Career Connected

Career Technical Education Program Spotlights

October/November 2023 - Issue No. 7

Truck Built by Duncan Students Wins Best of Show at Fresno Fair

Duncan Polytechnical High School

A 1935 Ford truck that Duncan Polytechnical High School students built last spring has won best of show at The Big Fresno Fair. Seniors in auto teacher Dale Dutcher's class began assembling the Factory Five Racing kit truck in January.

Duncan Garage students inventoried 42 boxes of parts, then built and hand-fit every part of the car. Bobby's Auto Body and Paint completed the paint and bodywork, and the students finished the car. With their teacher's help, the students built a 347-stroker motor that made 550 hp.

The bed of the truck was cut and fit by Nick Zamora, a construction student. The exhaust system was hand crafted by welding student Samuel Martinez. And manufacturing students Yingqi Yang and Ashley Martinez CNC machined the Duncan Garage in the bed of the truck and laser etched the custom license plate.

Duncan Garage: Oscar Nieto, Jose Serna, Rigoberto Espinoza, Jorge Hernandez, Bryan Castillo, Roy Rodriguez, Israel Duron, Alyssa Torrez, Karen Vathanaphong.

Sunnyside at the Fresno Fair

Sunnyside High School

Students from Sunnyside took home multiple 1st place prizes for projects, plants, and birds, as well as making sales in the market pen.

- Ag Mechanics Chicken Coop project: 1st place in division
- Plant projects:
 - o 80 total entered
 - Multiple 1st place
 - Lorain Valadez won Best in Show for her Ficus Benjamina
- Poultry projects:
 - o 9 Breed Birds
 - Lavender Orpington 1st, 2nd, and 3rd place
 - Buff Orpington 6th place
 - Light Brahma 6th place
 - Black Silkie 4th place

- o 9 Market Pen Sales
 - Kyley Workman \$150
 - Rachel Vang \$250
 - Brianna Lopez-Valle \$300
 - Marco Felix-Casillas \$400
 - Tatiana Espino-Ortega \$150
 - Riley Howard \$200
 - Connie Sifuentes \$175
 - Getsemani Alvarez \$175
 - Xitlaly Diaz \$275

Phoenix at the Fresno Fair

Phoenix Secondary

Students from Phoenix took home 1st, 2nd, and 3rd place prizes in two categories at this year's Fresno Fair.

- Purple Sage:
 - o 1st place Noah M
 - o 2nd pace Enrique L
 - o 3rd place Phillip H
- Seedless Raisins:
 - 1st place Julian F
 - o 2nd place Elijah S
 - o 3rd place Monique A

Baird Battles South Africa in Minecraft Esports Match

Baird Middle School

Though it was only 7am when the match started, there was a watch party on the Baird campus full of students, parents, and Baird staff cheering on the Baird Explorers in the Minecraft Esports Match against South Africa. The competition against South Africa has been going on for 4 years, and Baird has been in the championship for three of those years (Figarden took the spot once).

Yazz, a Baird Middle School student who was a past member of Baird's Esports team, was the Shoutcaster at the event. Evan and Lizbeth, McLane Art Venture students from Mr. Kevin Clifton's class, supported the event by running the Stream and Broadcast

The prompt was to build a sports stadium or arena. Both sets of students chose to represent their countries by choosing a specific sports event that represented a time in sports history that brought our countries together unlike ever seen before or after. South Africa recreated the World Rugby Championship finals that was hosted in their country shortly after Nelson Mandela abolished apartheid.

Baird recreated the 1980 Miracle on Ice when the USA defeated the USSR and won the Olympic gold medal. Above the hockey arena, they added Simone Biles completing the Yurchenko double pike off the orange vault.

We are so proud of our Baird Explorers for winning the match and representing FUSD so amazingly!

Watch a video about the match on Vimeo.

McLane Students are MADD Volunteers

McLane High School

Mothers Against Drunk Driving (MADD) held their annual Walk Like MADD at Dry Creek Park in Clovis. It was a fantastic fundraising event with the purpose of providing education to the Central Valley youth and support of victims/survivors throughout the year. Once again, McLane provided the majority of volunteers who assist in running the walk with McLane's Medical Education & Research Academy (MERA), Key Club, and Cheer represented. Additionally, McLane's ArtVenture Production Academy (AV) volunteers provided photography and videography for the event. McLane High School has been a fundamental part of Walk Like MADD for the last eight years, typically providing more than half of the volunteers at the event. This year it was closer to three quarters!

The volunteers arrive around dawn, set up the event by putting out tables, chairs, helping the vendors set up, make sure the walkers don't get lost, cheering on the walkers, providing food and water, and ensure booths run smoothly. Then when the event is over the volunteers clean everything up as if we were never at the park. It is the perfect environment for teens to see the ramifications of drunk/drugged driving, learn of the impact those choices have made on others, and directly interact with victims/survivors and their families.

Construction Pathway Partners with GRID Alternatives

Duncan Polytechnical High School

Twelve Duncan seniors participated in a seven-day training led by GRID Alternatives to earn their Solar Futures certificate for solar panel installation. Students received training on fall and electrical safety, electrical wiring, conduit bending, and panel installation. After receiving their training, these students put their technical and leadership skills to the test and led the rest of their classmates in lessons on electrical wiring and conduit building.

Farmer's Market at Phoenix

Phoenix Secondary

FUSD's first specialty crop farmer's market and food distribution was piloted at Phoenix on Friday, October 13. This event came about as a partnership between Phoenix Secondary Academy Ag Club and Staff, Fresno Metro Ministry, the Central California Food Bank, Local farmers, the Farmers at YoVille, and the CDFA grant obtained by Fresno Unified's Nutrition and Food Services Department.

Phoenix CTE students were involved with setting up, tearing down, assisting with the food distribution, passing out food samples to guests, and selling plants they had been growing from seed in class. Parent University had a booth set up, also. The sweet potato was highlighted as the specialty crop and students had recipes available using the sweet potato. Local farmers proudly showcased their fresh specialty crops while guests savored delectable food tastings and received food distribution support from the Central California Food Bank. Stay tuned for more fantastic markets in different corners of our community!

Stop the Bleed

DeWolf High School

126 students at DeWolf High School were certified by the American College of Surgeons to "Stop the Bleed" in emergency situations. They learned how to apply pressure dressings, proper wound packing techniques, and tourniquet application to control hemorrhage. 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.

Sunnyside High School

Around 500 students at Sunnyside High school were certified by the American College of Surgeons to "Stop the Bleed" in emergency situations using direct pressure, wound packing, and a tourniquet. 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. Sunnyside Agriscience, Health, and Teacher Academy students participated.

Biomedicine Health Career Focus Day

Center for Advanced Research and Technology (CART)

CART's aspiring medical professionals in the Biomedicine Lab had a busy day engaging with current medical professionals who sat on a Career Panel. They also participated in an Industry training that led to a certification. The day started with medical professional Sarah Ellis, who is Community Regional Medical Centers' (CRMC) Trauma Program Clinical Educator, leading a brief health career discussion and lecture around the evolution of Stop the Bleed.

For the second part of the training, Sarah brought along a host of her co-workers and partners to help students receive their certification in Stop the Bleed. After students had learned about the basic techniques of bleeding control, they put their skills to the test, and those who passed received their Stop the Bleed certification.

Field Trip to Broken Controller

Sequoia Middle School

Middle school students took a field trip to a local VR company to pitch their idea for a VR controller guard and receive constructive feedback. They also interviewed the owner about the field of VR and current trends. Additionally, they were able to participate in a variety of VR/AR experiences.

Virtual Tour of NASA's Jet Propulsion Laboratory

Center for Advanced Research and Technology (CART)

Students in the Engineering, Manufacturing, and Robotics, UX, Game, and Web Design Labs had a unique opportunity to experience a virtual tour of NASA's Jet Propulsion Lab (JPL). Led by NASA specialists, students viewed a multimedia presentation on JPL entitled "Journey to the Planets and Beyond," which provided an overview of the Laboratory's activities and accomplishments. Students also interacted with JPL employees who gave them an inside perspective of the history of missions which JPL has provided since the early 1950s. Specifically, students got to take a deep dive into the current rover mission on Mars and get a sneak peek at the probes and robots that are planned for use in exploring Europa, an icy moon with liquid oceans. They also visited the von Karman Visitor Center, the Space Flight Operations Facility, and the Spacecraft Assembly Facility. Students enjoyed a Q&A session where they learned about future missions and internship and employment opportunities with JPL and other NASA labs.

Students Create Project to Help Youth in Foster Care

Center for Advanced Research and Technology (CART)

A team of students from CART is working on a Kare4kids project to increase awareness of the financial support for higher education available to foster youth. The students from the Law & Policy pathway have created an infographic with startling statistics about how many foster youth graduate and pursue higher education, and a QR code to scholarships, grants, and resources for foster youth. The team's goal is to increase opportunities for foster youth and decrease the number who become homeless or incarcerated.

Click here to see the Kare4kids infographic.

CTE Leads LEGO 4 All Trainings

Fresno Unified's CTE Department has expanded its initiative to bring engineering in STEAM (Science, Technology, Engineering, Art, and Math) and Career Exploration into the classrooms of Pre-K, TK, and Kindergarten students to include 1st grade classrooms.

In November, Fresno Unified 1st grade teachers had 4 opportunities to come to an evening training led by CTE TSA's Gianni Danisi and Leanne Cervantes Johnson. At the training, the teachers learned about CTE courses and programs in our district. They were also able to explore how LEGO can be used in the classroom to help students explore careers. Besides being fed a delicious dinner, teachers also received a LEGO Coding Express Kit and LEGO People kit for use in their classrooms.

HERo Women's Leadership Camp

On Monday, November 27, female students in grades 9-12 had the opportunity to attend the Women's Leadership HERo Camp which was held at the Fresno Police Department's Regional Training Center and hosted by the Fresno Police Department. Students heard from Women in Blue guest speakers, had the opportunity to explore careers in law enforcement, and participate in hands-on experiences such as participating in the Emergency Vehicle Operators Course (EVOC) riding alongside police officers, and interacting with officers from various units within the Fresno Police Department.

Green Academy GRID Certification

Edison High School

In October and November of 2023, juniors in Edison High School's Green Energy and Technology Academy participated in Grid Alternatives' "Solar Intensive" workshop. In the weeklong course, students completed basic Safety Certification and Solar Array Certification, trained by the staff at Grid Alternatives.

Computer Science Students Meet the Mayor

Edison High School

Students from the Green Energy Academy, Engineering, and Computer Science programs attended the annual Manufacturing Summit hosted by the San Joaquin Valley Manufacturing Alliance (SJVMA). During this event, students were able to attend interview sessions, industry booths, listen to key note speakers in the manufacturing industry, and some even met the Mayor of Fresno. In the featured picture, students from our 4 year Computer Science pathway were able to meet and chat with Mayor Jerry Dyer. This event is always a wonderful opportunity for our students.

Thrilling Project Designed for Medical Pathway Students

McLane High School

Students from McLane's Medical Education & Research Academy recently were able to engage in a hands-on, collaborative project themed around the spookiness of the Halloween season. Aptly titled "Hmm or Eww," students were tasked with creating physical models of various human anatomy that when presented mysteriously might elicit a reaction of curiosity or uncertainty. To heighten the experience, students also designed blind boxes to shroud their creations for additional hesitation upon investigating. With these creative elements in place, students playfully confronted any sensations of fear, using their hands to plunge into the unknown identifying each anatomical creation. If needed, students were allowed a small dose of context given by written clues, and sometimes by a worrying liquid oozing from the box.

This ingenious project designed by the wonderful teacher Mrs. Roseanna Flores served as a joyful learning experience not only in her junior courses, but for other student cohorts in the pathway as well, honing their research skills, critical thinking, and teamwork — all essential in the medical field.

Homeless Awareness in Fresno Unified

McLane High School

Project Access of Fresno Unified reached out to the ArtVenture Production Academy to create a public service announcement video around Homeless Awareness and their program, which assists foster youth and students experiencing homelessness. To produce the PSA, Art Venture students and their teacher, Mr. Kevin Clifton, created a shot list, gathered background footage in downtown Fresno, and recorded commentary and filmed interviews joined by Project Access staff. The edited product is a moving piece focusing on both the personal challenges and elevated institutional barriers unhoused students face in the areas of chronic absences, school suspensions, and staying on-track to graduate. Outlined also are ways in which Project Access develops trust among each student they serve, while pairing needs with social emotional support, case management, academic counseling, and linkage to community resources.

CTE Ambassadors Help With FUSD Fundraiser

Bullard High School

Students from Bullard High School's CTE Ambassadors, a group made of CTE students who advocate for their programs and help spread awareness about career technical education opportunities at Bullard High School, assisted with Fresno Unified's State of Education Gala. Students welcomed guests, checked them in and assigned them to their tables for the evening.

Linked Learning FCHIP

Patiño School of Entrepreneurship

The 10th grade Linked Learning Fresno County Health Improvement Project (FCHIP), I Challenge You to Be Healthy, asked students to identify health problems within their own neighborhood and community, and create feasible solutions in an ethical manner. Students were given choice and voice to address and advocate change in their community.

They applied the Design Thinking Process and SCRUM to manage the specific phases. Students created various products for each linked course including, but not limited to a PSA (Science & WOM), Reflection (Humanities), Community Physical Fitness Product/Model, Map with data analysis (Geometry), and scale model of park with renovations included. They presented their projects to partners from the City of Fresno PARCS department and other community members. As an additional benefit, every student who pitched is now eligible to apply for the State Seal of Civic Engagement.

CDAT (Construction, Design, and Technology Academy) Field Trip Fresno High School

Under the guidance of teacher Joel Osuna, a dedicated group of 26 students from Fresno High School is making a significant impact by actively participating in construction work. Their noble endeavor aims to support families in building their own homes through the Self-Help program in Reedley, California. This collaborative effort not only showcases the students' commitment to community service but also highlights the positive influence young individuals, guided by their teacher, can have in fostering sustainable housing solutions.

Students Produce Videos for College and Career Readiness

Sunnyside High School

Sunnyside High School cinematography students from Cruz Gonzales' class are producing videos for the College and Career Readiness Department. These videos will highlight the work-based elementary experiences that first through sixth graders participate in each year, including Bricks 4 Kidz, the Fresno Chaffee Zoo lab and tours of colleges, the Fresno Police Department and the FUSD Nutrition Center. The videos will be made available to elementary teachers to show to their students prior to their experience.

Computer Science Shark Tank

Edison High School

On November 14th, students pitched their senior project ideas to industry professionals including Drone Legends, and Fresno Unified's transportation department. Student projects include a map tool for Fresno Unified busses and a driver's education simulator.

Visit by Bruno Mars' Photographer

Hamilton K-8 School

Daniel Ramos, a past student of Ms. Ryatt's, paid her afternoon classes at Hamilton a visit to talk about the importance of soft skills and really knowing your camera settings, which led him to his position as Bruno Mars' personal photographer. He started off by shaking every student's hand and then shared videos, photos, and stories of his work and travels with some of the top performers in the music industry.

9th Grade OSHA Celebration

Patiño School of Entrepreneurship

In order to complete project-based collaboration with project teams at the PI Shop, one of Patino's industry partners, students were required to earn OSHA certification. Once certified, students became eligible to work with the tools and equipment at the PI Shop to build prototypes for their next project.

Students Build Their Own Camera

Hamilton K-8 School

Students played "telephone" passing along the story of the first documentation of the Camera Obscura. The team to pass the information, one by one with the best accuracy, earned the use of the Camera Obscura, where they saw the world turn upside down. Students also built a telescoping "Zoom" pinhole viewing camera. This allowed them to see how the length of the tube, also known as the focal length, determines how close the object appears on the viewing screen inside the camera.

CTE Internships Students Receive Soft Skills Training

Presenters from Fresno Unified's CTE staff led a training for Internship Students on November 17th (Fresno and McLane interns) and December 1 (Bullard and Roosevelt interns). All students intermingled while sharing traits of their personality in "like" groups based on a communication style rubric they were provided. They then discussed three main topics: 1. The descriptors of how they typically respond when in conflict, 2. The "Triggers" or things that cause them to react negatively in conflict, and 3. What they desire from others when they are in conflict.

They looked at causes, both internal and external, specific to them that make conflict difficult. They were provided descriptions of healthy and unhealthy conflict and given tools to help them navigate difficult conversations, and prompted to reframe conflict in a more positive light of growth as opposed to something to avoid. This workshop was the second in a series they received. The first workshop taught students about Networking.

Mini Lessons in Teacher Academy

Hoover High School

Students in Teacher Academy taught lessons to their peers in math. Pairs of students demonstrated their teaching abilities by conducting a lesson for approximately 15-20 minutes. They utilized the materials and technology of their choice to deliver the lesson they created using a provided lesson planning template and the knowledge they have gained during their semester in the course.

The presenters engaged and encouraged student participation by asking a question for the warm-up or another type of activity of their own choice, presented the main content (instruction which included teaching the lesson, circulating, answering questions, etc.), and concluded the lesson by summarizing the key points or with an exit ticket as an assessment.

CTE and Reading Heart

Students from a number of schools are decorating book bins for the Reading Heart project. Once decorated, the bins will be delivered to elementary schools so that students can select free books from the bins and donate books too. For Computech's bin, students decorated the bin with similes, such as, "A book is like a key – it opens the door to your future."

Schools designing Little Book Bins: Hoover, Sunnyside, Duncan Polytechnical, DeWolf, and Fresno High Schools; McCardle Elementary School; and Computech and Sequoia Middle Schools.

School receiving a Little Book Bin this year: Calwa, Eaton, Easterby, Bullard TALENT, Holland, Williams, Powers, Webster, Bakman, McCardle, Jefferson, Addams, Sunset, Vang Pao, Vinland, Kirk, Herrera, Malloch, and Manchester GATE elementary schools, and Wawona K-8 School.

Students Learn about Personal Finance

McLane High School

Our district is embarking on a new initiative to offer a personal finance elective class at all high schools next year. As part of this work, the district is partnering with Next Gen Personal Finance to develop a curriculum to help students learn how to make good financial decisions. Through the new partnership, author Yanely Espinal talked with McLane High School students on October 24 about the importance of financial literacy and gave them signed copies of her book, "Mind your Money."

Watch a video about the Mind Your Money book tour on Vimeo.

Breakfast with Blue

Roosevelt High School

The Roosevelt Public Service pathway had breakfast with personnel from a variety of public service agencies. The agencies rotated so students could speak with several different people and ask about their careers. They also had the opportunity after questions and answers to wander through their booths and look at their equipment and other tools of the trade.

Volunteering at the Elk Lodge

Duncan Polytechnical High School

Duncan Construction seniors Kevin Sanchez, Erika Gonzales, Alex Castillo, Jordan Sagrero, and Izamar Ramirez assisted Fresno Unified Board member Valerie Davis and fellow Elks Lodge Members prepare for the construction of an outdoor patio. Students worked alongside construction industry professionals and spoke with the owner-operator of a construction company to learn more about the trades.

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