

Why Is STEAM Important to the Central Valley?

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In California, the Central Valley is one of the most fertile regions. It is known for its rich farmland that produces large amounts of food, including oranges, grapes, raisins, nuts, fruits, and vegetables. As a result, it is a world leader in agricultural innovation. As the Central Valley continues to grow and improve, it must continue to keep up with technological changes. This is where STEAM comes in.

STEAM stands for Science, Technology, Engineering, Art, and Math. These five areas of study allow students to solve problems, think creatively, and build new ideas.

STEAM is greatly needed in the Central Valley because it is closely connected to many aspects of agriculture. Agriculture is a big part of life in the Central Valley, but it faces many challenges, including drought, limited water, labor shortages, air pollution, and government regulations.

Science supports farmers in understanding the nature of water, soil, and plant health. Technology gives farmers the tools to use water, soil, and plants more efficiently. Engineering helps farmers by designing machinery and creating systems

that are more efficient to meet the many needs of agriculture. Both large and small farming companies benefit from engineering results. The arts help farmers by exploring creative design approaches to their markets. Packaging design and web exposure support farmers on many creative levels to compete in today's challenging industry.

On March 7, 2026, the Jefferson Elementary Migrant Club from Dinuba, California, had the opportunity to participate in Fresno State's Migrant STEAM Conference. The clear message from every workshop was that students who participate in STEAM can develop the skills needed to pursue careers in botany, computer technology, engineering, graphic design, mathematics, and many other fields.

In conclusion, STEAM is needed in the Central Valley because it improves agriculture, protects the environment, creates new job opportunities, and promotes creativity. When students learn STEAM, they build a brighter future for themselves and their community.



Jefferson Elementary Migrant Club from Dinuba at the 2026 Fresno State Migrant STEAM Conference, Rafael Aguilar, Sofia Aguilar, Ulises Castaneda, Kenia Garcia, Joel Guzman, Monserrat Ochoa, Axel Ramirez, Lesly Renteria, Elizabeth Trevino.

From the Fields to the Lab: Why STEAM at Fresno State Matters for Us

By Kimberly Penaloza, Genesis Perez, Miguel Ibarra, Rosa Zaragoza and Ms. RubyAnn Alvarado

From Brick Walls to Big Dreams

Have you ever seen the big Fresno State campus and wondered what's behind those brick walls? To many of us in elementary school, it might seem like a place just for "big kids," but it's actually a place where our future can start! At Fresno State, students are using STEAM (Science, Technology, Engineering, Art, and Math) to help our families who work in the fields. Many of our parents work in the fields picking the food that feeds the world, and Fresno State is working on ways to make that work safer and better using new inventions.

Drones, Dirt and Driving Robots

Did you know Fresno State has a giant 1,000-acre farm right on their campus? It's part of the Jordan College of Agricultural Sciences and Technology. Scientists there are using cool tools that might look like toys, like drones and tractors that can drive themselves using GPS! These machines are a big deal for our community because they can do the hardest jobs in the hot sun. If we learn STEAM now, we can be the ones going to Fresno State later to program those robots and help our moms and dads.

The Super Scientist Squad

Fresno State also has a special STEAM Institute just for students like us! Every spring, kids from our community

get to go on campus and learn how to be scientists. They get to use real labs to study plants and water. The programs like STEAM: Enriched Pathways at the College of Science and Mathematics are made to

help students from farm-working families have a clear path to becoming engineers or doctors. They want us to know that our "field smarts" can help us become great scientists!



Where Science Meets Style

Art is a big part of the Fresno State community too. In the Kremen School of Education, they have a STEAM Hub where they show how science and art work together. They use art to tell the stories of our families and to design tools that are easy for everyone to use. When we draw or write for the Migrant Voice, we are using our art skills to show how strong and smart our community is. It reminds everyone that we aren't just workers; we are also creators and thinkers.

Homegrown Heroes

So, why does this matter to us today? Because Fresno State is right in our own backyard! We don't have to move far away to find a great job. We can stay right here and become experts who help save our Valley's water or tech experts who work with farm data. By practicing STEAM in our classrooms now, we are getting ready to be the leaders at Fresno State later. From the dusty fields to the science labs, we are the next generation who will help our community grow strong!



MEET OUR JOURNALISTS

Jefferson Elementary



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