



NCTM Legislative Platform

for the 114th Congress

Ensuring that the country's young people leave high school prepared to succeed in the workforce or college relies on a strong pre-K–12 mathematics education for all students. A strong foundation in mathematics is increasingly important to our nation's economic stability, future national security, and workforce productivity. An economically competitive society recognizes the importance of mathematics learning to adult numeracy and financial literacy, and it depends on citizens who are mathematically literate. The National Council of Teachers of Mathematics (NCTM) believes that teachers and what they do in the classroom are at the heart of producing college- and career-ready high school graduates and making this vision a reality.

NCTM supports investing in teachers at every stage of their development and welcomes the increased emphasis that policymakers have given to early childhood education, family engagement, high-quality standards and assessments and the appropriate conditions for learning in the country's schools and classrooms. NCTM has identified the following legislative priorities for the 114th Congress and supports them in broader contexts.

Reauthorization of the Elementary and Secondary Education Act

- ◆ Support thoughtful, deliberate reauthorization of the Elementary and Secondary Education Act that incorporates lessons learned since enactment of the No Child Left Behind Act, including research on best practices in preparing and supporting K-12 teachers and classrooms and a prospective consideration of what teachers, parents, students and the public can expect from federal K-12 education policies.
- ◆ Support adequate investments in the programs authorized by the Elementary and Secondary Education Act that serve as the basis of federal support for local education, including specific programs for STEM (science, technology, engineering, and mathematics) education and STEM subjects.
- ◆ Support an increase in Title I funds for the country's poorest students and schools, and other efforts to improve schools nationwide that are inadequately serving their students.
- ◆ Support an increase in Title II professional development funds to support teachers, coaches and school leaders in continually updating their content knowledge, strengthening their skill in teaching mathematics, and deepening their understanding of how mathematics is learned.
- ◆ Support early-career teachers through mentoring programs, incentives, and ongoing long-term professional development.
- ◆ Increase efforts to make curriculum and assessments coherent and aligned with learning goals, ensuring that assessment data serve as meaningful guides for decision making about schools, programs, and individual students' instruction.

- ◆ Emphasize the importance and value of assessments and accountability systems that base critical decisions about students, teachers, and instruction on multiple measures rather than the results of any single summative test. Use ongoing formative and summative assessments that allow students to demonstrate mathematical knowledge in multiple ways and that provide a moving picture of what students know and are able to do.
- ◆ Support curricula based on how children and adolescents learn, especially research-based findings showing that (a) having a strong start gives young children significant advantages, (b) conceptual understanding, procedural fluency, and problem-solving skills mutually reinforce one another, and (c) effort, not simply inherent talent, counts in mathematical achievement.
- ◆ Encourage research that brings together the education research community, the mathematics community, and classroom-based mathematics education practitioners in producing research results and building on findings with immediate and long-term applications for teachers and students.
- ◆ Support the development and identification of high-priority mathematics education research and foster the growth of a base of both descriptive and experimental findings that are methodologically sound and balanced.

Federal Investments in Mathematics Education and Educators

- ◆ Support investment in the preparation of mathematics teachers through Title II of the Higher Education Act and the development and expansion of exemplary programs for preservice teacher education as Congress considers how to rewrite the Higher Education Act.
- ◆ Support investment in the preparation and ongoing support of middle and high school teachers of mathematics as well as mathematics specialists, coaches, and mathematics teacher leaders in the elementary schools. This includes developing strategies that attract those changing careers and capitalizing on the skills that these professionals bring to the classroom. It also recognizes that community colleges and alternative teacher preparation programs play a growing role in meeting the demand for effective mathematics educators.
- ◆ Support increasing the budget of the National Science Foundation (NSF), with NSF education programs receiving increases that are at least commensurate with those of the overall NSF budget. In particular, support the STEM + Computing Partnerships (STEM+C) program, which can help the teachers, schools, and students that need it the most. This funding is intended to support programs in NSF's Directorate for Education and Human Resources that directly address several important issues:
 - The need to recruit and retain highly qualified teachers with strong knowledge of content and pedagogy in the STEM disciplines
 - The need to increase the number of students interested in and educated for careers in STEM fields, as well as to educate a more scientifically literate citizenry
 - The need to educate all students in the use of mathematics as scientifically and financially literate citizens.

- ◆ Support the Mathematics and Science Partnership program established by the Department of Education to improve students' academic achievement in mathematics and science by channeling funds directly to states through formula grants.
- ◆ Advocate for maximizing and leveraging federal investments in research and teacher professional development across federal agencies, particularly at the Department of Education and the National Science Foundation, to inform and improve instructional practice.
- ◆ Ensure that changes to all federal education laws—the Elementary and Secondary Education Act, the Higher Education Act, the Carl D. Perkins Career and Technical Education Act, the Individuals with Disabilities Education Act, the Education Sciences Reform Act and others—reflect the importance of preparing mathematics teachers who can prepare all young people for future success.
- ◆ Ensure that revisions to the Education Sciences Reform Act reflect the importance of research in improving teacher preparation, classroom practice, and the development of effective mathematics curriculum and assessments that inform and improve classroom instruction for all students.

Supporting State and Local Decision Makers

- ◆ Support alternative, state-devised accountability systems that ensure that all mathematics students are being educated adequately as the Department of Education oversees implementation of waivers given to states to provide relief from some of the most onerous provisions of the No Child Left Behind Act while Congress works on updating the law.
- ◆ Provide leadership through the Mathematics Common Core Coalition, which consists of the National Council of Teachers of Mathematics, National Council of Supervisors of Mathematics, Association of Mathematics Teacher Educators, Association of State Supervisors of Mathematics, the Council of Chief State School Officers, National Governors Association, advise those charged with developing 21st-century assessments in mathematics, and support efforts to adopt and implement the Common Core State Standards for Mathematics.
- ◆ Advocate for professional development that supports teachers in the transition to implementing the Common Core State Standards for Mathematics (CCSSM) that supports teachers and supports the substance of the CCSSM.
- ◆ Develop long-term strategies and implement initiatives to effect a significant change in mathematics education as set forth in NCTM's *Principles to Actions: Ensuring Mathematical Success for All*.
- ◆ Support growing efforts to prepare and place more elementary mathematics specialists in classrooms in the early grades.
- ◆ Provide information, guidance, and support to state administrators considering and implementing uniform standards and assessments.

Legislative Actions That Support Mathematics Education and Educators

- ◆ Support federal funding for programs dedicated to STEM education and the national priority placed on inspiring students to pursue study in the fields of science, technology, engineering, and mathematics to fill the STEM careers pipeline and satisfy the workforce needs of the future.
- ◆ Ensure that lawmakers' efforts to improve investments in teacher preparation programs and ongoing professional development for educators reflect best practices and focus on the importance of qualified and effective teachers in every mathematics classroom.
- ◆ Advocate for new federal investments in high-quality early childhood education programs and support proposals to provide or strengthen education for the youngest children most at risk for falling behind in pre-K–12 classrooms.
- ◆ Highlight the role of mathematics in major legislation to ensure that citizens develop and apply the mathematical and critical thinking skills necessary to evaluate choices and their effects on their financial, statistical, economic, scientific, and technological literacy.
- ◆ Maximize opportunities presented by ongoing attention to STEM education by collaborating with other organizations with similar priorities and interests, including the STEM Education Coalition.
- ◆ Support efforts to coordinate federal investments in STEM education, as well as efforts to define “STEM education” in legislation and regulation in such a way that all of the disciplines reliant on mathematics and important to a vibrant economy are included in efforts to support a robust STEM pipeline.

(Approved by the Board of Directors on February 19, 2015)

The National Council of Teachers of Mathematics is the world's largest professional organization dedicated to improving mathematics education for all students. The Council's *Principles to Actions: Ensuring Mathematical Success for All* (2014) describes the principles and actions, including specific teaching practices, that are essential for a high-quality mathematics education for all students. *Principles and Standards for School Mathematics* (2000) provides guidelines for excellence in mathematics education. *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence* (2006) outlines the next step in implementing the Standards by identifying the most important mathematical topics that form the foundation for understanding and lasting learning at each grade level. *Focus in High School Mathematics: Reasoning and Sense Making* (2009) advocates practical changes to the high school mathematics curriculum to refocus learning on reasoning and sense making. The Council is committed to a constructive public dialogue to ensure a mathematics education of the highest quality for all students.

