Established in 2006, the Dallas Independent School District African American Mathematics Achievement Task Force was created in support of Dallas Independent School District’s (Dallas ISD) initiative to improve the academic achievement of all students and to eliminate the achievement gap between and among student groups.

The objectives of the African American Mathematics Initiative (AAMI) were (1) to increase the mathematics achievement of all students, (2) to close the mathematics achievement gap between student groups and (3) to improve African American student achievement in mathematics.

The focus of this evaluation was (1) to describe characteristics of the African American Mathematics Initiative program and (2) to determine the impact of the African American Mathematics Initiative on student mathematics achievement.

Program Characteristics

During the 2010-11 school year, the African American Mathematics Initiative paid out $16,427 to Dallas ISD mathematics teachers in the form of tuition reimbursements. Twenty one mathematics teachers were each reimbursed up to $900 for tuition-related expenses incurred during the completion of graduate coursework in mathematics or curriculum and instruction.

Forty-seven percent of AAMI tuition reimbursement recipients were ethnically/racially identified as white, whereas about 26 percent were Hispanic, 21 percent were African American, and 6 percent were Asian (there was only one Asian recipient). Eleven of twenty-one (52%) mathematics teachers who received AAMI tuition reimbursements were female; ten were male. Two of the ten male recipients were African American.

Group Excellence provided mathematics tutoring and mentoring services to 10,220 students throughout 130 Dallas ISD schools. Students who received Group Excellence tutoring and mentoring services were about equally split between gender with about 49 percent being identified as female and 51 percent male. Over 97 percent of students served in the Group Excellence tutoring program were either African American (61.3%) or Hispanic (36.2%).

Dallas ISD students who received Group Excellence services were equally split across school levels. Thirty-five percent of middle school, 33 percent of elementary, and 32 percent of high school students received Group Excellence tutoring and mentoring services during the 2010-11 school year. Figure 1 presents number and percentage of Group Excellence participants by school level.

The African American Mathematics Initiative reported that about $1,000,000 was utilized to provide pertinent technological equipment to Dallas ISD mathematics classrooms during the 2010-11 school year. The African American Mathematics Initiative provided Title I middle and high school geometry and algebra teachers with a classroom set of Texas Instruments Nspire (TI-Nspire) graphing calculators and a TI-Nspire Navigator system. The African American Mathematics Initiative also purchased and distributed 237 in-focus projectors and 209 document cameras to Title I elementary (third grade) mathematics classrooms.

Due to budget constraints, AAMI was unable to provide principals, mathematics teachers, and instructional mathematics coaches with professional development activities aimed at increasing participant knowledge and utilization of culturally-relevant pedagogy and standards-based
models of mathematics instruction. Consequently, AAMI-funded *Culturally-Proficient* book studies, seminars, and demonstrations, Grades 3-5 Summer Math Teacher Academy, and the Carnegie Learning Mathematics Institute were eliminated from the 2010-11 AAMI program.

**Program Outcomes**

*Texas Assessment of Knowledge and Skills* Mathematics test results revealed that district students increased their mathematics achievement from prior years. During the 2010-11 school year, African American and Hispanic students had a one percentage point increase on the 2011 TAKS Mathematics test (67.3% for African American and 78.9% for Hispanic) from the prior school year; however, white students’ passing rates stayed relatively the same (86%). Figure 2 presents student passing rate percentage on the TAKS Mathematics test from 2008-09 to 2010-11.

![Figure 1. Student Passing Rate Percentage on the TAKS Math by Ethnicity, 2008-09 to 2010-11.](image)

Although African American student TAKS Mathematics test passing rates increased annually during the 2007-08 to 2010-11 period, African American passing rates were lower than district student passing rates each year. African American student passing rates were nine percentage points lower than district students in 2007-08, ten percentage points lower than district students in 2008-09, and nine percentage points lower than district students in 2009-10 and 2010-11. African American student commended rates were between seven and eight percentage points lower than district students each school year from 2007-08 to 2010-11.

A comparative review of TAKS Mathematics test results revealed that district students increased their mathematics achievement over time (from 2007-08 to 2010-11). Although African American students improved their mathematics performance from prior years, African American students consistently continued to have the lowest student passing and commended rates among all ethnic/racial student groups. Although results revealed that mathematics achievement gaps or differences continue to exist between student groups, with the largest gap being found between white and African American students, they decreased slightly 2008-09 to 2009-10 and 2009-10 to 2010-11.

![Figure 2. African American Student Passing and Commended Rate Percentages on the TAKS Math (2007-08 to 2010-11).](image)

**Recommendations**

With the cancellation of AAMI professional development aimed at preparing teachers and school staff to appropriately address the academic needs of all students and African American students specifically, the African American Mathematics Initiative has evolved into a program designed to increase the mathematics achievement of all district students in general, with no particular focus on the mathematics achievement of African American students.

In an effort to ensure the closing of the achievement gap between high- and low-performing children, especially the achievement gaps between minority and nonminority students, and between disadvantaged children and their more advantaged peers; it is recommended that the African American Mathematics Initiative program continue undertaking studies to determine additional services or interventions that would be most beneficial in further decreasing mathematics achievement gaps or differences between student ethnic/racial groups, especially those gaps found between white and African American mathematics students.
For more information, see EA11-152A-2 at http://www.dallasisd.org/inside_disd/depts/evalacct/index.htm