# Journal of Mathematics Education at Teachers College

Spring – Summer 2010 Inaugural Issue

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The Journal of Mathematics Education at Teachers College is a publication of the Program in Mathematics and Education at Teachers College Columbia University in the City of New York.

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This issue's cover and those of future issues will honor past and current contributors to the Teachers College Program in Mathematics and Education. Photographs are drawn from the Teachers College archives and personal collections.

This issue honors NCTM 2010 Lifetime Achievement Medalist, Dr. Henry O. Pollak, who has completed 22 years as a member of the Program in Mathematics and Education at Teachers College. Dr. Pollak has contributed so much to the mathematical preparation of the Program's graduates and to the communities of mathematics and mathematics education professionals in the United States and throughout the world.

David Eugene Smith, also pictured on the front cover, was the founding professor of the Teachers College Program in Mathematics and Education. Like Dr. Pollak, Professor Smith was widely respected by both mathematicians and educators.

#### Aims and Scope

The *JMETC* is a re-creation of an earlier publication by the Teachers College Columbia University Program in Mathematics and Education. As a peer reviewed, semi-annual journal, it is intended to provide dissemination opportunities for writers of practice-based or research contributions to the general field of Mathematics Education. Each issue of the *JMETC* will focus upon an educational theme. Themes planned for the 2010-2011 issues are: *Teacher Education, International Education, Curriculum, Technology, and Equity*—all centered upon mathematics and its teaching. The *JMETC* will have a distinctive niche in the world of education publishing. Our readers are educators from pre K-12 and college and university levels, and from many different disciplines and job positions—teachers, principals, superintendents, professors of education, and other leaders in education.

#### **Manuscript Submission**

We seek conversational manuscripts (2500-3000 words in length) that are insightful and helpful to mathematics educators. Articles should contain fresh information, possibly research-based, that gives practical guidance readers can use to improve practice. Examples from classroom experience are encouraged. Articles must not have been accepted for publication elsewhere. All manuscripts may be submitted electronically at www.tc.edu/jmetc. This system will help keep the submission and review process as efficient as possible.

**Abstract and keywords.** All manuscripts must include an abstract with keywords. Abstracts describing the essence of the manuscript should not exceed 150 words. All inquiries should be sent to Ms. Krystle Hecker, P.O. Box 210, Teachers College Columbia University, 525 W. 120<sup>th</sup> St., New York, NY 10027.

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#### **Call for Papers**

The "theme" of the fall issue of the *Journal of Mathematics Education at Teachers College* will be *International Mathematics Education*. This "call for papers" is an invitation to mathematics education professionals, especially Teachers College students, alumni and friends, to submit articles of approximately 2500-3000 words describing research, experiments, projects, innovations, or practices related to international or comparative mathematics education. Articles should be submitted to www.tc.edu/jmetc by September 1, 2010. The fall issue's guest editor, Dr. Juliana Connelly, will send contributed articles to editorial panels for "blind review." Reviews will be completed by October 1, 2010, and final drafts of selected papers are to be submitted by November 1, 2010. Publication is expected in late November, 2010.

#### **Call for Volunteers**

This *Call for Volunteers* is an invitation to mathematics educators with experience in reading/writing professional papers to join the editorial/review panels for the Fall 2010 and subsequent issues of *JMETC*. Reviewers are expected to complete assigned reviews no later than 3 weeks from receipt of the blind manuscripts in order to expedite the publication process. Reviewers are responsible for editorial suggestions, fact and citation checking, and identification of similar works that may be helpful to contributors whose submissions seem appropriate for publication. Neither authors' nor reviewers' names and affiliations will be shared; however, editors'/reviewers' comments may be sent to contributors of manuscripts to guide further submissions without identifying the editor/reviewer.

If you wish to be considered for review assignments, please request a *Reviewer Information Form* from Ms. Hecker. Return the completed form to Ms. Krystle Hecker at JMETC@tc.columbia.edu or Teachers College, Columbia University, 525 W 120th St., Box 210, New York, NY 10027.

#### Looking Ahead

Anticipated themes for future issues are:

Spring 2011	Curriculum
Fall 2011	Technology
Spring 2012	Equity
Fall 2012	Leadership
Spring 2013	Psychology

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# PREFACE

# Addressing Critical Issues in the Preparation of Teachers of Mathematics

Selecting *Teacher Education* as a theme for the inaugural issue of the *Journal of Mathematics at Teachers College* demonstrates the importance placed on professional development by the Program in Mathematics and Education. It underscores our view that highly skilled teachers are critically important in providing a rich and rewarding experience for students in the mathematics classroom.

The Journal includes articles by faculty, graduate students, TC graduates, and distinguished professionals. Notes from the Classroom consists of excerpts from the weekly journals written by student teachers currently completing their field experience in either a middle school or a high school. The selection does not provide a complete picture of the activity, but rather a "snapshot" that captures student teachers' perspectives on some of the issues they may encounter while developing their craft. In this issue, Notes from the Classroom includes comments by experienced college instructors in regard to enriching the calculus course through student research.

The feature article was written by Edward Silver of the University of Michigan. Professor Silver received the Program's 2009 Distinguished Alumnus medal. His article on best practices and teaching mathematics for understanding is based on a colloquium presentation he made in the 2009 fall term. Other contributors include three recent doctoral graduates and two doctoral candidates in the Program in Mathematics and Education and other programs at Columbia University.

I would like to express my gratitude to the *JMETC's* editorial board for my selection as the guest editor of this inaugural issue. This has been an experience from which I have learned more than I have contributed. I have benefited from an association with colleagues of remarkable talent. After so many years in public education, it has been a privilege for me to be a part of a Program that has such a long and distinguished history.

The *Journal* brings to the reader some of the issues in teacher education. We trust this issue will be of interest and that it will contribute to the discussion of how best to prepare teachers for the mathematics classroom.

> Stuart Weinberg Guest Editor