

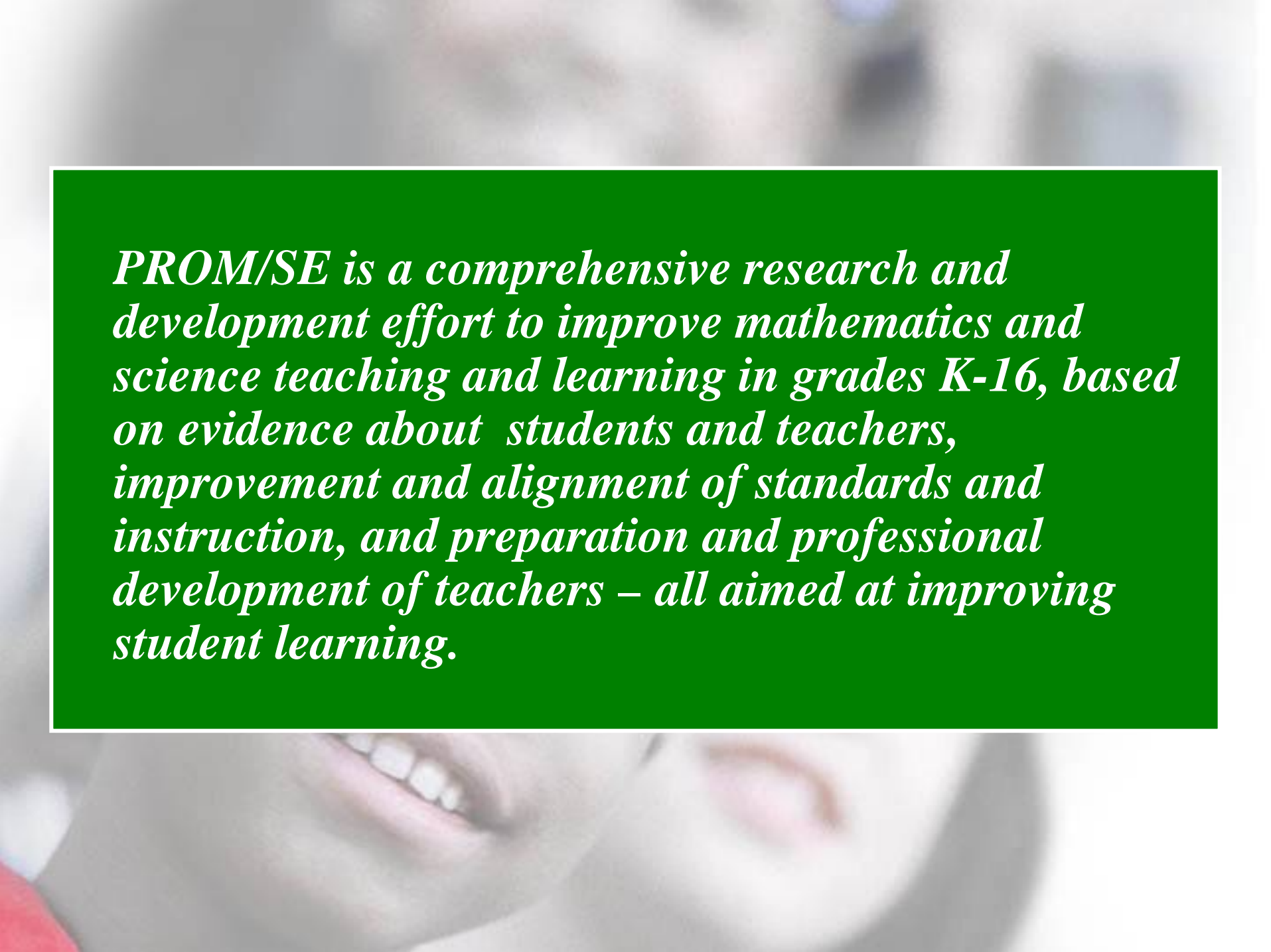
A background image showing a close-up of two young children, a boy and a girl, smiling. The boy is in the foreground, looking slightly to the right, and the girl is behind him, also smiling. The image is slightly blurred, giving it a soft, warm feel.

PROM/SE:

**Promoting Rigorous Outcomes in Math and
Science Education**

Overview, Fall 2004

What is PROM/SE?

The background of the slide is a blurred image of children's faces, showing their smiles and eyes, which adds a warm and educational context to the text.

PROM/SE is a comprehensive research and development effort to improve mathematics and science teaching and learning in grades K-16, based on evidence about students and teachers, improvement and alignment of standards and instruction, and preparation and professional development of teachers – all aimed at improving student learning.

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Mathematics and Science
Partnership Grant

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Project Organization



PROM/SE Partners

Ingham, MI Intermediate School District

St. Clair County, MI Intermediate School District

Calhoun County, MI Intermediate School District

SMART Consortium – Cleveland, Ohio Area

High AIMS Consortium – Cincinnati, Ohio Area

Michigan State University

Project Leaders:

Joan Ferrini-Mundy, Associate Dean, College of Natural Science,
and Director, Division of Science & Mathematics Education

William Schmidt, MSU Distinguished Professor,
College of Education

Partner Site Contacts:

Terry Krivak, Executive Director, and Nancy Burce, Director of
Staff & Services for Education, SMART Consortium, greater
Cleveland Area

Robert Yearout, Executive Director, and Susan Brown, Project
Director, High AIMS Consortium greater Cincinnati Area

Mary Gerhig, Director of Curriculum, Calhoun ISD

Martha Couretas, PROM/SE Coordinator, Ingham ISD

Terry Parks, Director of Math & Science Center, St. Clair ISD

PROM/SE Scope

~350,000 K-12 students

~65 school districts

~1200 PROM/SE associates

~5000 inservice teachers

~ 800 preservice teachers

PROM/SE Goals

- Gathering and analyzing data to inform curriculum and instruction decisions
- Helping all teachers to teach to high standards
- Building capacity among teachers
- Improving teacher education
- Improving student achievement

Project Design, year-by-year

Year 1: 2003-2004

- set up and organize project management and structure
- gather baseline evidence:
 - student achievement
 - teachers' topic emphasis survey
 - curriculum and standards
 - professional development
 - teacher and student background
- **select PROM/SE Mathematics Associates**
- **begin Leadership Professional Development:**
PROM/SE Mathematics Associate/Administrator Institute,
August, 2004

Year 2: 2004-2005

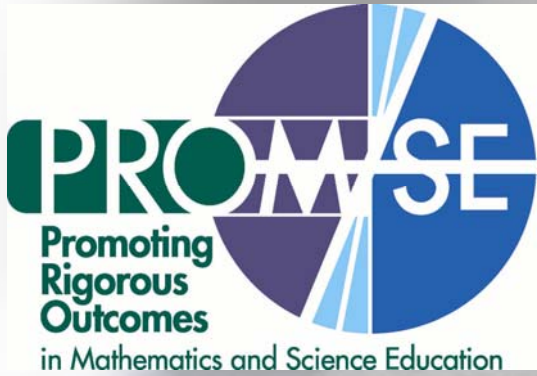
- Detailed analysis of baseline data
- Interpretation of data with PROM/SE Associates
- Action plans (Associates and districts)
- Select PROM/SE Science Associates
- Teaching to Michigan and Ohio Standards
- Academic year workshops, Associates
- Initial work in buildings and districts, Associates
- Ongoing research and evaluation
- Summer Institute for Associates

Year 3: 2005 - 2006

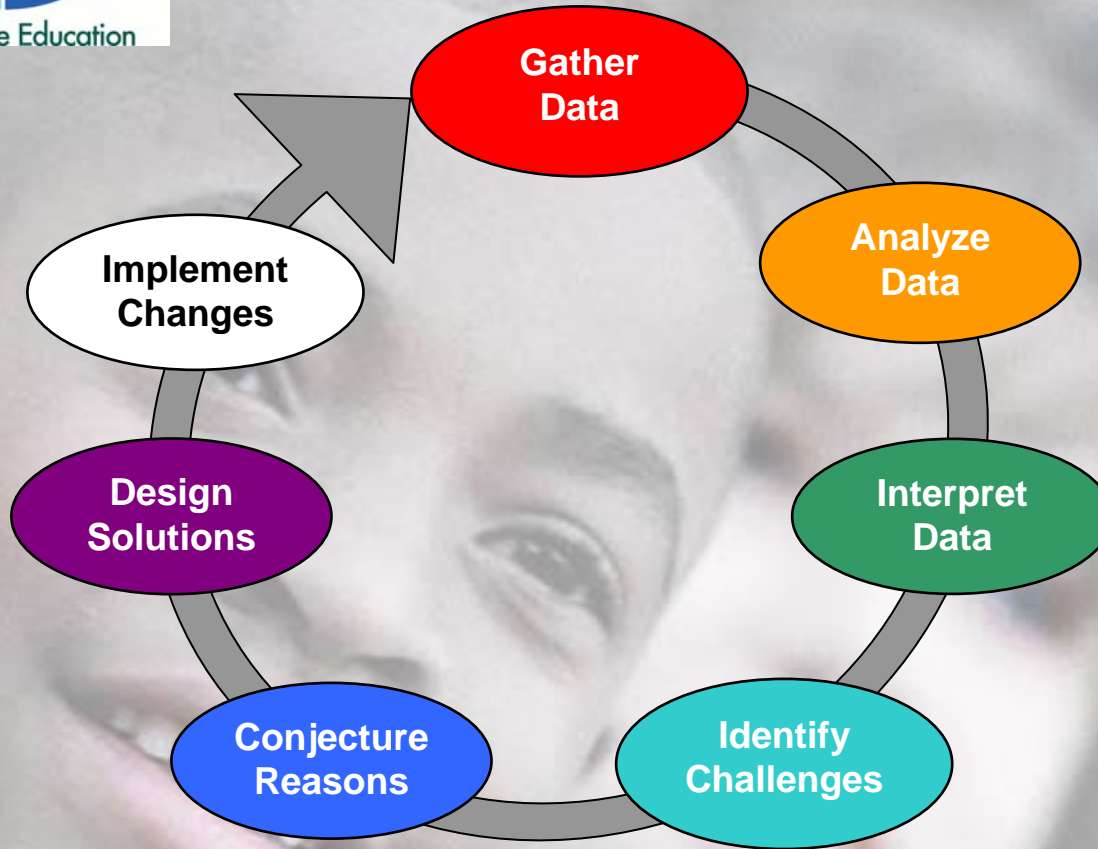
- Mathematics Associates -- engaged in building and site level initiatives, locally designed
- PROM/SE Virtual Resource -- planning and piloting underway with Associates
- Science Associates -- weekend workshops
- Targeted follow-up assessment, linkage to state assessments

Years 4 & 5: 2006-2008

- Targeted follow-up assessment, linkage to state assessments
- Associates collaborating in buildings, districts
- Virtual PD Resource



The PROM/SE Process



PROM/SE Associates

A goal of the PROM/SE grant is for each school building in the project to have a PROM/SE Associate.

Associates will play a key role in the success of the project and the improvement of mathematics and science education.

Associates will be involved in professional development for themselves as well as playing a role, with the principal and central office, in the planning, coordinating, and implementing of professional development for others in their building.



Associate Roles and Opportunities

- Teacher
 - Leader
 - Learner
- Resource broker
 - Designer



Principal Roles and Opportunities

- Building administrator
 - Instructional leader
 - Learner
 - Resource broker
 - Designer



Central Office Roles & Opportunities

- District administrator
- Instructional leader
 - Learner
- Resource broker
 - Designer



Teacher Roles and Opportunities

- Teacher
 - Learner
- Participant in “building level” learning community



Focus of Summer Institute: August 2004

- Review and analysis of mathematics data and student achievement
- Review and reflection of mathematics standards, district curriculum and alignment, and student achievement
- Discussion and elaboration of Associates roles
- Begin to develop plans and identify next steps



Questions for development of action plans:

- What is the most serious challenge in improving mathematics teaching and learning in your school?
- What is your evidence?