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Uri Treisman* (uri@austin.utexas.edu). *Strengthening the Improvement Infrastructure for Mathematical Sciences Education.*

Everyday and everywhere myriad mathematics instructors are working to improve their teaching, strengthen their programs, and respond as educational leaders to mathematics' increasing importance to society and to students' prospects for upward mobility. As a community, we are awash in a sea of educational innovation made turbulent by tectonic plate shifts in our understanding of how people learn, in the public policies shaping the demand for and funding of mathematics instruction, and, of course, in the mathematical sciences themselves. Yet little of this innovation goes to scale or becomes normative practice. All too often, the learning from even the most successful, well-designed experiments and pilot programs dissipates in a fog of collective amnesia.

In the last few years, several high-profile efforts have been launched to build a robust infrastructure for strengthening and modernizing mathematics education. These coexist with large-scale movements often launched from outside the mathematics community to reshape national practice.

This talk describes the design principles behind these recent efforts and their theoretical and organizational bases. It hopes to shed light on their successes and failures with lessons for a discipline in the policy spotlight. (Received September 26, 2017)