

Hoover, M. & Ball, D. L. (2021). Practice-based research on the teaching of mathematics: progress and imperatives for the future. *Nordic Studies in Mathematics Education*, 26 (3-4), 171–190.

## Abstract

Professional fields face persistent challenges in connecting practice and theory. In particular, tensions exist as to how theory and knowledge are developed, as well as what constitutes authority for practice. Together the articles in this issue explore three elements of the turn toward “practice-based” research and professional education in mathematics education: designing teaching and learning in and for practice, learning mathematics teaching as a practice, and collaborating across professional roles and identities. In this commentary, we interrogate meanings of practice-based research on teaching and discuss themes across this collection of articles. We then argue for three imperatives for future efforts: (i) working on shared understandings of what the term “practice-based” might mean; (ii) developing more nuanced conceptualizations of “teaching”; and (iii) attending explicitly to justice in practice.

## Mark Hoover

Mark Hoover is an Associate Research Scientist in Educational Studies at the University of Michigan. He acknowledges that U.S. society is rooted in a colonial history that confiscated indigenous people’s lands, enslaved Africans, and patronized women. In response, he conceptualizes public school mathematics teaching that disrupts patterns of injustice and prepares students for civic participation. He investigates the work of teaching and its mathematical demands, with an understanding that for teaching to be educational it must be just.

## Deborah Loewenberg Ball

Deborah Loewenberg Ball is the William H. Payne Collegiate Professor of education at the University of Michigan, an Arthur F. Thurnau Professor, a research professor in the Institute for Social Research, and the director of TeachingWorks. She taught elementary school for more than 15 years and continues to teach children every summer. Ball’s research focuses on the practice of teaching, using elementary mathematics as a critical context for investigating the challenges of building relationships with children and helping children develop agency and understanding, and on leveraging the power of teaching to disrupt racism, marginalization, and inequity. Ball is an expert on teacher education, and her current work centers on ways to improve the quality of beginning teaching to advance justice.