ABOUT THE AUTHORS



Joseph Bolz is a current PhD student in Curriculum and Instruction at the University of Denver. He is also an employee of Denver Public Schools where he serves as a high school math teacher, a department chair, and

an instructional coach. Joseph has presented at numerous conferences including regional and national NCTM conferences, AATC, and TODOS. His research interests include mathematics education in an urban setting (specifically how to support under-represented populations in higher level mathematics), new mathematics teacher preparation and retention, social justice in mathematics, and formative assessments in mathematics. His partner in life, Kristen Will, is an amazing high school English teacher, and they have two wonderful daughters -Tess and Elsa.



Jonathan D. Bostic is an assistant professor of mathematics education at Bowling Green State University located in Bowling Green, Ohio. He strives to examine mathematical proficiency through a lens that allows

researchers to consider the impact of instructional contexts and changes in them, rather than one element of the context (i.e., individuals, learning environment, and task), and the impact on students' mathematical proficiency. Jonathan instructs undergraduate and graduate students through a variety of courses and also works with inservice teachers through professional development and grant-funded research projects.



Roberta Michnick Golinkoff, Ph.D., holds the H. Rodney Sharp Chair in the School of Education at the University of Delaware and is also a member of the Departments of Psychology and Linguistics. An author

of twelve books and numerous professional articles, she founded and directs the Child's Play, Learning and Development Lab, whose goal it is to understand how children tackle the amazing feat of learning language and developing spatial skills. The recipient of a prestigious John Simon Guggenheim Fellowship, and a James McKeen Cattell Sabbatical award, she is frequently quoted in newspapers and magazines and has appeared on Good Morning America and many regional morning shows. Dr. Golinkoff also speaks at conferences around the world about children's development.



Brenna Hassinger-Das, Ph.D., is a Postdoctoral Fellow in the Department of Psychology at Temple University. She has a background in both education and psychology research. Her areas of expertise encompass

executive functioning, early number sense, and vocabulary acquisition. She is particularly interested in investigating the role of play and games for learning. She is committed to translating her research for use by the public through community-based research projects as well as blog posts and commentaries featured in outlets such as The Huffington Post, NewsWorks.org, and as well as additional local outlets.



Kathryn Hirsh-Pasek, Ph.D., is the Stanley and Debra Lefkowitz Faculty Fellow in the Department of Psychology at Temple University and a Senior Fellow at the Brookings Institution. Her research examines the develop-

ment of early language and literacy as well as the role of play in learning. She is author of 12 books and hundreds of publications. She is the recipient of the American Psychological Association's Bronfenbrenner Award, the American Psychological Association's Award for Distinguished Service to Psychological Science, the Association for Psychological Science James McKeen Cattell Award and the APA Distinguished Lecturer Award. She is a Fellow of the American Psychological Association and the American Psychological Society, is the President Elect of the International Society for Infant Studies and served as the Associate Editor of Child Development. Dr. Hirsh-Pasek has a strong interest in bridging the gap between research and application. To that end, she served as an investigator on the NICHD Study

of Early Child Care and is on the Advisory Board of Jumpstart and Disney. She has also been a spokesperson on early development for national magazines, newspapers, radio, and television.



Zahra Hazari is an Associate Professor in the Department of Teaching and Learning, STEM Transformation Institute, and Department of Physics at Florida International University. Dr. Hazari's research focuses on

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Geoffrey Howson is an Emeritus Professor of Mathematical Curriculum Studies at the University of Southampton, England. After beginning his scientific career in algebra, he went into the field of mathematics education, making

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Christa Jackson is an assistant professor in Mathematics Education in the School of Education at Iowa State University. She teaches undergraduate and graduate courses in mathematics education. Her research focuses on teachers'

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Cindy Jong is an assistant professor of Mathematics Education in the STEM Education Department at the University of Kentucky. She teaches undergraduate and graduate courses in mathematics education and STEM education.

Her research aims to understand elementary preservice teachers' conceptions (e.g. attitudes, beliefs, and dispositions) in mathematics education over time and the factors that influence such conceptions. In addition, Cindy is interested in examining how teaching mathematics for social justice can improve teachers' classroom practices to broaden student participation, develop critical thinking skills, and foster positive identities as learners of mathematics.



Richard Kitchen is the Kennedy Endowed Chair in Urban Education and Professor in the Department of Teaching and Learning Sciences at the University of Denver. Dr. Kitchen was the co-Principal Investigator of

the Center for the Mathematics Education of Latinos/as (CEMELA) that was funded through the National Science Foundation (NSF), Center for Learning and Teaching. He is the lead author of one book, co-editor of two books, initiated and served as a co-editor of the TODOS: Mathematics for All Research Monograph, and has worked nationally and internationally with numerous schools.



Kayan Lloyd Munroe is from Jamaica and is currently reading for his Ph.D. at Hiroshima University in Japan. He has been studying the use of the openended approach in the teaching of mathematics in Japanese ele-

mentary schools for the past 4 years. He acquired a Bachelor's degree from the University of the West Indies, Mona, and a Master's from Yamaguchi University, Japan. Both degrees are in Mathematics Education. He has taught at both primary and secondary levels in Jamaica's education system as well as worked at the Ministry of Education's regional office in Montego Bay. His Ph.D. dissertation is focused on the impact of the open approach on Jamaica's fourth grade students' understanding of mathematical concepts. He believes success is directly proportional to hard work.



Sarah Anderson Ridder is a doctoral student at the University of Denver as well as an Instructor with TEACH-NOW, an online teacher certification program. In the past, Sarah worked as a middle school mathematics,

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Philip Sadler is currently the Director of the Science Education Department at the Harvard-Smithsonian Center for Astrophysics and F.W. Wright Senior Lecturer in Astronomy. He holds a B.S. in Physics from MIT and

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Gerhard Sonnert is a research associate in the Science Education Department at the Harvard-Smithsonian Center for Astrophysics and an associate of the Harvard Physics Department. He holds a doctorate in sociology

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Tamara Spiewak Toub, Ph.D., is a Postdoctoral Fellow at the Temple University Infant and Child Lab in the Department of Psychology. She has studied various connections between play and learning, including the rela-

tion between preschoolers' pretending and their executive function abilities and the use of games and other playful activities to support language development. Her background in professional theater has fueled her interest in the effects of pretend play and formal theater experiences on development for both children with autism and typically-developing populations. She is committed to the application of the science of learning in children's everyday lives. This commitment has led to her collaborations with organizations such as the Joan Ganz Cooney Center and Reflection Sciences. She has also written chapters in books for educators, policymakers, and families and for The Huffington Post blog, as well as peer-reviewed scholarly iournals.



Carol Wade is an assistant professor in secondary mathematics education at The College at Brockport, State University of New York (SUNY). She holds a Ph.D. from Clemson University in Curriculum and Instruction,

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Charity Watson is a doctoral lecturer in the Mathematical Sciences department at Clemson University. She holds a M.S. in Mathematical Sciences and a doctorate in Engineering and Science Education. Dr. Watson has taught

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ACKNOWLEDGEMENT OF REVIEWERS

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