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

In 2009-2010, the focus of the AAMI evaluation was to describe the program characteristics of the AAMI, examine the relevance and utilization of AAMI professional development activities, and determine the impact of AAMI on student mathematics achievement.

Program Characteristics

During the 2009-2010 school year, more than 2,359 Dallas ISD staff participated in AAMI professional development activities. African American Mathematics Initiative professional development activities were geared towards increasing participant knowledge and utilization of culturally proficient pedagogy and standards-based models of mathematics instruction.

The African American Mathematics Initiative paid out $8,100 to Dallas ISD mathematics teachers in the form of tuition reimbursements. Nine mathematics teachers were each reimbursed $900 for tuition-related expenses incurred during the completion of graduate coursework in mathematics or curriculum instruction.

Group Excellence provided mathematics tutoring and mentoring services to 9,438 students throughout 63 Dallas ISD schools. Students who received Group Excellence tutoring and mentoring services were about equally split among gender with about 51 percent being identified as female and 49 percent male. Over 97 percent of students served in the Group Excellence tutoring program were either Hispanic (59.1%) or African American (38.6%). Figure 1 presents the number and percentage of Group Excellence participants by school level.

![Figure 1. Number and Percentage of Group Excellence Participants by School Level.](image-url)

Thirty-nine instructional mathematics coaches, trained under AAMI protocols, were placed at high-risk schools. Depending on the instructional needs of the campus, 59 Dallas ISD schools had, at the minimum, a part-time instructional mathematics coach assigned to their campus. The largest percentage of mathematics coaches were placed at elementary schools (35.6%), followed by 33.9 percent at high schools and 30.5 percent at middle schools.

The African American Mathematics Initiative purchased and distributed classroom sets of Texas Instruments Nspire graphing calculators and navigator systems to all Title I high school geometry and 12 algebra classrooms. The Dallas ISD Mathematics Department reported that they purchased and distributed 5,000 graphing calculators and 150 navigator systems during the 2009-2010 school year.

AAMI Professional Development Survey Results

The 2009-2010 AAMI Principal Professional Development Survey was administered to Dallas ISD principals who attended the Transforming School Culture: How to Overcome Staff Division and Will and Skill seminars. The survey asked respondents to answer questions regarding the
relevance and utilization of AAMI professional development. The majority (69%) of respondents reported that they strongly agreed or agreed that the AAMI Culturally Proficient book series was relevant to cultural proficient instruction.

Eighty percent of respondents agreed or strongly agreed that the AAMI Transforming School Culture seminar was relevant to creating a healthy school culture and 88 percent of respondents reported that they had utilized strategies demonstrated during the seminar to address school culture needs at their campus.

However 76 percent of respondents (who reported that their mathematics teachers had not participated in Will and Skill professional development activities), noted that mathematics teachers did not receive Will and Skill professional development training during the 2009-2010 school year.

Although survey responses seemed to evidence the relevance and utilization of AAMI professional development activities, it seemed that many mathematics teachers may not have had access to AAMI-sponsored or AAMI campus-based professional development activities during the 2009-2010 school year.

Program Outcomes

A comparative review of TAKS mathematics test results revealed that district students increased their mathematics achievement from prior years. African American students had a four percentage point increase on the 2010 TAKS mathematics test from the prior school year, whereas Hispanic students had a three percentage point increase and white students had a two percentage point increase. Figure 2 presents student passing rate percentage on the TAKS mathematics test from 2008-2009 to 2009-2010.

Texas Assessment of Knowledge and Skills (TAKS) mathematics test results showed that mathematics achievement gaps or differences between student groups decreased slightly from prior years. The largest gap was between white and African American students.

Recommendations

Recommendations for African American Mathematics Initiative program improvement include (1) further investigation to identify the rationale surrounding, or barriers preventing, all Dallas ISD mathematics teachers from having the opportunity to participate in AAMI professional development activities and (2) 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 EA10-152-2 at http://www.dallasisd.org/inside_disd/depts/evalacct/index.htm