Effective University/School District Collaboration: The Rice University School Mathematics Project
RUSMP Goals

- Work with Houston-area teachers of mathematics to improve their mathematical knowledge.
- Implement and create national, state, and local reform-based curriculum in education.
- Promote and model student-centered learning of mathematics.
RUSMP Goals

- Encourage the use of technology and manipulatives in the teaching of mathematics.
- Provide an awareness of minority and gender issues.
- Develop the leadership capabilities of mathematics teachers that enables RUSMP to have a multiplied impact on Houston-area teaching.
RUSMP master teachers

Mathematics content and pedagogy

Curriculum development
RUSMP support teachers

Summer program for students

Collaborative planning
Keynote presentations from distinguished mathematicians and educators

Activities led by RUSMP alumni, master and support teachers
# LEARNING PLAN

<table>
<thead>
<tr>
<th>Exploratory Activities</th>
<th>CONCEPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept Development Activities</td>
<td>Materials and Resources</td>
</tr>
<tr>
<td>Basic Facts and Standard Algorithms Formalized</td>
<td>Originality and Creativity</td>
</tr>
<tr>
<td>Assessment</td>
<td>Written</td>
</tr>
<tr>
<td>Related TEKS/TAKS</td>
<td>Verbal</td>
</tr>
<tr>
<td></td>
<td>Kinesthetic</td>
</tr>
<tr>
<td></td>
<td>Visual</td>
</tr>
</tbody>
</table>

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The RUSMP Geometry Module

A comprehensive teacher training module which

- effectively assists teachers in developing a deeper understanding of the concepts in Geometry.

- helps teachers develop pedagogical skills.

- was recognized by the Math Forum as exemplary curriculum for mathematics educators.
Academic-Year Programs
RICE UNIVERSITY
SCHOOL OF MATHEMATICS
PROJECT
http://rusmp.rice.edu
Institutes
Collaborations
Evidence of the Summer Campus Program’s Effectiveness

- Increased student learning and achievement in mathematics
- Improved teacher knowledge of mathematics
- Increased teacher efficacy
Evidence of Urban Programs’ Effectiveness

- Increased student interest in mathematics
- Increased student achievement on TAKS
- Reduction of student drop-out rates
- Increased collaboration among teachers
Recognition of RUSMP’s Work

National Staff Development Council cited RUSMP as one of the top professional development programs 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

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.
The National Science Foundation Mathematics Science Partnership

Rice University was awarded a $3.8 million grant to establish a Mathematics Leadership Institute (MLI).
MLI Goals and Expected Outcomes

- Develop school-based intellectual leaders in mathematics.
- Implement high-quality mathematics instruction school-wide.
- Increase mathematical achievement.
- Reduce achievement gap in mathematics of diverse student populations.
- Impact instructional practices of higher education faculty, post-docs, and graduate students.
Visit the Rice University School Mathematics Project web site: http://rusmp.rice.edu