

## **Citation for the 2020 Award for Interdisciplinary Excellence in Mathematics Education to Dr. Maria L. Blanton**

It is with great pleasure that the Award Committee announces that the 2020 Award for Interdisciplinary Excellence in Mathematics Education is given to Dr. Maria L. Blanton, TERC Inc., USA, in recognition of her distinguished and sustained contributions in improving teaching and learning early algebra through federally-funded projects, scholarship development, and connecting research to practice. By researching and emphasizing the development of algebraic thinking in elementary schools, Blanton has promoted the development of elementary mathematics education as an interdisciplinary field.

Blanton's scholarly work has been predominantly focusing on the teaching and learning of early algebra and, in particular, on the ways in which early algebra instruction can build upon children's informal intuitions about patterns and relationships to lay a foundation for the development of more formalized ways of thinking algebraically. Her work considers both students and teachers as she seeks to understand students' algebraic thinking and the ways in which teachers can support the development of that thinking. She has employed both qualitative and quantitative research methods, ranging from clinical interviews with students to classroom teaching experiments to large-scale experimental design. In this work, she has been well supported with more than a dozen federally-funded research grants for the past 20 years. She has reported her work in numerous publications in the most prestigious journals in the field (e.g., *Journal for Research in Mathematics Education*, *Educational Studies in Mathematics*, *American Educational Research Journal*, and *Cognition and Instruction*), as well as in the form of books and book chapters. She is one of the leading scholars in the mathematics education community in the area of early algebra. Building on her research, Blanton has also made a conscious effort to connect her research to practice. In particular, she has co-authored many practitioner-oriented early algebra articles and book chapters, co-authored two early algebra books for practitioners (*Algebra and the Elementary Classroom: Transforming Thinking* and *Transforming Practice and Developing Essential Understanding of Algebraic Thinking for Teaching Mathematics in Grades 3–5*), and regularly presents at practitioner conferences.

Blanton is also a steward of the mathematics education research community, having served as member and then Chair of the Editorial Panel for the *Journal for Research in Mathematics Education* (a leading research journal in the mathematics education community), as the co-Chair of the AERA Special Interest Group for Research in Mathematics Education (AERA's largest special interest group), as a guest editor for several special issues of journals, and as the early algebra working group leader for several national and international conferences. Her expertise with funded research projects has also led to her being sought beyond her home institution. She has contributed to nine federally-funded projects as Advisory Board member.

Blanton received her doctorate in 1998 from North Carolina State University, USA. Upon graduation, she joined Department of Mathematics, University of Massachusetts Dartmouth (UMD), where she had been an assistant, associate, and then full professor from 1998 to 2009. With department structure changes at UMD, she became a full professor in the Science, Technology, Engineering and Mathematics Education Department, UMD, before joining TERC in Cambridge, Massachusetts, as a Senior Scientist in 2011. She is also a Founding Faculty Member and Advisory Board Member of The Kaput Center for Research and Innovation in STEM Education, University of Massachusetts Dartmouth.