 14 years in the European theater of operations. At retirement he served in the highest enlisted grade representing the top 1% of the enlisted force. Chief Hughes is married to the former Paloma Anton of Madrid, Spain, and they have three sons, Andrew, Kyle, and Marco. Andrew and Marco serve on active duty in the Air Force and Kyle is a computer engineer.

"Cleveland City Schools is very fortunate to offer our students a JROTC pathway. Colonel Campbell and Chief Hughes exemplify honor and professionalism daily. As a result, our JROTC students mimic their leadership across our campus and throughout our community . . . Integrity on display."

- Renny Whittenbarger, Cleveland City Schools Career and Technical Education Supervisor

## A Message From The CTE Supervisor

Cleveland High School CTE 850 Raider Dr. Cleveland, TN 37312 (423) 472-8098 rwhittenbarger@clevelandschools.org

January 29, 2021

We're so fortunate to live in Cleveland, Tennessee, where a strong industry base, community support, and robust educational opportunities are highlights of our area. Cleveland City Schools Career and Technical Education (CTE) strives daily to investigate potential course selections to help continually offer our students relevant choices that are rewarding and exciting career opportunities. Cleveland City Schools CTE realizes technology is frequently changing and our course direction must follow suit; always being willing to adapt to an ever-changing workforce. Though advances in technology may seem to be taking the place of some workers, always remember that a person will have to know how to repair, program, and modify that technology. Elbert Hubbard stated, "One machine can do the work of fifty ordinary people, but no machine can do the work of one extraordinary person." As we look to the future, Cleveland City Schools CTE will continue to offer what is necessary to meet the needs of our community, as well as create a student that is well-rounded regarding their skillset.

Thank you for your continued support.

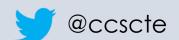
Sincerely,

Renny Whittenbarger



### Connect with us!

Join us on social media and stay up to date on many of the great things happening here everyday.





@ccscte

### **Important Dates**

#### February 15

President's Day Schools Closed

#### March 8 - 12

Spring Break
Schools Closed

#### **April 2**

Easter Break Schools Closed

#### April 27

**CTE Banquet** 

#### **May 21**

Last Day of School for Students Abbreviated Day

