



STATE OF TENNESSEE

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**FOR IMMEDIATE RELEASE**

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Tennessee student math achievement must improve

NASHVILLE, Tenn.—Tennessee has a math problem. Less than one quarter of Tennessee students score proficient on the mathematics National Assessment of Educational Progress, according to a report from the Comptroller’s Office of Education Accountability entitled “Teaching Kids Math: Is Tennessee Doing Enough?”

In 2003, 24 percent of the state’s 4<sup>th</sup> graders scored at or above proficient and 30 percent scored “below basic”—the lowest achievement category. In the same year, 21 percent of Tennessee’s 8<sup>th</sup> graders scored at or above proficient and 41 percent scored below basic.

Other telling indicators of Tennessee students’ math difficulties include:

- The majority of states have a higher percentage of students at or above proficient on the mathematics NAEP than Tennessee.
- On both state and national mathematics exams, Tennessee has a wide “achievement gap” between its white and African American students and between its students of low socioeconomic status (SES) and students of higher SES.
- In 2004, Tennessee failed to meet the No Child Left Behind Adequate Yearly Progress mathematics benchmarks in five categories, all of which involve insufficient performance on state assessments by student subgroups (African Americans, students with disabilities, and students with limited English proficiency).

In addition, the report indicates Tennessee students attain significantly higher scores on the state’s own math tests than on national math tests. Tennessee schools, the report suggests, may not be preparing students to master mathematics at a level that makes them competitive with other states’ students or ready for college.

Poor student mastery of mathematics affects students’ academic futures and careers, which could negatively impact the state’s economy in the long term. Mathematical competence is considered a gateway to college and a filter for employment.

The report also found that students who earned respectable grade point averages in Tennessee schools often still need help in math once they enter college. “Many of the state’s lottery scholarship recipients,” the report said, “are likely to require a developmental class in math.” In such cases, the state essentially is paying twice for the same instruction: once in high school and again in college.

At elementary and high school levels, both state and national math assessments indicate that the state has significant, persistent achievement gaps between white students and students of color and between students of lower and higher socioeconomic status.

The report found that Tennessee students' difficulties with math mirrors that of the United States compared to many other nations. On the most recent international assessment of math achievement, the 2003 Program for International Student Assessment (PISA), U.S. 15-year-olds performed below their peers in 20 out of 30 participating industrialized countries. Because PISA focuses on real-world applications of math knowledge and skills, the results are especially salient to U.S. future economic competitiveness.

The report suggests that some of the reasons for Tennessee's (and the nation's) poor math showing include low expectations for teachers, poor communication among higher education faculty who prepare K-12 teachers, a culture that finds it generally acceptable to be "bad" at math, and lack of sustained and quality training for teachers.

The report recommends that policymakers should reconsider the lottery scholarship criteria, make closing the achievement gap one of the state's educational priorities, and improve the dissemination of best practices and research findings about the teaching of mathematics so that all Tennessee educators can benefit. The report also recommends that the state put more resources into teacher professional development by including it as part of the state's K-12 funding formula.

The report is available on the Comptroller's Web site at [www.comptroller.state.tn.us](http://www.comptroller.state.tn.us).

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