

Summaries of Funded Education Grant Projects – 2016-17

Bakersfield City School District

- **Electromagnetic Motor Lab**
Henry Sanchez, Emerson Middle School
Eighth grade students will build an electromagnetic motor from familiar materials through enquiry and exploration. This is a next generation science standard that requires batteries, duct tape, paper clips and magnets for hands on learning.
- **Entomology Bugs Me!**
Valerie Padilla, Evergreen Elementary School
Kindergarten students will study and examine spiders and insects, including butterflies, as science comes alive. Grant funds will purchase books, x-rays of bugs, live and acrylic specimens and magnifying equipment to allow students to explore, draw and write about what they see.
- **Munsey Stars Track Team**
Sarah Riess, Munsey Elementary School
Grant funds will be used to fund the first ever track team at the school. Fourth and fifth grade students will meet after school twice a week and receive instruction in proper nutrition, breathing techniques, hydration and the importance of staying physically active.

Central Unified School District

- **Doodling in 3D**
Ryann Shoaf, Herndon Barstow Elementary School
Funds will be used for 3D pens to create original, three dimensional works of art for these fourth through sixth graders. This exciting, new technology will spark interest in art.
- **Central West Self-Care Project**
Michael Marquez, Central West High School
After-school yoga classes will provide high school students an opportunity to learn about self-care, meditation, decreasing stress and mindful breathing to improve health. Grant funds will be used for yoga mats, supplies and curriculum to help these high school students cope with stress, resolve conflict and learn about confidence as they find value in themselves.
- **Mastering 5th Grade Through the Arts**
Dawn Donat, Harvest Elementary School
Fifth grade students will learn art history, and techniques to develop their creative thinking and problem solving as they make art. Grant funds will be used for curriculum and art supplies.

Clovis Unified School District

- **Flexing our Brains through Flexible Seating**
Nicole Lack, Nelson Elementary School
Fourth and Fifth grade students will enjoy flexible seating with swivel stools, lap trays, outdoor mats and stability balls to name a few items. Math, reading and writing will be the tasks at hand as student's experiment and choose what seating option works best for them.
- **STEM in the Classroom**
Cindy Best, Mountain View Elementary School

First grade students will explore motion, magnetism and buoyancy as they complete hands on experiments and engineering activities. Grant funds will purchase four projects worth of Lakeshore Learning curriculum.

Coachella Valley Unified School District

- **Making Healthy Choices**

Arlyn Sams, Cesar Chavez Elementary School

Third grade students will investigate the history of grapes as they plant, monitor and care for vines. Project funds will buy ten vines, irrigation, trellis and tools for this math, history, health and agriculture focused project. Students will also take a field trip to a vineyard.

- **3D-Assisted Wind Turbine**

Edwin Detoya, Bobby Duke Middle School

Seventh and eighth grade students will design and build a miniature Wind Turbine prototype that generates power. The 3D printer that grant funds will purchase can produce the over-sized plastic gear that is needed to increase power output.

- **Salton Sea Community Star Gazing**

Virginia Haddad, Sea View Elementary School

Grant funds will purchase a telescope kit, moon filter and deluxe solar filter to sponsor monthly Star Gazing Nights for the entire community. Science and astronomy lessons will come to life for students and their families.

Coalinga-Huron Unified School District

- **Photo Journalism - Photographic Essays**

Julie Lance, Coalinga High School

This digital and media arts project will study and emulate Pulitzer Prize winning photographers such as Ansel Adams, Dorothea Lange, Eddie Adams and Alfred Eisenstaedt. Eleventh and twelfth grade students will develop the tools necessary to document events, people, places and things at industry standard with this photo ID printer.

Delano Joint Union High School District

- **Innovative Designer Scarves**

Carol Gardner, Cesar Chavez High School

Ninth through twelfth grade students will learn the art elements and principles of scarf design with this project to create designer scarves. Grant funds will purchase the Brother Scanner and Cut 2 to create unique scarves using their knowledge of balance, harmony and unity.

Delano Union Elementary School District

- **ATMS Special Olympics**

Jennifer Rivera, Almond Tree Middle School

Sixth through eighth grade special education students will receive running shoes appropriate to track and field, both to practice for the Special Olympics and to keep afterward. Health and physical fitness activities provide an appreciation for an active lifestyle, and good shoes reduce the risk of injury.

Desert Sands Unified School District

- **Fitness Refurbishment**
Liz Gordon, La Quinta High School
Weight room refurbishment for students and athletes will allow lessons in proper technique, lifelong fitness and equipment hygiene. Funds will be used to purchase parts for weight machines that may be used by every student.
- **Solving the Impossible Puzzle**
Nathan Manderfield, Monroe Elementary School
Grant funds will be used to purchase Rubik's Cubes, a speed timer, t-shirts and supplies for these fifth grade students to master the Rubik's Cube as they learn about math, spatial reasoning, goal development, memorization and develop a love of learning.
- **Agricultural Engineering in Mini Greenhouses**
Colleen Hahn, Palm Desert Charter Middle School
Grant funds will purchase the equipment and materials needed to upgrade their garden project to include miniature green houses to protect the plants from freezing. Seventh grade students have analyzed the data and designed this solution for maintaining their garden ecosystem.

Dinuba Unified School District

- **Introduction to STEM Careers with Robotics**
Andrew Vega, Lincoln Elementary School
These fourth through sixth graders will be using robotic kits funded by the grant to complete various tasks in the fields of engineering, robotics, programming and electrical design.
- **Exploring California Foods and Nutrition**
Bronwen King, Kennedy Elementary School
Focused on California agriculture, this project will help teach science, reading, math and nutrition. Third through sixth grade students will grow, cook and taste produce first hand. Grant funds will purchase cooking supplies, California cheeses, mushroom kits to grow and taste, and transportation to visit an olive oil company.

Firebaugh-Las Deltas Unified School District

- **Together we Paint**
Ana Herrera, Firebaugh Middle School
Sixth, seventh and eighth grade students will create a 10x12 foot mural in this art project focused on group collaboration, leadership, artistic responsibility and time management. Grant funds will be used for art supplies, canvas, paint and brushes.

Fresno Unified School District

- **Aquaponics System for Chemistry and Agriscience Classroom**
Cynthia Purves, Sunnyside High School
Tenth grade students will design and build an aquaponics system as they study chemistry to demonstrate the technology emerging in agriscience. Grant funds will be used to purchase an aquarium, equipment, plants and fish.
- **Coding for Students**

Rafael Carranza Jr., Jane Addams Elementary School

Sixth grade students will learn to code with Tynker, an online program that teaches math, technology and engineering by creating their own video games. Grant funds will purchase a tablet and curriculum.

- **3D Scanner for 3D Visual Arts**

Brandi Capuchino-Mendoza, Roosevelt High School

Visual arts classes, 3D design and math courses will be working with this 3D scanner to be purchased with grant funds for ninth through twelfth grade students. With this important piece of equipment students will be able to see objects differently and scan them from multiple angles.

- **Arts and Crafts for Emotionally Disturbed Children**

Kristy Page, Wilson Elementary School

Grant funds will purchase art and craft supplies for emotionally disturbed first through sixth grade students. Art instruction can be relaxing, it builds confidence, improves fine-motor skills and helps create community.

Fresno and Clovis Unified School Districts

- **Implementation and Experimentation of OpenAg Food Computer**

William Dunn, The Center for Advanced Research and Technology

Eleventh and twelfth grade students will be learning about engineering, programming, earth and environmental sciences, agriculture and technology with this project to build and program a food computer. They will grow the crops to be monitored, experimenting to optimize production and sharing their findings with middle school students who are interested in science and engineering.

- **Bioprospecting – Antibiotic Discovery from Natural Sources**

Matt Jordan, Brad Parson, Michelle Mar, The Center for Advanced Research and Technology

Eleventh and twelfth grade students will experiment to discover antibiotics from natural sources through curiosity and experimentation. Grant funds will be used for scientific equipment.

Golden Valley Unified School District

- **Live your Reality – Virtual or Real**

Mike Erickson, Liberty Madera Ranchos High School

Virtual reality headsets will allow these ninth through twelfth grade students to watch 3D videos about DNA molecules, pivotal historical events, journey through the galaxy and experience archeological wonders without leaving the classroom.

Kern County Superintendent of Schools

- **All Hands on Deck for Hands-On Learning of STEM Concepts**

Joy Limbengco, Aurora Program / Emotionally Disturbed Program (Planz Elementary Site)

Grant funds will purchase hands-on STEM (science, technology, engineering and mathematics) curriculum for third through fifth grades to ensure that students are highly engaged in learning. Students will explore basic concepts of airflow, friction, flight and motion as they build miniature models of windmills, cars, planes and roller coasters.

- **Brewer's Beautiful Buckets**

- **Esthela Brewer, Beardsley Intermediate School**

- Visually impaired fourth through eighth grade students will learn about seasons, fruits, vegetables and flowers by planting a class garden. This project will allow the students to learn about science, growing plants, health and nutrition as they prepare and snack on the produce they have grown.

Kern Union High School District

- **Shakespearean Film Festival**

- **Andrew Chilton, Stockdale High School**

- High school seniors will host an annual Shakespearean Film Festival showcasing movies the students film, act and produce themselves. This creative and collaborative project focuses on language arts, film study, art appreciation with the necessary reference material, books and DVD's.

- **Programming with Pi**

- **Scott Lockhart, East Bakersfield High School**

- Grant funds will be used to purchase micro-computer, Raspberry Pi boards for these ninth through twelfth grade students to learn about mathematics and computer science with coding and programming.

- **Potential Perils Faced by San Joaquin Valley Aquifers**

- **Marc Halling, Frontier High School**

- Ninth grade students will learn about aquifers with a focus on pitfalls of the closed aquifer system in the San Joaquin Valley by creating a small-scale functional aquifer in the classroom. This ecology and earth science lesson will culminate with a field trip to a water treatment facility. Grant funds will purchase materials, equipment and the bus ride for the field trip.

- **Assess Impact of Air Pollution on the Student Lung Volumes**

- **Navdeep Singh, Liberty High School**

- Ninth and tenth grade students will study ecology and physiology as they conduct research about air pollution and its impact on lung volumes compared to averages around the country. Grant funds will purchase flow meters and disposable mouth pieces.

Kingsburg Elementary Charter School District

- **Broadcasting Trailers**

- **Garrett Smothers, Rafer Johnson Junior High School**

- Seventh and eighth grade students will create broadcasting trailers to promote school events and spread awareness about various clubs and electives. Grant funds will be used for Adobe Premier (School Edition) software.

- **The Green Classroom**

- **Barbara McPherson, Lincoln Elementary School**

- Hands-on gardening will teach these second and third grade students about math, reading, science, nutrition and more. Grant funds will be used to refurbish and replace irrigation in a garden this same grant made possible two years ago.

Lindsay Unified School District

- **Virtual Reality Walkthroughs, Simulations and Games**

Tyler Campbell, Lindsay High School

Virtual reality walkthroughs, simulations and games will make computer science, math, physics and logic fun for these high school students. Coding and programming will come to life as they prepare for their future.

Pacific Union School District

- **I am the next Norman Rockwell!**

Jane Hills, Pacific Union School

Oil paints and table easels will allow these fifth graders to connect with history and create their own interpretation of one of the four basic freedoms delineated by Franklin D. Roosevelt in his 1941 State of the Union Address.

Palm Springs Unified School District

- **Self-Esteem Art**

Sara Perry, Rio Vista Elementary School

Third through fifth grade students will benefit from these five art workshops that emphasize emotional coping skills, self-esteem, affirmations, happy memories and positive thinking. Grant funds will purchase the creative art materials needed for these lessons.

- **Chopped Jr. California**

Jennifer Moore, Bella Vista Elementary School

Fourth grade students will compete in a Chopped Jr. California cooking show to learn about agriculture, nutrition, math, science and compile a recipe book to share with their parents. Grant funds will purchase aprons, cookie sheets, measuring spoons, food and awards.

- **Renewable Energy with Wind Turbines**

Shelly Dow, Landau Elementary School

Third grade students will work on multiple hands-on activities to learn about renewable energy and wind turbines. Grant funds will be used for a ten lesson curriculum, four turbine kits and other materials.

- **Let's Make Energy!**

Lynn Yada, Desert Learning Academy

All grade levels, Kindergarten through twelfth grade will participate in this project to study and make renewable energy through wind turbines. Grant funds will be used to buy wind kits and supplies.

Panama–Buena Vista Union School District

- **Real Food for Real Kids / Healthy Kids = Happy Kids!**

Stacy Morrison, Berkshire Elementary School

Kindergarten through sixth grade students will prepare and eat healthy food while they learn about nutrition and create their own recipe books.

Riverdale Joint Unified School District

- **The Wonders of Yosemite**

Heather Burnett, Fipps Primary School

Funds will be used to take a trip to Yosemite after an in depth study of the National Parks. Some topics include fossils, species survival, environmental changes over time, the weather and glacial activity. These science lessons will focus on geography and geology for these third grade students.

- **STEM-Learning Engineering with RC Cars**

Mario Gonzalez, Riverdale High School

Ninth through twelfth grade students will use RC cars to conduct experiments to learn about engineering, technology and design.

Sanger Unified School District

- **John Wash Community Garden**

Mary Jakovickas, John Wash Elementary School

Grant funds will purchase a tool shed, garden bed, irrigation and gardening supplies for third through sixth grade students to experience math and science as they work collaboratively before school to grow fruit and vegetables, and learn about healthy eating habits.

- **Infection Detection**

Keith Berry, Fairmont Elementary School

Fifth graders will learn about germs, infections and agents of disease with this infection detection science project. They will perform an investigation, analyze data, propose a solution and share their findings.

- **A Picture is Worth 1,000 Words**

Julie Daniel, Jefferson Elementary School

First through fifth grade students will learn about kindness and empathy by taking pictures of people who are demonstrating acts of caring and kindness for display and distribution. Grant funds will purchase cameras and supplies.

Selma Unified School District

- **Ozobots for 6th Graders**

Cyndi Hernandez, Roosevelt Elementary School

Sixth grade students will program robotic kits as they learn social studies, math, economics and more. Grant funds purchase Ozobot starter packs and construction accessory kits so collaborative teams can engineer these robots.

- **Student Inventors Using littleBits**

Jeromy Winter, Terry Elementary School

Kindergarten through sixth grade students will invent and learn about signals, circuits, power, inputs, outputs, wires and magnetism. This after school program is a collaboration with the library staff to learn about science. Grant funds will purchase littleBit modules and accessories.

- **Green Thumb Project**

Diana Colmenero, Indianola Elementary School

Students as young as five will have the opportunity to investigate and understand the basic needs and life cycle of plants through this Green Thumb Project to build and plant a garden. Kindergarten through sixth grade students will build upon their knowledge of ecosystems as they learn science, math and nutrition by teamwork and physical activity.

Visalia Unified School District

- **Trout in the Classroom**
Amanda Prado, Crestwood Elementary School
Fifth grade students will raise trout from eggs, monitor water and tank quality, study habitat and learn about conservation and the earth's ecosystems. Science and math will be the focus of the project, with funds used for an aquarium and supplies.
- **A Rubik Science**
Sal Campos, Golden Oak Elementary School
Grant funds will be used to purchase Rubik's Cubes for these fourth grade students to master a series of steps that leads to a solution. Math, sequential reasoning, the process of incremental steps and spatial awareness improves cognitive function and promotes self-confidence.
- **Fundamentals of Mechanical Engineering, 101**
Steven Post, Redwood High School
Double acting cylinders will allow these ninth through twelfth grade students to compete in the state and national VEX competition, Starstruck. The project covers mechanics, complex problem solving, troubleshooting as a team and computer programming.
- **Elementary and Junior High Counseling Resources**
Audra Gosvener, Four Creeks Elementary, Ivanhoe Elementary, Charter Home School Academy
Children suffering from grief, lack of social skills and poor emotional regulation will be taught in a small group setting with games and crafts to manage anger and feel empathy. Grant funds will purchase counseling resources and supplies to improve school adjustment for kindergarten through eighth grade students.
- **Hands on Art: Mosaics**
Sarah Coker, Sequoia High School
Grant funds will provide the tile cutters, glue and tiles for a hands-on art mosaics project for tenth through twelfth grade students.
- **Learning Through Body Movement**
Ana Sanchez, Ivanhoe Elementary School
Grant funds will be used to purchase wobble chairs for these kindergarten through fourth grade students. This special seating will provide an outlet for extra energy as they learn math, reading and writing.