



Inspired to Change

Teachers that attend the summer institute are inspired to change their classroom practice and parents are moved to become more actively involved with their children's learning:

- "Thank you so much for helping make this opportunity for all of us educators to grow in our teaching. Our children deserve these

opportunities to enhance their understanding of math. Thank you for inspiring and reinvigorating my enthusiasm for math instruction."

- "That was one of the best PDs in all my 17 years of teaching. I am "jazzed" for next school year!"
- "Your summer institute has an amazing quality to it. The growth I witnessed in only five days was astonishing. It was an honor to be a part of your group, even if my brain hurt at the end of the day!"
- "I think it was an excellent idea to have parents involved. For parents to understand why a teacher is utilizing these different strategies as opposed to the way math was taught 25 years ago, will assist with parents' support of teachers' methods. It will hopefully help raise the confidence level of students as well when they realize they CAN do it."

About the Thomas R. Brown Family Foundation

The IMPACTS programs are made possible by the generosity of the Thomas R. Brown Family Foundation. The Brown Foundations are the legacy of the Burr-Brown Corporation, a semiconductor company sold to Texas Instruments in 2000, and Tom Brown, one of its co-founders.

"Thomas R. Brown believed that education and training enhance the ability of individuals to reach their potential and become productive citizens. Supporting math teachers through the type of professional development and training offered by IMPACTS is critical to improving math outcomes and opening opportunities for students in southern Arizona. The Brown Family Foundation is pleased to support teachers seeking to enhance the efficacy of their math instruction and take on greater leadership in mathematics at their school sites and in the community."

-Sarah Smallhouse, President, Thomas R. Brown Foundations

Be a part of this exciting collaborative effort!



Interested in learning more about IMPACTS or in forming a Teacher Team, please visit:

crr.math.arizona.edu

Or email rodrigog@math.arizona.edu (6th-8th)

Or email mhosten@math.arizona.edu (K-5th)

IMPACTS K-8

Improving Mathematical Problem solving,
Agency, & student-Centered Instruction for
K-8 Teachers and Students



CENTER FOR RECRUITMENT AND RETENTION OF MATHEMATICS TEACHERS

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COLLEGE OF SCIENCE
MATHEMATICS

The **IMPACTS** Program caters to teachers from K-8th grade to help bring about the greatest change in students' foundational mathematics experiences and improve student outcomes in mathematics.

IMPACTS Goals

- Improve teacher competence and confidence in conceptual mathematics instruction
- Improve student competence and confidence in mathematics
- Generate teacher leaders in mathematics

IMPACTS K-8 is designed to generate teacher leaders in mathematics while improving teacher and student competence in mathematics.

The Summer Institute is a deep dive into foundational mathematics in grades K-5 and the Critical Foundations for School Algebra in grades 6-8. The Summer Institute brings teachers, principals, and parents together.

Elements of the IMPACTS Program:

Teacher Teams

- Teams of teachers are recruited from schools partnered with the CRR to represent geographic diversity, including rural and urban districts. CRR personnel support classroom implementation of program ideas.

Professional Development Workshops

- Each team participates in at least two workshops with strong emphases on experiencing, discovering, and implementing exciting mathematics aligned to the standards.

Summer Mathematics Institute

- A one-week intensive summer institute is provided to the Teacher Teams who show productive mathematics dispositions, commitment to their schools, and the capacity to become school site mathematics leaders.

Mathematics Educator Appreciation Day Conference

- Teacher Teams present at CRR's Mathematics Educator Appreciation Day conference (MEAD), the largest K-12 mathematics education conference in Arizona.



Summer Mathematics Institute

Teamwork

Teachers attend as a team from a school site. They work together, throughout the institute, to explore how children learn and understand the big ideas of mathematics and problem solving.

Discovery

Teachers discover ways to meaningfully incorporate the academic mindsets into their classrooms and reinforce and reinvigorate students' self confidence and love of learning mathematics. Teams will analyze student work to understand how to help children progress through learning these important mathematical ideas.

Professional Development

Teacher Teams work with their principal to create a professional development plan that will be used to share all they have learned with their school site colleagues. In order to encourage this leadership from the classroom, the Summer Institute will help teachers develop productive adult learning and facilitation skills.

Family Involvement

Teacher Teams will have the opportunity to work with parents on two days of the institute, problem solving and discovering mathematics together.