

## EXECUTIVE SUMMARY

The present evaluation report provides a description of the Technology, Engineering, Math and Science (TEMS) Summer Academy program in the Alexandria City Public Schools (ACPS) which has been offered to rising 7<sup>th</sup> through 9<sup>th</sup> grade students since the summer of 2000. The objective of the TEMS Summer Academy is to expand the awareness of potential scientific, technical, engineering and mathematical career opportunities among minority and female students, while promoting their ability to enter and complete higher-level, post-secondary programs in mathematics, science, engineering and technology. The TEMS Summer Academy provides participants with a 'co-curricular' introduction to science and technology, by combining mentorships, business and college partnerships, career-guidance, and hands-on science activities with classroom instruction in science, mathematics and computer technology.

Data for the evaluation were collected from program documentation, staff surveys, interviews and reviews of student records. The focus of the evaluation was upon an assessment of four key aspects of the TEMS Summer Academy: Implementation (including staffing, student selection, facilities, and the curriculum), Community and Business Partnerships, Student Participation and Achievement, and Cost Analysis.

Major findings of the study were as follows:

The TEMS Summer Academy promotes comparative performance gains in the areas of student attendance and achievement in mathematics and sciences.

TEMS participants had decreased mobility, suspension and infraction rates, when outcomes for two cohorts of participating students were compared with those of a matched control group of non-participating students.

The TEMS program has been highly successful in developing community and business liaisons. The program encourages the active involvement of the community, parents, businesses and professional associations.

Student selection efforts should be carried out in a more systematic manner. Suggestions for changes in recruitment strategies are outlined.

There is a need for a local program evaluation to assess the program's effectiveness with regard to college enrollment and employment in science and technology career tracks.

Justification for the program's mission is supported by a persistent achievement gap between minority and non-minority students, both in the ACPS and nationwide, on standardized tests of achievement in mathematics and science.

The report concludes with eleven recommendations based upon the analysis of program features.