

A Study of High-Ability Students in 8th Grade CPM Algebra as a Predictor of Enrollment in Calculus.

Most of our early studies focused on the achievement of general and low-ability students in CPM classes. This is the first study to focus exclusively on very high-ability CPM students. To investigate the achievement of this group, we looked for schools in California that have been using CPM in classes designated as honors algebra or honors geometry for at least four years. There were only four such classes in the state and only three responded with data. (Note: The first draft of the Algebra 1 course was used in 1989 and the first edition of the course was released in 1992.)

For these three schools, the results are quite dramatic. When schools switched either their honors algebra 1 or their honors geometry class to CPM, the percentage of students who took calculus four or three years later went up **59%** (from 51% before CPM to 81% after) in one case and **63%** (from 49% to 80%) in the other. In the third case, the high school taught no calculus until four years after CPM had been introduced in an eighth grade honors class. By that point 22 out of 24 of those students (**92%**) took calculus. In all three schools the same teacher has taught the honors class (before CPM and then after CPM was introduced) and, in the two schools where a calculus course existed, the same teacher has taught the calculus class for the entire period of the study.

In the first school, the practice is now to take the best students from CPM Math 3 (Algebra 2) and put them directly into calculus. These students have all earned an “A” so far.

School A

Year of graduation	Type of program	Original number in class	% graduating from school	% of graduates taking calculus	Average SAT scores
1994	Non-CPM	47	98%	50%	569
1995	Non-CPM	55	93%	37%	543
1996	Non-CPM	19	89%	59%	561
1996	CPM	31	81%	80%	628

School B

Year of graduation	Type of program	Original number in class	% graduating from school	% of graduates taking calculus
1994	Non-CPM	38	87%	55%
1995	Non-CPM	60	85%	55%
1996	Non-CPM	35	86%	43%
1996	CPM	52	83%	81%