JOURNAL OF

MATHEMATICS EDUCATION AT TEACHERS COLLEGE

A Century of Leadership in Mathematics and Its Teaching

Postsecondary Mathematics Education

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PREFACE

This issue of the *Journal of Mathematics Education at Teachers College (JMETC)* features two articles developed from a series of colloquium presentations at Teachers College as well as six articles which fall under the umbrella of the Journal's theme, *Postsecondary Mathematics Education.* Postsecondary mathematics education is crucial to the Science, Technology, Engineering, and Mathematics (STEM) degrees and career success trajectory. It plays a significant role in how we meet the needs of our changing cultural landscape and prepares students for the current and future demands of an increasingly shifting technological, data-driven, and scientific society.[1]

From the colloquium series, Dr. Kilpatrick, in the article *Rainforest Mathematics,* reminds us that to meet the demands of the 21st Century, school mathematics ought to connect the formal, abstract, generalized mathematics of the academy to the social and cultural backgrounds of the learners. Dr. Stephens, a visiting professor at multiple Chinese universities, addresses the changing landscape and language of China's national mathematical standards and their relation to other national and international standards documents.

The six articles on postsecondary mathematics education provide insight on what other institutions, mathematics educators, and researchers are doing to increase student engagement and success. The articles range in focus from working with prospective teachers to increase their mathematical and pedagogical knowledge and skills, to analyzing college students' routinely observed misconceptions about standard topics in the Calculus 1 curriculum, to the effects an Undergraduate Learning Program had on departmental culture at one university. From the scope of articles presented in this issue, we see the important role mathematics education plays in preparing students to meet the challenges of this and future generations. We hope that the readers of this issue will walk away with insight on exemplary research and best practices for improving instructional outcomes and motivating students' mathematics success at the postsecondary level.

Matthew DeGraaf
Simone Salmon-Nembhard
Guest Editors

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[1] Bressoud, D. M., Friedlander, E. M., & Levermore, D. C. (2014). Meeting the challenges of improved post-secondary education in the mathematical sciences. *Notices to the AMS, 61*(5), 502-503. Retrieved from American Mathematical Society website: http://www.ams.org/notices/201405/rnoti-p502.pdf