# Legislative Priorities of the National Council of Teachers of Mathematics 2023

Founded in 1920, the <u>National Council of Teachers of Mathematics</u> (NCTM) supports investing in teachers of mathematics at every stage of their development and believes that mathematical literacy and fluency can be achieved for every student through an increased emphasis from policymakers on early childhood education, rigorous and engaging PK–12 mathematics instruction, family engagement, high-quality standards, appropriate assessments, and the guarantee of conditions conducive for learning in every school and classroom. Teachers and the work they do in PK through grade 12 classrooms are at the heart of preparing college-, career-, and citizen-ready high school graduates. Time and again, research demonstrates that the quality of the teacher in the classroom is the most important factor in successful learning. Success on this count requires support from federal, state, and local policymakers.

### Mathematics Does Not Have the Profile It Warrants

Understanding mathematics increases opportunities for success. Mathematics increases our ability to navigate the world around us, make sense of information, manage finances, understand economics, and countless other functions. Yet the teaching and learning of mathematics does not receive the attention in federal, state, and local policy discussions they warrant.

There is no question that mathematics achievement among US students has been a disappointment year after year for the past 20 years. The drop in mathematics scores by 5 points and 8 points, respectively, for grades 4 and 8 in the 2022 National Assessment of Educational Progress (NAEP) is the largest ever and affected students at every performance level. This decline removed the modest gains accumulated over the past 20 years. Scores are back to 2003 levels.

To address these challenges, we need only consider the growth in mathematics learning for the 20 years prior to 2003. During this period, grades 4 and 8 mathematics learning saw the largest increases on record for NAEP. Policies and funding during this growth focused on improving the quality of instruction and systemically changing how students engaged in learning mathematics.

Urgency and alarm from policymakers are needed. Current policies have significantly stunted previous gains in mathematics, and a change is needed to increase the mathematics learning and understanding for the country, support its economic growth, retain its leadership in technology and STEM (science, technology, engineering, and mathematics), and prepare our K–12 graduates for the opportunities and challenges of the future.

## Successful Mathematics Educators Need Adequate Support

In 2023, teachers are being called on to do much more than teach. They are juggling their own family obligations and their commitments to students and colleagues, are worried about working conditions and surroundings, and are managing hostilities on multiple fronts. These circumstances have laid bare the need to support all educators. Teachers of mathematics and the mathematics education community need lawmakers to—

- invest in professional development programs that recognize the unique demands and opportunities of teaching mathematics at every grade level and experience;
- sustain and increase investments in the E-Rate program and other programs that give all students and teachers access to the technology they need to be successful in teaching and learning mathematics, no matter their setting;
- invest in programs that support colleges of education and the modernization of mathematics teacher preparation programs at all levels and support the recruitment and development of diverse future teachers; and
- rely on research-informed practices in preparing and supporting PK–12 mathematics teachers and classrooms.

# Mathematics Achievement Must Improve

NCTM members are increasingly concerned about the state of mathematics education, particularly given the persistently disappointing achievements of the country's students on both the NAEP and the Programme for International Student Assessment. NCTM has taken a critical look at policies, practices, and issues that affect mathematics education at every level —early childhood and elementary, middle school, and high school—to support the critical conversations and actions needed to create positive systemic change. Specifically, we ask lawmakers to do the following:

- Convene a panel, similar to the 2006 National Mathematics Advisory Panel, to advise the
  President of the United States and the Secretary of Education on how best to prepare
  mathematics educators for modern classrooms, how best to support mathematics educators
  throughout their careers, how best to balance quality mathematics teaching and learning
  with mandatory annual student assessments of mathematics, and how best to ensure that the
  mathematics being taught and learned increases opportunities for each and every student.
- Establish programs for leaders and teachers that focus on practices that result in engaging
  and lasting mathematics learning to confront the pervasive challenges of unmet learning
  that are experienced disproportionately in mathematics at all levels.
- Establish federal, state, and local programs that provide high-quality, evidence-based professional development for mathematics educators.
- Ensure that accountability requirements do not continue to result in practices that minimize sense making and understanding of mathematics concepts and that decrease mathematics learning time annually.
- Facilitate the use of federally funded research to inform classroom teaching through changes to the What Works Clearinghouse and other resources.



Work with NCTM and other like-minded organizations to ensure that every student
has access to quality mathematics teaching and teachers in every year of their PK-12
schooling, regardless of location, race, or socioeconomic status.

### **Education Needs Adequate Investments**

Current conditions for teachers and students are not adequate for or conducive to learning, particularly in areas that are economically challenged. Addressing the impact of the pandemic on mathematics learning in K–12 education requires a longer-term investment. Students and teachers do not have access to the resources and supports they need. Federal, state, and local governments must use public resources to create a minimum standard and improve school facilities and infrastructure. NCTM asks lawmakers to support—

- investing in school buildings, transportation, and technology to bring all learning facilities up to the 21st-century baseline; and
- investing in programs authorized by the Every Student Succeeds Act at their authorized funding levels and not the lower amounts that have been appropriated since the law's 2015 enactment. Specifically, increase Title I funds that support the country's neediest schools, Title II programs that support educators, and Title IV, Part A funds that support local choices related to serving students and schools.

The National Council of Teachers of Mathematics is committed to a constructive dialogue and policies to ensure a mathematics education of the highest quality for each and every student.