



# *Class Size*

### Context

New York City public schools have the state's largest class sizes. In the Campaign for Fiscal Equity case, the state's highest court found that the city's children were denied their constitutional right to an adequate education, in large part due to excessive class sizes. According to the New York City Department of Education's learning environment surveys, reducing class size is the top priority of the city's parents. Furthermore, 86 percent of New York City principals say they cannot provide a quality education because of overly large classes. Yet class sizes have increased for the last four years, and in the early grades are now the largest in thirteen years.

There are many decision-makers when it comes to class size. Among them are the New York State Legislature and the Governor, who decide on state aid and approved the Contracts for Excellence (C4E) legislation in 2007, which mandated that New York City reduce class size in all grades. The New York State Education Department, responsible for enforcing the C4E law, and the New York City Department of Education, which sets overall policies, priorities, and allocates school spending, and the members of the City Council, who approve the education budget and also play a role in helping to determine class sizes in New York City public schools. But the next mayor will clearly have the pivotal role.

### Evidence

The research showing smaller classes boost learning and success later in life is voluminous. The Institute of Education Sciences, the research arm of the U.S. Department of Education, cites class size reduction as one of four K–12 reforms that have been proven to work through rigorous evidence (Institute of Education Sciences 2003). Large-scale randomized experiments reveal that children who are in smaller classes in the early grades get higher test scores, better grades, fewer disciplinary referrals, and are more likely to graduate from high school, go to college, and own their homes more than twenty years later (Finn et al. 2001; Nye, Hedges & Konstantopoulos 1991; Finn 2002; Finn et al. 2005; Krueger & Whitmore 2001; Chetty et al. 2011). In addition, smaller classes enhance the development of “non-cognitive” skills not captured by tests, like persistence, motivation, and self-esteem, which are also linked to success in school and in life (Dee & West 2011; Babcock & Betts 2009; Heckman & Rubenstein 2001).

While experiments in class size reduction in the early grades have not been replicated in the middle and upper grades, many controlled studies indicate that students in smaller classes in both middle and high school achieve higher test scores, are more engaged, and are less

likely to drop out of school than students in large classes. One comprehensive study commissioned by the U.S. Department of Education analyzed the achievement levels of students in 2,561 schools across the country. After controlling for student background, the only objective factor positively correlated with higher performance was smaller classes. Moreover, the researchers found that student achievement was even more strongly linked to class size in the upper grades than the lower grades (Dee & West 2011; Babcock & Betts 2009; Heckman & Rubinstein 2001).

Class size reduction is one of the few education reforms that significantly narrow the achievement gap between racial and economic groups (McLaughlin & Drori 2000; Lubienski et al. 2008). Four years in a smaller class in the early grades more than doubles the odds that a student living below the poverty line will graduate from high school in time – equaling the graduation rate of their affluent peers. Furthermore, being assigned to a small class narrows the black-white gap in college test taking by 54 percent (Konstantopoulos & Chun 2009). Some experts have even posited that one of the major factors contributing to the significant narrowing of the achievement gap that occurred nationally in the 1970's and 1980's was the concurrent lowering of class size during this period (Krueger & Whitmore 2002; Barton & Coley 2010).

Some critics have argued that there is a trade off between class size and teacher quality. Yet the evidence suggests the opposite: smaller classes are likely to lead to a more effective and experienced teaching force, especially in New York City and other high-needs districts, by lowering the high rate of teacher attrition. Studies in California, New York State, and elsewhere have shown lower rates of teacher turnover when class sizes are reduced (Gallagher 2002; Isenberg 2010). A report prepared for the New York City Department of Education in 2003 based on exit interviews with teachers who left after one year cited excessive class size as one of the top reasons for leaving. In interviews, the subject of excessive class size recurs over and over again (Smith 2003). A survey in 2004 found that among New York City teachers who were considering quitting, class size reduction was one of the top three reforms that would entice them to stay longer (New York City Council Investigation Division 2004). Teachers surveyed nationally respond that the best way to improve their effectiveness is to lower class size (Public Agenda 1999).

Other critics claim that since the best-known large-scale study of class size, the STAR experiment in Tennessee, showed gains for students in classes of thirteen to seventeen compared to those in classes of twenty-two to twenty-five, classes would have to be reduced to these levels to produce benefits. Yet many researchers have shown that there is no necessary threshold for class-size gains (Blatchford, Bassett & Brown 2011). A re-analysis of the STAR results demonstrates that even for students placed in the “larger” classes of twenty-two to twenty-five, the smaller the class within that range, the better the outcome (Krueger & Whitmore 2002).

Still others argue that class size reduction is too expensive. Yet Alan Krueger, former chief economist for the Treasury Department and currently Chairman of the Council on Economic Advisers, has estimated that every dollar invested in smaller classes yields about

\$2 in benefits (Krueger 2003). This estimate does not take into account savings from lower rates of grade retention or special education referrals, both of which are quite costly and would likely fall if class sizes were reduced. Yet another study suggests that smaller classes would produce large medical savings because of improved life prospects, concluding, “Reducing class sizes may be more cost-effective than most public health and medical interventions” (Muennig & Woolf 2007).

In 2009, the New York City Department of Education estimated that it would cost \$358.4 million to achieve the class size goals in their C4E plan of no more than twenty students on average in grades Kindergarten through three, twenty-three students in grades four through eight, and twenty-five in high school (New York City Department of Education 2009). Yet the city spends nearly one billion dollars subsidizing charter schools, and its total education budget is more than \$21 billion, so achieving these goals would cost less than 2 percent of its overall budget.

## Bottom Line

Researchers, educators, and parents agree that class sizes should be reduced in New York City schools to improve student outcomes, to provide a more equitable opportunity for children to learn, and to narrow the achievement gap.

## Related Research

For more studies that show correlations between smaller classes in the middle and upper grades and improved academic outcomes, see the Class Size Matters fact sheet, “The importance of class size in the middle and upper grades at <http://www.classsizematters.org/wp-content/uploads/2011/04/fact-sheet-on-upper-grades.pdf>

## Examples of Best Policy and Practice

In 2012, as in earlier years, the Icahn charter schools outscored all other New York City charters on the state standardized exams in reading and math. These schools cap class size at eighteen students in grades Kindergarten through eight (New York City Charter School Center 2012; Gonen 2009).

In California, the Quality Education Act of 2006 provides funding for reducing class sizes to twenty students in grades Kindergarten through three, and twenty-five in grades four through twelve in schools with large numbers of low-income, minority, and English learners. Since then, 85 percent of these schools have met their goals for improving outcomes (Malloy & Nee 2010).

In 2003, Florida voters approved a change in their state constitution requiring a gradual reduction of class size in all grades. This led to a cap of eighteen students per class in grades pre-Kindergarten through three, twenty-two in grades four through eight, and twenty-five in high school, to be achieved by the 2010-2011 school year. Between 2003 and 2009, the state’s students experienced significant gains on the national assessments

known as the NAEPs, as well as a narrowing of the achievement gap between white and black students (Florida Department of Education 2012).

Finland is consistently among the developed nations' highest achievers on the international assessments called the PISAs. In 2009, the nation scored third in reading, sixth in math and second in science. Finland also has some of the smallest class sizes among the OECD nations, averaging twenty-one or less in all grades – and is also among the most equitable, with little variation in class size across schools (OECD 2011). According to experts, including the former Finnish Education Secretary, a key reason that the country's schools have outperformed others with similar demographics is their small class size (Snider 2011; Abrams 2011).

Prepared by: Leonie Haimson, Executive Director, Class Size Matters,  
[www.classsizematters.org](http://www.classsizematters.org)