



CLEVELAND CITY SCHOOLS CAREER & TECHNICAL EDUCATION

February 2022

NEWSLETTER

Career and Technical Education at Cleveland Middle School

Research has identified middle school as a time when students can benefit the most from career exploration, a process of building self-awareness, learning about potential careers, and developing a plan for reaching future goals. A key way career exploration is provided to middle school students is through exploratory and introductory CTE courses.

At Cleveland Middle School, led by principal, Nat Akiona, students have the opportunity to experience multiple CTE programs including, Business Communications, Medical Science, and Engineering/STEM.

The Business Communications Academy includes four courses—Business Communications 1, Business Communications 2, Computer Applications (college credit opportunity), and Broadcasting (Raider TV). In Business Communications, students practice coding, graphic design, and video editing. Computer Applications students practice skills in Microsoft Word, Power Point, and Excel. They also have the unique opportunity to earn high school and college credit for this dual credit class. In Broadcasting class, students produce a morning news show each day for the school to watch, called RaiderTV! This class not only gives students a wonderful opportunity to learn more about the broadcasting and communications industry, but it also serves our school in a very important way.

Medical Science introduces middle school students to the exciting, dynamic world of the health sciences, an industry that is rapidly changing and high in demand for workers who can think critically to solve a range of health-related problems. Students explore healthcare systems, legal and ethical issues in healthcare and basic healthcare skills. Students can then pursue courses in high school that lead to careers in the fields of biotechnology research, therapeutics, health informatics, diagnostics, and support services.



In the Engineering/STEM classroom, students learn that engineering design is a process of developing solutions to problems and challenges in order to meet the needs of society. The Project Lead The Way (PLTW) curriculum empowers students to lead their own discovery. The hands-on program boosts classroom engagement and excitement, drives collaboration, and inspires “aha! moments” and deep comprehension. As students engage in PLTW’s activities in engineering, they see possibilities they can look forward to in high school and beyond.

CTE at Cleveland Middle School is about career exploration and students finding their passion. This can be achieved through our career exploration platform. This platform is built to provide academic advising for all learners. It allows students to take career interests surveys, learn about career aptitude, set goals, conduct academic planning and career research, see their future educational options and provide counseling opportunities.

Middle school CTE has the power to expose students to college and career options and equip them with the transferable skills they need to plan for and succeed in high school and beyond.

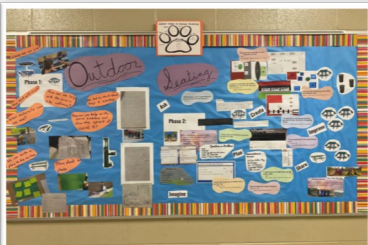
Join us in the March newsletter to see STEM and CTE in our elementary schools.

To learn more about CTE, follow us on Twitter [@ccscte](https://twitter.com/ccscte), or visit our website www.clevelandschools.org.



Arnold Elementary School

The first grade students learned about arctic animals and how blubber is a key factor in their surviving extremely cold conditions. We used the engineering design process to experiment with materials that mimic how animals use their external parts to help them survive, grow, and meet their needs.



Blythe-Bower Elementary

After completing a Project Based Learning Unit on making our campus a better place, fifth grade students researched, planned, and presented ideas for outside seating. The students decided on the best plan that would fit within the budget and have ordered the tables.



Candy's Creek Cherokee Elementary School

Candy's Creek Cherokee Elementary second grade students code Bee-Bots for the first time.



E.L. Ross Elementary

Ross students have practiced coding and are now applying their skills to inventing with Makey Makeys and programming Dash robots.



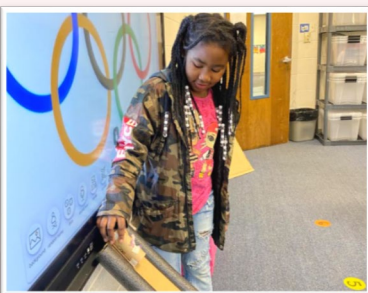
George R. Stuart Elementary

Students at Stuart focused on Earth and Space Science standards this month. First graders learned about patterns in the sky and how scientists and astronomers use tools to study the solar system. Students had opportunities to recreate known constellations as well as create constellations of their own.



Mayfield Elementary

Mayfield Kindergarten classes are learning to code using Bee-Bots. They maneuver the robot across the grid by counting the steps and turns needed to go from the green light to the red light. Their team decides where to place the green and red lights. They work together to solve the algorithm.



Yates Primary

Students at Yates Primary celebrated the Winter Olympics by designing and testing their own version of a bobsled. They tested them on many different types of ramps.



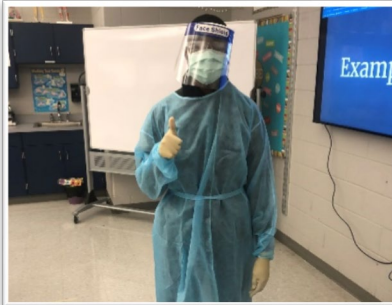
Students Complete Their Second College Exam

CMS is proud of the 8th grade Computer Applications students for completing their second college exam! One more to go this year! Great job students!



CMS Raider TV Says Thank You

CMS RaiderTV is thankful for our Cleveland City School Board! Thank you for supporting our program. You enable us to have the resources we need to serve our school by producing broadcasts each day.



Personal Protective Equipment

CMS Medical Science students put their dress up skills to the test as they learn about personal protective equipment.



Learning Vital Signs

Students learn the four main vital signs routinely monitored by medical professionals and health care providers such as, body temperature, pulse rate, respiration rate, and blood pressure.



Flight Simulators

Engineering students enjoy the flight simulators in the classroom. There might be some pilots in this group!



Building to Scale

STEM students use math to design and build houses according to scale.



Presenting The Colors

The Blue Raider Corps presented the Colors for the home basketball games this season.



Saber Arch

Cadets came in on a Saturday this month to receive training on Sabers. The cadets will soon be able to offer Saber Arch's for athletic senior night activities. It's a great addition to our program.



The Raider Corps Say Thank You

The cadets of Blue Raider Corps would like to say thank you to Cleveland City School Board Members for their continued support for our schools and our AFJROTC program at Cleveland High School. Thank you!



Changing the Power Steering Hose

CHS Automotive 2 students change a power steering hose on Mr. Crossland's car. It's a big job for a entry level technician, but easy enough to teach. The back of the engine has to be dropped down for this job to happen and these guys made it happen.



Hearing From Industry

CHS Advanced Automotive students join Raider Evolve students as they sit in on a presentation from one of our local business owners.



Post-Secondary Opportunities

Students explore post-secondary opportunities at The University of Northwestern Ohio.



Aviation is Thankful for Cleveland City School Board

Aviation is blessed to have such great support from our School Board. Thank you for all you do for CCS!



Student Say Thank You to Governor Lee!

Thank you to Governor Lee, the Tennessee Legislators, and the Tennessee Department of Education for all your support to CTE and our Cleveland High School Aviation program. We have amazing resources for our students in Aviation!



Flight Simulators

Aviation students had the opportunity to use the new flight simulators located in the classroom. The school has received six new flight simulators.



Teamwork

One of the most important skills that everyone will need to use in the workplace is teamwork. Business students' teamwork skills were put to the test in this fun balloon tower exercise.



Raider Evolve Student Goes Above and Beyond

Kiya Sanders is the Business Marketing team leader and has been working hard (even staying after hours) to design multiple items.



Raider Evolve Starts Production

Raider Evolve CEO, Hunter Cahoon, assists the Production team with the heat press. Raider Evolve started creating shirts and will be selling them to the public.



Color Theory

Students are learning color theory in preparation for hair color services.



CHS Cosmetology Thanks CCS School Board

Cosmetology students pause to thank the School Board for all of their support.



Students Learn the Layers of the Skin

Cosmetology students find creative ways to remember the layers of the skin.



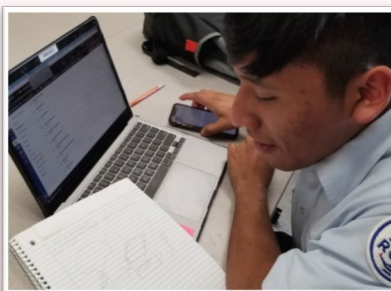
Solving Crimes

Mrs. Morgan says that teaching students how to solve crimes is her favorite thing to do!



Dressing the Part!

Criminal Justice student, Keaton, dresses up as a law enforcement officer.



Paradigm Projects

Abemeal makes a paradigm poster about change in his life.

CULINARY ARTS



Students Prepare for Teacher Luncheon

The Raider Café hosted a teacher luncheon, serving white chicken chili with toppings, dessert, and beverages.



Thanks to the School Board

Raider Café students, Stephanie and Maddie, say thank you to the Cleveland City School Board members for their support of the Culinary Arts Academy.



Mise En Place

Mise en place is French for “putting in place” and is used for prepping kitchen equipment and food before serving. Culinary Arts students learn all about “Mise en Place” while prepping for the soup project.

DIGITAL MEDIA



Supporting Black History Month

Digital Media class shows their support of Black History Month by producing videos to be published on social media.



CHSLive Gets a New Sign

Raider Evolve created a sign for CHSLive. You can see the new sign hanging in the Digital Media hex.



CHSLive Livestream

CHSLive hosted Mix 104.1 at for the livestream of the Cleveland vs Bradley basketball game. The students did a great job setting up, running cameras, and producing the live show.



@BLUERAIDERSLIVE



@CHSLIVE



CHSLIVE



CHSLIVE



Design Challenge

One group of students are using their hobby as fishermen to create biodegradable, environmentally friendly fishing lures. Oftentimes, lures are lost on underwater logs, weeds, rocks or in the trees. Leaving original plastic lures pollutes the natural habitat of many animals. These students are looking into recycling certain plastics with other materials to make a biodegradable material, and have contacted a number of local industries who are willing to create the injection molds for production.

CHS Bike Rentals

A group of students are working with Autumn O'Bryan, CHS Principal, to look into creating a bike rental/repair service for students who walk to/from school. They are currently taking bike donations, disassembling them to paint them as a CHS bike rental, and finally reassembling and repairing them to make them functional again. The bikes will be given a specific tag and assigned to a student for a set period of time, and brought back in for fine-tuning/repairs.

Engineering Thanks Our School Board

Thank you, Cleveland City School Board! Our students greatly appreciate the opportunities you have provided in our Engineering courses!



Learning About Muscles

Anatomy and Physiology students got to use their new Anatomage table to help them build their muscles on their manikin.

Antibiotics Lab

Pharmacy students participate in an antibiotics lab. They create labels, measure, and mix antibiotics.

Patient Transfers

Students learn how to properly transfer patients.



Disassembling Computers

Students in Dr. Saez's computer science class worked on disassembling computers to inspect the hardware components this week. They learned and found many great things!



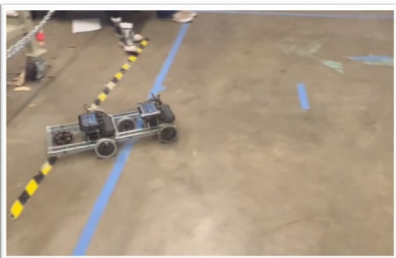
Mr. Tucker Speaks to Computer Science Students

Thank you Nate Tucker for speaking to Dr. Saez's computer science class about your IT job. Mr. Tucker also serves on our Cleveland City School Board, we appreciate his hard work and time pouring into our students and community!



IT Academy Thanks The School Board

Thank you to our amazing school board for all you do! Without your support, we wouldn't be able to offer innovative courses for our students in the I.T. Academy program. From Dr. Saez and her students, we thank you!



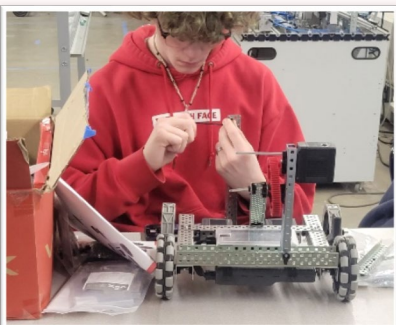
Robot Sumo Wrestling

After Several weeks of building, Robotics 3 decided to blow off some steam and have a friendly competition, Robot Sumo Wrestling!



FIRST Robotics

Our FIRST Robotics team, Ministry of Mechanics, is getting their robot built for competition! Each student has a role and responsibilities. Some are placing bumper guards on the robot, and some students are cutting out plexi-glass pieces for the robot!



VEX Robotics

Robotics students have been assembling the VEX Robotics Claw Bot build. Students have been challenged electrically, mechanically and structurally while working on these builds.

A Message From The CTE Supervisor

February 28, 2022

February is the month we celebrate Career and Technical Education (CTE) across the nation. By offering CTE programs to our students, we're ensuring students are college and career ready. This has become a critical issue as concerns rise about the success of the U.S. education system and, ultimately, the country's economic competitiveness. The discussion surrounding college readiness is generally limited to academic skills, but actual career readiness requires an even more rigorous blend of academic, technical and employability skills, and the ability to apply these skills in authentic environments. The series below outlines these skill requirements and explores how elements of the CTE system can contribute to students' overall career readiness. Cleveland City School CTE department understands and implements academic, technical, and 21st Century Skills into our everyday classroom and lab activities in order to prepare our students for a global and competitive job market. Currently Cleveland Middle School has 1091 students enrolled in our CTE programs, and Cleveland High School has 1172 enrolled in our CTE programs for the 2021/2022 school year. What do these numbers tell us? Our students, parents, and community see, value, and support our CTE programs, while recognizing the current and future value of CTE related careers. CTE is "Shaping The Future."

Sincerely,

Renny Whittenbarger



Connect with us!

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



@ccscte



@ccscte

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

Important Dates

March 7-11

Spring Break – Schools Closed

April 15

Easter Break – Schools Closed

April 18

Parent Conferences – Schools Closed

April 21

CTE Awards Banquet

May 20

Abbreviated Day/Last Day of School for Students

May 23

Staff Development – Schools Closed

