## ABOUT THE AUTHORS



Mark Bloom is an Associate Professor of Biology at Dallas Baptist University (DBU) in Dallas, Texas, where he teaches both major and non-major biology courses. He holds a bachelor's degree in Biology from DBU, a master's degree in Biology from Baylor University, and a doctorate in Science Education from Texas Christian University (TCU). Prior to DBU, he taught for over 10 years in the Biology Departments at Tyler Junior College and TCU. In TCU's College of Education, he taught elementary and middle school science methods courses, as well as under-

graduate and graduate content courses. He also conducted numerous professional development summer institutes with inservice science teachers. He is a member of the Association for Science Teacher Education, School Science and Mathematics Association, and International Consortium for Research in Science and Mathematics Education. His research interests include nature of science, environmental education, and teacher knowledge for mathematics and science teaching.



José Contreras earned his Ph.D. in Mathematics Education from The Ohio State University. Currently, he teaches mathematics and mathematics education courses at the undergraduate and graduate levels at Ball State University. He is interested in integrating problem posing and solving, technology, realistic contexts, modeling, history, proof, and aesthetic aspects of mathematics in teaching and teacher education.



Benjamin Dickman is from Brookline, MA. After graduating from Amherst College, Dickman spent the following academic year in Nanjing, China, on a Fulbright Grant to research high school mathematics education. He returned to his host institution of Nanjing Normal University the following year on a Chinese government grant for Mandarin studies, and spent his free time becoming fluent in the Nanjing dialect. Dickman is currently a National Science Foundation Graduate Fellow at Columbia University, pursuing his Ph.D. in Mathematics Education (and playing a lot of Boggle).

Besides working as a Course Assistant for a range of classes-including Abstract Algebra, Analysis, Calculus, Problem Solving, Set Theory, and Topology—he was also able to serve as a Graduate Instructor for Teachers College doctoral candidates during a recent summer study tour to Shanghai.



Nicole Fletcher is a Ph.D. candidate in Mathematics Education at Teacher 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. She is a Zankel Fellow at the Teachers College Community School, where she tests and implements *MathemAntics*, a mathematics software suite for young children. She has served as a Course Assistant for a number

of classes, including Mathematics for Elementary Schools, Development of Mathematical Thinking, and Combinatorics. Her research interests include early elementary mathematics, special education and mathematics, design of mathematics software for young children, equity in mathematics education, and elementary professional development.



Herbert P. Ginsburg is the Jacob H. Schiff Professor of Psychology and Education and holds a dual appointment in the Program of Mathematics Education at Teachers College Columbia University. He has conducted basic research on the development of mathematical thinking, with particular attention to young children, disadvantaged populations, and cultural similarities and differences. He has drawn on cognitive developmental research to develop mathematics curricula (Big Math for Little Kids) and storybooks for young children, tests of mathematical thinking, and

video workshops to enhance teachers' understanding of students' mathematics learning. He has recently developed a model course on early mathematics education for use in colleges and universities. Also, he has created computer-based systems (MCLASS: MATH) for helping teachers to conduct basic clinical interviews to assess children's mathematical knowledge. With colleagues, he is now developing computer software, MathemAntics, to foster young children's (from age 3 to grade 3) mathematics learning. He holds a B.A. from Harvard University and his M.S. and Ph.D. from the The University of North Carolina at Chapel Hill.



**Heather Gould** received a Ph.D. in Mathematics Education from Teachers College Columbia University in 2013 and is now an Assistant Professor of Quantitative Reasoning at Eugene Lang College, The New School for Liberal Arts. Her research interests include mathematical modeling, particularly in the context of the Common Core State Standards for Mathematics, teacher education, and the development of mathematical literacy.



Carole Greenes is Associate Vice Provost for STEM Education, Professor of Mathematics Education in the Fulton Schools of Engineering, and Director of the Practice, Research and Innovation in Mathematics Education (PRIME) Center in the College of Liberal Arts and Sciences at Arizona State University. Prior to joining ASU in October 2007, Carole Greenes was Professor of Mathematics Education at Boston University, where she served as Assistant Dean for the 20-year Boston University-Chelsea Partnership Project, Dean of Overseas Programs, and then Associate Dean

for Research, Development, and Advanced Academic Programs. At ASU, she served as Dean of the School of Educational Innovation and Teacher Preparation at the Polytechnic campus before assuming her current position as Associate Vice Provost for STEM Education in February 2009. Greenes has authored more than 70 articles and 300 books and programs for students in pre-kindergarten through Grade 16, as well as four mathematical musical mysteries, the history of mathematics in story and song. In 2003, she was inducted into the Massachusetts Mathematics Educators Hall of Fame. In 2011, she won the Glen Gilbert/Ross Taylor National Leadership Award from the National Council of Supervisors of Mathematics. In 2012, her NSF and Helios Education Foundation projects won Outstanding After-School Programs in the State of Arizona. Greenes' research focuses on pre-K – 14 students' difficulties with algebraic concepts and reasoning methods, their abilities to apply mathematical concepts and reasoning methods to the solution of STEM interdisciplinary problems, and the design of assessment and intervention strategies to promote learning.



Kurt Kreith is a retired professor of mathematics. During a lengthy career at the University of California, Davis, his interest in mathematics education led to participation in a Master of Arts in Teaching degree program, the California Mathematics Project, and the California State Summer School for Mathematics and Science (better known as Cosmos). Together with G. D. Chakerian, he has authored school materials in the form of a book entitled Iterative Algebra and Dynamic Modeling and some classroom materials on Teaching Mathematics Using Technology. At

Davis, he continues to teach First Year Seminars on Cryptology and Doing Mathematics-With a Computer At Your Side.



Anne Marie Marshall is an Assistant Professor in the department of Early Childhood and Childhood Education in the School of Education at Lehman College. She received her Ph.D. in Curriculum and Instruction from the University of Maryland, College Park. Her current research interests focus on preservice mathematics teacher education and inservice teacher professional development. In addition to teaching mathematics methods courses for elementary preservice teachers, she delivers mathematics content professional development for inservice

elementary teachers. The following questions inform her research: How do elementary preservice teachers learn the mathematics and pedagogy needed for teaching? How can elementary mathematics content and methods experiences be designed to support preservice teachers' learning?



Heather Peace is an Associate Professor of Mathematics at Weatherford College in Weatherford, Texas. She received her doctorate in Science Education at Texas Christian University. Her educational philosophies focus on the development of mathematical thinking both inside and outside of the classroom. In particular, she views mathematical literacy as combining content knowledge with the ability to apply mathematical concepts to a variety of situations. She is interested in making mathematics more accessible for students and researching preservice teachers'

perceptions of mathematics and science teaching.



Sarah Quebec Fuentes is currently an Assistant Professor in Mathematics Education at Texas Christian University. She was a middle and high school mathematics teacher for ten years prior to receiving her doctorate in mathematics education from Montclair State University. She teaches mathematics methods courses for undergraduate preservice teachers across all grade levels, graduate mathematics education courses, and an action research course. She is interested in the teaching and learning of mathematics for understanding, with her projects focusing on

classroom discourse, preservice teacher education, teacher self-efficacy, teacher knowledge, elementary-level textbook analysis, and the development of university-high school collaborations.



Nicholas Wasserman is an Assistant Professor in the Department of Mathematics, Science, and Technology at Teachers College Columbia University, specializing in mathematics education. He received his B.S. in Mathematics from the University of Texas at Austin with the UTeach program and graduated from Teachers College Columbia University with a Ph.D. in Mathematics Education. His scholarly interests focus on teachers' professional development and teachers' mathematical content knowledge—in particular, how advanced or horizon mathematics inform teaching

practices. He also enjoys problem solving, mathematical modeling, and working with prospective and practicing teachers.

## ACKNOWLEDGEMENT OF REVIEWERS

The Editorial Board would like to acknowledge the following reviewers for their effort and support in reviewing articles for this issue of the Journal of Mathematics Education at Teachers College. Without the help of these professionals, it would be impossible to maintain the high standards expected of our peer-reviewed journal.

Mr. Phillip Boda Teachers College Columbia University

Mr. Dale Dawes Borough of Manhattan Community College

Mrs. Elizabeth Brennan DeGraaf Teachers College Columbia University

Mr. Matthew DeGraaf Teachers College Columbia University

Mr. Benjamin Dickman Teachers College Columbia University

> Mr. Andre Freeman Capital Community College

Dr. Adam Goldberg Southern Connecticut State University

Dr. Heather Gould Eugene Lang College, The New School

Dr. Hanna Haydar Brooklyn College, City University of New York

Dr. Matthew Johnson Teachers College Columbia University

Ms. Rebecca Johnson Teachers College Columbia University

Dr. Susan Licwinco Borough of Manhattan Community College

Mr. Diego Luna Bazaldua Teachers College Columbia University

Ms. Albina Marushina Teachers College Columbia University

Mr. Yevgeniy Milman Borough of Manhattan Community College

Mr. Derek Morf Teachers College Columbia University

Mr. Nazar Rabadi Teachers College Columbia University

> Mr. Luke Rawlings City College of New York

Ms. Simone Salmon Teachers College Columbia University

Mr. Andrew Sanfratello Teachers College Columbia University

Ms. Alice Seneres Teachers College Columbia University

Dr. J. Phillip Smith Teachers College Columbia University

Ms. Arundhati Velamur Teachers College Columbia University

Ms. Jessica Vialva Teachers College Columbia University

Ms. Brandie Waid Teachers College Columbia University

Dr. Erica Walker Teachers College Columbia University

> Dr. Thomas Walsh Kean University