



FOR IMMEDIATE RELEASE

Contact:
media@nctm.org

2022 NAEP Math Scores Reinforce Why Systemic Change Is Needed in Mathematics Education.

Reston, Va. — October 24, 2022 — Lower mathematics scores for grades 4 and 8 in the 2022 National Assessment of Educational Progress (NAEP) are cause for systemic change in how we engage students in learning mathematics, according to the National Council of Teachers of Mathematics (NCTM). The latest results in the Nation’s Report Card point toward the need for a greater focus and higher priority on mathematics instruction. Drops in math scores back to 2003 levels highlight the need for increased focus on students’ mathematical understanding and reflect the impact of policies that have significantly slowed previous gains in mathematics.

The decline in scores in mathematics of 5 and 8 points in grades 4 and 8, respectively, are on par with 2003 results. Mathematics scores fell at every performance level in both 4th grade and 8th grade. Not just some students—all students were affected. And, for all subpopulations that were tracked, nearly every one of their scores were significantly lower than the last assessment. This points to the systemic challenges in policies and practices facing teaching and learning mathematics.

“NCTM fully supports increasing the “time on task” for mathematics learning,” said NCTM President Kevin Dykema, who is a middle school mathematics teacher. “Students need to spend more time on high-quality mathematics instruction—rigorous and engaging mathematics learning grounded in students making sense of the mathematics. This is the foundational work, at every grade, that supports students in continuing as active learners of mathematics.”

Of particular concern to NCTM is the tendency to blame teachers, students, and communities for losses. There were no states, no subgroups, and no large districts that posted any significant gains in the 2022 results. For too many students—especially those deemed in need of “catching up”—the focus of mathematics instruction has been on rules, tricks, and memorization, rather than engaging students in making sense and developing their understanding of mathematics.

“We need to ensure that we have high expectations of every student, in every district, and that they have access to a well-trained and qualified mathematics teacher using high-quality mathematics curriculum and instructional strategies,” Dykema said. “Students are capable of learning and making sense of mathematics. A positive learning experience coupled with research-informed and equity-based instructional strategies increase learning and students’ belief in their ability to do mathematics.

NEWS RELEASE



“These systemic efforts are critical,” Dykema said. “And even more critical is the systemic structures in place that use education—and specifically mathematics education—to restrict and deny opportunities to students of color and those who are economically disadvantaged. These challenges, while long-standing, are just as critical to the well-being of our communities, states, and country.”

###

The [National Council of Teachers of Mathematics](#) (NCTM) is the public voice of mathematics education, supporting teachers to ensure equitable mathematics learning of the highest quality for each and every student through vision, leadership, professional development and research. As the world’s largest organization dedicated to improving mathematics education in prekindergarten through grade 12, with members in every state and more than 230 Affiliates, NCTM is dedicated to ongoing dialogue and constructive discussion with all stakeholders about what is best for students and envisions a world where everyone is enthused about mathematics, sees the value and beauty of mathematics, and is empowered by the opportunities mathematics affords.

Contact: David Barnes, dbarnes@nctm.org, (703) 795-0002