JOURNAL OF

MATHEMATICS EDUCATION AT TEACHERS COLLEGE

A Century of Leadership in Mathematics and Its Teaching

Mathematics Teacher Education

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PREFACE

Many of the concerns about the Common Core State Standards in Mathematics (CCSSM) pivot around questions and concerns about how teachers will be able to make effective changes in their practices to achieve the more learner-focused standards and goals of the CCSSM. This issue of the *JMETC* will be the first in more than five years that does not focus on a particular theme within the field of mathematics education. As it happened, the manuscripts that were accepted for publication organically ranged the topic of Mathematics Teacher Education. We hope this issue will serendipitously serve to support teachers and teacher educators alike in this moment of systemic reform.

The importance of the topic of Mathematics Teachers Education is seen in the quality and depth of the articles presented. Featured is a colloquium series presentation held at Teachers College, in which Dr. Cozzens describes her vision and the beginnings of a project that helps teachers develop the skills they need to address the issue of curricular adaptability in mathematics education within the context of ever changing standards.

The remaining four articles in the issue discuss different approaches to preparing and equipping mathematics teachers to meet the challenges of their future teaching endeavors and resonate in tone and timbre with much of the research on teacher education and professional development. Elementary preservice teacher education is discussed in two articles, one which discusses findings of a research program supported by the National Science Foundation that is designed to study music-mathematics pedagogical practices and teacher self-efficacy, while the other focuses on the use of cartoons as an educational tool that shows potential to both increase enjoyment and decrease anxiety about mathematics by providing preservice teachers an opportunity to use cartoons to pose mathematical problems or attach a story to lend meaning to a given mathematical problem. Broadening the issue are two articles which focus on secondary mathematics teachers and their development. Dr. Contreras provides a discussion of how a well-worn mathematical situation such as the Pythagorean Theorem can be used to promote deeper and overlooked mathematical explorations and instill mathematical habits of mind

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[1] Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915 – 945.

[2] Korthagen, F. A., Kessels, J., Koster, B., Lagerwerf, B., & Wubbels, T. (2001). *Linking practice and theory: The pedagogy of realistic teacher education.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

PREFACE (Continued)

with preservice mathematics teachers. Dr. Epperson and Dr. Rhoads share the characteristics they use when selecting mathematical tasks for practicing secondary teachers to further develop and extend their knowledge of school mathematics.

From the scope articles presented in this issue, we hope that the reader will be able to walk away with examples of innovative research as well as valuable ideas and best practices that can be used when working with and developing mathematics educators.

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Guest Editors