ABSTRACT

Class-size reduction (CSR) in California was a popular, rapidly implemented reform that improved student performance. This dissertation provides information to state-level policy makers that will help them avoid two implementation problems seen in California’s CSR implementation. The first problem was with flat, per student reimbursement scheme did not adequately cover costs in districts with larger pre-CSR class-sizes or smaller schools. To help policy-makers understand the relationship between existing conditions at schools (enrollment, existing class size), policy choices (class-size goal, class size measurement mechanism), and costs four simple “rules of thumb” were created through analysis of a simulation of CSR in seven Florida school districts. At a classroom cost of $53,000, the “rules of thumb” per student cost for CSR is a $435 for reduction to 20, double for reduction to 17 and triple for reduction to 15 when existing class size is 24. The price moves up or down $80 for each change in existing class size above or below 24. Setting the class size goal as a hard ceiling instead of allowing rounding increases costs by about $240 at enrollment of 100. This extra cost declines as enrollments increase to 350 where costs are remain about $30 higher. Schools with enrollments under 100 face costs that are 5% to 10% higher. These “rules of thumb” and three other reimbursement strategies are evaluated for their ability to adequately estimate reimbursements for the cost of CSR. The strategy used in California, of a flat per student reimbursement, was the least efficient. Strategies using district information on costs, class sizes, and enrollments are adequate for reimbursing districts. The “rules of thumb” was the most robust strategy for reimbursing schools. A second problem seen in California was a decrease in the qualification level of the kindergarten through third teacher workforce. The largest decrease were in schools with higher concentrations of low-income or minority students. Modeling of the flow of K-3 teachers during the first year of CSR shows within district transfers create more vacancies in schools with more black or Hispanic students. These vacancies were then more likely to be filled with unqualified teachers. Potential policy responses to this problem are to not fill classrooms created by CSR with transfer teachers, and to provide incentives for teachers to remain in schools that are difficult to staff.