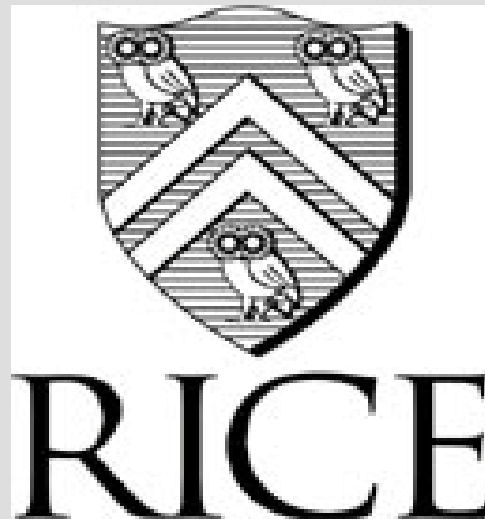


The Rice University School Mathematics Project





RUSMP Goals

- Work with Houston area teachers of mathematics to improve their mathematical knowledge.
- Promote and model more effective teaching of mathematics that involves greater student involvement in the learning process.
- Encourage the use of technology and manipulatives in the teaching of mathematics.



RUSMP Goals

- Promote the involvement of classroom teachers in professional organizations and in the mathematics/school reform process.
- Provide a forum for communication and collaboration among teachers, university mathematicians and scientists.
- Form a local mathematics education network.



RUSMP Goals

- Implement national, state, and local reform efforts in mathematics education.
- Create innovative curriculum in mathematics.
- Provide an awareness of minority and gender issues.
- Create a multiplier effect by developing the leadership capabilities of mathematics teachers that enables RUSMP to have a significant impact on Houston area teaching.



RUSMP Teaching Goals

- Develop important mathematical concepts.
- Emphasize student thinking, activities, creativity, and products.
- Make connections with the real world, with other disciplines, and in particular, with science.
- Integrate manipulatives, calculators, and computers.
- Foster discovery and group activities.

LEARNING PLAN

Exploratory Activities	CONCEPT
Concept Development Activities	Materials and Resources
Basic Facts and Standard Algorithms Formalized	Originality and Creativity <i>Student Products</i>
Assessment	Written Verbal
Related TEKS/TAKS	Kinesthetic Visual

The RUSMP Summer Campus Program

- RUSMP Master Teachers
- Mathematics Content and Pedagogy
- Curriculum Development
- Colloquia

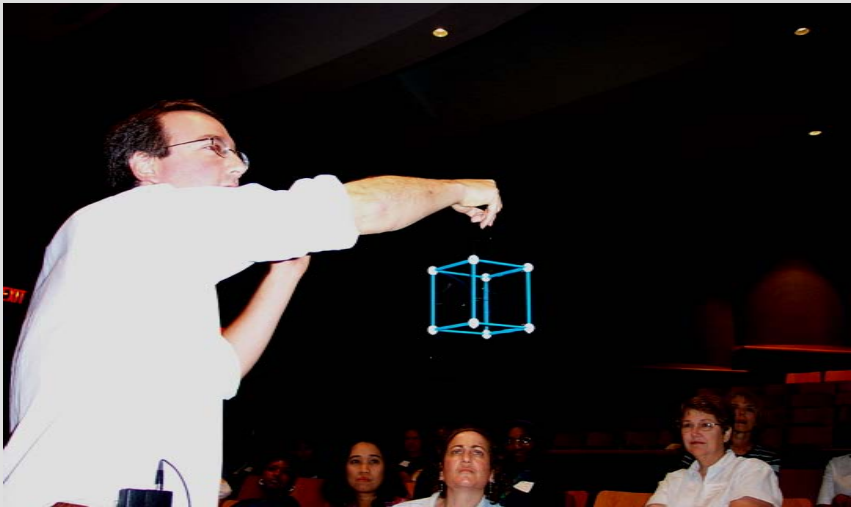




Impact of RUSMP's Summer Campus Program

- Student learning and achievement in mathematics have improved.
- Teacher knowledge of mathematics has increased.
- Teacher classroom beliefs and practices are better aligned to the NCTM *Standards*.
- Teacher self-efficacy has increased.

Fall and Spring Networking Conferences



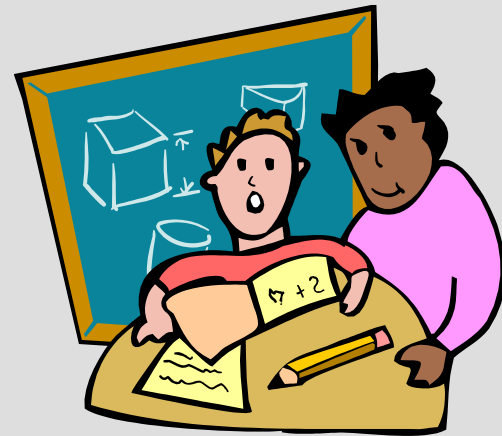
The RUSMP Urban Program

- RUSMP Support Teachers
- Collaborative planning
- Summer program for at-risk students



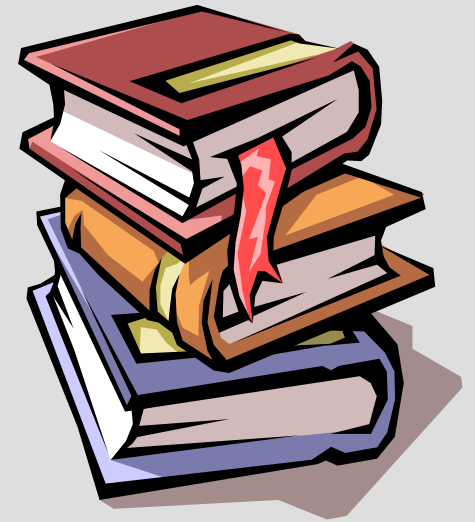
Impact of RUSMP's Urban Programs

- Increased student interest in mathematics
- Increased student achievement on standardized tests
- Reduction of student drop-out rates
- Increased collaboration among teachers



Academic-Year Courses to Support *Standards-Based* Instruction

- Algebra for Elementary Teachers
- Geometry for Elementary Teachers
- Algebra for Middle School Teachers
- Geometry for Middle School Teachers
- Advanced Topics for Middle and High School Teachers
- Calculus for High School Teachers



TEXTTEAMS Mathematics Institutes

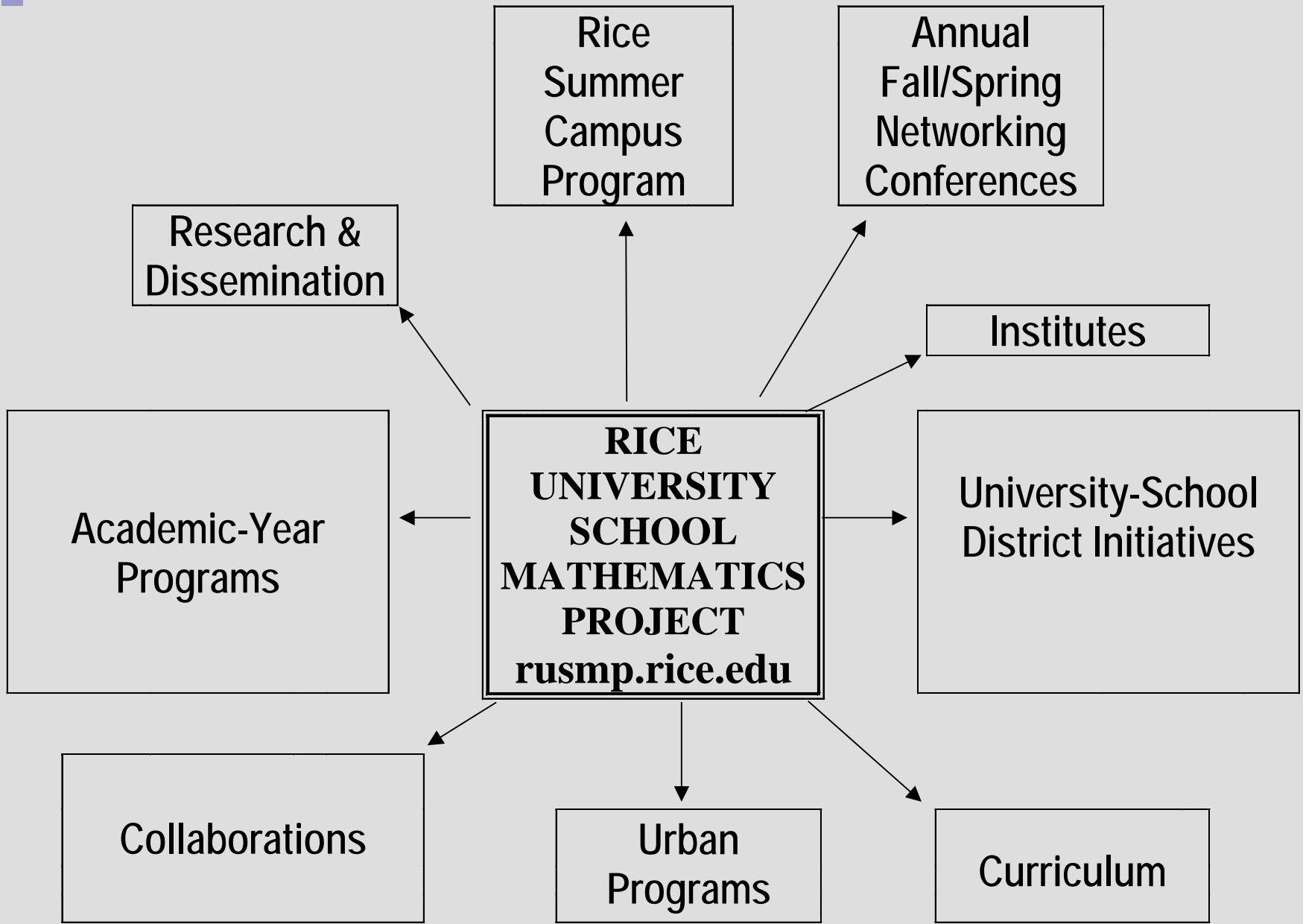
- Algebra I: 2000 and Beyond
- Geometry Across the TEKS
- Algebra II/Precalculus



Technology Support

- Teachers Teaching with Technology T³, training for mathematics teachers
- District-level staff development for mathematics and science teachers
- Individual support for teachers in the use of calculator and computer technology







Recognition of RUSMP's Work

National Staff Development Council cited RUSMP as one of the top professional development centers in mathematics in U.S. 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's Work

RUSMP was 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.



Recognition of RUSMP's Work

RUSMP was 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).



Visit the Rice University
School Mathematics Project
web site:
<http://rusmp.rice.edu>