Journal of Mathematics Education at Teachers College

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A Century of Leadership in Mathematics and its Teaching

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ABOUT THE AUTHORS

Jeremy Kilpatrick is Regents Professor of Mathematics Education at the University of Georgia. He has taught at European and Latin American universities, receiving four Fulbright awards. He holds an honorary doctorate from the University of Gothenburg and is a Fellow of the American Educational Research Association, a National Associate of the National Academy of Sciences, and a member of the National Academy of Education. He has received a Lifetime Achievement Award from the National Council of Teachers of Mathematics and the 2007 Felix Klein Medal from the International Commission on Mathematical Instruction. He began his career in mathematics education in 1967 at Teachers College, Columbia University.

Robert Reys is Curators' Professor Emeritus of Mathematics Education at the University of Missouri. He has co-authored or edited more than 40 books, and had more than 200 articles published in peer reviewed journals. For more than a decade his research has focused on doctoral programs in mathematics education and job opportunities for mathematics educators in institutions of higher education. He was recognized with the 2004 Faculty-Alumni Award from the University of Missouri and received the 2008 Lifetime Achievement Award from the National Council of Teachers of Mathematics.

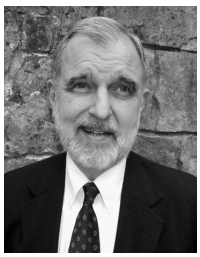
Ubiratan D'Ambrosio is Emeritus Professor of Mathematics, State University of Campinas (UNICAMP) and Professor in the Mathematics Education Graduate Program of Universidade Bandeirantes Anhanguera (UNIBAN), in São Paulo, Brazil. In 1983 he was elected a Fellow of the AAAS with the citation "For imaginative and effective leadership in Latin American Mathematics Education and in efforts towards international cooperation." He was awarded the 2001 Kenneth O. May Medal of History of Mathematics and the 2005 Felix Klein Medal of Mathematics Education. His research interests are in the historical, philosophical, and epistemological foundations of mathematics through the Program Ethnomathematics. He is also interested in mathematics education as support for world peace and social justice.

Beatriz S. D'Ambrosio is a Professor of Mathematics Education in the Department of Mathematics at Miami University in Oxford, Ohio. Her research interests include the study of the complexities in the preparation and in-service of K–12 mathematics teachers, examining socio-cultural issues in mathematics education, and supporting teachers to engage in action research that enhances children's construction of mathematical knowledge. She has served on the Board of Directors of the National Council of Teachers of Mathematics, on the Editorial Board of the *Journal for Research in Mathematics Education (JRME)*, and as a guest member of the Editorial Panels of special issues on equity and diversity in mathematics education for both JRME and the *Journal of Mathematics Teacher Education*.

Matthew R. Larson is the K–12 Curriculum Specialist for Mathematics for the Lincoln Public Schools in Nebraska. A past member of NCTM's Board of Directors, Larson was also a member of NCTM's Research Committee and Task Force on Linking Research and Practice. He is the co-author of major K–8 mathematics programs as well as numerous professional books and articles. He has taught mathematics at the secondary and college levels and held an honorary appointment as a visiting associate professor at Teachers College. He has a particular interest in the application of research to problems of practice. He earned his Ph.D. at the University of Nebraska-Lincoln.

ABOUT THE AUTHORS

Wendy M. Smith is a research assistant professor at the University of Nebraska-Lincoln in the Center for Science, Mathematics and Computer Education, where she serves as the research coordinator for NebraskaMATH, and co-PI for several other grants focused on K–12 mathematics teaching and learning. As a mathematics educator, Smith is a former middle school teacher for the Lincoln Public Schools, and now teaches curriculum, equity, and research courses for preservice and in-service mathematics teachers. Smith's research interests include teacher change, teacher leadership, school district-university partnerships, and new teacher induction.



Joel Cunningham received his Ph.D. in commutative ring theory under David K. Harrison at the University of Oregon. He was a mathematics faculty member at the University of Kentucky and held faculty and administrative posts at the University of Tennessee at Chattanooga, Susquehanna University, and Sewanee: The University of the South, including serving as Susquehanna's president for 16 years and Sewanee's vice-chancellor for 10. In 2010 he retired from administrative work and is enjoying being a full-time professor of mathematics at Sewanee. In 2010–2011 he was a visiting professor in the Columbia Teachers College Mathematics Program and is slated to be there again for a 2013 summer-session course.

Carole Greenes is Associate Vice Provost for STEM Education, Professor of Mathematics Education, and Director of the Practice, Research and Innovation in Mathematics Education Center at Arizona State University. She is PI for two research projects, *Prime the Pipeline Project: Putting Knowledge to Work* and *STEM in the Middle*. She has authored more than 300 mathematics books and programs and four math musical mysteries. In 2003, she was inducted into the Massachusetts Mathematics Educators Hall of Fame, and she received the 2011 Glen Gilbert/Ross Taylor Leadership Award from the National Council of Supervisors of Mathematics. Her research focuses on students' difficulties with algebraic concepts and reasoning and the design of assessment and intervention strategies to promote learning.

Alfred S. Posamentier is Dean of the School of Education and Professor of Mathematics Education at Mercy College, New York, and previously Distinguished Lecturer at New York City College of Technology of the City University of New York. He is Professor Emeritus of Mathematics Education at The City College of the City University of New York, and former Dean of the School of Education, where he served for 40 years. He is the author of more than 55 mathematics books, and he is also a frequent commentator in newspapers and journals. He served on the New York State Education Commissioner's Blue Ribbon Panel on the Math-A Regents Exams, the Commissioner's Mathematics Standards Committee, and on the New York City schools Chancellor's Mathematics Advisory Panel.

Kurt Kreith is Professor Emeritus of Mathematics at University of California, Davis. Prior to retirement he was active in a Master of Arts in Teaching (MAT) degree program offered jointly with the School of Education and helped create a Davis site of the California State Summer School for Mathematics and Science. He is co-author of *Iterative Algebra and Dynamic Modeling* (Springer-Verlag, 1999) and *Teaching Mathematics Using Technology* (McDougal Littell, 2002), addressing the role of computer technology in secondary school mathematics. His current interests include the role that school mathematics can play in helping students understand the world they are soon to inherit.

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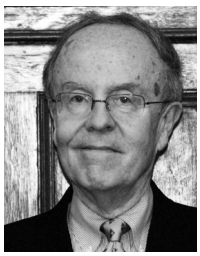
Al Mendle has been a Lecturer at University of California, Davis since 1993. Working in the School of Education, he has taught Mathematics Methods and Educational Technology. He has contributed to books for College Preparatory Mathematics and Activity Resources Publishing as well as the 2013 publication, *Academic Language in Second Language Learning*. Having 25 years of teaching experience at the elementary and secondary levels in public schools, he has also served as Director of the University of California at Davis Mathematics Project. His presentations have included speaking engagements at the annual conferences for the National Council of Teachers of Mathematics, the California Mathematics Council, and the American Educational Research Association.

Jessica Pfeil taught high school mathematics for seven years before becoming an Assistant Professor of Mathematics at Sacred Heart University. She received her Ph.D. in Mathematics Education from Teachers College, Columbia University. She is currently teaching mathematics and focusing on educational research. Her research interests include professional collaborations in mathematics education, recursive thinking and student understanding of recursion, assessment development and validation, and alternative teaching styles for remedial students.

Jenna Hirsch is an Assistant Professor of Mathematics at Borough of Manhattan Community College, CUNY. She received her B.S. in Mathematics from Pennsylvania State University, and a M.Ed. in Mathematics Education from Rutgers University. She taught mathematics to Elementary, Middle and High School students before earning her Ph.D. from Teachers College, Columbia University in Mathematics and Education. Her research interests include student understanding of Group and Ring Theory and abstract algebra in general, as well as retention problems in remediation. She is also interested in using unique pedagogies to pique student interest in remedial mathematics.

Jan A. Yow is an assistant professor of secondary mathematics education at the University of South Carolina. A former high school mathematics teacher and current National Board Certified Teacher, she teaches mathematics methods courses as well as courses in teacher leadership. Her research focuses on mathematics teachers who lead from within the classroom with the ultimate goal of strong mathematics teaching and learning for all students. She received her B.S. at Meredith College, Ed.M. from Harvard University, and Ph.D. from the University of North Carolina, Chapel Hill. She is the recipient of the 2012 College of Education Early Career Research Award at the University of South Carolina.

Kazuko Ito West is Vice President and Assistant Head, and former Mathematics Department Chair of Keio Academy, a private, residential high school in Purchase, New York, attached to Keio University, Tokyo, Japan. Her interest is in mathematics teacher competence, mentoring, and development with a research focus on assessment of mathematical knowledge and effective teaching. She is also an Adjunct Lecturer at Manhattanville College, School of Education, and an Invited Visiting Researcher at Institute of Teacher Education at Waseda University, Tokyo. She has B.S. and M.S. degrees in mathematics from Waseda University, an Ed.M. from Harvard University, and a Ph.D. in mathematics education from Teachers College, Colombia University.



J. Philip Smith served for forty years in the faculty and administration of Southern Connecticut State University in New Haven. He is a graduate of Dartmouth College, holds an MS in mathematics from Stanford University, and a Ph.D. in mathematics education from Teachers College, Columbia University. Since 1975 he has also taught and worked extensively with doctoral students in the Mathematics Education Program at Teachers College. His research interests include assessment and problem solving.

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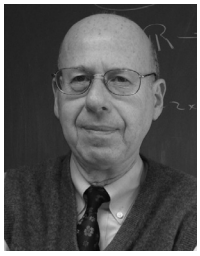
Loretta K. Smith, now retired, was a member of the Mathematics Department at Southern Connecticut State University and, later, at the University of New Haven, where she also served for many years as Director of the Center for Learning Resources. She was the first treasurer of WIKS-USA, Inc, a 501(c)(3) organization supporting charitable endeavors in Kenya. She completed her undergraduate studies at Radford University and holds a M.S. in mathematics from the University of Maryland.



Stuart Weinberg was the Mathematics Department Chairman at Stuyvesant High School before joining the Teachers College faculty as Director of Student Teaching for the Program in Mathematics. Dr. Weinberg has applied his extensive classroom experience to the development of methods of assessing teachers' classroom performance utilizing belief systems and attitudes. He has an Ed.D. in Mathematics Education from Teachers College, Columbia University. He has participated in or conducted 10 international study tours to provide participants the opportunity to observe teaching practices in other countries.

Maryann Ferrara is the current Mathematics Department Chairperson at Stuyvesant High School. In that capacity, she has been an advocate for mathematically promising students and has worked with colleagues in developing a community of professionals to provide students with a rich experience in mathematics. She has been active in promoting problem solving as a central activity in the high school mathematics curriculum and in extracurricular activities. She completed her undergraduate and graduate studies at Hunter College in New York City.

Peter Garrity is a visiting professor at Teachers College Columbia University where he teaches Theories of Knowing and Learning Mathematics as well as elementary and secondary mathematics methods courses. He received his Ed.D. from Teachers College in 1979 under the supervision of Professors Bruce Vogeli and Jeremy Kilpatrick. Dr. Garrity served as an adjunct professor at the Columbia Graduate School of Business from 1976–2002. He is a consultant to a number of school districts on Long Island and New York City. His research focuses on integrating instructional strategies that align with the Common Core that bring all students to college and career readiness.

Christopher J. Huson teaches algebra and geometry at the Bronx Early College Academy in the south Bronx, New York. He has a B.S. from the Massachusetts Institute of Technology and a M.S. from Teachers College, Columbia University, where he is currently pursuing a Ph.D. in Mathematics Education. His interests include technology in education, mathematically gifted students, and educational reform. He had a 25 year career as a financial engineer with various Wall Street banks prior to becoming a teacher. He served as treasurer and board member of the Rudolf Steiner School in New York City, and he founded the New Amsterdam Early Childhood Center, a Waldorf preschool, also in New York City.

Nicole Fletcher is a Ph.D. candidate in the Mathematics Education program at Teachers College Columbia University, where she received her Ed.M. in Mathematics Education and M.A. in Early Childhood General and Special Education. She taught for nine years in various settings, including preschool, kindergarten, and first grade in both general education and inclusion classrooms. Her research interests include development of mathematical thinking in young children, special education and mathematics, equity in mathematics education, and elementary mathematics professional development.