Javits Grant | 2016-2019

The state of Arizona has been privileged to receive significant federal funding for expanding gifted and talented services through the Jacob K. Javits Grant from the U.S. Department of Education. So-named the Arizona Aligning Efforts for Talent Development Project, its overarching goal is to improve the equitable access, participation and performance of high ability and high potential students, particularly those from traditionally underrepresented groups. In Pima County, the Jacob K. Javits Grant has supported professional development, parent meetings, engaging curriculum, and a consortium of educators of the gifted to improve the effectiveness of leaders, teachers and families to support ongoing talent identification, development and enhancement of high ability students.

How the grant supported Pima County:

- **National Association for Gifted Children Annual Conference**
  2017-18: 8 teachers attended.
  2018-19: 10 teachers & 3 administrators attended.
- **Arizona Association of Gifted & Talented Conference**
  2017-18: 18 teachers attended.
  2018-19: 10 teachers attended, 1 administrator attended, and 6 educators presented a session together on the STEAM Pipeline between Craycroft and Lauffer, and the role the Javits Grant played in that development.
- **World Gifted Conference**
  2 Gifted Coordinators from Pima County attended.
- **SENG Conference**
  2017-2018: 1 Gifted Coordinator attended.
- Substitute teachers funded so teachers could attend trainings and conferences.
- Sunnyside Gifted Program Evaluation, conducted by PEDLS 2018-2019.
- Online CoGAT purchased to provide universal screening at second grade district wide for 3 years, beginning 2018-2019.
- Paid for speakers at 5 different events for parents and teachers.
- USA-BMX STEM Cycling and Track Modeling Program funded 2017-2019.
- Registrations paid for 12 Sunnyside teachers to take the Provisional Gifted Endorsement Course. Funded 3 gifted courses towards a gifted endorsement at state universities.
- Southern Arizona Gifted Network Gifted created.
- Regional Gifted Parent Teacher Institute created.
- Materials to assist teachers in instruction:
  - Books and other teacher resources.
  - ICONS cards, magnets, Differentiation guides.
- Programs supported at Lauffer:
  - Future Cities: training for teachers.
  - Robotics: teacher training, Backyard Brains neuroscience materials, 3D printer for robotics lab.
- STEMAZing LEGOs - two teachers' registrations.
- Paid the salary of the Javits Coordinator 2 days per week 2017-18.
- Paid the salary of the Javits Coordinator 1 day per week 2018-19.

PIMA COUNTY
SCHOOL SUPERINTENDENT

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Sunnyside STEAM Programs Build Capacity with the Javits Grant
Problem Based Learning for Gifted Students

Wouldn't the world be an amazing place if people worked to solve their own problems? Imagine students having access to the resources and opportunities to solve their individual and shared community problems. The Javits grant played a significant role in providing those resources and opportunities for **students in the Sunnyside School District** through the funding of STEAM Programs (science, technology, engineering, arts, and math) at select elementary and middle schools. A goal of the Sunnyside Future City STEAM Program is to inspire students to pursue STEM careers and improve the representation of Hispanics and other underrepresented populations in STEM fields. **With the support of the Javits grant**, Sunnyside students developed engaged citizens that applied 21st century skills to real-world problems.

Craycroft Elementary K-4 grades

- Students researched and designed BMX Tracks.
- Students met and worked with professional BMX athletes.
- The Engineering Design Process was used to enable students to do what engineers do! During the process, students became stronger, more resourceful individuals and problem-solvers.

Lauffer Middle School 5-8 grades

- Established a MakerSpace, an intentional space to imagine, explore, and build upon ideas and utilized by Lauffer Future City, robotics, MESA, and Honors Science students during the year.
- More than 200 students enrolled in Future City classes and researched, designed, and presented solutions to specific engineering and urban sustainability challenges that included age-friendly cities, equitable public spaces, and resilient power grids.
- Students entered science and engineering research projects in the SARSEF (Southern Arizona Research, Science, and Engineering Fair)in the categories of environmental engineering, behavioral and social sciences, computer science, and physics.
- Applied math and engineering design knowledge through the Ian Byrd Hotel project.
- Established a 3D printing lab and robotics design space.

Students as Community Educators and Mentors

A goal of the Sunnyside STEAM Program is the presentation and sharing of student work with the greater community. Students presented their projects during a variety of events and competitions including:

- Robot Wars and Not a Box STEAM Day; middle school students hosted a STEAM day for a neighboring elementary school. More than 100 students attended the STEAM day and enjoyed presentation of student work in robotics, Future City, and honors science in the MakerSpace.
- Future City Arizona Regional Competition; more than 100 teams and 500 people attended the 8-hour event where students presented their ideas and demonstration models.
- Tucson Festival of Books draws thousands of people to its three day festival. Students served as Science City volunteers and presented and discussed their city designs with the community.
- Former Lauffer Middle School students returned from high school to mentor current middle school students preparing for various STEAM competitions.

Field Trips as Community Classrooms

Student participated in field trips to collect research on urban challenges and sustainable design:

- Sonoran Co-housing field trip to explore alternative, sustainable community design including green energy infrastructure.
- Udall Recreation Center and Senior Olympians. Interviews with seniors 60 years and older were conducted to gather research on the needs of an age friendly city and its' citizens.
- Mini Time Machine Museum; preview scale model building techniques and construction.
- UA ENR2 LEED Building and CATS Self Driving Car Lab to explore sustainable city planning, sustainable LEED design and benefits, SMART transportation.

Teachers and Staff

- Collaborative school improvement and sustainability planning.
- Integrated professional learning.
- Gifted education, conferences, and endorsements.
- Targeted support for leaders and teachers.
- Family outreach.
- Data collection and reporting.