The Honorable Bill Cassidy, M.D.
Chairman, Committee on Health, Education, Labor, and Pensions
455 Dirksen Senate Office Building

The Honorable Bernie Sanders
Ranking Member, Committee on Health, Education, Labor, and Pensions
332 Dirksen Senate Office Building

April 22, 2026

Dear Chairman Cassidy and Ranking Member Sanders,

On behalf of national mathematical and statistical sciences and education organizations, which represent students, teachers, researchers, entrepreneurs, and industry professionals, we greatly appreciate your attention to mathematics education and college preparedness.

Mathematics and statistics education is a foundational investment in students' futures, opening doors to opportunity in the workforce and beyond. We share your concerns about recent assessment results, including fragmented declines in performance on the National Assessment of Educational Progress (NAEP), and ongoing challenges in college readiness and instruments used to assess it. These data and trends highlight the urgency of strengthening mathematics education at all levels. Beyond well-known general issues (e.g., chronic absenteeism and cell phone use), there are indeed unique challenges and opportunities specific to mathematics education. Challenges include: access to qualified mathematics teachers, student support systems, and meaningful learning and work opportunities; misalignment between curriculum and modern workforce skills; and longstanding underinvestment in mathematics-specific instructional support systems and professional learning for teachers.

For improving outcomes in mathematics education, we know that meaningful progress is possible. Recent education reforms in Louisiana, Alabama, and Mississippi—including targeted investments in high-quality instructional materials, teacher professional development, career-connected high school courses, coaching and tutoring, and early numeracy—have demonstrated that coordinated, evidence-based strategies can yield impressive results. These states also show that improvements at scale require high-quality data, focused interventions, and long-term commitment.

From our perspective, we recommend several national priorities:

Continue to Incorporate Mathematics Education into the Nation's AI and Tech Strategy
As artificial intelligence (AI) becomes embedded across sectors of the economy, strong preparation in the mathematical sciences is increasingly essential for using AI responsibly and effectively, in the classroom and beyond. AI—and emerging technology more broadly—rely on mathematical topics including data, statistics, linear algebra, modeling, optimization, probability, and discrete mathematics. Students who lack familiarity with these areas will be limited in their ability to understand algorithms, evaluate models, interpret data-driven decisions, or contribute to innovation in AI-enabled fields.

With targeted investments, incentives, and assessments at all levels of education, federal policy can help ensure that:

- problem-solving and sense-making remain foundational for our education system;
- schools have access to modern technology and up-to-date instructional materials; and
- educators are equipped to teach mathematics strategically with and without AI co-pilots.

Over the next few years and in response to widespread AI adoption, we expect to see dramatic changes in both what mathematics is learned and how it is taught. It is imperative that federal education policy support this transformation and the community that implements it.

Strengthen the Mathematics Teacher Workforce: Targeted Recruitment, Preparation, and Retention
We know—from decades of research—that well-prepared, well-supported mathematics teachers are the single most powerful in-school factors that influence student learning. Yet districts and states across the country face persistent shortages of mathematics and statistics teachers, particularly in rural communities and high-poverty districts. In addition, we see shortages in teachers with expertise and experience in advanced high school mathematics.

Addressing these shortages requires a comprehensive teacher workforce strategy, which could include:

- competitive compensation and career pathways that recognize advanced expertise in mathematics teaching;
- high-quality, mathematics content-rich teacher preparation programs aligned with research on effective mathematics instruction;
- community-designed pathways into the teaching profession ;
- mentoring programs that support early-career teachers during their most vulnerable years;
- ongoing and rewarded professional learning that deepens both mathematical content knowledge and pedagogical skill; and
- training in mathematics-relevant AI approaches to lower administrative and planning burden for educators.

Teachers are more likely to join and remain in the profession when they have access to strong instructional materials, meaningful collaboration time, supportive leadership, clear opportunities for professional growth, and salaries that are commensurate with the important work of educating our children. Federal policy can incentivize and support these conditions, particularly in high-need areas.

Ensure Access to Key Mathematics Education Opportunities
Longstanding disparities in access to certain courses—such as algebra, statistics, data science, and calculus—contribute to inequities in college readiness. In addition, students often lack access to tutors, coaches, and other support systems. Federal policies can help expand access to high-quality instruction, modern mathematics pathways, and effective systems of student support. As an example, we applaud many states and districts that have implemented changes so that Algebra 1 (or Integrated Math 1) is

offered to all students by 9th grade—and coaches and tutors are available to ensure that students grasp the content and are prepared for higher-level math. Such policy changes are nationally scalable, while allowing local education agencies to refine what works best for their students. Importantly, we think that all students—including those from rural communities and low-income districts—should have access to advanced mathematics coursework in their secondary education.

Invest in Basic and Translational Research in Education

Research in mathematics education provides clear guidance on appropriate mathematics content and progression, effective teaching practices, high-quality instructional materials, and formative assessment. Federal policy can support this basic research. Indeed, we applaud Congress–especially this committee–for advancing the Mathematical and Statistical Modeling Education Act (S. 1602), which will expand our evidence base for modernizing mathematics curriculum and its accompanying pedagogy.

Today's economy increasingly demands quantitative reasoning, data literacy, computational thinking, and the ability to apply mathematics in interdisciplinary contexts. We support basic and translational research efforts to:

- expand rigorous pathways in statistics, data science, modeling, and discrete mathematics alongside traditional algebra-to-calculus sequences;
- strengthen alignment between high school mathematics and entry-level college courses to reduce unnecessary remediation;
- scale corequisite support models that allow students to complete credit-bearing mathematics while receiving targeted academic assistance;
- sustain and incentivize the use of robust federal education data; and
- partner with employers and industry leaders to ensure that mathematical preparation reflects emerging fields, including advanced manufacturing, health analytics, cybersecurity, and artificial intelligence.

Such reforms should happen quickly, being respectful of and working with the broad community of stakeholders. They should also maintain high expectations while broadening the definition of mathematical readiness to reflect the diverse quantitative demands of modern careers. Critically, federal policy can incentivize these reforms and partnerships.

In closing, we wish to emphasize that the year 2026 has been proclaimed the Year of Math (S.Res. 569, H.Res.1091). This bicameral and bipartisan recognition marks 2026 as the perfect moment to launch efforts that will support and enhance mathematical sciences education in the United States.

Thank you for your leadership in examining these opportunities and challenges in education. We welcome the chance to provide expertise, research insights, and practitioner perspectives. Our organizations stand ready to serve as a resource to inform the Committee's work.

Sincerely,

American Mathematical Society (AMS)
American Statistical Association (ASA)
Association for Women in Mathematics (AWM)
Consortium for Mathematics and its Applications (COMAP)
Data Science 4 Everyone (DS4E)
Institute for Operations Research and the Management Sciences (INFORMS)
Mathematical Association of America (MAA)
National Council of Teachers of Mathematics (NCTM)
Society for Industrial and Applied Mathematics (SIAM)
Transforming Post-Secondary Education in Mathematics (TPSE Math)