

# The Journal of Mathematics and Science:

COLLABORATIVE EXPLORATIONS

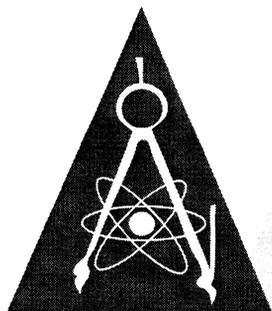
Volume 11, Spring 2009

## **PART I: SPECIAL ISSUE**

**Mathematics and Science Partnership Institutes**

National Science Foundation

## **PART II: REGULAR JOURNAL FEATURES**



Virginia Mathematics and Science Coalition



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## **SPECIAL ISSUE**

### **National Science Foundation Sponsored Mathematics and Science Partnership Institutes**

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Virginia Mathematics and Science Coalition



## Preface

The Mathematics and Science Partnership (MSP) Institutes supported by the National Science Foundation's MSP program are designed to provide high quality professional development to the participating teachers. Perhaps more importantly they serve as models and standards for professional development nationwide and conduct research on effective and innovative ways to increase teachers' content and pedagogical content knowledge and to improve student learning.

The work of the Institutes is being disseminated through the MSP net, and it is anticipated that at the conclusion of each project the research findings will be described in scholarly publications. In addition, we believe that the publication in this Special Issue of the "*Journal of Mathematics and Science: Collaborative Explorations*" of refereed papers describing work in progress and preliminary research findings will have great value to the field.

We received support to dedicate this Special Issue of the *Journal of Mathematics and Science: Collaborative Explorations* to the work of the MSP Institutes. With the support of an Editorial Advisory Board for the special issue we invited leaders of the 12 MSP Institute projects to submit papers. Papers were solicited in the following categories:

- **Research Results and Preliminary Findings.** We were interested in the impact of particular approaches of professional development on the knowledge and perceptions of the teachers who are participants in the Institute, on their classroom practices, and on the learning by their students. While some findings may be preliminary at this stage and may call for future study, these papers add to the research base in this area.
- **Descriptive Reports of Effective and Innovative Approaches to Professional Development.** While these reports typically contain quantitative data and evaluative information, they focus on describing particularly interesting and promising aspects of projects of interest to others designing professional development programs.

A three person Editorial Advisory Panel for the Special Issue assured that the high standards of the Journal were maintained. The members of the panel solicited papers and worked with the

leaders of each MSP Institute to assist in defining appropriate articles from each project and utilized the Editorial Board of the Journal and the broader MSP community to referee the articles.

**Advisory Panel members:**

Reuben Farley, Professor Emeritus, Virginia Commonwealth University;  
Editor of *Journal of Mathematics and Science: Collaborative Explorations*

Tom Dick, Professor of Mathematics, Oregon State University;  
PI of Oregon Mathematics Leadership Institute Partnership

Larry Gladney, Professor of Physics and Astronomy, University of Pennsylvania;  
PI of University of Pennsylvania Science Teachers Institute

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