

# **INTERGOVERNMENTAL AGREEMENT BETWEEN THE UNIVERSITY OF ARIZONA CENTER FOR RECRUITMENT AND RETENTION OF MATHEMATICS TEACHERS (CRR) AND THE TUCSON UNIFIED SCHOOL DISTRICT**

**Dr. Giovanna Grijalva - Senior Director of Curriculum Development  
Heidi Aranda – Senior Coordinator – K-12 Mathematics**

**Melissa Hosten – Co-Director of CRR  
Dr. Rodrigo Gutierrez – Co-Director of CRR**



COLLEGE OF SCIENCE

MATHEMATICS

## The Center's Mission:

- **Attract and prepare** mathematically talented college students to become mathematics teachers
- **Retain and support** those mathematics teachers currently in the classroom

## The Center's Vision:

- An Excellent Mathematics Teacher for Every Child

# TUSD's partnership

- ▶ For the past 17 years, TUSD has partnered with the Center for Recruitment and Retention of Mathematics Teachers (CRR) to provide TUSD teachers with mentoring, professional development, conference opportunities, tutoring and resources.
- ▶ In the 2016-2017 SY, over 300 TUSD teachers participated in CRR opportunities.

# New Teacher Induction Program

- ▶ Provides support and coaching for first- and second-year secondary mathematics teachers.
- ▶ Funding supports stipends for new teachers, coaches, and materials for teachers & workshops.
- ▶ TUSD currently has 9 teachers participating.

# Mathematics Educator Appreciation Day Conference (MEAD)

- ▶ Hosted at Tucson Magnet High School
- ▶ Brings together over 600 mathematics teachers of all levels from all over Arizona
- ▶ AZ's largest K-16 Math conference

# IMPACTS (Improving Mathematical Problem Solving, Acumen, & Confidence for K-5 Teachers & Students)

- ▶ K-5 teachers attend multiple workshops in a year to deepen content knowledge and to experience effective presentation strategies.
- ▶ Teacher teams are recruited to attend a Summer K-5 Mathematics Teacher Institute.
- ▶ Teachers work with site administrators to design a professional development for their K-5 school colleagues.

# IMPACTS DATA

Using ANOVA it was determined AzMERIT data shows a statistically significant difference in student scores from teachers that participated in 3 or more IMPACTS workshops in one year.

$p=0.037$  (no gifted/gifted cluster classrooms)

$p=0.031$  (including gifted/gifted cluster classrooms)

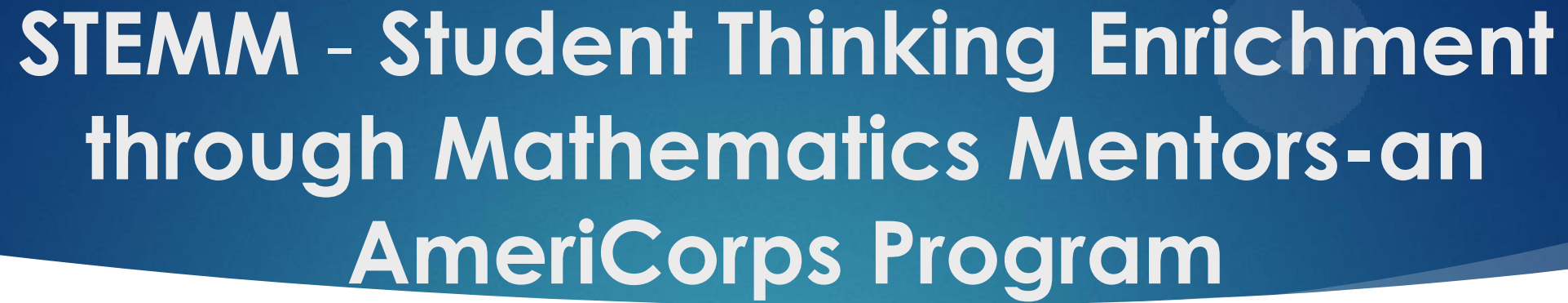
# Herbst Enrichment Mathematics Seminars (HEMS)

- ▶ K-12 Teachers attend a Saturday Workshop presented by an exemplary colleague.
- ▶ Teachers are paid a \$25-\$50 stipend for their full participation.



# Teacher Workshops

- ▶ Deepens K-12 teachers' understanding of mathematics and promotes student-centered learning.
- ▶ Funding supports workshop materials, teacher stipends, presenter compensation, & filming costs.



# STEMM - Student Thinking Enrichment through Mathematics Mentors-an AmeriCorps Program

Recruits mathematically talented UA undergraduates to assist teachers in local classrooms and mentor students.

# Advanced Placement Calculus and Statistics Practice Exams

- ▶ Prepares local students for success on the National College Board exam in calculus.
- ▶ Funding covers room rental fees and testing materials.

# Questions