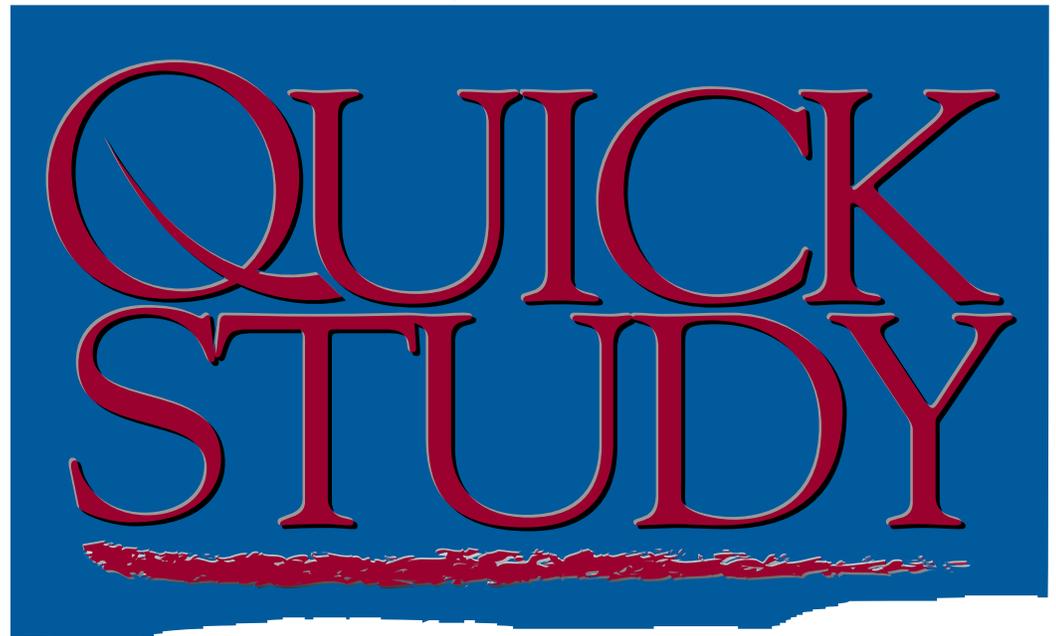


Over the past 40 years, taxpayers have supplied the U.S. public education system with steady improvements in funding, teacher pay, teacher credentials, and student/teacher ratios. Yet with these resources, public education has consistently failed to produce well-educated children; indeed, the quality of education has declined over time as measured by almost any standard. Centralization and unionization have removed parental voice and exit from the system, which can only be restored through school choice.



## No VOICE, No EXIT:

### *The Inefficiency of America's Public Schools*

In 1996, the Brookings Institution released *Does Money Matter?* In nearly 300 pages of scholarly analysis buttressed by statistics, the book arrived at no definitive conclusion as to whether school resources affect student achievement. Now it is 2001, and despite all the studies, analyses, arguments and proposals, American public education is still mired in the crisis of productivity that began in the 1960s.

This study surveys what America has spent on public education over the past three decades and what the money has bought us in terms of student achievement, parental satisfaction and public confidence. It compares U.S. spending and results with those of other advanced nations and reports that we fall short. It explores some reasons why inputs and outputs in K-12 education are not more closely linked. Finally, it suggests how we can regain authority, restore local accountability and enhance the efficiency of U.S. public schools.

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#### WHAT AND HOW WE SPEND

In 1996, the year in which the aforementioned book was published, state and local governments in the United States

spent \$279 billion on K-12 education, by far the largest item in their collective budgets. As a whole, our nation spends more on education than it spends on national defense. In 1999, the U.S. Census Bureau reported that education consumes more money at all levels of government, federal, state and local, than does any program other than Social Security. And the expenditures continue to grow.

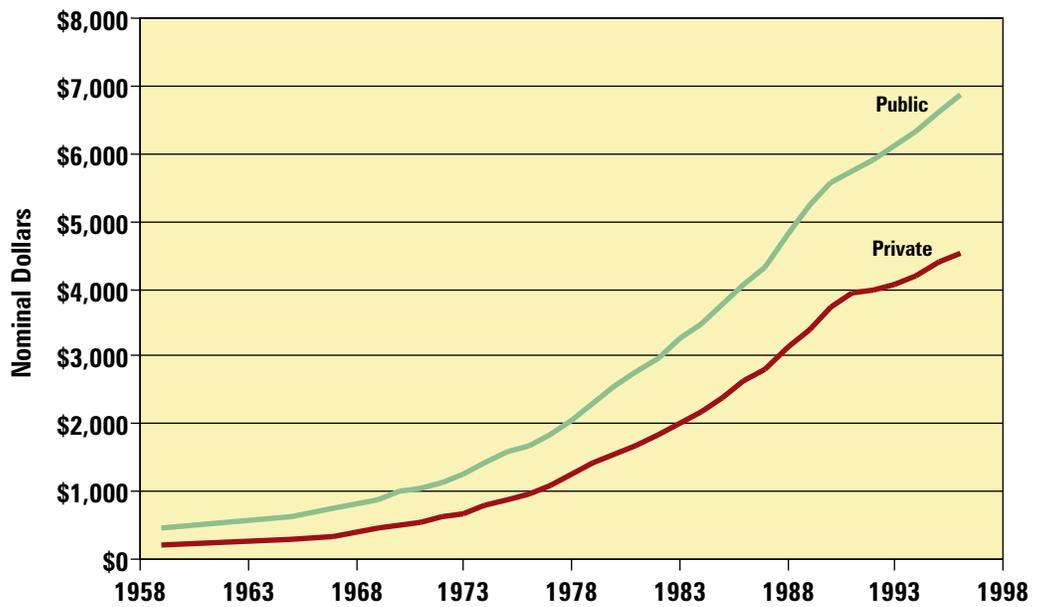
With this money, which amounts to a 1300 percent increase in real spending per student since 1919 — to nearly \$8,000 in 1998 — we have steadily improved a number of measures associated with quality education. Over the past 40 years, the number of pupils per teacher has fallen, the number of teachers with advanced degrees has more than doubled and the average experience level of teachers has increased.

Over the same 40 years, the fraction of resources spent on salaries for teaching staff has declined from 61 percent in 1960 to 46 percent in 1990. The fraction of resources devoted to non-school administration and maintenance has held constant. What has grown is the share devoted to fixed charges and other instructional spending, the former

comprising health and retirement benefits and the latter including teaching material and clerical staff as well as an array of government-mandated social programs.

And over the same period, U.S. Department of Education data show how the total expenditures for public and private K-12 schools compare. Private school spending, made up not only of tuition payments but also of money from philanthropic donations, fundraising drives and tax subsidies, has approached public school spending in percentage terms. Yet private schools still spend only two-thirds as much per pupil as do public schools.

**PER-PUPIL SPENDING IN PRIVATE AND PUBLIC SCHOOLS, K-12**



Source: U.S. Department of Education, National Center for Education Statistics (1997), *Digest of Education Statistics* (1997 and 2000).



## HOW OTHER NATIONS COMPARE

In 1997, based on a survey of 29 OECD countries, the United States was holding its own in terms of resources devoted to education. Countries used for comparison included English-speaking and Asian nations; countries with federal systems of government (Switzerland and Germany); and one nation with a centralized government (France). The United States appeared about average in the share of gross domestic product (GDP) devoted to public education. But because our GDP is so large, we appeared substantially above the average in money spent per pupil. Indeed, among the developed countries we ranked behind only Denmark, Austria, Norway and Switzerland.

Despite these financial inputs, the “outputs” of our public schools have been disappointing. In terms of math and science performance in international tests over the past 40 years, two patterns are evident. First, U.S. students perform comparatively better in science than in math. Second, students tend to fall behind as they move up in grade level. The latter pattern is repeated in reading; although U.S. 9-year-olds scored behind only Finland in a recent evaluation, our 14-year-olds ranked seventh in reading skills. Measured in terms of value added per dollar invested, American students ranked last.

Further comparisons are similarly troubling but enlightening. The very latest figures, from the National Commission on the High School Senior Year 2001, indicate that the high school curriculum in many of America’s public schools is suboptimal. Most 17-year-olds in other countries are studying math, one-third of U.S. students are not. Nearly two-thirds of final-year students in other countries are studying science, two-thirds of

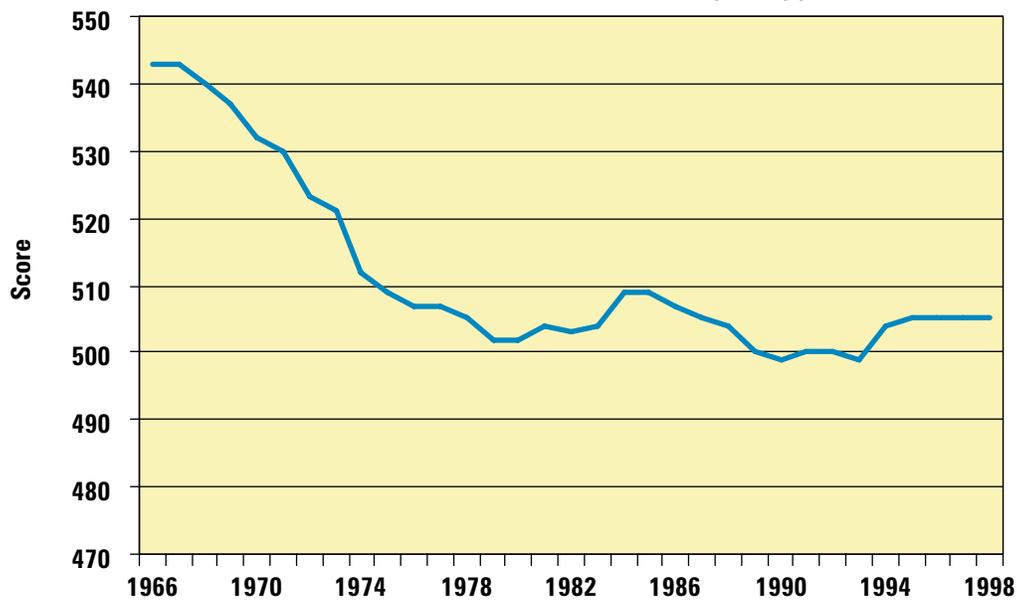
U.S. students are not. It is no wonder our high school graduates recently ranked 15 out of 21 countries in math, and 12 out of 21 in science!

## COSTS OF POOR PERFORMANCE

Researchers do not all agree that the relative weakness of our public education system thwarts our nation’s economic growth. This lack of agreement is unsurprising, given the array of statistics with which the different researchers are working and the diverse perspectives they bring to their tasks. However, at least one study released this year found that scores on international tests are strongly related to economic growth: countries with high scores have skilled labor forces and thus grow faster. The test scores appear to be a better indicator of the human capital embodied in a nation’s labor force than of the amount spent on education in general, or on student-teacher ratios or enrollment rates in particular.

Information is readily available on a separate but related issue: the direct costs of our inadequate public schools to America’s colleges and universities. Seventy-five percent of U.S. colleges offer remedial courses in reading, writing and math. In 1993, nearly 50 percent of the freshman class of the California State universities needed remedial assistance. By the mid-1990a, the California State universities estimated the cost of providing remedial help to be \$10 million per year; the University of California estimated the annual cost of its multi-campus remedial programs at \$1.6 million; both figures would no doubt be higher today. In the fall of 1995, a researcher found that 13 percent of freshmen at the Amherst and Boston campuses of the University of Massachusetts were taking at least one remedial course. Also in Massachusetts, the figure at Fitchburg State was 44 percent and at Worcester State, 20 percent.

## AVERAGE SCHOLASTIC ASSESSMENT TEST (SAT) SCORE 1966-1998



Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2000*.



## WHAT IS REALLY WRONG

If lack of resources — in today's dollars, in relationship to our past or in comparison with other nations — is not the problem, what is? Spending, class size and teachers' salaries have been examined in nearly 400 studies over about the last decade. The studies' results have been meager. For example, 277 studies attempted to estimate the effect of teacher-pupil ratios on student performance. Of these, 15 percent found that fewer pupils per teacher had a statistically positive impact on student achievement, 13 percent found a negative effect and

72 percent found no statistically significant effect at all.

That is not to say that resources — inputs such as more money, smaller classes, higher teachers' salaries, nicer schools and better technology — never matter. Rather, it is to say that the public education system in the United States cannot use these resources to consistently deliver the results we expect and deserve: well-educated children.

Two factors go a long way towards explaining why.

## WHY CENTRALIZATION HARMS

The inefficiency associated with a monopoly — what economists term “x-inefficiency” — is one such factor. Perhaps its most prominent aspect is the increasing centralization of school funding. Throughout the decades of decline in student achievement, parental satisfaction and community involvement, educators and economists among others have known that big bureaucracies with monopolistic powers are inefficient. “Big Brothers” crush creativity and squash success. Yet through all these years, nothing has been done to reverse the public education system's direction. In fact, local control has eroded more and more. Revenue sharing, regional governance, school district consolidation and the flow of power upward to state and federal governments have weakened the link between schools and the local parents and other community taxpayers they should serve.

This was not a simple matter resulting from, for example, local community inattention or rapid population growth. In the 1960s, squadrons of lawyers supported by foundation and federal government grants began seeking to have local school funding mechanisms declared unconstitutional on equal protection grounds. The arguments generally found little sympathy in federal courts, but they often succeeded in state supreme courts, where judges pointed to

Direct costs also fall on individual employers. Poorly prepared students waste the time and money of some — if not all — of our nation's top employers. The most recent survey prepared for and published in *Training* magazine found that 30 percent of businesses and other organizations offered remedial training: 35 percent had a training program for remedial math, 28 percent for remedial writing and 28 percent for remedial reading. Elsewhere, AT&T reported that, on average, 115 out of 117 applicants failed its employment exam. Motorola found that 80 percent of its applicants failed an exam designed to evaluate English skills at the seventh-grade level and math skills at the fifth-grade level.

Arriving at a single number, a single way to say “this is what our public education policies cost America,” is hard, but systematic studies have found that the cost of poorly prepared students is significant. A dozen years ago, one expert estimated that the decline in test scores from 1967 to 1980 cut labor quality 2.9 percent, and in 1987 cost the U.S. economy \$86 billion in foregone output. The same author calculated that the cumulative cost of the decline between 1987 and 2010 is 3.2 trillion in 1987 dollars (\$4.9 trillion in 2000 dollars). A year 2000 study conducted for Michigan's Mackinac Center for Public Policy by Jay P. Greene found that the cost of unprepared high school graduates to the state's businesses and schools was \$601 million per year. Dr. Greene's extrapolation of this figure to the entire United States yields an annual cost of the lack of basic skills in American workers of \$16.6 billion.

Arriving at an estimated cost to the unprepared workers themselves is even harder. Much of the evidence is bound to be anecdotal. But the cost in personal income, job satisfaction, social mobility and even health must be quite high.

specific state constitution clauses requiring equity in education. The most egregious of the judicial interventions occurred in Kansas City, Mo., where per pupil dollars were hiked to \$11,700, elaborate facilities were constructed and ancillary services were added. The results were negligible. The white-black achievement gap remained the same and the schools remained segregated.

The increase in state government shares in funding caused by attempts at equalization further decreased school efficiency. Since funding is determined by state formula, the property tax feedback is muted. And neither federal nor state funds arrive unencumbered. Virtually all of the funding comes with strings — regulations — attached.

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## WHOM TEACHERS' UNIONS HURT

The second factor mitigating against public education's improvement is the strength of teachers' unions. The rise of these unions occurred simultaneously with the decline of test scores in the 1960s. Before that decade, few teachers belonged to a union. By 1990, according to at least one study, three of every four did.

Union contracts and the rules they impose on administrators often make public schools less efficient. The salary schedules, grievance procedures and seniority-based assignments tie administrators' hands. They make it difficult or impossible for principals and superintendents to cull the incompetent and reward the able. For example, salary schedules that reward teachers solely for years of experience and years of schooling prevent administrators from paying more for those qualified to teach in subject areas where the best educators are badly needed. Experience-based pay also may encourage teachers to cling to their positions, when the public schools' students might be better served by energetic young teachers with fresh skill sets.

Finally, evidence suggests that the emergence of unions as a powerful interest group has driven many parents and children from the public schools. The sense of losing their voices on the schools' direction and the disruption caused by strikes or strike threats often is the proverbial "last straw" that points public school families to the exit.

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## CONCLUSION

As discussed earlier in this study, the flow of resources into America's public school system has kept ahead of inflation and America's per pupil spending should make it a world leader. It has not; during the 1960s, student achievement fell as spending rose and over the past decades we have been unable to reverse that pattern. The principal causes for this failure appear to be the growth of the education bureaucracy and the concomitant growth of the teachers' unions.

Turning the clock back to a less complex time is impossible. Solving America's public education problem is not. In fact,

while it will be hard to wrest control of our schools from all the state and federal politicians, judges, lawyers, teachers' unions and others claiming to be public school "stakeholders," it is essential. If we are to improve the quality of public schools and the lifetime opportunities of public school students, we must give strong new voices to parents and local school officials. And we must do so soon.

In a number of locations across the nation, local control and accountability already has taken hold. In Arizona, for example, where 6 percent of public school children attend charter schools, the competition has made public school districts more responsive. Parents in one district wanted the schools to teach their children phonics. Since the district reading program did not offer it, the parents pressed for the opening of a charter school with a phonics-based curriculum. That school lured away nearly half of the district's enrollment. In response, the district modified its reading program to offer a choice of phonics or whole language instruction. Another large urban district, concerned at the number of students leaving for charter schools, instituted a customer service program to win students back.

Only school choice through vouchers, tuition tax credits or charter schools can restore local accountability — and make *all* of America's schools work for *all* of America's schoolchildren.

This study is a summary of IPI Policy Report # 158, *No Voice, No Exit: The Inefficiency of America's Public Schools*, by Robert Franciosi, Ph.D. Dr Franciosi is a research fellow at the Goldwater Institute in Phoenix, Arizona.

### WANT MORE INFO?

Copies of the full study are available from our Internet Website ([www.ipi.org](http://www.ipi.org)), in both HTML and Adobe® Acrobat® format. Point your browser to our website, and follow the dialogs to the Policy Reports section. Or contact IPI at the address below, and we'll mail you a full copy.

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