

A Comparison of the College Preparatory Mathematics Algebra 1 Program with a Traditional Algebra 1 Program

This study compares the performance of approximately 200 ninth grade Algebra 1 students at each of two high schools in the same city in Northern California. One of the schools uses the College Preparatory Mathematics *Mathematics 1 (Algebra 1)* text and the other uses the *Holt Mathematics Algebra* series. There were seven CPM and five non-CPM teachers, who were reasonably similar in terms of age, teaching experience, mathematics teaching experience, and algebra teaching experience.

The study used comparison data from three sources: (1) an algebra readiness test administered in September 1999; (2) the same test given as a post-test in May 2000; and, (3) an end-of-the-year final algebra exam that was cooperatively written by teachers from both schools. The final consisted of both short problems graded right or wrong and larger problems graded on a four point rubric. Each test was graded by a pair of teachers, one from each school.

The CPM students showed more growth on the algebra-readiness test—6.49 points to 4.89 points) in the comparison of the pre- and post-test scores. The results of the final exam show that students using the CPM program did better on 14 of the 15 problems and significantly better on 13 of the 15 questions co-written by the two groups of teachers. The average score on the final in the CPM classes was 14.3; the average in the other classes was 8.69. These results are especially noteworthy since the algebra readiness test and two-thirds of the final exam tested basic facts and procedures.