

# Archived Information

Mathematical Sciences Education Board

## IMPROVING TEACHER KNOWLEDGE

### Next Steps in the Mathematics Preparation of Teachers, Grades 9-12

**Goals of the Activity:** To explore the mathematical knowledge needed by high school teachers of mathematics, how teachers acquire that knowledge, and the roles that both pre- and in-service teacher development play in building a cadre of exemplary high school teachers of mathematic.

**A Brief Summary:** A workshop exploring the items mentioned in the goals is being held March 7-9, 2003, at the National Academy of Sciences Building. The workshop will be attended by over 100 mathematicians, mathematics education, professional developers, teachers and policy makers. Major themes include mathematical thinking: algebra, geometry, statistics, analysis (calculus), and modeling; and vehicles for professional development: curriculum materials, test items and grading rubrics, video, cases, reflective practices, and lesson study. A video cast of a case study analysis will be held for those unable to attend the workshop and will be posted on the web for future viewing and professional development. A Workshop Report will be published in the summer of 2003.

**Accomplishments/Results:** It is assumed that the workshop, web cast, and publication will result in greater knowledge of research and best practice.

**Plans for the Next 12 Months:** There will be wide distribution of the Workshop Report with further dissemination at various mathematics meetings.

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