

Reference: Bohrnstedt, G. W., Stecher, B. M., & Wiley, E. W. (2000). The California class size reduction evaluation: Lessons learned. In Wang, M.C. & Finn, J.D. (Eds.), How small classes help teachers do their best (pp. 203-225). Philadelphia, PA: Temple University Center for Research in Human Development in Education.

STRUCTURED ABSTRACT

Background: In 1996, the state of California launched an ambitious initiative to reduce class size in kindergarten through third grade in public elementary schools. This statewide initiative affected over 1.6 million students, cost over \$1 billion annually, and is considered by many to be the largest state educational reform in the history of the United States. School districts voluntarily participated in the initiative. By the end of the first year of the program, about 90% of first-grade students attended classes with 20 or fewer students; by year two, almost all first-grade and second-grade students in California attended reduced size classes. California's class size initiative provides valuable information about the relationship between class size and student achievement in the early grades and about the implementation of small class size in a very large and diverse state.

Purpose: To report the findings of a comprehensive evaluation of the first two years of California's class size reduction initiative.

Setting: The entire state of California.

Population: 1.6 million students in grades K-3 in public elementary schools.

Intervention: The state of California highly incentivized school districts throughout the state to reduce class size in grades K-3. In 1996-1997, districts received \$650 per child for every student in a reduced size class of 20 or fewer in first and second grade. In 1997-998 the reimbursement rate was increased to \$800 per child for every student in a reduced size class of 20 or fewer in grades K-3.

Research Design: Quantitative comparison; policy evaluation.

Data Collection and Analysis: Five organizations joined together to form a research consortium of the California class size reduction initiative: The American Institutes for Research, RAND, EdSource, Policy Analysis for California Education and WestEd. This consortium was awarded a four-year contract by the California State Board of Education to evaluate the statewide class size initiative.

Data for this analysis of the first two years of the California class size initiative come exclusively from third-grade students. Some third-grade students had been in large classes in first and second grade (with an average class size of 29 students), but most had been in small classes of 20 or fewer students the previous two years. Since the California class size initiative was a broad-scale policy initiative and not a randomized-controlled field trial, it was not possible to directly assess the causal relationship between class size and student achievement, as students were not

randomly assigned to small and large classes. Instead, cross-sectional comparisons of students in small and large classes were used to estimate the effect size of class size on student achievement.

Findings: Third-grade students who had attended small classes in California for one or two years previously showed small positive gains in reading, math, and language, with effect sizes of 0.05 to 0.10, when compared with their counterparts who had been in large classes. These differences in achievement were consistent regardless of students' race or ethnicity, family income level, or language status.

There were no significant differences between small and large classes in spelling in third grade.

There were few observed differences in classroom instructional practices between small and large classes in third grade.

Parental satisfaction with schools and contact with teachers was slightly higher in the small third-grade classes than in the large classes. In small classes, 74% of parents initiated contact with teachers versus 69% of parents with children in large classes; in small classes, 85% of parents were contacted by teachers versus 81% of parents of children in large classes.

The rapid implementation of the California class size initiative created shortages in teacher staffing and in classroom space. Over 23,000 new teachers were added to K-3 classrooms in the first two years of the initiative, and the number of new teachers hired who were not fully credentialed increased dramatically. In districts where 30% or more of all students came from low-income households, the percentage of teachers who were not fully credentialed jumped tenfold, from 2% in 1995-1996 to 21% in 1997-1998.

The rapid implementation of the California class size initiative also created shortages in classroom space. By 1997-98 over 20% of schools had converted libraries and computer labs into classrooms, and over 25% had taken away space from special education, child care, and music and arts programs.

Conclusions: This evaluation of the first two years of the statewide California class size initiative shows that third-graders who had been in small classes of 20 or fewer students for one or two years realized modest gains in student achievement in reading, math, and language. These small but positive effect sizes held up across a wide and diverse spectrum of third-grade students throughout California, including students of different races and ethnicities, different economic backgrounds, and different language backgrounds.

These reported effect sizes were smaller than those reported in the Tennessee class size study, but there were several major differences between the California initiative and Project STAR. Project STAR was a randomized-controlled experiment that occurred in a limited number of schools and involved around 11,600 students; the California initiative began with broad statewide implementation involving around 1.6 million students. In Project STAR, class size was reduced from 22-26 students to 13-17 students; in California, class size was reduced from an average of 29 (with a maximum of 33) to an average of 19 (with a maximum of 20). In Project STAR, implementation began with kindergarten and first grade; in California, statewide

implementation began with first and second grades. Furthermore, the greatest student achievement gains in Project STAR were reported in kindergarten and first grade, whereas the California two-year evaluation was based on the achievement of third grade students. As a result of these fundamental differences, direct comparisons should not be made between the Tennessee and California studies.

The implementation of the class size reduction initiative in California caused serious administrative problems for school districts because of its rapid introduction and because of its extremely large scale, especially in the areas of staffing and facilities.