



# STEMM - Student Thinking Enrichment through Mathematics Mentors Program Year 2018 - 2019

**Tucson, Arizona**

**Federal Legislative Districts 2 & 3**

## **PROGRAM FAST FACTS**

**Congressional District(s): 2, 3**  
**State Legislative District(s): 2, 3, 9, 10**  
**Service Area by County/City: Pima/Tucson**  
**Project Federal Share: \$130,883**  
**Project Local Match: \$48,744**  
**2017 – 18 Volunteers Recruited: 36**  
**2017 – 18 Volunteer Hours Served: 16,200**  
**Value of Volunteer Hours: \$381,834**  
**2017 – 18 Cash and In Kind Support Generated: \$48,744**  
\*2016 Independent Sector Rate for the Value of a Volunteer Hour in Arizona is \$23.57

## **Community Need**

Students in high poverty schools show lower achievement on national, state, and local measures of academic performance, especially in mathematics. Students with low mathematics achievement have less access to post-secondary degrees and less access to STEM careers. Children in these schools need academic interventions in order to have the same opportunities that non-economically disadvantaged students have.

## **National Priority Area and Program Performance Goals**

STEMM is aligned with the priority, Education - improving student academic performance in Mathematics. The STEMM program will provide academic and mentoring services to 320-360 middle and high school students, with 320 students showing improved mathematics achievement.

## **Program Activities**

Student Thinking Enrichment through Mathematics Mentors (STEMM) AmeriCorps members provide direct service to high need middle and high school students to improve their confidence, understanding, and achievement in mathematics. Member activities include providing tutoring during math class time, after hours mentoring, coordination and volunteering at community STEM nights and Family Math Nights, and other related support.

## **Program Impact**

Student Thinking Enrichment through Mathematics Mentors (STEMM) in Tucson, AZ serves high need students with mathematics tutoring during class and mathematics mentoring outside of class. The students are often behind in mathematics credits, preventing them from graduating on time. The AmeriCorps mentors help the students understand the mathematics at a conceptual level through tutoring, and they help the students change their disposition towards mathematics and graduation through mentoring. The members have helped the high need students understand mathematics better, which has improved their disposition towards mathematics, improved in their success rate in intervention mathematics courses, and help students get back on track with their peers in math credits and achievement. One student said when interviewed, "I thought I was bad at math, but now I know how I learn and I know I am actually good at math". While serving, STEMM AmeriCorps members learn new ways to explain and represent mathematics to improve student success. They also learn ways to build confidence in students' own ability to succeed in mathematics. Finally, high need students are able to make a connection to positive AmeriCorps member role models and AmeriCorps members get to see the positive results of national service.



*STEMM AmeriCorps members volunteering at Family Math Night with Balloon Racers*

# Continued: Student Thinking Enrichment through Mathematics Mentors (STEMM)

## **Mission**

The mission of the Center for Recruitment and Retention of Mathematics Teachers (CRR) in the University of Arizona Department of Mathematics is to Attract and retain mathematically talented college students to become mathematics teachers, and retain and support those mathematics teachers currently in the classroom.

## **Vision**

The vision of the Center for Recruitment and Retention of Mathematics Teachers in the University of Arizona Department of Mathematics is an excellent mathematics teacher for every child.

## **History**

The STEMM program was launched in 2017, and has served over 1200 students in the first year of the program.

## **Partnerships**

The CRR has partnerships with 14 local school districts and 9 private or charter schools. The CRR is partnered with Pima Community College and works closely with both the University of Arizona South Campus and the Pima County Schools Superintendent's Office. STEMM will serve students in schools throughout Tucson Unified School District, Sunnyside School District, Marana School District, Amphitheater School District, City High School.

## **Other Information**

The 2017-2018 STEMM service members participated in National Days of service and community events throughout Tucson. The members have coordinated 32 community volunteers, and have served more than 400 families during the community events.



*STEMM AmeriCorps members at MLK Day 2018*