

# southern arizona microgrants SOLUTIONS THAT RETHINK LEARNING

### **FINALIST SNAPSHOT**

May 2022 | Round 2



### GILA VISTA JUNIOR HIGH SCHOOL

Yuma County | Rural Public District | Principal

#### YUMA ELEMENTARY SCHOOL DISTRICT

**Problem:** Mesa Heights neighborhood youth are largely cut off from extracurricular fine arts activities, as families cannot afford to take part in fee-based recreational activities and existing arts activities are not available near the Mesa Heights area and thus inaccessible to youth who rely on walking. During the pandemic, opportunities for students to collaborate in person with peers – from their own neighborhood and outside of it – disappeared, severely limiting opportunities for academic and social growth. This proposal is part of the plan to fill that void with a bold community partnership and access to educated adult role models and artists to alleviate the imbalance.

Solution: This proposal fits in an ambitious plan involving the City of Yuma, Yuma School District One, and numerous community partners braiding together their resources to remove barriers to accessible, high-quality, cost-free, mentored activities for neighborhood low-income young people grades K-12, whether they attend the traditional public school or not. This Microgrant will create a hub for arts enrichment in the late afternoons, evenings, and Saturday activities so youth can join through a combination of partnerships, engaging activities, and mentoring by volunteer community experts. The grant will be used to refurbish antiquated facilities including the Gila Vista performance stage and necessary upgrades include providing adequate curtains, updating the sound system, adding wireless capability, and replacing the lighting system. The Arts Enrichment Hub will also be used by community groups, such as the community theater group, local college music groups, and high school mariachi bands to bring performances to the Mesa Heights neighborhood. The vision is to enrich the quality of life for Mesa Heights residents, giving adults and youth an enticing venue to build skills in music, drama, visual arts, public speaking and debate, audio mixing, and other media modalities, concerns, and productions.

**Community Partners:** McGraw Elementary School – Yuma Elementary School District One, City of Yuma – Neighborhood Services Division, Arizona Western College Music Department, Yuma Community Theater, YMCA of Yuma, Yuma Music Educators Association, Yuma Union High School District

### Grant Award \$25,000

#### DEMOGRAPHICS

The target school community for this proposal is the Mesa Heights Neighborhood Revitalization Strategy Area in Yuma, Arizona, designated by the City as "one of the most distressed areas" suffering from extreme poverty with 72% of residents living at the federal low or moderate income level. In addition, 14% of students have parents who are mobile migrant farm workers; 85% are Hispanic youth; only 12% of feeder school and 10% of Gila Vista students participated in any extracurricular activities outside of school.

> K-12 Grade Levels Served



**COMMUNITY CONNECTEDNESS** 

### MEXICAYOTL ACADEMY OF EXCELLENCE

Santa Cruz County | Rural Charter | School Leader

**Problem:** Mexicayotl Academy of Excellence is located on the international border of the U.S. and Mexico in the community of ambos Nogales, which includes the twin cities of Nogales, Arizona and Nogales, Sonora.

As a result of the pandemic, many are questioning the role of education, the effectiveness of digital versus face-to-face instruction, and the benefits of planning at an early stage for a child's higher education. The high sense of self efficacy and educational ambition of their students and overall community is being tested. Hopes and dreams that were collectively shared before the pandemic are no longer at the forefront of thought and action. The questioning of the effectiveness of excellent academic practice is now more apparent than ever. Mexicayotl has seen that some parents and students are becoming less engaged and that the common notion that all students have been set back and that the school should not demand so much from its students academically at this time is slowly becoming the norm. Mexicayotl believes that this is the wrong path to take and must have a strong response to continue their trajectory toward academic success and instructional innovation.

**Solution:** To push back against this pressing problem, Mexicayotl Academy of Excellence seeks to re-engage the community in a collaborative effort to set a continued trajectory for future strong academic outcomes. They will introduce a new generation to their form of oral history and storytelling. Mexicayotl will work with a digital creation company, Cine Segovia, that has roots in the borderlands and empower student leaders to learn oral history, storytelling, and production skills in high demand. This process and product will not only engage teachers, staff, students, and families, but also Nogales as a whole. This Microgrant aims to rebuild community connectedness and help to create their next vision for what's possible.

# Grant Award \$25,000

#### DEMOGRAPHICS

The school serves a student population that is predominantly made up of students of color with 98% of the population self-identifying as Hispanic/Latino. The free and reduced lunch percentage is 95% and English Language Learners make up 50% of the student population. Students who are not ELL demonstrate a strong bicultural and bilingual identity and skill set.

> **K-8** Grade Levels Served



SARSEF Pima County | Community Organization | Entrepreneur

Problem: According to research from UArizona and Johns Hopkins, 40% of Arizona students are graduating unprepared for the emerging economy. In Tucson, the figure is six out of ten and for students of color the disparity is even greater. Too many students have not been encouraged to pursue STEM careers or learning that builds the transferable skills necessary for the emerging global economy. In addition, many parents are now seeking alternative approaches and nontraditional learning environments for their students. Whether homeschool, micro-schools, or some other innovative approach, more students are in nontraditional learning environments now than ever before. SARSEF is dedicated to creating an equitable, representative STEM pipeline for Arizona students with rigorous STEM programming and learning experiences.

Solution: SARSEF will create STEM learning experiences in rural communities, with a focus on high school learners, and effective ways to reach students in nontraditional learning environments. This Microgrant will enable the team to reach more students and adapt when, where, and how it delivers its programs to remain attentive and responsible to families' needs and choices. SARSEF will reduce a potential barrier for nontraditional learning spaces with the creation of adaptive tools and programs and provide expert support in STEM learning. SARSEF is committed to support parents, families, and students in all learning spaces and aims to increase critical thinking, problem solving, interest in STEM, and improved math and science outcomes. Part of their Microgrant will support outreach and community listening sessions to solicit feedback from nontraditional learning partners to revise service delivery models and related curriculum, resources, tools, and learning opportunities.

Grant Award \$25,000

#### DEMOGRAPHICS

SARSEF impacted over 50,000 students in Arizona through STEM education programs and activities last year. Of these students reached, 53% were female, 53% were non-white, and 73% of schools served were Title I.

> K-12 Grade Levels Served

10,000 Total Learners Served Year 1



SOUTHERN ARIZONA MICROGRANTS

#### **HIGH-IMPACT TUTORING**

### LITERACY CONNECTS

Pima County | Community Organization | Entrepreneur

**Problem:** In Pima County, more than 50% of third-graders are not reading at grade level. Students who don't read proficiently by fourth grade are four times more likely to drop out of high school, a number that rises when those children also come from poverty. New research suggests that most students will begin next academic year even further behind due to the pandemic. Racial and socioeconomic achievement gaps have widened because of disparities in access to computers, home internet connections, and direct instruction from teachers. Even with recent COVID relief funding, reading interventions are costly and directed at specific prescribed skills and outcomes.

Solution: Reading Seed offers an innovative solution to low childhood literacy by mobilizing the community to provide individualized, holistic, research-based one-to-one mentoring at local learning sites. At the heart of this model is that collaborative relationships lead to transformational learning. Reading Seed recruits, trains, and supports volunteers to work one-to-one with children reading below grade level. Reading Seed creates an individualized learning experience targeting direct needs and helping youth build a trusting relationship, where their skills and knowledge are valued and their interests are a priority. The Microgrant will help cover the costs of increased, strategic volunteer recruitment for 400 trained volunteer reading coaches and new volunteer training to expand capacity to reach 1,200 children - an increase of 71% over this school year. Students will also be provided with freebooks weekly throughout the school year, chosen specifically to match their reading level and interests. This expansion effort of high-impact tutoring aims to increase reading proficiency for more young learners to develop healthy identities as readers and learners, and ultimately to positively impact third grade students reading on grade level.

# Grant Award \$25,000

#### DEMOGRAPHICS

Reading Seed will partner with 32 sites in Pima County next school year (2022-2023), 100% of which at least 55% of children receive free or reduced-price lunches. The total averages of student ethnicities served over the past three years were: 3% Native American, 5% Asian/Pacific Islander, 67% Hispanic, 5% African American, 17% Caucasian, and 3% Mixed Race.

> K-2 Grade Levels Served



### **RIO RICO HIGH SCHOOL** Santa Cruz County | Rural Public District | IT Director

#### SANTA CRUZ VALLEY USD NO. 35

**Problem:** Students in this rural school district have a limited ability to experience scientific, arts, and cultural sites physically. Rio Rico believes that a virtual reality solution will help captivate and motivate students to a new level of creativity and expression. The SCVUSD No. 35 Teaching, Learning, and Assessment team recently visited the ASU Dreamscape Virtual Reality (VR) program and found multiple uses for this new technology.

**Solution:** Rio Rico High School will pilot a Virtual Reality Lab to provide stimulating and engaging learning experiences thru VR headsets and aligned curriculum. In this space, students will be presented with real world problems to view and solve as well as simulated tactile experiences and visual and sonic experiences in the health and natural sciences that they cannot currently experience. Students will also be able to view and manipulate virtual objects and places they would not otherwise have access to outside the four walls of their classroom. This learning space will help provide personalized learning experiences for each learner.

**Community Partnerships:** ASU Dreamscape Virtual Reality (VR) program





#### DEMOGRAPHICS

The student population at Rio Rico High School is 98% Hispanic with a free and reduced rate of 90%. According to state test scores, 31% of students are proficient in math and 35% in reading.

> **9-12** Grade Levels Served



### **AGUA CALIENTE ELEMENTARY SCHOOL**

Pima County | Public District | Principal

#### TANQUE VERDE UNIFIED SCHOOL DISTRICT

**Problem:** Two-time award winner Agua Caliente is in the process of renovating their historical Nature Trail to have two outdoor classrooms but there are obstacles to making the space more accessible and usable to teachers, students, and the broader community. Enhancing the overall academic rigor thru outdoor education is a top priority for Agua Caliente Elementary and with these resources will build their natural environmental studies program, develop a STEM project-based learning curriculum, create an outdoor science learning lab, and grow student leadership and interest in science.

**Solution:** Agua Caliente will utilize the Southern Arizona Microgrant to leverage matching funds from their school district to create an outdoor science lab, enhance an outdoor learning space for research and learning in a natural desert ecosystem, engage in project-based learning experiences, and add a STEM teacher to lead the outdoor learning space. Incorporating and participating in Citizen Science projects will advance the students' educational learning as well as teach them the benefits of contributing to national science research to improve the world. Completing the outdoor learning space within the historical nature trail with nature cameras, a weather station as well as science equipment and lab materials will provide not only students, but the community, an opportunity to engage in learning activities and hands-on learning experiences that make an impact beyond the classroom.

# Grant Award \$25,000

#### DEMOGRAPHICS

his learning community serves 500 students, including 9% identifying as gifted, 11% are exceptional education students and 1% that are twice exceptional. The student population is 21% Hispanic, 75% Caucasian, and 4% multiracial.

K-6 Grade Levels Served



### OUTDOOR LEARNING TANQUE VERDE ELEMENTARY

Pima County | Public District | Principal

#### TANQUE VERDE UNIFIED SCHOOL DISTRICT

**Problem:** Tanque Verde Elementary has been experiencing a decline in enrollment over the past several years. School leaders are developing innovative kindergarten programming to attract new families to the school. The primary focus is to utilize music instruction to improve student achievement and provide students an outlet that is engaging and gets students excited about coming to school and learning. As an added benefit, the school is working to see a decline in playground and classroom discipline incidents as students are more engaged with creating music and a healthy outlet. TV Elementary is seeking new ways for children to be physically and intellectually engaged in an outdoor setting.

Solution: It is a well-known fact that music helps students to develop intellectually, socially and emotionally while also enhancing overall motor skills, language and literacy. TV Elementary is creating innovative spaces for outdoor musical adventures and lessons by adding large musical instrument structures to the kindergarten and primary playgrounds. During the day, the music teacher will teach proper techniques for each instrument and provide space and time for students to explore, improvise, and experience musical concepts. Music helps the body and the mind work together so providing creative learning spaces on the playground for recess and outside learning will have a positive impact on learning in the classroom. The school will collaborate with community partners to create Community Learning Hubs in the outdoor musical spaces and provide an after-school music learning hub for students to practice skills, create, and spark renewed passion and joy for learning outside of the classroom and outside of the school day.

# Grant Award \$25,000

#### DEMOGRAPHICS

This learning community serves 650 students with 60% utilizing Open Enrollment from the surrounding Tucson area. Student population is 69% Caucasian, 23% Hispanic and the remaining 8% are a mix of Native American, African American, and Asian.

**PREK-6** Grade Levels Served



### NO MORE FAILING SCHOOLS

Pima County | Community Organization | Entrepreneur

**Problem:** Children of color persistently score low on standardized achievement tests in math. This group of students was also disproportionately impacted by COVID academically. In addition, minority girls continue to be underrepresented in STEM-related fields. Mathematic skills are the key to entry into STEM-related fields of study. Through this innovative idea, third through fifth grade girls will receive support to build their math confidence and math skills to close that gap and response to COVID learning loss.

Solution: Minority girls need intentional opportunities to simultaneously develop their math confidence, math identity, and math conceptual knowledge. This innovative approach will provide young girls the opportunity to develop a variety of math skills and knowledge while also building relationships through hands-on, interactive Math Girl Hubs, led by female mathematicians, as well as math exploration in their homes. Real world math activities and Hub exploration sessions will allow the girls to experience the relevancy of math in their daily life through engaging hands-on activities and direct instruction from local mathematicians from the community. Each girl will receive a monthly theme based box, filled with math activities using real-world math experiences to inspire math confidence and math abilities. Boxes also include a caring adult guide, incentives, and affirmations for social/emotional support. Girls will then use the boxes at the Math Girl Hubs for direct instruction, hands-on learning, and continue exploration at home. Parents will also be able to attend the Math Girl Hubs to learn how to provide math support in the home in response to COVID learning loss.

# Grant Award \$25,000

#### DEMOGRAPHICS

Students participating in the Math Girl Hubs identify as 100% free and reduced price lunch, 100% children of color, 100% girls, and 10-15% are English Language Learners.

**3–5** Grade Levels Served





C. E. ROSE K-8

Pima County | Urban Public District | Teacher

#### **TUCSON UNIFIED SCHOOL DISTRICT**

**Problem:** Until the fall semester of 2021, the students at C. E. Rose had not been exposed to the computer science of coding. C.E. Rose wants to see their students compete with equal opportunity for high-demand technology careers to other students at public or private schools with access to modern technology and rigorous computer science coursework. The goal is to introduce coding to 7th and 8th grade students who should have been introduced as early as second grade – or roughly five years prior.

Solution: C.E. Rose will create a student-led technology mentorship program with a local high school and create a STEM Learning Hub with 3D printing, design, and virtual reality technology, robotics, circuit board, and handheld devices to empower students to see codes work in a real physical environment. Different grade levels will synergize and collaborate thus removing learning barriers and empowering C.E. Rose to meet the needs of all learners. Student-led mentorship will foster the younger students to be intellectually engaged with this challenging content and spark interest in coding as they see robotics and other technology in action. Students will have the opportunity to build academic connections with high school mentors, which will foster a sense of community and comfort when transitioning to high school and will motivate them to participate and sign up for classes in computer programming. This student-led approach encourages student-centered learning by fostering the sharing of decision making and teaching for both learners and mentors giving rise to a greater curiosity for learning and unleashing knowledge and wisdom in every student. Students will also be able to take home devices for learning with their families and friends outside of the STEM Learning Hub.

# Grant Award \$25,000

#### DEMOGRAPHICS

Student population is 95.5% Hispanic, followed by 1.9% native American, 1.6% Caucasian, .4% African American, and .1% Multiracial. 10.4% percent of the population at C.E. Rose is part of the exceptional education program and 11.3% of the students are English Language Learners. 82% of the students meet the income eligibility guidelines to qualify for free and reduced lunch.

**7-8** Grade Levels Served



### **CRANE ELEMENTARY SCHOOL DISTRICT #13**

Yuma County | Rural Public District | Entrepreneur

**Problem:** Through the course of the last 18 months, Crane has witnessed an increase in behaviors among exceptional students that detract from their ability to concentrate and focus on learning and positive social/emotional experiences during the regular school day. The pandemic has wrought innumerable changes for students at home and in the community, manifesting in adverse behaviors at school and in class.

**Solution:** Crane will create sensory room spaces to teach students de-escalation strategies for students who are over-stimulated, mental and physical calmness, increased concentration opportunities, improved social exchanges with adults and peers, and fine and gross motor skill development. Students will have a familiar non-traditional learning space to soothe and concentrate to prepare for meaningful learning experiences. Crane will also provide updated sensory resources for students and staff in sites that currently have designated sensory rooms. Parents will also be engaged in Zones of Regulation self-regulation programming and trainings so students can have support at home. The new learning spaces will focus on exceptional students, but ultimately aim to help all students that need a safe and soothing outlet to de-escalate behaviors and improve social exchanges.

# Grant Award \$25,000

#### DEMOGRAPHICS

100% of students qualify for free breakfast and lunch. Student population is 60% Latino, 30% Caucasian, and roughly 5% Asian and African American student population. Nearly 10% of the student body is made up of migrant students and 17% of students are English Language Learners. Crane has a higher-than-average number of gifted students, especially for an incredibly remote school system.

> PREK-8 Grade Levels Served





# UTTERBACK MIDDLE SCHOOL

Pima County | Public District | Principal

#### **TUCSON UNIFIED SCHOOL DISTRICT**

**Problem:** Utterback Middle School is focused on addressing student self-esteem and confidence which is impacting students' willingness to be academic risk takers and to think like innovators. Trauma plays a large part in students' willingness to see themselves as worthy and potential change agents. Students often see themselves as incapable of having the ability to create, problem solve and design in the real world. In addition, many students lack background knowledge on topics which becomes a barrier to higher-order thinking and communication capacity.

**Solution:** Utterback is reimagining real-world opportunities for students as young as middle school by creating a student-generated content creation studio, providing 6-8 grade students with broadcasting and storytelling opportunities to highlight students' voices and to help students realize that fundamental concepts like literacy and research can be fun and engaging. Through methods such as podcasting, student-created news, and announcement, documentary-style creating, students will develop a higher sense of self, improve their listening skills and enhance learning interest. These productions will engage students in real-world quests that are connected to broadcasting as a vehicle. Youth will also be able to engage in professional broadcasting and programming opportunities outside of traditional courses and elective hours to explore further.

# Grant Award \$25,000

#### DEMOGRAPHICS

This Title 1 school serves the Western Hills community, one of the most economically depressed regions of Tucson. 100% of students received Free and Reduced lunch. Approximately 20% of students are English Language Learners. Utterback Middle School students are 70% Hispanic, 10% African American, 10% Hispanic and 5% Caucasian.

> **6–8** Grade Levels Served

