

Journal of Mathematics Education at Teachers College

Fall – Winter 2010

A CENTURY OF LEADERSHIP IN
MATHEMATICS AND ITS TEACHING

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Teachers College Columbia University
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The *Journal of Mathematics Education at Teachers College* is a publication of the
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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. Photographs are drawn from the Teachers College archives and personal collections.

This issue honors Dr. Alexander P. Karp, an Associate Professor in the Program in Mathematics at Teachers College. A native of St. Petersburg, Russia who is the author of more than one hundred publications including textbooks used throughout Russia, Professor Karp represents Teachers College at meetings and conferences throughout the world as well as through his role as managing editor of the *International Journal for the History of Mathematic Education*.

Former Teachers College Professor and Mathematics Education Chair, Howard Franklin Fehr, was among the most influential mathematics educators of his era. Through his many international contacts, he was the organizer of conferences, projects, and publications including the Congresses of Mathematics Education, a seminal conference on Needed Research in the field, and curriculum initiatives including the Secondary School Mathematics Curriculum Improvement Study.

Aims and Scope

The *JMETC* is a re-creation of an earlier publication by the Teachers College Columbia University Program in Mathematics. 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 2011 issues are: *Mathematics Curriculum* and *Technology*. *JMETC* readers are educators from pre K-12 through college and university levels, and from many different disciplines and job positions—teachers, principals, superintendents, professors of education, and other leaders in education. Articles to appear in the *JMETC* include research reports, commentaries on practice, historical analyses and responses to issues and recommendations of professional interest.

Manuscript Submission

JMETC seeks conversational manuscripts (2,000-2,500 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. To keep the submission and review process as efficient as possible, all manuscripts may be submitted electronically at www.tc.edu/jmetc.

Abstract and keywords. All manuscripts must include an abstract with keywords. Abstracts describing the essence of the manuscript should not exceed 150 words. Authors should select keywords from the menu on the manuscript submission system so that readers can search for the article after it is published. All inquiries and materials should be submitted to Ms. Krystle Hecker at P.O. Box 210, Teachers College Columbia University, 525 W. 120th St., New York, NY 10027 or at JMETC@tc.columbia.edu

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Call for Papers

The “theme” of the spring issue of the *Journal of Mathematics Education at Teachers College* will be *Mathematics Curriculum*. This “call for papers” is an invitation to mathematics education professionals, especially Teachers College students, alumni and friends, to submit articles of approximately 2000-2500 words describing research, experiments, projects, innovations, or practices related to mathematics curriculum. Articles should be submitted to Ms. Krystle Hecker at jmetc@tc.edu by January 1, 2011. The spring issue’s guest editor, Nicholas Wasserman, will send contributed articles to editorial panels for “blind review.” Reviews will be completed by February 1, 2011, and final drafts of selected papers are to be submitted by March 1, 2011. Publication is expected in mid-April, 2011.

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 spring 2011 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 citations review, 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*. Return the completed form to Ms. Krystle Hecker at jmetc@tc.edu or Teachers College Columbia University, 525 W 120th St., Box 210, New York, NY 10027.

Looking Ahead

Anticipated themes for future issues are:

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| Spring 2011 | Curriculum |
| Fall 2011 | Technology |
| Spring 2012 | Evaluation |
| Fall 2012 | Equity |
| Spring 2013 | Leadership |
| Fall 2013 | Modeling |
| Spring 2014 | Teaching Aids |
| Fall 2014 | Special Students |

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PREFACE

International Comparisons in Mathematics Education in an Increasingly Globalized World

As American students continue to perform at or below average on international mathematics examinations, the field of international comparative mathematics education continues to grow. In light of academic and economic global competition, traditional educational practices may need to be reevaluated—both for their strengths and weaknesses, highlighted by comparison with other competitors on the global stage. Even as different countries have developed different educational systems based on their traditions, values, and cultures, there is still a great deal that United States educational institutions and departments of education at all levels can learn from international models.

This themed issue of the *Journal of Mathematics Education at Teachers College* gathers a series of studies and observations from countries and regions across the globe—from Singapore to Scandinavia and Southeast Asia to Eastern Europe. The studies span a wide range of educational levels and settings, from elementary and secondary schools to higher education programs in mathematics and teacher preparation. Some articles analyze emerging trends in light of recent international achievement exam results or textbook publications, while others explore the historical context behind the development of certain educational traditions within a given country. While it would be impossible to produce a fully comprehensive journal highlighting all countries, it is our hope that among the wide panorama of international and comparative studies selected for this issue of *JMETC*, all readers will find something of interest that inspires further study or can be related back to their own teaching.

As discussed by several of this issue's authors, any educational improvements within a country need to draw upon that country's own traditions rather than importing curricula and methodology from another culture. By researching and assessing the programs of other countries, we can learn from their successes and challenges and, hopefully, improve the American mathematics education system by applying the lessons learned.

Julianna Connelly Stockton
Guest Editor