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AT TEACHERS COLLEGE

A Century of Leadership in Mathematics and Its Teaching

Examining Practices and Resources from Mathematics Classrooms

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PREFACE

The Spring 2022 Issue of the *Journal of Mathematics Education at Teachers College* features three articles that discuss a broad range of topics, from engaging students in peer feedback and supporting positive mathematical identities, to the impact of reform efforts on a chapter in a calculus textbook. Additionally, we have two *Notes from the Field* articles that reflect on the practitioners' implementation of Algebra activities and teaching strategies. In this edition, educators will find research and descriptions of specific tasks designed to meaningfully engage students in mathematics learning, as well as some of their challenges.

Husband and Nikfarjam begin with a report on the results of a study they conducted on the impacts of peer feedback in an elementary mathematics classroom. To expand on the research of peer feedback, Husband and Nikfarjam investigated the possible benefits for the providers of peer feedback. By collecting and examining student-to-student feedback on a number of mathematical tasks and activities, they found that when students are directed to "comment on the mathematics," students who provide feedback have the opportunity to self-reflect, make connections, and engage in mathematical discourse.

After providing an overview of the current state of research in the field of mathematical identity, Barba invites readers to consider a variety of research-based practices that mathematics educators can employ to promote students' mathematical identities. Engaging students in such activities, Barba contends, may increase interest, as well as success in Science, Technology, Engineering, and Mathematics (STEM). Moreover, it may help students to see themselves as doers of mathematics and, therefore, contributing members of a mathematics community.

Lastly, Pogorelova investigated calculus textbook reform by evaluating the contents of a chapter in a reform-minded calculus textbook. By identifying and analyzing the type and characteristics of questions contained in the chapter, Pogorelova described how well the contents aligned to typical reform-based mathematics teaching and learning practices. The results showed that while a number of important reform-based strategies were employed, there was also a larger than expected amount of more traditional practices. Pogorelva also reflects on some of the challenges faced by reform textbook writers.

Each of these articles highlight important aspects of mathematics teaching and learning. The authors remind all educators to reflect on the strategies and practices we use to engage our students, as well as the physical materials we often rely on.

Ms. Alyssa MacMahon Mr. Davidson Barr

Guest Editors