



Supporting
PreK-12 Mathematics
in the Greater Houston Area
and Across Texas

1987 - Present



RUSMP

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Vision and Mission

- Provide a bridge between the Rice University mathematics research community and Houston-area mathematics teachers
- Help teachers and administrators better understand the nature of mathematics, the effective teaching and assessing of mathematics, and the importance of mathematics in today's society



Vision and Mission

- Founded on the belief that sustained instructional changes can best be supported through the development of professionalism among teachers
- Creation of a network of teachers who have extensive knowledge of both mathematical content and pedagogy



Goals

- Increase the mathematical knowledge of teachers
- Promote and model effective teaching and assessment of mathematics with active student involvement in the learning process
- Encourage the appropriate use of technology and manipulatives in the teaching of mathematics



Goals

- Provide strategies to actively engage struggling students, English language learners, and underrepresented minorities in learning mathematics
- Understand and promote research-based teaching and learning of mathematics



Goals

- Encourage classroom teachers to participate in professional organizations and in the mathematics/school reform process
- Provide a forum for communication and collaboration between and among teachers and university mathematicians and scientists



Goals

- Form a local mathematics education network to implement national, state, and local reform efforts in mathematics education
- Develop mathematics teachers' leadership capacity
- Create innovative curricula in mathematics



Goals

- Advise developers of mathematics programs and curricula
- Provide coaching, mentoring, and professional development programs for PreK-12 teachers



RUSMP Summer Campus Program

- Rigorous mathematics and pedagogical instruction for K-12 teachers
- Active approach to learning and teaching mathematics
- Concept-based learning
- Curriculum development using the RUSMP Learning Plan



RICE UNIVERSITY SCHOOL MATHEMATICS PROJECT



RUSMP master teachers



Mathematics content
and pedagogy



Curriculum development



RUSMP Urban Programs

- Assist teachers in transferring knowledge gained to their classroom teaching
- Model and promote teaching and assessment techniques that increase student involvement
- Foster an increased sense of confidence in students' abilities to learn mathematics
- Increase students' mathematical content knowledge



RICE UNIVERSITY SCHOOL MATHEMATICS PROJECT



RUSMP support teachers



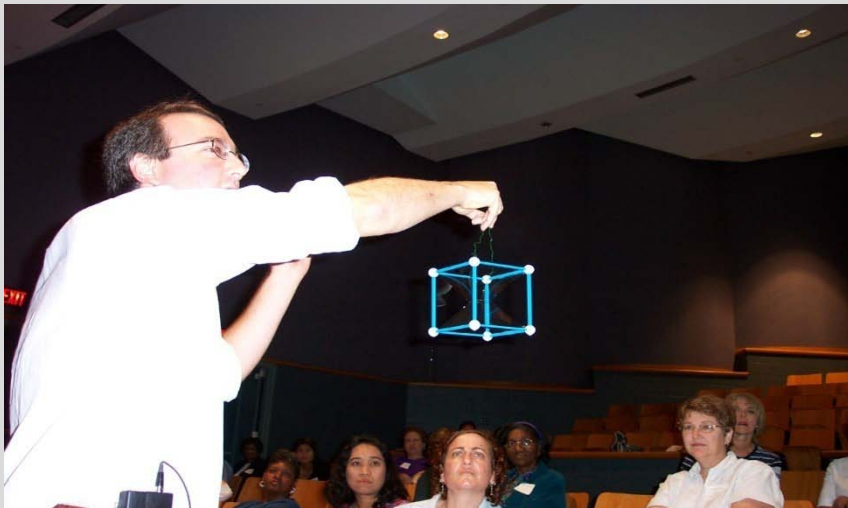
Summer program for students



Collaborative planning



Fall and Spring Networking Conferences



Keynote presentations from distinguished mathematicians and educators

Activities led by RUSMP alumni, master and support teachers





RICE UNIVERSITY SCHOOL MATHEMATICS PROJECT



Academic-Year
Programs





Texas Education Agency Collaborations

- Mathematics Instructional Coaches Pilot Program (Galena Park ISD, Galveston ISD, Houston ISD, La Marque ISD, Pasadena ISD, Weslaco ISD)
- Intensive Summer Program (Galveston ISD, Houston Gateway Academy, Pasadena ISD)
- Algebra Readiness (Houston ISD, La Marque ISD)



RICE UNIVERSITY SCHOOL MATHEMATICS PROJECT



Mathematics Leadership Institute





RUSMP Impact

- Over 7,000 teachers have participated
- Improved teacher knowledge of mathematics
- Increased teacher efficacy
- Teacher classroom beliefs and practices better aligned to the NCTM *Standards*



RUSMP Impact

- Increased collaboration among teachers
- Improved school-level instructional support
- Expanded school-level mentoring and team leadership



RUSMP Impact

- Increased student learning and achievement in mathematics
- Increased student interest in mathematics
- Decreased student drop-out rates



Recognition of RUSMP

National Staff Development Council cited RUSMP as one of the top professional development programs in mathematics in US for its impact on student achievement in *What Works in the Middle* (1999), *What Works in the Elementary School* (2002), and *What Works in the High School* (2002).



Recognition of RUSMP

Cited as a model program for its response to teacher preparation and teacher quality in Texas in *Advanced Mathematics Educational Support: Support, Recommendations, and Resources for Facilitating Collaboration, Between Higher Education Mathematics Faculty and Texas Public High Schools* (2003).



Recognition of RUSMP

Highlighted in the report, *Identifying High Performing Texas Schools and Their Methods of Success in Middle School Math and Algebra I End-of-Course Performance* (2001), written for the Texas Education Agency.



Visit the Rice University
School Mathematics Project
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