## JOURNAL OF

# MATHEMATICS EDUCATION

AT TEACHERS COLLEGE

A Century of Leadership in Mathematics and Its Teaching

**Evolving Priorities and Practices in Mathematics Education** 

### © 2025.

This is an open access journal distributed under the terms of the Creative Commons Attribution License, which permits the user to copy, distribute, and transmit the work, provided that the original authors and source are credited.

## TABLE OF CONTENTS

#### **PREFACE**

**V** Molly Stern, Teachers College Columbia University Kihoon Lee, Teachers College Columbia University

#### **ARTICLES**

1 The Relationship Between Student Attitude Towards Mathematics and Student Mathematics Achievement

Michael Osborne, Eastern Kentucky University Brandon Hibbard, University of the Cumberlands

9 Navigating through Social Justice in Mathematics Education: Prospects, Priorities, Processes, and Problems

Bed Raj Acharya, Faculty of Education, Tribhuvan University
Samara Madrid Akpovo, Department of Theory and Practice in Teacher
Education, University of Tennessee Knoxville
Shashidhar Belbase, Department of Mathematics, Troy University
Bishnu Khanal, Faculty of Education, Tribhuvan University
Mukunda Prakash Kshetree, Faculty of Education, Tribhuvan University
Maxwell Peprah Opoku, Department of Special and Gifted Education,
United Arab Emirates University
Ram Krishna Panthi, Faculty of Education, Tribhuvan University

29 Secondary Mathematics Teacher Decision-Making and Their Selection of Digital Materials

Anita Sundrani, Chicago Public Schools

#### **40 NOTES FROM THE FIELD**

41 Online Investigations of the Quadrilateral Hierarchy Using "Launch-Explore-Summarize"

Eileen Fernández, Montclair State University Elise Lahiere, Ateneo de Manila University Eliza Leszczynski, Montclair State University

46 Programs and Opportunities for Early Career Mathematics Education Scholars

Nicole Fletcher, Fairfield University
Nathan N. Alexander, Howard University
Bona Kang, Ohio Wesleyan University
Lybrya Kebreab, Benjamin Banneker Association
Brittany L. Marshall, San Diego State University
José Martínez Hinestroza, Texas State University
Anita Sundrani, Chicago Public Schools
Richard Velasco, The University of Oklahoma

58 A Reflective Homework System In Mathematics Courses

Wiktor Mogilski, Utah Valley University Alan Parry, Utah Valley University

## PREFACE

The Spring 2025 issue of the *Journal of Mathematics Education at Teachers College* features a set of contributions that reflect the evolving priorities and practices in mathematics education as well as the lived experiences of those working within it. The Articles section consists of three research-based pieces, and the Notes from the Field section presents three pieces that offer insights grounded in practice.

In the first research-based article, Osborne & Hibbard use the 2019 Trends in International Mathematics and Science Study data to investigate how eighth-grade students' attitudes towards mathematics relate to achievement. By drawing on a large, nationally representative dataset, Osborne & Hibbard extend prior research on the relationship between students' attitudes and achievement in mathematics. Their findings highlight the role of social and emotional factors in mathematical learning and offer guidance for teachers seeking to foster more positive attitudes about mathematics.

Then, Panthi et al. present a comprehensive conceptual overview of social justice issues in mathematics education, organizing their analysis into a four-part framework: prospects, priorities, processes, and problems. The authors argue that meaningful reform must address curriculum, instruction, and assessment, and they call for greater teacher agency in prioritizing social justice issues in mathematics education despite persistent structural challenges.

Lastly, Sundrani investigates the decision-making processes of secondary mathematics teachers as they select online instructional materials from platforms such as Teachers Pay Teachers. In this study, Sundrani identifies key heuristics that shape teachers' choices and therefore impact classroom instruction.

> Molly Stern Kihoon Lee

**Guest Editors**