

# *The Toughest Battleground: Schools*

Eric A. Hanushek

Over four decades ago, Milton Friedman published *Capitalism and Freedom* (Friedman 1962). This insightful little book traveled across a broad range of important topics collected around the theme of how government can best operate within a free society. The message was expanded two decades later in *Free to Choose* (Friedman and Friedman 1980). At the time, the battle of the ideas introduced by these books was being waged by nations, nations that were willing to contemplate war over how societies should be organized. As we look back on how the world has changed since then, I wonder if anybody guessed that changing the schools would be the most difficult subject taken on. It is useful to look at what progress has been made, what evidence exists on the topic, and what the future might hold in the area of education. The simple question is: Why are the schools tougher to crack than the walls of the Communist bloc?

## **ARGUMENTS ABOUT SCHOOLS**

Perhaps the key insight in *Capitalism and Freedom* was that government concern about schools and the schooling of its population could be separated from the issue of who actually runs the schools. While government may want to finance schools for a variety of reasons—externalities, economies of scale, income distribution, or what have you—they do not have to do the actual production. Indeed, there are reasons—obvious now, but perhaps not as obvious forty years ago—why government monopoly in schools may be undesirable. These themes are amplified in *Free to Choose*.

In my economics of education course, Friedman's chapter 6, "The Role of Government in Education," occupies an early lesson. And perhaps no other section of the course incites such eye-opening thoughts and raw emotions as discussion of vouchers and private schools perhaps replacing some public schools. This paper reviews what has happened in schools since 1962, chroni-

cling the somewhat divergent paths of schooling outcomes and the intellectual debate on choice.

Before doing this, however, it is important to underscore what may be an equally important chapter of the book for the activities of schools, the chapter on occupational licensure. Today, while battles continue around ideas of choice in schools, equally strong and, in my view, potentially equally damaging battles surround the appropriate standards for credentialing and licensure of teachers.

### SOME FACTS ABOUT U.S. SCHOOLS SINCE 1960

The backdrop for today's discussion is what has happened to U.S. public schools over the time since *Capitalism and Freedom* and *Free to Choose* entered into the intellectual fabric of the country.

Start with the resources and support for public schools. Table 1 displays the pattern of resources supplied to public schools in the United States between 1960 and 2000. Several things are obvious from this table. First, the United States has been running a class size "experiment" for forty years. Between 1960 and 2000, the pupil–teacher ratio fell by more than a third. Second, there has also been an expansion in the conventional measures of teacher quality—graduate education and experience. The percentage of teachers with a master's degree or more doubled over this period, with the typical teacher now having an advanced degree. Experience also reached new heights.

An obvious implication of these changes in real resources of schools is that spending on schools has risen dramatically. Teacher education and experience are prime determinants of teacher salaries, and the pupil–teacher ratio determines across how many students the salaries are spread. Thus, as the last line of the table indicates, real spending per pupil in schools was *240 percent higher* in 2000 than in 1960. That is, after adjusting for inflation, we had truly dramatic increases in our school spending—increases that appear to exceed public perceptions by a wide margin.

Table 1  
Public School Resources in the United States, 1960–2000

	1960	1980	2000
Pupil–teacher ratio	25.8	18.7	16.0
Percentage of teachers with master's degree or more	23.5	49.6	56.2*
Median years teacher experience	11	12	15*
Real expenditure/ADA (2000–01 dollars)	\$2,235	\$5,124	\$7,591

\* Data for 1996.

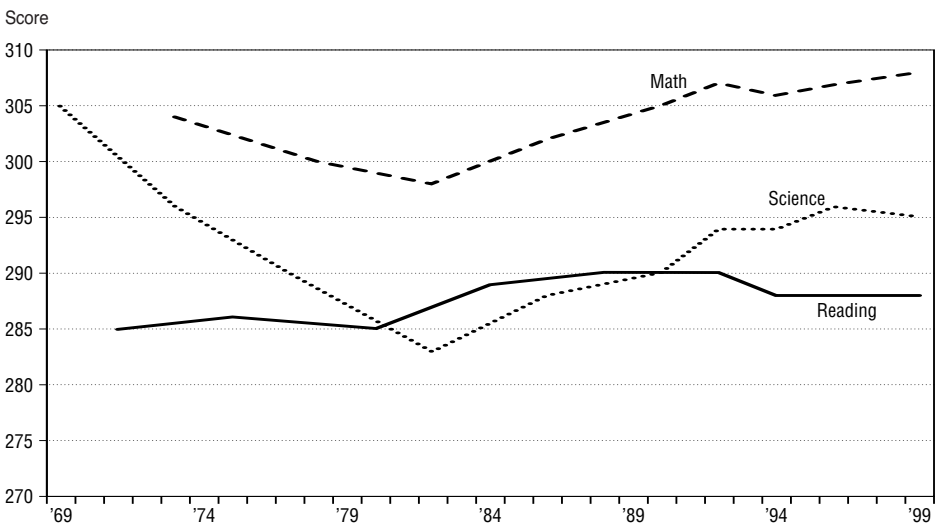
SOURCE: U.S. Department of Education (2002).

The contrast of resource increases with what has happened to student performance is equally startling. Figure 1 displays the pattern of performance of U.S. 17-year-olds from the National Assessment of Educational Progress (NAEP). NAEP provides a consistent measure of performance over time for a random selection of students. The picture shows that mathematics and reading performance is up slightly over the period while science is down.<sup>1</sup> A simple summary of performance over this period is that it was flat. School resources more than tripled, but there was no discernible effect on performance.

Of course, the overall trends could be misleading, particularly if there were significant changes in the student population or in the institutional structure of schools. For example, it is frequently cited that families are less stable or that there are more difficult-to-educate immigrants in the schools. Indeed, until the decade of the 1990s, the proportion of children in poverty had been rising. Relatedly, the proportion of children in single-parent families has risen, although this leveled off in the last decade. Finally, in terms of factors adversely affecting achievement, the prevalence of families not speaking English at home has increased.

But, these adverse changes have coincided with other changes that would generally be viewed as favorable for children and learning. Parents are more educated, and families are smaller. Additionally, greater percentages of children age four and five are attending preschool programs.

Figure 1  
Performance of 17-Year-Olds on the National Assessment of Educational Progress (NAEP), 1960–99



It is difficult to know precisely how these factors net out in their overall effect on students. The best estimates available, while surrounded by uncertainty, suggest that the net effect of these factors is, if anything, positive. Without taking a strong stand, it is sufficient to conclude that the evidence does not show an overwhelming decline in “student input quality.”

In sum, the aggregate data do not suggest that the existing schooling system has been performing very well, even though resources have been provided at sharply increasing levels over the past decades.

There is, nonetheless, a different possible perspective. If U.S. performance has been high and has exceeded that of other nations, the fact that it is flat over time might not be such a concern. In that case, the main issue to be considered here would be the continual pressures to increase expenditure (with the implication that inefficiency in government provision of schooling has been increasing). Unfortunately, that interpretation does not hold up. Table 2 shows the U.S. ranking on international math and science examinations given in 1995. The results of the Third International Mathematics and Science Study (TIMSS) show that particularly by the twelfth grade U.S. students are simply not competitive with those from other countries—ranking 19 and 16 out of the participating 21 countries in mathematics and science, respectively.

It is increasingly difficult to resist the conclusion that U.S. public schools are not performing particularly well. Perhaps in the past it could have been argued that with a little more time, with a few more resources, with adoption of today’s good ideas, things will get much better. At some point, though, we have to face reality.

But let us look at the other side of the story. Have families abandoned the public schools, seeking out better opportunities elsewhere? First, in terms of private-school enrollment, the answer is essentially no. The percentage of students in private schools has fallen since 1959 and has remained stuck at roughly 11 percent of the K–12 student population. The largest change has been the composition of the religious schools. Catholic schools have gone through a long decline, being replaced by other religious schools. Private, nonsectarian schooling has remained roughly constant.

One aspect of the schools, however, points in a slightly different direction. We have seen the rise in homeschooling—i.e., complete withdrawal and a

Table 2  
U.S. Rank on the Third International Mathematics and Science Study (TIMSS), 1995

	<b>Fourth Grade</b>	<b>Eighth Grade</b>	<b>Twelfth Grade</b>
Mathematics	12 out of 26	28 out of 41	19 out of 21
Science	3 out of 26	17 out of 41	16 out of 21

return to the schooling that preceded the public schooling movement in the United States. The data on this are sketchy. It is difficult to track even the numbers of students in homeschooling, let alone find out any information about the results of this. Some estimates suggest that as many as 2 percent of students of the relevant K–12 age population are being homeschooled, but it might be 1.5 percent or 2.5 percent (Henke et al. 2000; Bielick, Chandler, and Broughman 2001).

*Capitalism and Freedom* suggests that one reason advanced for the current governmental role in schools is that of “technical monopoly.” It may not be possible to elicit sufficient supply of private schools if there is low population density coupled with some economies of scale, at least at very small school sizes. And yet, a significant number of parents are choosing the very expensive option of schooling their own children because they find that the public schools are not meeting their demands.<sup>2</sup>

One other trend has begun to intrude on schooling in the United States. A wide range of analyses, including the influential *A Nation at Risk* in 1983, have suggested that U.S. schools face serious problems. Partly related to a continued desire to “reform” the schools, a number of policy discussions focus on the importance of high-quality teachers. This secondary “reform” effort (in addition to simply supplying more resources) has been tightening up on the credentialing of teachers. New and more restrictive requirements for teacher credentials have been introduced in a variety of states and are contemplated in even more. The only thing absent has been any demonstration that these new requirements are at all related to the ability of teachers to improve student achievement (Hanushek and Rivkin 2004).

## THE FACETS OF RESISTANCE

Does the continued draw of the public schools represent a refutation of Friedman arguments that there is pent-up demand by households for schools that look different from the public schools? Hardly.

First, throughout this entire period, with small exceptions discussed below, parents have a choice between free public schools and costly private schools. Moreover, because the costs of schools are spread across the whole population, the resources available in the public schools generally exceed the tax expenditures of parents. Privately matching these expenditures represents substantial expenditures by parents.

Second, parents have been systematically led to believe that their schools are doing quite well. Regularly, the typical parent rates his or her own school as a B-plus, even if the very same random sample believes that the other public schools rate a C-minus (Rose and Gallup 2001). Perhaps because the typical parent learned math in the public schools, few worried about this inconsistency,

at least before Garrison Keillor publicized Lake Wobegon. Moe (2001) also finds that a small proportion of all parents think their schools are in need of serious change, and parent satisfaction with schools rises with family income.

There is also an aggregate story. A variety of writers who do not want to see any fundamental change in the structure and operation of schools simply take the position that all is well. Consider Alfie Kohn, a prominent critic of academic standards and testing, who wrote in 2000:

As proof of the inadequacy of U.S. schools, many writers and public officials pointed to the sputtering condition of the U.S. economy. As far as I know, none of them subsequently apologized for offering a mistaken and unfair attack on our educational system once the economy recovered, nor did anyone credit teachers for the turnaround.<sup>3</sup>

Another prominent defender of the school system, Gerald Bracey, took the argument one step further. Noting that a variety of people from before and after *A Nation at Risk* had argued for improving schools in order to maintain U.S. economic strength, he wrote:

None of these fine gentlemen provided any data on the relationship between the economy's health and the performance of schools. Our long economic boom suggests there isn't one—or that our schools are better than the critics claim.<sup>4</sup>

Of course, what these authors have ignored is that the idea behind improving the quality of schools is a long-run issue. Improving the knowledge of today's high school seniors will obviously not translate into lower unemployment today. In fact, it will not be discernible for some time to come. Moreover, a range of other features of the U.S. economy enter into economic growth and the productivity of the nation's labor force. Indeed, these are in part the other elements of *Capitalism and Freedom*: the comparatively favorable U.S. regulatory environment, the limited size of government, and the fewer intrusions in labor and product markets. (Here, however, I am sure that Professor Friedman will rightfully say, "Maybe, but these things could be better.")

But, this discussion of resistance to change cannot be complete without noting a truly significant change in schooling. In the early 1960s, the idea of teachers overwhelmingly joining in a traditional craft union was not really on the horizon. The early debates about unionization—as opposed to simple professional organizations—did not clearly point to the current heavily unionized teaching force.

One aspect of this unionization is the concentration of immense political power. There are currently three million teachers, a significant voting bloc with very specific ideas on the form that any reform of schools should take. The teachers unions control significant political funds (coming directly from union

dues), and they use these funds to further their agenda at the local, state, and federal level.

Picture the District of Columbia. This is an odd school district, because it comes directly under the jurisdiction of the U.S. Congress. In 2000, D.C. spent \$10,874 per pupil, dramatically above the average spending for the country, which is less than \$7,000. Yet, according to the National Assessment of Educational Progress, performance of D.C. students rated last in the nation. Moreover, performance of just black students in D.C. compared with black students in other states also ranked at the very bottom. Imagine then that some members of Congress, including the representative for the District of Columbia, are trying to obstruct the introduction of a voucher at an amount noticeably less than the current average spending in the District. The argument: We should not do anything to harm the public schools of the District.

One just has to witness the amount of opposition spending by the unions to the voucher referenda in California, Michigan, and Colorado to have an appreciation for the self-interested politics. The very sophisticated media campaigns supported by the teachers unions convinced voters that the introduction of vouchers, no matter how constrained, would damage the public schools, would be expensive, and would not be in the interests of society.

## **EXPERIENCE WITH VOUCHERS**

A few cracks have developed in the resistance to vouchers. These include the introduction of a limited voucher program in Milwaukee, the broader introduction in Cleveland along with the U.S. Supreme Court affirmation of such policies, and the introduction of a variety of private voucher programs.

These experiences have been discussed and analyzed in many different places (e.g., Rouse 1998, Howell and Peterson 2002) and are set out in Paul Peterson's commentary for this conference (Peterson 2004). While different authors and commentators have interpreted the data differently, my summary is fairly straightforward.

First, none of these are general tests of voucher programs. They rely (at least until recently) on schools in existence before the vouchers were introduced. Thus, they give little indication of any supply response that might be seen if there were more general vouchers that were assured of being around for some time into the future.

Second, in almost all situations the expenditures in the voucher schools are noticeably less than those in the competing public schools. This differential implies that these are not tests of Friedman vouchers, although they may give some partial information.

Third, parents tend to be happier with the voucher schools than with the corresponding public schools (Witte 1999, Howell and Peterson 2002, Peterson

2004). In other words, even given the restrictions discussed above, there is a group of parents that highly values the alternative schools.

Finally, achievement in voucher schools appears to be as high as or higher than that in comparison public schools. Allowing for possible differences in student bodies, those attending voucher schools score better on average—although this is not consistent across subgroup, outcome measures, or length of voucher operation.

Before evaluating these results, however, it is useful to expand the discussion to include other forms of choice.

### **EXPERIENCE WITH OTHER FORMS OF CHOICE**

One of the significant changes in school choice since *Capitalism and Freedom* has been the introduction of different kinds of school choice. While vouchers are the purest form, and the one obviously preferred by the Friedmans, innovation in choice has occurred.

As previously mentioned, there has been a considerable surge in home-schooling. A significant number of parents have simply withdrawn their children from the regular public schools and taken personal responsibility for their education. Unfortunately, however, little is known about this in terms of movements in and out or of performance.

Citizen sentiment for expanded choice has generally increased over time, a fact not missed by opponents of more choice. Thus, one reaction to calls for vouchers and more choice has been the mantra of a number of people that they are for choice but it should be restricted to public school choice. This position has been particularly popular among politicians who want to protect the existing public schools from any competitive pressures while still seeming open to more fundamental reforms.

A particularly popular version of public school choice involves an open-enrollment plan. For example, students could apply to attend a different school in their district rather than the one to which they are originally assigned. Or in a more expansive version, no initial assignment is made, and students apply to an ordered set of district schools. A common version of this has been the use of magnet schools that offer a specialized focus such as college preparatory or the arts.<sup>5</sup>

It is fair to say that these public school choice plans do not even bear a pale resemblance to the ideas of choice included in voucher plans. First, the flows of students are heavily controlled. For example, the first caveat is always “if there is space at the school,” but the desirable public schools virtually never have space. Second, large urban school systems where there is a natural range of options frequently face other restrictions, such as racial balance concerns that severely constrain the outcomes that are permitted.



Third, and most important, these plans seldom have much effect on incentives in the schools. The competitive model of vouchers envisions that schools that are unable to attract students will shut down. This threat provides an incentive to people in the schools to perform well or potentially lose their jobs. But in the cases of open-enrollment schools that are not fully regulated to ensure that all of the schools maintain enrollment, the people in undersubscribed schools generally still have employment rights and would simply move to another school with more students.

Some magnet schools do look to be very good and almost certainly meet the interests of the attendees. The long illustrious records of Brooklyn Tech, Stuyvesant, and Bronx Science in New York City stand out. But this is far different from the idea of introducing more competition in the provision of schools.

A variant of open-enrollment plans is permitting students in a city to attend any public school in a state. Conceptually this could offer some competitive incentives. If a district lost sufficient students through out-migration, they could be left with less funding and could be forced to reduce their workforce. Again, however, the reality is not much in the way of competition. The funding for such plans generally has the choice student carrying less than the full funding for the receiving district, meaning that any district accepting students is asking its residents to subsidize the education of students outside the district. Further, the “if there is space at the school” clause generally stops all but some token movement.

A different development looks closer to voucher schools—that of charter schools. There is no common model for charter schools because they are creatures of the separate states and operate in different ways according to state rules. The essential features are that they are public schools, but ones that are allowed to operate to varying degrees outside of the normal public schools. They are schools of choice, surviving through their ability to attract sufficient numbers of students. Their form differs widely, however, in the rules for their establishment, in the regulations that apply to them, in the financing that goes with the students, and in a host of other potentially important dimensions (see, for example, Finn, Manno, and Vanourek 2000). Some states, for example, layer a variety of requirements about teacher certification, curriculum, acceptance of special education students, and the like—advertised as “leveling the playing field”—to ensure that charter schools do not offer any true innovation and competition. Other states, however, remove a substantial amount of regulation and truly solicit innovation and competition (Center for Education Reform 2003).

Charter schools can offer true competition to the regular public schools because they can draw students away from poorly performing regular publics. Employment rights typically do not transfer between charters and regular publics, so there is potentially pressure on school personnel to attract students.

Moreover, we see that a substantial number of attempted charters do not succeed in the marketplace (Center for Education Reform 2002).

Currently, some forty states and the District of Columbia have authorized charter schools. The student population attending charters has grown to over 1 percent nationally during the last decade, but in some places the enrollment is truly much more significant. For example, in the 2001–02 school year, 9.2 percent of students in the District of Columbia, 6.7 percent in Arizona, 3.8 percent in Michigan, and 3.7 percent in California attended charter schools (Hoffman 2003).

What do we know about the performance of charter schools? Analysis has actually been very limited. To begin with, any school of choice—from the classic Catholic schools through vouchers and charters—necessarily has a self-selected population.<sup>6</sup> Thus, inferring the impact of the school, as distinct from the characteristics of the students that are attracted, is always difficult. Additionally, because charter schools are largely new, most are still going through a start-up phase. The results observed during this phase may not be indicative of what they will look like in the steady state.

With those caveats in mind, I can provide some preliminary estimates of the performance of charters in Texas. Texas has a significant number of charter schools (although the legislature has capped the total number). Because Texas has tested students for a decade, it is possible to trace the students who enter and leave charter schools.<sup>7</sup> The simplest design that deals with the selection problems is to compare the average learning growth for individual students when in the regular public schools with their own performance in the charters. In this way, charter students become their own control group.

Preliminary results of Hanushek, Kain, and Rivkin (2003) address the issue of charter school quality. Three things come out of this in terms of quality indicators. First, on average, charter schools perform very similarly to the regular public schools. But, second, start-up problems are real, and new charters do not perform as well as more-established charters. More-established charters (those over four years in age) on average outperform the regular public schools of Texas. Third, there is a significant distribution of performance across both regular publics and privates. The good are good, and the bad are truly bad.

Note that this judgment is also biased against charter schools to the extent that their objectives may not simply be developing the basic math and reading skills that are used in the analysis. If they have specialized purposes, no attention is given to those.

These results await, nonetheless, both the general maturation of more charter schools and the investigation of their performance in different settings.

One other aspect of charter schools deserves mention. Choice schools have potential advantages by allowing students to find schools that meet their own interests and needs. But another important aspect of competitive markets

is enforcing a discipline on the other participants—in this case, the regular public schools. Is there any evidence that the regular public schools respond to the pressures of competition? Again, it is very early in the development of charters, but Hoxby (2003) introduces preliminary evidence that there are competitive improvements.

One final result of the analysis of charters is important. If we look at the behavior of parents, we find that they are significantly more likely to withdraw their children from a poorly performing charter as compared with a well-performing charter. This finding is particularly important because parents are not given information on their charter school's value added.<sup>8</sup> The behavior of parents shows, however, that they are good consumers and that they can use the performance data that are available to infer the school's quality. An early and continual criticism of the voucher idea is that parents are not good consumers, an assertion belied by the data.

It is useful to note that parents make similar judgments about the regular public schools, but they are much less likely to exit a regular public school given bad performance. The reason is obvious: It is generally much more costly to change public schools, given that a change of residence is frequently required. Further, this ability to exit a given public school is not shared equally by all parents. Middle- and upper-income parents have the resources to select among alternative districts, almost surely explaining their generally greater satisfaction with the public schools (Moe 2001). This differential ability is also a situation noted in *Free to Choose*.

## PROSPECTS FOR THE FUTURE

Let us retrace the discussion. If we begin with the situation in 1962—when Milton Friedman laid out the reasons for and benefits of enhanced choice—no measures suggest that student outcomes have improved. On the other side of the ledger, real spending has more than tripled, leading us to the unmistakable conclusion that schools have become more inefficient. Yet there has been little take-up of Friedman's basic proposal to introduce vouchers.

Is the introduction of broader choice hopeless? I would argue not.

The discussion of school choice stimulated by *Capitalism and Freedom* has grown and penetrated the broad public. A majority of parents and citizens now believe that more choice is desirable (Moe 2001, 2002).

Coupled with that predisposition is the beginning of better accountability by schools. Recent federal legislation in the No Child Left Behind Act of 2001 requires all states to develop regular performance measures of student learning and to make these measures publicly available. As noted previously, the typical parent believes his or her child is attending an above-average school. What will happen when numbers of these parents learn they were wrong?

In my opinion, providing parents and policymakers with better information about the current shortcomings of their schools offers the possibility of breaking the schools loose from the stranglehold school establishment has on them. While I do not see that simple accountability will work without greater school choice, I also do not think we will easily arrive at much greater choice without strong accountability. This indeed is one of the clear messages from the Koret Task Force when it considered why there had been so little true improvement since *A Nation at Risk* (Peterson 2003).

This is also an important time. There are forces pulling in the exact opposite direction. The educational establishment has also argued that reform is needed, but their “reform” is very different. They argue for doing what we have been doing, just more of it. The movement to reduce class sizes, while slowed by the fiscal problems of states and localities, has not gone away. The teacher licensure forces are pushing for tightening up on credentials—requiring master’s degrees of all, increasing the course requirements, deepening the ongoing professional development (Hanushek and Rivkin 2004). There is a struggle also to link tightened teacher credentials to the federal accountability requirements.<sup>9</sup> Substantial evidence suggests that improving the quality of teachers is key to any reform. There is no evidence to suggest that this will come from expanded certification and licensure.

It does not seem to matter that the portfolio of policy proposals emanating from the establishment looks much like those we have pursued over the past four decades. The only difference seems to be that those making these proposals disavow the mistakes of the past. They want to hear nothing of our schools’ performance history. And they certainly do not acknowledge that the problems are deeper than being short on some standard dimensions.

Perhaps, however, we will still see the iron curtain that has surrounded school policy fail. The force—the same as in the economies of Eastern Europe—will be poor and inefficient performance.

## NOTES

- <sup>1</sup> Writing performance, not shown, was assessed between 1984 and 1996 and was significantly down over that period, although there are questions about the reliability of scoring the writing examinations. Longer time-series evidence on performance comes from the SAT test, which shows declines from the mid-1960s. This trend is difficult to interpret, however, because the SAT is a voluntary test, where participation rates have increased significantly over time. Nonetheless, analyses of these changes—particularly the earlier changes—suggest that the movement is a combination of decreased selectivity in test taking and real changes in skills and performance (Congressional Budget Office 1986, 1987).
- <sup>2</sup> The reasons for choosing homeschooling are clearly complex. A survey of parents finds that half list “giving their children better education at home” as a reason, while 40 percent cite religious reasons (Bielick, Chandler, and Broughman 2001).

- <sup>3</sup> Kohn (2000).
- <sup>4</sup> Bracey (2002).
- <sup>5</sup> Forms of open-enrollment plans were the response of a number of Southern districts to the desegregation orders flowing from *Brown v. Board of Education*. In general, simple open-enrollment plans were not found to satisfy the court requirements for desegregation of districts, but magnet schools (with racial balance restrictions) became a reasonably common policy approach (Armor 1995). In 2001–02, 3 percent of all students attended a magnet school (Hoffman 2003).
- <sup>6</sup> For a more complete discussion of the analytical problem along with the evidence on Catholic schools, see Hanushek (2002).
- <sup>7</sup> The ability to track students over time is the result of the Texas Schools Project at the University of Dallas. That project has linked students over time and matched them with their schools.
- <sup>8</sup> In the previous analysis, the growth in student test scores was compared with that in regular public schools to obtain an estimate of each school's value added. Parents, however, can only observe an absolute score of student performance that is unadjusted for any selectivity of the school.
- <sup>9</sup> No Child Left Behind requires that all students have a highly qualified teacher, a requirement that a number of groups are trying to equate to having existing or expanded credentials.

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