Standards for Preparing Teachers of Mathematics

Advocating for mathematics teacher preparation practices that support candidates in becoming high-quality teachers who are ethical advocates for children and effectively guide student learning in alignment with research and best practices.

STANDARDS FOR WELL-PREPARED BEGINNING TEACHERS OF MATHEMATICS

C.1. MATHEMATICS CONCEPTS, PRACTICES, AND CURRICULUM
Well-prepared beginning teachers of mathematics possess robust knowledge of mathematical and statistical concepts that underlie what they encounter in teaching. They engage in appropriate mathematical and statistical practices and support their students in doing the same. They can read, analyze, and discuss curriculum, assessment, and standards documents as well as students’ mathematical productions.

C.2. PEDAGOGICAL KNOWLEDGE AND PRACTICES FOR TEACHING MATHEMATICS
Well-prepared beginning teachers of mathematics have foundations of pedagogical knowledge, effective and equitable mathematics teaching practices, and positive and productive dispositions toward teaching mathematics to support students’ sense making, understanding, and reasoning.

C.3. STUDENTS AS LEARNERS OF MATHEMATICS
Well-prepared beginning teachers of mathematics have foundational understandings of students’ mathematical knowledge, skills, and dispositions. They know how these understandings can contribute to effective teaching and are committed to expanding and deepening their knowledge of students as learners of mathematics.

C.4. SOCIAL CONTEXTS OF MATHEMATICS TEACHING AND LEARNING
Well-prepared beginning teachers of mathematics realize that the social, historical, and institutional contexts of mathematics affect teaching and learning and know about and are committed to their critical roles as advocates for each and every student.

Comprehensive, aspirational standards describing a national vision for the initial preparation of all teachers Pre-K–12 who teach mathematics.

STANDARDS FOR EFFECTIVE PROGRAMS FOR PREPARING BEGINNING TEACHERS OF MATHEMATICS

P.1. PARTNERSHIPS
An effective mathematics teacher preparation program has significant input and participation from all appropriate stakeholders.

P.2. OPPORTUNITIES TO LEARN MATHEMATICS
An effective mathematics teacher preparation program provides candidates with opportunities to learn mathematics and statistics that are purposefully focused on essential big ideas across content and processes that foster a coherent understanding of mathematics for teaching.

P.3. OPPORTUNITIES TO LEARN TO TEACH MATHEMATICS
An effective mathematics teacher preparation program provides candidates with multiple opportunities to learn to teach through mathematics-specific methods courses (or equivalent professional learning experiences) in which mathematics, practices for teaching mathematics, knowledge of students as learners, and the social contexts of mathematics teaching and learning are integrated.

P.4. OPPORTUNITIES TO LEARN IN CLINICAL SETTINGS
An effective mathematics teacher preparation program includes clinical experiences that are guided on the basis of a shared vision of high-quality mathematics instruction and have sufficient support structures and personnel to provide coherent, developmentally appropriate opportunities for candidates to teach and to learn from their own teaching and the teaching of others.

P.5. RECRUITMENT AND RETENTION OF TEACHER CANDIDATES
An effective mathematics teacher preparation program attracts, nurtures, and graduates high-quality teachers of mathematics who are representative of diverse communities.

PURPOSES OF THE STANDARDS

1. Improve individual teacher preparation programs
2. Inform the accreditation process
3. Promote national dialogue and action related to mathematics teacher preparation

FOR MORE ABOUT THESE STANDARDS, GRADE-LEVEL ELABORATIONS, AND ASSESSMENT, VISIT AMTE.NET/STANDARDS

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