Archived Information

Academy for Educational Development

Urban Schools Science and Mathematics Program (USSAMP)

Goal Area of the Activity

The Urban Schools Science and Math Program (USSAMP) program was to improve the quality of science and math education and teaching in U.S. public middle schools and to increase access for minority and female students to more advanced college preparatory science and math courses and thus to scientific and engineering careers.

Brief Summary

USSAMP sought to enhance the quality of middle-grades mathematics and science education in Atlanta, Cleveland, and Detroit. AED provided these three school districts with technical assistance through all phases of the project including local needs assessment, planning, implementation, evaluation, and preparation for institutionalization. USSAMP's strategy had four main components: revision of mathematics and science curricula focusing on problem-solving, higher-order thinking skills, integrating new technologies into the classroom, and making instruction and content relevant to daily life and the workplace; integration of the math and science curricula; effective professional development, including training teachers in new instructional approaches and changing their perceptions of minority students' abilities in math and science; and improved academic and nonacademic supports, including counseling, career awareness activities, mentoring, tutoring, and involvement of families.

Purpose

The purpose of the USSAMP project was to enhance general science and math education in three U.S. urban school districts and to achieve the goals of: improving science and math curriculum and instruction in the middle grades; raising minority and female student performance in these areas; and improving their preparation for advanced courses of study in high school, opening the doors of opportunity for technical careers in science and math.

Accomplishments/Results

AED provided the three school districts involved in the project with program resources, funding, and technical assistance to develop and implement a range of capacity-building and program improvement strategies. Each district's initiative contains some element of the three basic US/SAMP components: curriculum development and improved course offerings in science and math; staff development aimed at improving the knowledge and skills of science and math teachers; and improvements in student support systems focusing on academic services, career awareness, and counseling.