

The Mathematical Education of Teachers II

<http://www.cbmsweb.org/MET2/>

From Preface:

This report is a resource for those who teach mathematics—and statistics—to PreK–12 mathematics teachers, both future teachers and those who already teach in our nation’s schools. The report makes recommendations for the mathematics that teachers should know and how they should come to know that mathematics. It urges greater involvement of mathematicians and statisticians in teacher education so that the nation’s mathematics teachers have the knowledge, skills, and dispositions needed to provide students with a mathematics education that ensures high school graduates are college- and career-ready as envisioned by the Common Core State Standards.

From Acknowledgements:

The work of preparing the MET II report was made possible by a grant from Math for America. The content and exposition of this report has benefited from extensive and thoughtful criticism of an earlier draft from teachers, mathematicians, and mathematics educators. That earlier draft drew on comments and suggestions made by participants at the 2010 Conference Board of the Mathematical Sciences (CBMS) Forum on Content-Based Professional Development and the 2011 CBMS Forum on Teaching Teachers in the Era of the Common Core. These were made possible by support from the Brookhill Foundation and the National Science Foundation.

Chapter 6: High School Teachers

What mathematics should prospective high school teachers study to prepare for their careers?

What kinds of coursework and programs will prepare high school teachers for teaching mathematics?

What sorts of professional development experiences will develop and sustain high quality mathematics teaching in high school?

How can mathematicians make valuable contributions to these endeavors?

These questions are the topics of this chapter.

About the Conference Board of the Mathematical Sciences

The Conference Board of the Mathematical Sciences (CBMS) is an umbrella organization consisting of sixteen professional societies all of which have as one of their primary objectives the increase or diffusion of knowledge in one or more of the mathematical sciences. Its purpose is to promote understanding and cooperation among these national organizations so that they work together and support each other in their efforts to promote research, improve education, and expand the uses of mathematics.

The CBMS member societies are:

American Mathematical Association of Two-Year Colleges
American Mathematical Society
Association of Mathematics Teacher Educators
American Statistical Association
Association for Symbolic Logic
Association for Women in Mathematics
Association of State Supervisors of Mathematics
Benjamin Banneker Association
Institute of Mathematical Statistics
Mathematical Association of America
National Association of Mathematicians
National Council of Supervisors of Mathematics
National Council of Teachers of Mathematics
Society for Industrial and Applied Mathematics
Society of Actuaries
TODOS: Mathematics for ALL