

Joan Ferrini-Mundy, National Science Foundation, *Common Core Implementation and the Mathematical Education of Teachers: Policy Perspectives and Support*

The policy formulations that resulted in the establishment of the Common Core State Standards (CCSS) initiative by the National Governors Association and the Council of Chief State School Officers were rooted in the need to provide clear and consistent frameworks to prepare our children for college studies and, ultimately, successful working lives in science, technology, engineering, and mathematics (STEM) careers. Forty-one States, the District of Columbia and the U.S. Virgin Islands have formally adopted the common core standards in mathematics.

We are poised at the doorstep to implementation activities, state-by-state, as well as important policy research to brace the efforts. The new standards in mathematics elicit a well-known problem: If we expect children to demonstrate deeper mathematical understanding and be able to articulate their own reasoning, then we must strengthen programs for the education of both existing and future teachers of mathematics and align that preparation with what is expected by the common core in mathematics.

Scholarly organizations across the country are already at work (the Conference Board of the Mathematical Sciences has issued recommendations on January 1, 2011) and this workshop is part of that national effort. In this talk, I will offer a NSF perspective about the challenges and opportunities in reaching tens of thousands of current mathematics teachers (as well as the undergraduate and graduate students in mathematics education programs that will soon join the workforce). What is NSF planning in terms of support for building the knowledge base to fortify these efforts? What are other federal and non-federal funders planning in terms of providing the resources for both professional development and teacher preparation?