

# Career Connected

Career Technical Education Program Spotlights

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## Welcome to the CTE Newsletter!

Fresno Unified has an aligned College and Career Readiness Continuum that begins in elementary school and continues through high school and into post-secondary programs, degrees, and certification. Through intentional work-based learning (WBL) experiences, students learn and apply critical thinking, creativity and innovation, problem-solving, and collaboration.

We are committed to reshaping the role of Career Technical Education (CTE) as an engine of educational reform, as well as workforce and economic development in our community. CTE embeds four key elements: academic and technical skills for college and career, hands-on learning experiences, real-world connections, and industry partnerships.

Career awareness, exploration, and preparation through integrated CTE programs and WBL opportunities continue to be a priority of our work through our focus on meaningful partnerships. Industry partners are an integral part of learning for both our teachers and students as they provide industry connections to curriculum that engage students in the world of work.

We invite you to learn more about our CTE students and teachers and our industry partners -- and the life-changing impacts they are making in our community.

## Stop the Bleed Certification

Sunnyside High School

More than 150 9th grade Health Science students were trained to "Stop the Bleed" in critical incidents. Health Science Pathway students were certified by the American College of Surgeons to "Stop the Bleed" in emergency situations using direct pressure, wound packing, and a tourniquet.

## Fresno City Fire Presentations

Hoover High School

Over 200 Hoover students sat in on Fresno City Fire Empowerment Camp & Explore presentations on Wednesday, September 21, 2022. The presentation was given by Engineer Christine Wilson, Firefighter Whitney Cotton, and Fire Explorers Lydia Perez and Emely Mendoza. Students learned about the opportunities they could participate in that lead to career opportunities for their future.

## **SLO Hot House Demo Days**

Patiño School of Entrepreneurship

Students toured the California Polytechnic State University, San Luis Obispo Center for Innovation and Entrepreneurship Hot House and participated in their annual Demo Days Pitch event. Students were able to tour the Hot House, meet with staff, and meet the accelerator students who were pitching that evening in the annual Demo Days Pitch event. They had an opportunity to explore downtown San Luis Obispo, and after the tour they headed to the Demo Days event. At the event, one of the student business teams from Patiño set up a booth and had an opportunity to share all about their business with the community. Students watched the Demo Days pitches and learned so much that they will implement in their own pitches in the future.

## **CART Hosts Fresno Wildlife Rehabilitation Meeting**

Center for Advanced Research and Technology (CART)

The students in CART's Environmental Science and Field Research Lab are grateful for the twenty-year partnership with Fresno Wildlife Rehabilitation. Since 2021, Fresno Wildlife Rehabilitation hosts their monthly meetings at CART. Students interested in veterinary science learn firsthand how to triage orphaned and injured wildlife. Through projects, students assist in socializing and releasing wildlife. This long-time partnership has touched many students and influenced their career pathways.

## **MASH Jobsites Begin!**

Duncan Polytechnical High School

On September 27th, 2022, 11th grade students in Duncan's Medical Academy of Science and Health (MASH) Medical Careers class started jobsite work at Cedarbrook Memory Care, Veteran's Hospital, and Addicott. This is an exciting time for students as they are able to gain real-world experiences and learn hands-on from our industry partners. Thank you to our Medical Careers teacher, Mrs. Madrigal, for preparing students for this opportunity!

## Green Energy Magazine Feature

Edison High School

Edison's Green Energy Academy was featured in an article on 21st century CTE in the California Teachers Association's "California Educator" magazine for encouraging students to pursue careers in energy and the environment. PG&E and GRID Alternatives donate money and materials to the academy and offer student internships. Students can also build electric cars and learn how to install solar panels that can lead to employment right out of high school. Green Energy is a Lighthouse Academy: A CPA that has demonstrated that they meet or exceed the standards necessary for success and is a model for other CPAs.

From the article: "I feel that the academy prepared me for the real world," says Liz Agundez, a 2022 graduate who learned about energy conservation and reusable energy. She plans to attend CSU Fresno and become a civil engineer.

## Teacher Academy CPR Certification

Bullard and Hoover High Schools

Mr. Lopez's Teacher Academy students at both Bullard and Hoover completed mandated reporter certifications and BLS CPR certifications ahead of their placement and work at other school sites. They went through CPR training which included lectures, practicing hands-on skills, and passing a skills test. Upon course completion, students will receive their American Heart Association Certification Card that is good for 2 years. This year more than ever before, Teacher Academy Students are well-prepared for the classrooms that will welcome them in the coming weeks.

## Internship Course Pilot

McLane High School

McLane is one of several high schools piloting a general internship course designed to allow 12th grade students the opportunity to gain off-campus work-based learning experiences during the school day. Students have been conducting career exploration activities and learning about workplace skills, and are now interviewing for internship sites.

One of these students has been selected for a paid internship through New Vision Aviation, which will also include the opportunity of learning to fly planes at Chandler Airport and working towards completing a full semester of pilot schooling before graduation.

This connection was previously a dream unrealized for the student who is now ecstatic to be immersed in contextual development for his future career interest.

## CMAC Live Sports Broadcast

Sunnyside High School

Community Media Access Collaborative (CMAC) partnered with Sunnyside Video Production Academy students to broadcast a live feed of the Sunnyside football game against Roosevelt. The feed was featured on Comcast 94, AT&T 99, and live streamed on CMAC's YouTube channel.

## 9th Grade Growth Mindset Project Feedback

Patiño School of Entrepreneurship

Students met with various industry partners to share their solutions to helping their peers create a growth mindset and move away from a fixed one. Students shared their ideas and business partners gave them feedback on their ideas and their presentation skills.

## The Story of CTE in Fresno Unified

A look at the highlights of a growing program

### 2014-2015

Linked Learning is launched with 13 pathways across the District, with 1,457 students participating in its first year. Reporting for Work-Based Learning (WBL) is focused on grades 9-12 and sites provide over 1,000 experiences, including students earning 60 industry-recognized certifications. CTE enrollment is growing at just over 9,000 students, and 58% of CTE courses are a-g approved.

### 2017-2018

WBL expands to all grades PK-12, with the number of experiences growing to just under 70,000, and the number of industry-recognized certifications exceeding 2,000. CTE Dual Enrollment earns 584 students college credit. CTE enrollment grows to over 11,000, and 84% of CTE courses are a-g approved. Over the course of 3 years, Linked Learning adds multiple Health pathways, as well as Business, Arts, Engineering, Law, and Manufacturing.

### 2018-2019

CTE enrollment grows to over 12,000 students, resulting in 44% of all 7th-12th grade students participating in CTE. Linked Learning has grown to 26 pathways, including a new Heavy Truck pathway, with over 5,800 total students participating. WBL experiences include nearly 700 interns and over 3,400 certifications.

### 2020-2021

As with most aspects of life, the pandemic impacts CTE activities and leads to a drop in WBL experiences and college credit opportunities. Enrollment still grows for CTE programs, however, with 12,788 CTE students enrolled and 5,854 Linked Learning students participating in 27 pathways, including a new

Pharmacy Technician pathway launched the prior year. Certifications also more than double to over 8,000, and 96% of CTE courses are a-g approved.

## 2021-2022

Linked Learning grows to a record 5,932 students in 27 pathways. CTE Dual Enrollment begins to bounce back with 423 students earning college credit. WBL experiences nearly double from their pandemic low to over 92,000, including over 13,000 certifications earned and 1,301 interns gaining job experience. Students who complete a CTE pathway continue to graduate at a higher rate than the District average, with data released in the fall of 2021 showing a 20/21 District graduation rate of 86.3%, while CTE completers had a graduation rate of 98.9%.

## A-G Then and Now

In the 2008-2009 school year, only 4% of CTE courses were a-g approved. As of the 2022-2023 school year, CTE courses are 100% a-g approved.

## Blue Nation Student Store Sells PE Clothes

Bullard High School

Business, Marketing, and Technology students opened the Blue Nation Student Store on Back to School Nights as well as 9th grade parent nights in order to accommodate sales of PE clothes to incoming freshmen and their parents. Students produced the clothes early on this year and worked with the site office to develop an order pickup system for parents to go along with the online ordering the store developed last year.

## Biomed Pathway Kickoff Event

Edison High School

Coming out of the pandemic where our students had been working in isolation, our Biomed teachers wanted to create a way to bring our students together, to rebuild the sense of belonging to our site and to reconnect our students to the Biomed family. We wanted all grade levels to have the opportunity to interact with not just each other, but with all the teachers that make this linked pathway so incredible. There were games and activities for the students to participate in, swag bags, food, and prizes, designed and run by all the teachers.

## Pathways in Medicine G.E.A.R. Orientation

Roosevelt High School

Health Pathway Students, grades 9-12, got a closer look at the pathway Grades, Engagements, Attendance, and Rewards. Students explored various stations to learn about pathway projects, dual enrollment, and expectations of being an RPM student. Each linked course had a station (English, Science, and the 2 CTE paths: Sports Medicine and Allied Health). These stations were run by the teachers who shared their project plans and GEAR expectations. Fresno City College was also in attendance to speak on Dual Enrollment and bring information on the various programs at FCC. The Health pathway counselors' station had information on college and how to reach them so they keep their grades up. Dina Scambray, CTE Coordinator, shared how the students can participate in the engagements to gain points for prizes.

## FBLA Officer Training Day

Roosevelt High School

This event prepared the students to compete in Future Business Leaders of America (FBLA) competitions and they were able to collaborate with other FBLA students from around the district. They participated in Officer, Leadership, competitive events, projects, and Elevator Pitch workshops, and also learned about the requirements of Champion Chapter.

## Self-Help Enterprises

Fresno High School

As part of a Construction, Design, and Architecture Technology (CDAT) pathway Day of Service, students assisted homeowners with their landscaping.

## Partnership with National University

Duncan Polytechnical High School

At the start of the Fall semester, National University Nursing Program came out to Duncan over 2 days, giving Duncan 11th and 12th grade Medical Academy of Science and Health (MASH) students their TB tests, which meets the need of our students going out to the medical jobsites. National University Nursing Students also went into our Nursing CTE classrooms as guest speakers for our students to learn about nursing opportunities in our community. This has been a great partnership for both Duncan and National University.

## CTE Teacher Collaboration

Duncan Polytechnical High School

Eder Lopez, Concepts of Design teacher for the Innovative Design and Applied Technology Academy (IDATA), has partnered with junior and senior CTE teachers within the academy to plan and co-teach engaging, relevant, and industry-focused lessons to his 10th grade students. While Mr. Lopez's curriculum is the same for each class, his students are cohorted in periods by their industry pathway, so he strives to theme lessons so they are relevant to the students' specific pathways.

For example, while learning about shop and personal safety, Mr. Lopez partnered with Doug Urabe, the Manufacturing pathway instructor, to create a lesson where the 10th and 11th grade manufacturing students were grouped together to complete a "scavenger hunt" activity in the manufacturing lab. The 11th grade students led the 10th grade students around the lab to show them all of the important safety equipment, explain the purpose and safe use of key equipment, and explain expectations of safe practices in the lab. During his unit on hand and power tools, Mr. Lopez partnered with Eric Rubio, the Medium/Heavy Truck pathway instructor, to deliver a two-day lesson to the 10th grade Medium/Heavy truck students on tools relevant to the heavy truck industry.

## CalCPA Dinner

Center for Advanced Research and Technology (CART)

Students in CART's Business & Finance Lab attended the CalCPA Student Night Dinner. Teachers, Valerie Dirlam and Jon Collard, and students networked with several local accountants.

Professionals shared their career journeys, which were encouraging to those beginning their postsecondary journey. Students also participated in an activity during which they asked relevant questions and grew their network. CART attendees were grateful for the opportunity to mingle with professionals.

## Duncan Fall Fest

Duncan Polytechnical High School

On September 29th, Duncan hosted its 2nd annual Fall Fest Family Night where various departments hosted Duncan students and their families for an evening of engaging activities, food, and prizes. The Construction pathway instructor, Ash Jones, ran a Construction Tools matching game. Automotive pathway students presented on engines and made their presence loudly known by starting one of the carburetor engines they built in the class.

The other three Innovative Design and Applied Technology Academy (IDATA) pathways helped families make s'mores if they visited each class. The Manufacturing pathway instructor, Doug Urabe, showed families how to program and operate the laser engraver to create custom lasered Duncan logos on the graham crackers; Heavy Truck senior, Daniel Varela, explained and demonstrated how to use an electrical wiring board and passed out chocolates; and families were able to toast their own marshmallows in the Welding pathway after watching and participating in welding demonstrations.

## Guest Speaker Nahel Ali

Edison High School

One of the amazing things about Edison is our alumni. They believe so much in our programs that they are always willing to come back and contribute. They want to inspire the same passion they felt for being a part of Edison. This is the case with one of our Engineering graduates, Nahel Ali. He came and spoke to our current Engineering students about his journey through Edison's program and beyond. His opportunity at Edison High provided various challenges, such as competitive design and networking, which modeled the way for him to achieve his M.S. in Civil Engineering and earn his California Board Approved PE license.

## CMAC Live Broadcast

McLane High School

Pathway students partnered with the Community Media Access Collaborative (CMAC) to produce a live broadcast of Highlander Football. Continuing through a well-established partnership with CMAC, McLane ArtVenture Production Academy students have already had several opportunities this school year for work-based learning experiences, often sharing their joy in learning more about equipment, software, editing, video production, journalism, event broadcasting, and leadership. Students have received hands-on training in CMAC's mobile broadcasting vehicle both on campus and on-site for several live athletic events. Check out more on the [Highlander Highlights YouTube channel!](#)

## Stop the Bleed Certification Expansion

The CTE Department is working together with Stop the Bleed industry partners to expand training and certification opportunities for Fresno Unified students and staff.

These trainings better prepare the public to save lives if people nearby are severely bleeding. This improves victim survival by empowering trained bystanders to take life-saving action if quickly needed—regardless of the situation or cause of severe bleeding.

29 new Stop the Bleed Instructors have been trained since May 2022. Over 500 students received certification in August and September at Sunnyside, CART, Edison, and DeWolf. In the near future, training events are planned at Bullard, Duncan, Phoenix, and Cambridge.

## Building Blocks for Black Excellence

This annual event is hosted by AASLA and A4 for parents and students to network with Fresno Unified, State Center Community College District (SCCCD), Fresno State, and other community partners. This event showcased the structure of the support African American students will have during their tenure at FUSD as we build blocks for success.



## Back to School Health Fair

The West Fresno Family Resource Center presents its 20th annual Back to School Health Fair, an annual event that the West Fresno Family Resource Center hosts for parents/guardians and students, which allows the community and educational centers to network and share the work that their programs offer for minority students and families, and health risks for pre-mature African American babies. Backpacks, clothing, shoes, free haircuts, and other resources were provided to students making sure they have everything they need for the start of school.

## First LEGO Champions Cohort

Twenty-eight pre-K, TK, and Kindergarten teachers came together on Tuesday, September 13th, 2022, to collaborate as the first-of-its-kind CTE LEGO Champion Cohort.

These pioneer teachers received hands-on training from LEGO Education regarding implementation of the new Lego "STEAM Park" and "People" kits with their early learners. These LEGO Champions will also work with the CTE department to create lessons with the kits that allow students to explore the world of work!

This event is a year-long collaboration with CTE, LEGO, and our Champions. Every PK, TK, and Kinder Teacher in the district will receive a STEAM Park and People kit as well as access to CTE content lessons created by our champions and CTE.

## More Information

For more information about CTE programs and opportunities, visit our website at the address below!

[www.ccr.fresnounified.org/career-readiness](http://www.ccr.fresnounified.org/career-readiness)