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## Proposed Algebra Standard the Right Measure to Meet

Governor Schwarzenegger has proposed a landmark shift in California's middle school mathematics testing, asking the State Board of Education to test every eighth grader in the state in Algebra I and dispensing with the General Mathematics Test.

"The state has been moving towards a goal of preparing every eighth grade student in algebra for some time," said CCST Executive Director Susan Hackwood. "Acknowledging that this is the standard to which California's students should be held is the right thing to do. The challenge lies in ensuring that the education system has sufficient numbers of fully prepared teachers, who are credentialed and teaching in their area of expertise, to help students meet this benchmark."

The State Board of Education established Algebra I as the standard for all 8th grade students in 1997. However, the state has struggled to keep pace with the increased demand for fully prepared middle school math teachers, and professional development has lagged. As CCST's 2007 report, *Critical Path Analysis of California's Science and Mathematics Teacher Preparation System*, documented, fewer than half of middle school teachers held a single-subject mathematics credential. Moreover, production of new mathematics teachers was meeting only 70% of estimated demand. A decade after the Board established the new standard, only half of middle school students are taking algebra, and the number of students taking classes with underprepared mathematics teachers at the middle school level continues to rise.

The problem became more urgent earlier this year when the U.S. Department of Education found California out of compliance in assessing its eighth grade students, noting that while California's standards call for algebra in eighth grade, half the state's students are tested at a lower level.

"California needs a sufficient sustained commitment by the Legislature to meet the goals set forth in 1997," said CCST Board Chair Karl Pister. "Making algebra the standard for eighth grade students was a strong step towards enhancing the rigor of our school standards. Now the state must allocate the resources necessary to ensure that its teaching workforce has the number of qualified teachers needed to achieve that standard."

The California Business Roundtable has also endorsed Schwarzenegger's proposal, which is due to be discussed by the Board on July 9.

"Policies that affect the mathematics and science education are one critical mechanism to ensure that California remains a national and world leader in the science and technology sector, a step vital to the state's economy," said Stephen D. Rockwood, SAIC and chair of CCST's education committee. "We look forward to California being able to meet a higher standard in mathematics education."

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*CCST is a nonpartisan, impartial, not-for-profit corporation established via Assembly Concurrent Resolution (ACR 162) in 1988 by a unanimous vote of the California Legislature. It is designed to offer expert advice to the state government and to recommend solutions to science and technology-related policy issues. For more information, visit [www.ccst.us](http://www.ccst.us), or call (951) 682-8701.*