



NATIONAL COUNCIL OF  
TEACHERS OF MATHEMATICS

August 26, 2008

Senator John McCain  
John McCain 2008  
P.O. Box 16118  
Arlington, VA 22215

Dear Senator McCain:

Congratulations on earning your party's nomination for president of the United States. As you pursue your quest for our nation's highest office, the importance of a strong and accountable public education system will be one of the many pressing issues before you. The stakes in education are high. Preparing and retaining a highly qualified teacher corps, closing persistent achievement gaps, addressing the dropout crisis in public high schools, and supporting a strong higher education system that offers equal opportunities are all essential to the formation of effective citizens, ready to safeguard our democratic values, our economic well-being, and our future. To date, discussions of important education issues in the campaign have been discouragingly infrequent and superficial. In the hope of deepening and extending those discussions, I would like to share with you some concerns and priorities of the more than 100,000 educators represented by the National Council of Teachers of Mathematics (NCTM).

NCTM is the world's largest professional organization dedicated to improving mathematics education for all students. The Council has long been committed to a constructive public dialogue to ensure a mathematics education of the highest quality for all students. In 2000, the Council published its landmark *Principles and Standards for School Mathematics*, providing influential guidelines for excellence in mathematics education. In 2006, NCTM's *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics* followed, dramatically reshaping the discussion of how to implement the Standards by identifying the topics that form the foundation for understanding and lasting learning in mathematics at each grade level.

NCTM strongly advocates greater focus and coherence in curriculum, assessment, and accountability in K–12 mathematics education. Aligning learning goals, curriculum, and assessment allows for gathering meaningful data on which to base important decisions about students and schools. Moreover, the Council supports a constructive national discussion about the value of voluntary common curricular expectations for mathematics education as a means of addressing the often inconsistent and unmanageable lists of learning expectations in many state standards. In the last two years, *Curriculum Focal Points* has successfully framed discussions about the importance of curricular coherence, introducing a much needed, workable strategy for addressing continuity in education in the face of student mobility—an issue of growing importance as the mobility of the U.S. population at large continues to increase.



## NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

A strong K–12 mathematics education for all students is increasingly important to our nation’s economic stability, security at home and abroad, and workforce productivity. In an economically competitive nation, everyone must recognize the importance of mathematics learning and be mathematically literate. NCTM believes that teachers and what they do in the classroom are at the heart of this vision. To transform vision into reality, NCTM works at the federal level to support policies that bolster mathematics education and programs that call for adequate investment in mathematics students, classroom teachers, and the educators who prepare them.

NCTM believes very strongly that the federal government should invest in qualified teachers at every stage of their development, including recruitment, preparation, and retention. The Council understands that a high-quality mathematics education requires ongoing support of teachers, math specialists, and math coaches.

Enactment and implementation of the No Child Left Behind Act, new education programs authorized as part of competitiveness legislation, and new provisions of the Higher Education Act affecting the preparation of teachers will be of concern to education advocates nationwide. Their practical implications at the local level will be of interest to students and families and will influence ballot decisions. When you speak of education, your emphasis on equity and the learning of all students, as well as your vision of an expanded early childhood education, heartens mathematics educators. Learning begins at birth, and a public commitment to preparing students to be successful learners as early as possible is vital. However, the early childhood years, although critically important, are not the only years deserving further examination and support. Recently, the importance of the middle school years has gained national attention, engendering efforts to align students’ experiences in those years with the needs of the workforce and the skills required for success in high school—in part as a way to address the growing dropout crisis. These issues extend beyond mathematics education but are crucial to its success.

NCTM fully embraces the goal of federal education policies to promote equity and reach the untapped potential of all of America’s students. The Council strongly supports programs and practices that provide access and assist in the acquisition of high-level mathematics concepts, skills, and problem solving by a wide range of overlapping populations, including children of poverty, English language learners, urban and rural students, students of all races and ethnicities, students with learning difficulties, students who are female, and students who are mathematically gifted.

“Foundations for Success,” the final report of the National Mathematics Advisory Panel, emphasizes that preparing elementary and middle school students for success in algebra is crucial to fostering academic and personal achievement. Last year, the America COMPETES Act authorized a new initiative to prepare elementary and middle school students for rigorous high school mathematics courses. We strongly support funding for this initiative and answering the Math Panel’s call for expanded research for mathematics education. NCTM also supports numerous other federal investments in mathematics education, research, and teacher preparation, including



NATIONAL COUNCIL OF  
TEACHERS OF MATHEMATICS

programs at the National Science Foundation—most notably the Math and Science Partnerships program, which reinforces efforts to improve math and science education nationwide.

Finally, we emphasize the urgent need for meaningful research—the need to frame questions, conduct investigations, interpret data, and promote inquiry that will improve teaching and learning in the classroom. Rigorous research with the potential to strengthen education policy and practice deserves increased support. To produce an agenda of research questions of importance to teachers, the Council brought together education researchers and practitioners for a weeklong conference earlier this summer.

As the country faces the challenges of the global economy of the 21st century, the importance of effective K–12 mathematics education cannot be overestimated. The new occupant of the White House will face all the challenges that this letter enumerates in education, and more, and we look forward to working with your team as it faces the policy debates and appropriations battles ahead and considers the reauthorization of the No Child Left Behind Act.

Thank you for your consideration and attention to these views. As the campaign continues, if we can provide you with any additional information, please do not hesitate to contact NCTM. Associate Executive Director for Communications Ken Krehbiel can be reached at (703) 620-9840, ext.2102, and Government Relations Consultant Ellin Nolan is available at (202) 289-3900.

Sincerely,

A handwritten signature in black ink that reads "James M. Rubillo". The signature is written in a cursive style with a large, looping initial "J".

James M. Rubillo  
Executive Director