## The 7 Myths of Class Size Reduction -- And the Truth

This post is by Leonie Haimson, Executive Director of Class Size Matters, adapted from a column that originally appeared in the Huffington Post on 11/1/10.

Across the country, class sizes are increasing at unprecedented rates. An estimated 58,000 teachers were laid off in September, at the same time as enrollment was increasing in much of the country.

In California, two-thirds of the districts have seen jumps in class size, with many early grade classes rising from 20 to 30 students, after rules first established in 1996 governing the state's class size reduction program were loosened.

In Texas, there are proposals to eliminate the state's long-standing mandate to keep class sizes in grades K-4 to no more than 22 students; recommended by the Perot Commission and implemented by Gov. Mark White in 1984 -- a reform which has contributed to the state's black and Hispanic students having some of the highest achievement levels in the country.

Clearly budget pressures are weighing on school districts, but there has also been a fierce attack on the value of class size reduction. This attack is issuing from many of the wealthy foundations advocating for corporate-style reforms, and commentators who receive funding from these sources.

A recent example was a column originally written for the Hechinger Center by Justin Snider, who teaches an introductory writing class at Columbia University. Snider claimed that class-size reduction programs in California and Florida now "look foolish" and are a "luxury... we can no longer afford."

Interestingly, Mr. Snider failed to mention that the writing class he teaches at Columbia is capped at no more than 15 students. Harvard College recently reduced the size of its writing classes to 10 students, in recognition of how labor intensive it is to teach students how to write well -- even to these Ivy League students.

Meanwhile, public school teachers working just a few blocks away from Mr. Snider's classroom endeavor to teach writing to as many as 34 high school students per class -- and with total teaching loads of 150 students or more. Many of their students are poor and/or recent immigrants, and far more in need of individualized instruction than the high-achievers enrolled at Columbia University.

So perhaps its time to review what the research really says and what experience shows about the importance of reducing class size. Here are seven myths about class size, commonly repeated as gospel by the corporate-type reformers, juxtaposed with the facts.

## 1. Myth: Class size is an unproven or ineffective reform.

Studies from Tennessee, Wisconsin, and states throughout the country have demonstrated that students who are assigned to smaller classes in grades K-3rd do better in every way that can be measured: they score higher on tests, receive better grades, and exhibit improved attendance.

The Institute of Education Sciences, the research arm of the United States Department of Education has concluded that class size reduction is one of only four, evidence-based reforms that have been proven to increase student achievement through rigorous, randomized experiments -- the "gold standard" of research. (The other three reforms are one-on-one tutoring by qualified tutors for at-risk readers in grades first through third; life-skills training for junior high students, and instruction for early readers in phonics -- and not one of the policies that the corporate reformers are pushing. )

A recent re-evaluation of the STAR experiment in Tennessee revealed that students who were in smaller classes in kindergarten had higher earnings in adulthood, as well as a greater likelihood of attending college and having a 410 K retirement plan. In fact, according to this study, the only two "observable" classroom factors that led to better outcomes were being placed in a small class and having an experienced teacher.

## 2. Myth: There is a threshold that has to be reached before class size reduction provides benefits.

Since STAR involved comparing outcomes between students in classes of 22 to 25 students and those in classes of 13 to 17 , many critics have argued that classes have to be reduced to a certain level to provide benefits.

Yet Alan Krueger of Princeton University analyzed the STAR results for the control group of students who were in the "larger" classes and found that within this range, the smaller the class, the better the outcome.

Indeed, esteemed researchers such as Peter Blatchford have found that there is no particular threshold that must be reached before students receive benefits from smaller classes, and any reduction in class size increases the probability that they will be on-task and positively engaged in learning.

## 3. Myth: Large scale programs such as class size reduction in California didn't work.

Actually, every controlled study of the California class size reduction program -- and there have been at least six so far -- have shown significant gains from smaller classes.

Unlike the STAR studies, nearly all elementary schools in the state reduced class size at once -especially in grades K-2nd -- so it was hard to find a control group with which to compare outcomes. Also, the state exam was new, making it difficult to compare achievement gains to past trends.

Yet given these limitations, the results were striking: even when analyzing the achievement of third graders who had the benefits of a smaller class for only one year, as compared to those who were in large classes, the gains were substantial, especially for disadvantaged students in innercity schools.

In the five largest school districts other than Los Angeles, namely San Diego, San Francisco, Long Beach, Oakland and Fresno, researchers found that class size reduction raised the proportion of third graders who exceeded the national median by 10.5 percent in math, and 8.4 percent in reading, after controlling for all other factors. Even larger gains occurred in schools with high numbers of poor students, and in schools that had 100 percent black enrollment, lowering class size resulted in 14.7 percent more students exceeding the national median in math, and 18.4 percent more in reading.

Another researcher, Fatih Unlu, avoided some of the pitfalls encountered by other researchers who were stymied by the fact that the state tests were new and there were few students to use as a control group. In his paper, he instead analyzed the change in National Assessment of Educational Progress scores, and by using two different statistical methods, he found very substantial gains from smaller classes.

## 4. Myth: Class size reduction lowers the quality of teachers.

This urban legend is often repeated by the corporate-style reformers. Typical is the claim from Mr. Snider, that lowering class size in California "had the unintended effect of creating a run on good teachers: the best teachers tended to flee to the suburbs, which were suddenly hiring and which offered better pay and working conditions."

Actually, though anecdotal reports at the time warned of teacher flight, what the follow-up studies from California showed is that after rising temporarily in all schools, teacher migration rates fell dramatically to much lower levels than before, and most sharply in schools with large numbers of poor students. In fact, for the first time, teacher migration rates began to converge in all schools, rich and poor.

This finding is not altogether surprising, since teachers in high-poverty schools had better working conditions and a real chance to succeed, their incentive to flee elsewhere was substantially alleviated. Indeed, other studies have confirmed that when class sizes are lowered, teacher turnover rates fall. This propensity would be expected to act synergistically to enhance teacher quality over time, as lower rates of attrition particularly in large urban districts would tend to increase the experience level and overall effectiveness of the teaching force.

## 5. Myth: Class size matters, but only in the early grades.

Although there has been no large scale experiment done for the middle and upper grades, as STAR did in the early grades, there are numerous studies showing that smaller classes are correlated with achievement gains and/or lower dropout rates in the middle and upper grades as well.

One comprehensive report, done for the United States 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 found to be positively correlated with student performance was smaller classes, not school size or teacher qualifications, nor any other variable that the researchers could identify. Moreover, student achievement was even more strongly linked to class size reduction in the upper grades than the lower grades.

Two recent studies that show that class size matters, even in college. One from the University of Richmond concluded that increasing class size to 30 students to 45 had a negative impact on the amount of critical and analytical thinking required in business classes, on the clarity of presentations, the effectiveness of teaching methods, the instructor's ability to keep students interested, and the timeliness of feedback, among many other key factors of educational quality.

Another study from Italy found significantly lower achievement and smaller wages after graduation for college students, depending on how large their introductory lecture classes were. The effects were especially substantial for lower-income and male students:

Our baseline results suggest that increasing class size by 20 students reduces a student's wage by approximately 6 percent. Given this estimate, it would be hard to dismiss class size reduction as an ineffective and inefficient policy.

## 6. Other reforms work better to narrow the achievement gap.

Though many of the corporate-style reformers who argue that their preferred priorities of more high-stakes accountability systems, the elimination of teacher tenure, and expansion of charter schools will narrow the achievement gap, there is no evidence to indicate that these policies would do so, and in fact, recent evidence suggests that such policies will further cause highquality teachers to flee from our neediest schools.

Instead, researchers such as David Grissmer of RAND have proposed that the reductions in class size that took place nationally in the 1970s and 1980s might account for part or most of the substantial test score gains among poor and minority students -- and the narrowing of the achievement gap -- that took place over the this period. Why? Students from disadvantaged groups experience two to three times the average gains from smaller classes than middle class white students.

Many of the most celebrated charter schools that the corporate reformers celebrate cap class sizes at 18 or less, such as the high-performing Icahn charter schools in the Bronx and the Harlem Children's Zone. Meanwhile, class sizes in our inner-city public schools continue to grow larger each year.

As a recent issue brief on the achievement gap from the Educational Testing Service points out, schools having high numbers of minority students tend to have larger classes of 25 students or more, and the class size gap between high-minority schools and low-minority schools actually worsened between 2000-2004. Don't we have a moral obligation to provide equitable
opportunities to all children, especially when we know that class size reduction especially benefits those who need this help most?

## 7. Myth: Even if class size matters, it's just too expensive.

Many studies have shown that class size reduction is cost-effective because it results in higher wages later in life (see the above study, for example), and lower costs for health care and/or welfare dependency.

One re-analysis of the STAR data published in the American Journal of Public Health estimated that reducing class sizes may be more cost-effective than almost any other public health and medical intervention, with large savings in health care and almost two years of additional life for those students who were in smaller classes in the early grades.

Moreover, there are some ingenious school leaders throughout the country who have managed to reduce class size without spending any more money, by redeploying out-of-classroom staff. See this study, for example, by Christopher Tienken and Charles Achilles, showing how a middle school in New Jersey managed to lower student failure rates from 3 to 6 percent to only 1 percent by reducing class size, at little or no extra cost.

Finally, even if reducing class size is costly, the question should be, compared, to what? As Derek Bok, former president of Harvard, once said, "If you think education is expensive, try ignorance."

If there are only a few reforms we know have substantial benefits to children, and improve their education, health, and life outcomes, why not invest in these reforms, rather than waste hundreds of millions of dollars, and in some cases billions on unproven policies with possibly damaging consequences, including the rapid expansion of charter schools, more high-stakes testing, and teacher performance pay, as promoted by Race to the Top and other federal programs?

So the next time somebody with power or influence tells you that class size reduction is a waste of money, ask him what the evidence-base is for the policies he favors instead. Or ask him what class sizes were in the school his own child attends.

Many of the individuals who are driving education policy in this country, including New York City Mayor Michael Bloomberg, Jeb Bush and Bill Gates, sent their own children to abundantly financed private schools where class sizes were 16 or less, and yet continue to insist that resources, equitable funding, and class size don't matter -- when all the evidence points to the contrary.

As John Dewey wrote, "What the best and wisest parent wants for his own child, that must the community want for all of its children." If education is really the civil rights issue of our era, it is about time those people making policies for our schools begin to provide for other people's children what they provide for their own.

