

Hyman Bass

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Following his 1959 PhD in mathematics from the University of Chicago, Hyman Bass did mathematics research (in algebra, algebraic geometry, number theory, and topology) at Columbia University, until coming to the University of Michigan in 1999 with a joint appointment in the Mathematics Department and the School of Education. His work in education has been largely in collaboration with Deborah Loewenberg Ball and her research groups. A continuing focus of that work has been a practice-based theory of mathematical knowledge for teaching, and its applications to teacher education, development, and evaluation. He is also currently investigating the teaching and learning of mathematical practices (made prominent in the Common Core), and, more broadly, relations of the school curriculum to disciplinary mathematics. To this end, he has identified some potentially disabling incongruities in these relations, and he has designed and implemented in a content course for teachers (“Connected Mathematical Thinking”) some instructional interventions to address such issues. In all of this work, he tries to address problems of inequitable access in STEM education. This entails the design of curricula and instruction that reconcile high aspirations with well-supported access, and that give ample attention to collective intellectual effort.

Bass has also been active in the public sphere. He was president of the American Mathematical Society and of the International Commission on Mathematical instruction. He is a member of the American Academy of Arts & Sciences, the National Academy of Sciences, the National Academy of Education, and the Third World Academy of Science. In 2012 he received the U.S. National Medal of Science for his work in both mathematics and education.