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A Supply-Side View of Student Selectivity

John E. Chubb

Chief among concerns about school choice is student selectivity, or what is more popularly called "creaming." If parents (or guardians) are allowed to choose the schools their children attend, and schools are required to compete for students and resources, the best students will become concentrated, like rising cream, in the best schools. The weakest students will be left behind in the poorest schools. Educational opportunity, which the public education system is supposed to provide equally to all children, will become even less equal than it is already. Whatever benefits school choice may yield—and they may be considerable for the overall quality of schooling and the level of student achievement—the risks of inequity may simply outweigh them.¹

On first inspection, selectivity would appear to be an important concern. Some parents are clearly better educated, more knowledgeable about schools, and more interested in their children's education than other parents. More able and interested parents would surely try harder to learn about quality school choices and to make application to those schools. At the same

¹On the theoretical benefits of school choice for student achievement, see esp.: John E. Chubb and Terry M. Moe, *Politics, Markets, and America's Schools* (Washington, D.C.: Brookings Institution Press, 1990).

time, schools would surely prefer to teach children who have interested parents and academic inclinations. Even if schools must accept all students, schools can still orient their programs and recruitment efforts toward the best and the brightest.

History offers some support for this reasoning. For the last half-century, parents have fled the cities for the suburbs, in pursuit of better and safer schools. Private schools proliferated in the South after *Brown v. Board of Education* to serve white families resistant to the integration of public schools. Public magnet schools are often oases of quality, in school systems bereft of decent schools, serving parents shrewd enough or lucky enough to gain admission.²

But appearances can be deceiving. The school choice programs being proposed or offered by policymakers today come with safeguards against selectivity.³ Public opinion surveys indicate that interest in school choice is greatest among poor and minority families, whose children have historically not been the highest achievers.⁴ And the simple fact is that experience with school choice is too limited to draw any conclusions confidently about selectivity.⁵ History provides

²For arguments and evidence that school choice promotes inequity and segregation, see: Bruce Fuller, Richard F. Elmore, and Gary Orfield, eds., Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice (New York: Teachers College Press, 1996); Ted Fiske and Helen F. Ladd, When Schools Compete: A Cautionary Tale (Washington, D.C.: Brookings Institution Press, 2000); and Gary Orfield, Schools More Separate: Consequences of a Decade of Resegregation (Cambridge, Mass.: The Civil Rights Project, Harvard University, 2001).

³On the importance of the structure of school choice systems, see Moe, Chap. 7 in this volume.

⁴The most comprehensive analysis of public opinion on school choice is Terry M. Moe, *Schools*, *Vouchers*, *and the American Public* (Washington, D.C.: Brookings Institution Press, 2001).

⁵The bulk of the empirical evidence on school choice comes from settings that are only proxies for what a widely available, publicly funded system of school choice might look like. The evidence includes especially, on private schools: James S. Coleman, Thomas Hoffer, and Sally Kilgore, *High School Achievement: Public and Private High Schools Compared* (New York: Basic Books, 1982); James S. Coleman and Thomas Hoffer, *Public and Private High Schools: The Impact of Communities* (New York: Basic Books, 1987); and Chubb and Moe, *Politics, Markets, and America's Schools*; on small voucher programs for the economically disadvantaged

evidence of how families with the financial wherewithal have chosen private schools or suburban schools—and how schools have cropped up to meet that demand. But history provides little direct evidence of how families or schools would respond if school choice were made available to parents as a matter of public policy, without regard to financial means.

NEW EVIDENCE

Slowly our knowledge base is improving. In the last decade, policymakers have begun offering parents truly meaningful school choice. Most important, some thirty-seven states now provide for charter schools—public schools largely independent of local school systems and open to all students regardless of achievement, income, or (usually) residence. Charter schools represent a major advance in school choice for two basic reasons. First, and most obviously, they create *demand* for public schools that is not tied to the ability of families to move to new school

students funded through private philanthropy or, in a couple of instances (Milwaukee and Cleveland), public funds: William G. Howell and Paul E. Peterson, School Choice in Dayton, Ohio: An Evaluation After One Year (Cambridge, Mass.: Program on Education Policy and Governance, Harvard University, 2000); Paul E. Peterson, William G. Howell, and Jay P. Greene, An Evaluation of the Cleveland Voucher Program After Two Years (Program on Educational Policy and Governance, Harvard University, 1999); and Paul E. Peterson, D. Meyers, and William G. Howell, An Evaluation of the New York City School Scholarships Program: The First Year (Cambridge, Mass.: Program on Educational Policy and Governance, Harvard University, 1998); on family mobility and competition among public school districts: Caroline M. Hoxby, "Does Competition Among Public Schools Benefit Students and Taxpayers?" American Economic Review, 90, no. 5 (December 2000): 1209–38; on family mobility and racial segregation: Orfield, Schools More Separate.

⁶On the early experience of charter schools, see: Chester E. Finn, Bruno V. Manno, and Greg Vanourek, *Charter Schools in Action: What Have We Learned?* (Indianapolis: Hudson Institute, 1997); Joe Nathan, *Charter Schools: Creating Hope and Opportunity for American Education* (San Francisco: Jossey-Bass, 1996); and Paul A. Berman et al., *A National Study of Charter Schools, Second-Year Report* (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1998).

districts or to threaten moves to private schools. Prior to charter schools, parents with limited financial means could not demand better or different public schools, except through school board elections and the political process. With the advent of charter schools, all parents have the power to switch schools, creating at least the beginnings of a market for public education.

The second reason charter schools are important is that they create a *supply* of public schools not under the control of local school systems.⁷ If parents are given the right to choose among public schools, but all public schools are under the control of a single public authority—that is, the local school system—the right to choose loses much of its force, or certainly the force associated with a market. When the "good choices" are all gone, parents are compelled to send their children to the choices that remain, choices provided by the local school system. Charter schools free the supply of public schools from the traditional sole provider. Charter schools in effect transform a monopoly into a potentially competitive market. Charter schools offer alternatives for families and students, and just as important, incentives for the traditional public schools to change and improve.

The supply of public education is, of course, vital. If parents are free to choose schools, but the schools among which they must choose never change, school choice amounts to little more than a reallocation of educational opportunity. Some students will get to attend better schools, whereas other students will have to attend worse schools. This is not the idea of school choice: the logic of school choice is the logic of the market. Markets require enough suppliers, as well as "buyers," to provide the benefits of competition. If charter schools succeed in creating markets

⁷On the general importance of the supply side of school choice, see Paul T. Hill, "The Supply Side of Choice," in Frank Kemmerer and Stephen Sugarman, *School Choice and Social Controversy* (Washington, D.C.: Brookings Institution Press, 2000).

for public schools, they will do so not only through charter schools themselves but also through responses by traditional public schools to the competition. Charter schools have the potential to stimulate improvement in the overall quality of schools from which parents choose.

As charter schools, now numbering over 2,000 nation-wide, proliferate, and as school systems respond to their pressure, we have our best opportunity ever to learn how school choice may affect the selectivity of public schools. Whom do charter schools attempt to attract? Who chooses charter schools? How do district schools respond? How do these new forces of supply and demand seem to affect the quality and equality of public schools? It may be another decade before we have confident answers to these questions. Even the oldest charter schools in America are barely a decade old, and most states have been authorizing charter schools for less than a decade. School systems may just be beginning to compete with charters—instead of suing and lobbying for them to go away. But the data are beginning to come in. And they are surprising.

EDISON SCHOOLS INC

Perhaps the largest single source of data on the charter experience is that of Edison Schools Inc, the largest private manager of public schools in the United States, and also the largest operator of charter schools. In the fall of 2001, Edison managed 136 schools in twenty-two states and the District of Columbia. Located in over fifty communities, the schools served some 75,000 students. About a third of the schools were charter schools; the remainder have schools of choice within public school systems. Edison

⁸On the response of public schools to competition, see esp. Caroline M. Hoxby, Chap 6 this volume.

⁹U.S. Department of Education, *The State of Charter Schools* 2000 (Washington, D.C.).

opened its first schools in 1995 and has since increased enrollment at an average rate of about 50 percent per year. ¹⁰

Edison's experience can enlighten both sides of the school choice equation—and in a number of ways. On the demand side, Edison operates scores of public schools of choice, of three distinctly different types: independent charters (with no connection to a local school district), district charters (freed from district management but accountable to a school district), and district schools of choice. Generally, both types of district schools are responses to the competition from independent charters. Who attends the different types of schools?

As the largest private provider of public schools, Edison also offers unique perspective on the supply side of school choice. Whom does Edison aim to attract to its schools? Why? How does Edison find itself competing with public school systems through independent charters, yet assisting public school systems through district charters and district schools of choice? More generally, how does a supplier of public schools think about the market? What are the costs and benefits of serving different types of students? Do the incentives for supplying new schools of choice favor families who have traditionally had little to choose from or families who already enjoy quality schools and ample choice? Without revealing trade secrets, Edison's experience suggests that supply-side incentives favor the traditionally disadvantaged. School choice may not promote student selectivity or creaming. School choice may in fact help equalize educational opportunity.

WHO ATTENDS EDISON SCHOOLS?

Edison Schools offers its public education partners—charter boards and traditional school boards—an education model that is designed to help all students, regardless of academic or socioeconomic background, succeed at high levels. The model

¹⁰Edison Schools Inc, Fourth Annual Report on School Performance (New York: Edison Schools Inc, October 2001).

is explicitly researched based. It attempts to bring together in a single comprehensive school design those wide-ranging factors shown consistently to influence student achievement and school performance. The factors include not only the obvious education variables—curriculum, instruction, and assessment—but also more general factors such as organization, leadership, management, technology, culture, and community.¹¹

For example, the model provides for a nontraditional school organization based on academies, houses, and teams—devices meant to foster a strong sense of community and commitment, even in the largest schools. The curriculum in all Edison schools is organized around academic standards developed by Edison that meet or exceed the standards in every state. Instruction employs researched-based programs and practices, including *Success for All* for elementary reading, a K–12 math program developed through the *University of Chicago School Mathematics Project*, and science programs developed by one of the nation's premier organizations of science educators, *BSCS*.

Edison schools make extensive use of computers: all teachers are provided laptops, all students above second grade are provided computers for use at home, schools are equipped with classroom and lab computers, and all computers are networked locally and nationally, connecting Edison teachers, students, and families coast to coast. The schools also emphasize the arts, with every student taking a fine arts or music class daily. Notwithstanding the breadth of the program, the schools are decidedly focused—on academic achievement. Edison high schools, for example, offer only an academic track—and an extensive remediation program so that all students prospectively can be successful in an academic track.

The model is not aimed at a particular clientele. It includes elements that are targeted at students at risk of academic failure, such as *Success for All*. And it includes elements that are

¹¹Extensive details on Edison's education program and school design are available on Edison's Web site <www.edisonschools.com>.

more characteristic of traditionally high-achieving schools, such as the math and science programs, the technology focus, and the academics-only high school. It is a model that would be well suited to poor and traditionally unsuccessful inner-city students or affluent and generally high-achieving suburban students.¹²

It may come as some surprise then to see who actually attends Edison schools. The vast majority of Edison's students are economically disadvantaged. Specifically, the average Edison school (see Table 1) has 70 percent of its students eligible for the federal government's free or reduced-price lunch program, an indicator of economic disadvantage in schools. Nor are these students a random slice of America's disadvantaged. Edison's students are primarily and disproportionately (that is, relative to America's poor generally) children of color. African Americans constitute 64 percent of the students at the average Edison school; Hispanics constitute 17 percent. On average, Caucasian enrollment at Edison's schools is only 16 percent, far below what it would be if Edison served all economically disadvantaged racial groups equally.¹³

TABLE 1
Demographics of Edison Schools, 2000–2001

8 1	,
School Demographic	Average School Percentage
African American	64%
Caucasian	16%
Hispanic	17%
Free/reduced lunch	70%
Number of schools	87

¹²On the history of the development of Edison's education program and school design, see John E. Chubb, "Lessons in School Reform from the Edison Project," in Diane Ravitch and Joseph Viteritti, *New Schools for a New Century* (New Haven, Conn.: Yale University Press, 1997).

¹³Nationwide the racial/ethnic distribution of families below the poverty line—a proxy for eligibility for free/reduced-price lunch—is 35 percent Caucasian, 32 percent African American, 28 percent Hispanic, and 5 percent Other. See U.S. Bureau of the Census, Washington, D.C., 2000.

Edison's students reflect in part the kinds of communities in which Edison schools have taken hold. Edison schools have a substantial presence in U.S. cities. Table 2 highlights the locations of all Edison schools open for the 2000–2001 school year, the last year for which complete demographic data are available (and when Edison operated 113 schools). Although Edison offers schools in a wide range of communities, cities predominate. From big cities such as Boston, Washington, D.C., Baltimore, Atlanta, Miami, Detroit, Chicago, Minneapolis, Kansas City, Dallas, San Antonio, Denver, and San Francisco, to smaller cities such as Albany, Rochester, York, Macon, Flint, Wichita, Tyler, and Fresno, Edison schools are much more likely than not to be urban. The 2001–2002 school year saw this tendency continue, with new Edison schools opening in the cities of Las Vegas and Buffalo.

Cities, of course, are made up of a range of people, not only the disadvantaged. Location alone cannot explain why Edison schools are so heavily attended by poor and minority children. Even in cities, Edison schools could easily fill up with students from more advantaged backgrounds. Edison schools are schools of choice. Although concerns about student selectivity would seem to predict a relatively advantaged enrollment, that has not happened. What accounts for Edison's student profile? It is not the schools' education program, which is well suited to high achievers. Could it be that some of the premises of the selectivity concern are wrong? Or are other factors at work to mitigate the forces of selectivity?

¹⁴Table 2 consolidates elementary, middle, and high schools that occupy a single building into one entry; hence the total number of schools in the table is somewhat less than 113.

¹⁵For example, urban private schools fill up rather easily with students from middle and upper class families looking for something either different (e.g., religious) or better (e.g., safer or more academically successful) than what the local public schools are offering. Many such families would seem potential candidates for (free) Edison schools. On private school choice, see: J. R. Betts and R. W. Fairlie, "Explaining Ethnic, Racial, and Immigrant Differences in Private School Attendance, *Journal of Urban Economics* 50 (2001): 26–51; and R. J. Buddin and J. J. Cordes, "School Choice in California: Who Chooses Private Schools," *Journal of Urban Economics* 44 (1998): 110–34.

Table 2

Edison Schools by State and Community, 2000–2001

School Name	City	State	School Name	City	State
Edison Brentwood Academy	East Palo Alto	Calif.	Flint Northwestern Community High School Edison Partnership	Flint	Mich.
Edison Charter Academy	San Francisco	Calif.	Garfield-Edison Partnership School	Flint	Mich.
Edison McNair Academy	East Palo Alto	Calif.	Inkster High School	Inkster	Mich.
Edison-Bethune Charter Academy	Fresno	Calif.	Meek-Milton Primary Academy	Inkster	Mich.
Feaster-Edison Charter School	Chula Vista	Calif.	Mid Michigan Public School Academy	Lansing	Mich.
Phillips-Edison Partnership School	Napa	Calif.	Mount Clemens Junior & Senior Academy	Mt. Clemens	Mich.
San Jose-Edison Adacemy	West Covina	Calif.	Southwestern Edison Jr. Academy	Battle Creek	Mich.
Starr King-Edison Academy	Long Beach	Calif.	Washington-Edison Partnership School	Battle Creek	Mich.
Academy-Edison Elementary School	Colorado Springs	Colo.	Williams-Edison Partnership School	Flint	Mich.
Emerson-Edison Partnership School	Colorado Springs	Colo.	Wilson-Edison Partnership School	Battle Creek	Mich.
Roosevelt-Edison Charter School	Colorado Springs	Colo.	YMCA Service Learning Academy	Detroit	Mich.
Timberview-Edison Junior Academy	Colorado Springs	Colo.	Edison/PPL School	Minneapolis	Minn.
Wyatt-Edison Charter School	Denver	Colo.	Kenwood-Edison Charter School	Duluth	Minn.
Wintergreen Interdistrict Magnet School	Hamden	Conn.	Raleigh-Edison Academy	Duluth	Minn.
Friendship Edison Public Charter School-Blow Pierce Campus	Washington	D.C.	Washburn Junior Academy	Duluth	Minn.
Friendship Edison Public Charter School-Carter G. Woodson Campus	Washington	D.C.	Allen-Edison Village School	Kansas City	Mo.
Friendship Edison Public Charter School-Chamberlain Campus	Washington	D.C.	Westport Edison Middle Academy	Kansas City	Mo.
Friendship Edison Public Charter School-Woodridge Campus	Washington	D.C.	Westport Edison Senior Academy	Kansas City	Mo.
Thomas A. Edison Charter School	Wilmington	Del.	Woodland-Edison Classical Academy	Kansas City	Mo.
Henry S. Reeves Elementary School	Miami	Fla.	Carver Heights-Edison Elementary School	Goldsboro	N.C.
Charles R. Drew Charter School	Atlanta	Ga.	Dillard-Edison Junior Academy	Goldsboro	N.C.

Martin Luther King. Ir-Edison	Macon	٣	Swift Creek-Edison Elementary	Whitakers	Z
Riley-Edison	Macon	Ga.	, Granville Charter High School	Trenton	Ż
Jefferson-Edison Elementary School	Davenport	Iowa	Granville Charter Middle School	Trenton	Ś
Chicago International Charter School-Longwood Campus	Chicago	:::	Granville Charter School	Trenton	ż
Feitshans-Edison	Springfield	ij	Schomburg Charter School	Jersey City	ż
Franklin-Edison School	Peoria	;;	New Covenant Charter School	Albany	N.Y.
Loueks Edison Junior Academy	Peoria	::	The Charter School of Science & Technology	Rochester	Z.
Northmoor-Edison School	Peoria	ij	Dayton View Academy	Dayton	Ohio
Dodge-Edison Elementary School	Wichita	Kans.	The Dayton Academy	Dayton	Ohio
Edison-Ingalls Partnership School	Wichita	Kans.	Lincoln-Edison Charter School	York	Pa.
Edison-Isley Partnership School	Wichita	Kans.	The Renaissance Academy-Edison Charter School	Phoenixville	Pa.
Jardine-Edison Junior Academy	Wichita	Kans.	Edison-Blair Academy	Dallas	Tex.
Boston Renaissance Charter School	Boston	Mass.	Edison-Henderson Academy	Dallas	Tex.
Seven Hills Charter School	Worchester	Mass.	Edison-Hernandez Academy	Dallas	Tex.
Gilmor Elementary	Baltimore	Md.	Edison–Maple Lawn Academy	Dallas	Tex.
Furman Templeton Elementary	Baltimore	Md.	Edison-Medrano Academy	Dallas	Tex.
Montebello Elementary	Baltimore	Md.	Edison-Runyon Academy	Dallas	Tex.
Baylor Woodson Elementary School	Inkster	Mich.	Edison-Titche Academy	Dallas	Tex.
Blanchett Middle School	Inkster	Mich.	Elm Creek Elementary School	Atascosa	Tex.
Detroit Academy of Arts and Sciences	Detroit	Mich.	Kriewald Road Elementary School	San Antonio	Tex.
Detroit-Edison Public School Academy	Detroit	Mich.	McNair-Edison Junior Academy	San Antonio	Tex.
Dr. Martin Luther King Jr. Academy	Mt. Clemens	Mich.	Scobee-Edison Junior Academy	San Antonio	Tex.
Edison-Oakland Public School Academy	Ferndale	Mich.	Stewart-Edison Junior Academy	Tyler	Tex.
Edison-Perdue Academy	Pontiac	Mich.	Milwaukee Academy of Science	Milwaukee	Wisc.

GOVERNANCE AND SELECTIVITY

All Edison schools operate under one of three basic governance structures. "District contract" schools are organized by the policies of local public school systems and are accountable by contract to the local board of education (or in one case, Baltimore, to a state board of education that has taken control of low-performing district schools). District contract schools can take many forms: existing schools or new ones, closed schools slated for reopening, failing schools or schools aiming to offer an alternative program. Whatever the case, a school district contracts with Edison to implement its school design and be accountable for all school operations and performance. "District charter" schools are organized by the charter school policies of a state but are accountable to a local school board, and sometimes a community charter board as well. District charters can come into being because an existing district school elects, by teacher and parent vote, to "secede" from district governance and operate as a charter, or because a group interested in starting a charter school successfully petitions the local school board to authorize a new charter school. Finally, "independent charter" schools are organized under the charter school policies of a state and are accountable either directly to a state or to a state-authorized chartering authority such as a public university. Independent charter schools operate completely outside of local district policies and control.¹⁶

However Edison schools are organized and governed, they are enrolled as schools of choice. Independent charter schools are enrolled entirely on the basis of choice: they have no assigned students; enrollment is strictly voluntary. Every student who attends an independent charter is there because a parent or guardian has taken affirmative steps to enroll the student. In contrast, students come to district charter schools and district contract schools by a

¹⁶Each type of governance also represents a theoretically different way for contracting between the public and private (or independent nonprofit) sectors to improve education. On contracting, see Paul T. Hill, Lawrence C. Pierce, and James W. Guthrie, *Reinventing Public Education: How Contracting Can Transform America's Schools* (Chicago: University of Chicago Press, 1997).

range of means. Although several of Edison's district schools are filled by choice alone, most are filled by some form of "neighborhood preference" choice: students in a school's attendance zone have the first claim to seats in a school, after which students throughout the district can fill unclaimed seats by choice. These rules, though more restrictive than full choice, tend to bring a significant measure of choice to Edison's district schools.

Edison also asks that no student be compelled to attend an Edison school. Students are therefore free to opt out of their neighborhood school (implicit choice) if they or their families do not want Edison's program. Moreover, many of the schools that districts ask Edison to manage are low performing and therefore underenrolled. They have ample room for explicit choice students. Although district schools are generally not shaped by school choice to the same degree as independent charter schools are, all Edison schools are shaped by school choice.

So, how do enrollments in Edison schools differ with school governance? Well, not as concerns about selectivity might suggest. Independent charter schools, enrolled strictly through choice, are not on average more advantaged educationally than district schools are (Table 3). On the one hand, district Edison schools have levels of economic disadvantage (as reflected in lunch programs) that are somewhat higher on average than Edison independent charter schools: 76 percent in district contracts and 60 percent in district charters (a weighted average of 68 percent) versus 65 percent in independent charters. On the other hand, independent charter schools are much more likely to attract African American students (83 percent on average) than are district charter schools (36 percent) or district contract schools (62 percent). If selectivity works, as it is most feared to work, independent charters would not enroll such high percentages of students whose backgrounds predict academic difficulty.¹⁷

¹⁷The average level of economic disadvantage in Edison's independent charter schools (65%) is much higher than the rate in all charter schools nationally (39%) and in all public schools nationally (37%). The percentage of minority students in Edison's independent charter schools (90%) is also much higher than the percentage (52%) in charter schools nationally. U.S. Department of Education, *The State of Charter Schools* 2000.

TABLE 3
Demographics of Edison Schools by Type of
Governance, 2000–2001

	Average School Percentage			
School Demographic	Independent Charter	District Charter	District Contract	
African American	83%	36%	62%	
Caucasian	8%	31%	15%	
Hispanic	7%	26%	20%	
Free/reduced lunch	65%	60%	76%	
Number of schools	26	16	45	

Of course, these differences should not be overinterpreted. They certainly suggest that choice may not be leaving needy students behind. But the levels of disadvantaged or minority enrollment need to be viewed relative to the levels in their respective home districts. Perhaps independent charter schools are located in communities where African American and economically disadvantaged populations are unusually high; if so, these schools might be relatively more advantaged than they appear. Or district schools might be in areas with fewer disadvantaged or minority students; these schools might be more disadvantaged than they appear. Finally, demographics only begin to tell the story about students. Perhaps choice attracts high percentages of disadvantaged and minority families—but the families of the highest-achieving disadvantaged and minority students. If so, schools of choice could still be creaming.

Home Districts

What, then, do we know about the communities in which Edison works? First, they are on average *less* disadvantaged than the families that Edison serves. Table 4 compares the demographics of Edison schools with the demographics of the public school systems in which Edison schools are located. On average, schools in the home districts of Edison

TABLE 4
Demographics of Edison Schools Compared with Home Districts, 2000–2001

	Average School Percentage			
School Demographic	Edison Schools	Home District		
African American	64%	42%		
Caucasian	16%	34%		
Hispanic	17%	19%		
Free/reduced lunch	70%	61%		

Note: Free/reduced lunch data exclude 11 schools and 4 districts where district data were unavailable.

schools have fewer students eligible for free or reduced-price lunch—61 percent versus 70 percent. Schools in the home districts of Edison schools have far fewer African American students—42 percent versus 64 percent—and far more Caucasian students—34 percent versus 16 percent. Only the percentages of Hispanic students are similar when Edison schools and schools in their home districts are compared, 17 percent and 19 percent, respectively. These data suggest that not only are Edison schools serving students who traditionally have had substantial educational needs, but also Edison tends to serve relatively more of these students than does the average public school in the communities in which Edison works. Again, this is not an outcome that concerns about student selectivity would predict.

But, how much does this outcome have to do with school choice? In Table 5 the demographics of Edison schools are compared with the demographics of their home districts, for each form of school governance in which Edison schools are involved. The picture is generally consistent with the one that has been emerging: school choice has not enabled Edison schools to cream the strongest students in their respective communities. Regardless of the form of governance, hence of school choice, Edison schools attract higher percentages than other local public schools of those students whose achievement

TABLE 5
Demographics of Edison Schools Compared with Home
District by Type of Governance, 2000–2001

			Average S	School Pe	rcentage	
		endent erter	_ :-:	trict irter	District Contract	
School						
Demographic	Schools	District	Schools	District	Schools	District
African American	83%	58%	36%	18%	62%	45%
Caucasian	8%	25%	31%	49%	15%	32%
Hispanic	7%	14%	26%	24%	20%	21%
Free/reduced lunch	65%	62%	60%	51%	76%	64%

has traditionally lagged behind national norms. Focusing just on the demographic categories that have lagged most consistently—economically disadvantaged students and African American students—Edison schools enroll higher percentages of these students than do schools in their respective home districts, under every form of governance.

The data do suggest that there may be forces at work on Edison's enrollment besides school choice. The percentages of economically disadvantaged students in Edison schools exceed the percentages in their home districts by wider margins in district contract and district charter schools than in independent charter schools—76 percent versus 64 percent, and 60 percent versus 51 percent, in contrast to 65 percent versus 62 percent. This contrast may reflect a preference of local school districts to locate Edison schools in high-poverty areas or a preference by Edison Schools Inc to access the revenue available for serving economically disadvantaged students and therefore to locate in needier areas. But ultimately families must choose or accept what Edison is offering.

The evidence in Table 5 suggests that families who traditionally have had significant educational needs are likely to

choose change. Where Edison offers independent charters—and choice reigns free—African American families are much more likely than other families in the local school district to choose an Edison school: 83 percent of the students in Edison independent charter schools are African American compared with 58 percent in the local public schools. And again, the choosers, apart from ethnicity, are not the economically advantaged. The average percentage of students eligible for free or reduced-price lunch in an Edison independent charter school is 65 percent, compared with 62 percent in the local public schools.

These average tendencies are all the more impressive because they reflect consistent patterns across most Edison schools. Table 6 compares minority enrollment in each Edison school with minority enrollment in the home district of each Edison school. Specifically, Table 6 asks which has the higher percentage of the home district's largest minority group, the Edison school or the average district school? For example, if the largest minority group in a district is Hispanic, and the average district school is 50 percent Hispanic, the Edison school would need to have 51 percent Hispanic to qualify as enrolling a higher percentage of the largest minority group.

In 90 percent of all Edison schools—78 out of 87 schools where data were available for the district as well as for the Edison school—the Edison school enrolls a higher percentage of the largest local minority group than the average

TABLE 6
Edison Schools with Larger Percentage of Dominant Minority Group
Than Home District, by Type of Governance, 2000–2001

Type of Governance	Number	Percentage
Independent charter	24/26	92%
District charter	14/16	88%
District contract	40/45	89%
All	78/87	90%

public school does. This high level of consistency is maintained for all types of governance: 92 percent for independent charters, 88 percent for district charters, and 89 percent for district contracts. Edison schools, in community after community, attract a higher percentage than the local public schools do of the families often thought least likely to choose.

Similar results obtain for economic disadvantage. Table 7 compares the percentage of students eligible for free or reduced-price lunch in each Edison school to the average percentage eligible in the home district of each Edison school. In 52 out of 75 cases where data were available for the district as well as for the Edison school, Edison schools enroll a higher percentage of students from low-income families than schools in their home districts do on average. This tendency depends somewhat on governance. For independent charters, 54 percent of the Edison schools enroll more economically disadvantaged students than the average local public school enrolls. For district charters the percentage is 71 percent and for district contracts the percentage is 78 percent. The pattern of results here sharpens a difference that emerged above. Although Edison schools are clearly popular with economically disadvantaged families regardless of how they are enrolled, and there is no evidence that Edison schools attract a more advantaged clientele than the local public schools even when the schools are independent charters filled by choice alone, there is a tendency for Edison

TABLE 7
Edison Schools with Larger Percentage of Students Eligible for Free/
Reduced Lunch Than Home District, by Type of Governance, 2000–2001

Type of Governance	Number	Percentage
Independent charter	13/24	54%
District charter	10/14	71%
District contract	29/37	78%
All	52/75	69%

schools enrolled with district guidance to be more disadvantaged relative to local public schools than independent charters are. Edison schools do not cream, but choice is not the only source of their economic makeup.

BASELINE TEST SCORES

In the vast majority of communities in which Edison works, Edison schools attract disproportionate numbers of economically disadvantaged students and students of color. This tendency is true of Edison's independent charter schools (particularly with respect to students of color), where parents have complete freedom to choose schools, and it is true of Edison's district charter and contract schools, where choice is constrained. The choice of Edison schools has generally not depleted the local public schools of their more affluent or Caucasian students, nor concentrated those students in Edison schools. Choice, in Edison's universe, has not exacerbated inequalities. To the contrary, choice has offered all families the opportunity to pursue a different education for their children, and although a range of families have chosen Edison schools, poor and minority families have been more likely than other families to make that choice.

There is, however, one caveat before we conclude that selectivity may not be cause for inordinate concern. Race, ethnicity, and income have traditionally been associated with student achievement—or a lack thereof. But a school that is relatively high in free or reduced-price lunch students or in African American students, as Edison schools are, may still be creaming. Schools of choice may attract the best students from communities that are largely poor and minority.

¹⁸See esp.: Christopher Jencks and Meredith Phillips, *The Black-White Test Score Gap* (Washington, D.C.: Brookings Institution Press, 1998); Christopher Jencks et al., *Inequality* (New York: Basic Books, 1972); and James Coleman et al., *Equality of Educational Opportunity* (Washington, D.C.: U.S. Government Printing Office, 1966).

This problem is explored first in Table 8. The baseline test scores of Edison schools are compared with the average test scores of all schools in the home district of the Edison school. The comparison involves all standardized tests mandated by states or local school districts. It focuses on tests taken either the year prior to Edison or during Edison's first year. The purpose of the comparison is to determine the relative achievement of the students that Edison initially enrolls. Are they more or less accomplished than the students in the district as a whole? Who chooses? We know their race or ethnicity and their economic circumstances. But are they perhaps the strongest students from groups that traditionally have not achieved at high levels?

The table provides separate comparisons for schools taking criterion-referenced tests and schools taking norm-referenced tests. The table reveals that Edison begins work, on average, with schools where student achievement is much lower than district norms. Overall, the difference

TABLE 8
Baseline Test Scores of Edison Schools Compared with Home District, by Type of Governance, 1995–2000

	Criterion-Referenced Tests		Norm-Referenced Tests	
Type of Governance	Edison	Home District	Edison	Home District
Independent charter	25%	42%	26	42
District charter	34%	42%	28	37
District contract	38%	48%	33	55
All	34%	46%	32	45

¹⁹Baseline test scores employ scores from the school's first year with Edison if the school is new or is enrolling many new students. Baseline scores employ scores from the year prior to Edison if the school's enrollment with Edison is generally unchanged from the prior year. For details, see Edison Schools Inc, Fourth Annual Report.

is 12 points on criterion-referenced tests—an average school-wide passing rate of 34 percent in Edison schools versus 46 percent in local district schools. On norm-referenced tests the difference is 13 percentiles—Edison schools begin on average at the 32nd national percentile rank while the home districts of Edison schools average the 45th national percentile for the year their respective Edison schools open. The differences are meaningful for students, amounting to perhaps a grade level of difference in achievement.²⁰

The differences between Edison and non-Edison students hold up regardless of governing arrangements. Indeed, the differences are greater for independent charter schools than for district charter and district contract schools. This is the reverse of the finding for economic disadvantage, and it is quite contrary to what concerns about selectivity would lead us to expect. Where parents have the complete freedom to choose—in independent charter schools—low-achieving students are especially likely, relative to local achievement levels, to choose an Edison school. The difference in norm-referenced test scores in Edison's baseline year between Edison's independent charter schools and local public schools is 17 points on criterion-referenced tests and 16 points on norm-referenced tests. This suggests that Edison attracts not only students from racial, ethnic, and economic groups that have not traditionally succeeded, but also students who are actually not succeeding on average. Edison schools do not cream the best students from the communities in which they work. Edison schools begin on average with students who are achieving below the norms of their local communities.

This conclusion is cemented with a look at the initial conditions of Edison schools on a school-by-school basis. Table 9 shows rather dramatically that a full 90 percent of

²⁰For the relationship between national percentile ranks and grade equivalent scores, see, e.g., *Stanford Achievement Test, Ninth Edition, Technical Manual* (New York: Harcourt Brace, 1998).

TABLE 9
Edison Schools with Lower Baseline Test Scores Than Home District, by Type of Governance, 2000–2001

Type of Governance	Number	Percentage
Independent charter	20/20	100%
District charter	13/16	81%
District contract	36/41	88%
All	69/77	90%

Edison schools open with students who are achieving below the average of their respective communities. Edison is not attracting the most successful students in the communities in which it works. This conclusion holds regardless of governing arrangement. Importantly, it holds where families have complete freedom of choice. In 100 percent of Edison's independent charter schools, the initial achievement level is lower than the achievement level in the home district.

Families that have exercised school choice through Edison are disproportionately families whose children are not succeeding academically. This is the bottom line, regardless of race, ethnicity, or economic disadvantage. It is also true that the families who have exercised school choice through Edison are disproportionately African American and poor. These are groups whose children have traditionally fared less well than the national average—and the families school choice is supposed to work against, if selectivity is a serious problem. And it matters very little whether choice is completely free, as it is in the lotteries of independent charter schools, or constrained by neighborhood preferences, as it is in district schools. There is some evidence that economic need may be a bit higher in schools if a district is involved, but there is also evidence that educational need may be higher in schools if only choice is at work. Overall, the pattern could not be clearer: the processes of school choice in which Edison schools have been involved since 1995 have produced schools that consistently and disproportionately serve students with serious educational, social, and economic needs—students that concerns about selectivity suggest would not be well served. The question, of course, is why?

DEMAND-SIDE CONSIDERATIONS

Part of the answer lies with the families who have chosen or have not chosen—Edison schools. These families, including tens of thousands who have enrolled their children in Edison schools and many more who have not, represent the demand for alternative schooling. Without direct evidence, perhaps formal surveys of choosers and non-choosers, it is impossible to say with confidence why families have or have not selected Edison schools. Edison Schools Inc does not use survey research to evaluate prospective markets for its schools.²¹ Edison does survey parents once they are enrolled in Edison schools. Each spring an independent survey research firm polls the parents and guardians of every student in every Edison school.²² These surveys are designed to help schools improve "customer satisfaction," and therefore probe deeply what families like and dislike about their particular Edison school. But the surveys do not ask why families chose an Edison school, and, of course, they are not administered to families who did not enroll in Edison schools. To understand the mix of families Edison has attracted, and failed to attract, we must therefore engage in a bit of speculation.

²¹Before Edison opened its first schools in 1995, the company did conduct extensive market research, but that was for the purpose of evaluating the demand for the concept in the first place and market-testing elements of the education program and school design. For details on the market research, see Chubb, "Lessons in School Reform from the Edison Project."

²²The surveys have been done annually since 1995 by Harris Interactive (formerly Gordon S. Black) of Rochester, N.Y. The survey also includes teachers and students and provides an analysis, called *CSImpact*, of the factors most responsible for each school's overall levels of satisfaction. Schools use the surveys and analysis to improve their practices and increase parent, teacher, and student satisfaction.

The strongest finding, amid many strong findings, in the analysis of Edison's enrollment is the low levels of Edison's baseline test scores. Edison schools have attracted disproportionate numbers of families whose children are achieving below national, state, and community norms. This is probably the most telling finding of the entire analysis, more telling by far than the racial and economic findings that are consistent with it. The test scores suggest, pretty plainly, that the families most likely to choose Edison schools are those who believe their current schools are failing their children educationally; the choosers are not families whose children are doing satisfactorily but want something better. The choosers are also disproportionately poor and minority groups we know from survey research are relatively dissatisfied with their public schools.²³ Although a range of families choose Edison schools, and the mix of families in typical Edison schools is broadly reflective of their respective communities, Edison's population skews toward the dissatisfied.

Selectivity concerns would lead us to believe that the families who have not fared well in existing schools would lose out in the process of choosing schools. Yet the evidence suggests that families who are relatively well served by existing schools are simply not the ones opting to change schools. We can only speculate why, but several reasons come immediately to mind. One is risk. Moving to a brand-new school without a track record in the community entails risk. Will the new school really do a better job than the current school? A family whose children are clearly succeeding may be reluctant to accept this risk and move, even if the new school looks very promising. A family whose children are performing only tolerably well, and therefore is dissatisfied, may also be reluctant to switch: there is a risk that the new school could be even worse. But a family whose children are just not succeeding—by local, state, or national norms—may be willing to accept the risk.

²³Moe, Schools, Vouchers, and the American Public.

A related reason may be what economists would call transaction costs. Changing schools is potentially disruptive to children and their families. Friends may have to be left behind. School clubs and after-school activities will probably need to change. Commuting may become more burdensome, for children as well as their parents. Just as the risk that a new school may not prove better than the old school may scare off all but the most dissatisfied families, so too may the costs of making a change be too high except for those with little to lose.

Finally, there is the matter of what families see in what Edison offers. Edison knows that families like most the fact that Edison is offering a richer education than many families are accustomed to receiving. A longer school day and year, art or music every day, a foreign language beginning in kindergarten, a computer for use at home: these basic elements of Edison's education program appeal to families across the economic and racial spectrum.²⁴ But which families are going to see these elements as most attractive? In all likelihood, families whose schools are most lacking in them, which often means families in inner-city schools.

Concerns about student selectivity may be based on inadequate, or careless, assumptions about the decision process families are likely to go through in evaluating whether to make a change. The prevailing thinking is that parents who care most about education and are most adept at obtaining information about their options will prevail in a world of school choice. Undoubtedly this is true, all things being equal. But all things are never equal. Choice also involves risk, transaction costs, and ultimately some benefit from making a change. These factors will add up differently for different families. Choice involves giving up what one has for the promise of getting something better in return.

²⁴Chubb, "Lessons in School Reform from the Edison Project."

The evidence from Edison schools suggests that families do not want to "mess with success," no matter how modest that success might be. The parents most likely to switch are not the parents who are always on the make for something better for their high-flying kids. The parents most likely to switch are those for whom the relative benefits of Edison schools are dramatic and for whom the costs of continuing academic failure outweigh the risks and costs of change. Particularly in these early years of charter schools and contract schools, choice may simply make the most sense to those families and students with the most to gain and the least to lose by making a choice.

A SUPPLY-SIDE PERSPECTIVE

Edison's education program and school design were developed to serve the full spectrum of students and schools served by public education. That was the company's express mission when it was launched in 1991 as the Edison Project, and it remains the company's mission today: to provide a "world-class education to all students." 25 Edison aims to offer a good educational choice for families and communities whether they are high-achieving or lowachieving, rich or poor. In fact, Edison serves a range of communities. For example, Academy Edison Elementary School in Colorado Springs is located in an upper-middleclass suburb near the U.S. Air Force Academy and serves a population where less than 10 percent of the students are eligible for free or reduced-price lunch. Edison schools serve predominately middle-class communities in San Antonio, Duluth, and Peoria, among other locations.²⁶ Every Edison school does not begin in academic difficulty.

Yet Edison has watched the demographic profile of its schools change systematically each year since it opened for

²⁵For mission statement and supporting detail see Edison's Web site <www.edisonschools.com>.

²⁶Edison also has schools serving low-income populations in these communities.

business. From the 1998–99 school year to the 2000–2001 school year the level of economic disadvantage in the average Edison school rose from 57 percent to 65 percent to 70 percent eligible for free or reduced-price lunch, and the proportion of African American students in the average Edison school rose from 46 percent to 55 percent to 64 percent.²⁷ Edison is prepared to serve students of all types, but increasingly it is serving students with the greatest needs.

Of course, Edison is not a monopoly provider. It must take demand such as it is. And the demand for Edison schools, as just outlined, leans toward the needy end of the economic and educational spectrum. But how does this demand intersect with Edison's interests as a supplier—with Edison's economic, as opposed to educational, interests? The answer is, positively.

First, Edison must maintain its schools at a high level of enrollment if it is going to receive the revenue it needs to cover its costs and earn a profit. Every Edison school is funded on a per pupil basis. The funding is set by state charter school law and/or by negotiations with local school boards and charter school boards. The funding level is roughly the average per pupil funding in the school district in which the Edison school is located. Edison must pay all the costs of the school from these funds, including the salaries of teachers and other school staff, books, and other instructional materials, technology, utilities—everything that goes into operating a school.²⁸ Because most of these costs are fixed, it is important to Edison financially that its schools are fully enrolled. Net revenue is maximized when a school is fully enrolled.

Because Edison obviously is loath to open a school in a location where enrollment will be a problem, enrollment prospects

²⁷Edison Schools Inc, Fourth Annual Report on School Performance.

²⁸Edison also must pay rent or mortgage expenses in its charter schools. Capital items such as books or technology are amortized. Certain services, such as transportation, may be provided by school districts and deducted from the perpupil fee.

become an important consideration during the development of a contract for a new school. Edison wants to minimize the risks that its schools will not be full. It does so through two strategies, the first of which is most important: Edison, in effect, shares the risk with a partner. All Edison schools are partnership schools—that is, they are schools organized jointly with a school district or community group interested in providing an educational alternative where there is already an identified need. The need may be one experienced by a community group that now wants to create its own charter school. Or the need may be one identified by a school board or superintendent looking at the schools for which they are already responsible. Either way, if a school has the community support or political support to be launched, it generally has a solid base for initial enrollment.

Edison's partners thus far have been community groups such as Friendship House in Washington, D.C., and Project for Pride in Living in Minneapolis that work with the economically disadvantaged, or urban school systems that serve disproportionately poor and minority families. Edison generally works with its partners to determine whether the support exists to launch and fill an Edison school before the decision to write a contract is ever taken.²⁹ Experience indicates with a high degree of consistency that the partners and communities most interested in creating new schools are those that have been experiencing educational disappointment or failure. Experience also indicates that schools that are targeted, through sponsorship or location, at families who have generally not enjoyed successful schools fill most rapidly.

This experience is reinforced after schools are opened for enrollment, initial sign-ups are complete, and empty seats

²⁹A dramatic exception to this practice occurred in New York City in 2000–2001, when the Board of Education designated five public schools for conversion to Edison schools without consultation with the school communities. The backlash from the schools scuttled the completion of the contract.

must still be filled. Edison does no national advertising, and obviously aims to keep its enrollment costs as low as possible. Edison therefore employs a second method to fill its schools—a range of relatively low-cost techniques to advertise and attract families, including radio ads, direct mail, parent nights at the school, auto dial calls (to hundreds of families, with a recording from the school principal), free transportation to visit the school, "door hangers" to get the word directly to every home, booths at community events, school festivals, barbecues, ice cream socials, giveaways or trinkets for kids, and free immunizations and health screenings. A few of these techniques—free transportation or free immunizations and health screenings—may appeal especially to the economically disadvantaged. But most of them are familiar retail strategies or tried-and-true school recruitment strategies that could be used whether the families targeted were rich, poor, or in between.

The point, then, is not that Edison has targeted particular families with its advertising and outreach. It is that the families who respond to these straightforward and relatively low-cost efforts tend disproportionately to be economically disadvantaged or educationally dissatisfied, or both. Edison has kept its schools enrolled at over 98 percent of their capacity, and at relatively little cost. It has done so by working with partners who have identified genuine educational needs in their communities and by accessing families who do not require much encouragement to recognize their educational needs. If Edison were aiming to fill its schools with families who were already satisfied, the effort would be considerably more expensive.

A second supply-side consideration is funding. Edison offers essentially the same educational program and school design whether it is serving a population that is disadvantaged or middle class. There are differences, of course. The school serving disadvantaged students will likely require more reading tutors, more small-group instruction, more social services, and perhaps more special education. These represent

additional operating costs. The school serving disadvantaged students may also have more teacher turnover because teaching in such schools can be more challenging. This means more training and support costs. These differential costs are not trivial. They could easily add \$200,000, or sometimes more, to the cost of a typical disadvantaged school.

But schools serving disadvantaged students or students with special needs are often, though not always, eligible for additional funding beyond a local per pupil average.³⁰ Economically disadvantaged students qualify a school for federal Title I funding. These funds can come to \$500 per student or more, and easily exceed \$200,000 per school. Many states offer their own "compensatory" or "at risk" funding, which depends on a school's economically disadvantaged population. Special Education students bring additional funding, as do English Language Learners, that is, students requiring bilingual education or English as a Second Language (ESL). None of these extra funds are large or, in the view of many educators, adequate to get the job done. However, the adequacy of the funds depends to a large degree on the nature of a school's core education program and how well that program serves the needs of all students.

Edison's education program and school design were conceived from the ground up to meet the needs of *all* students. The needs of many of the students for whom extra funding is available are met through schoolwide efforts, not through (expensive) extra programs, which almost inevitably deny students some of the regular instructional program. Edison still employs many specialists, such as special education and ESL teachers, but these teachers are working with students within a regular education program that is also meeting their needs. No money is saved in these specialized areas, but the results are likely to be better for the money spent. Overall,

³⁰Some state charter school laws fold all state categorical funds into the calculation of a per pupil funding level for charter schools. In these states funding does not change with the composition of the school's student body.

schools serving economically disadvantaged students can make financial sense. The extra funds are sufficient to meet their needs if the effort is made, as Edison has done, to do so through the entire education program.

A third supply-side consideration is economies of scale. Edison must supervise and support the schools for which it is responsible. Edison is accountable to its clients for student achievement, customer satisfaction, and implementing the Edison school design, among other things. Edison is also accountable to its public shareholders for financial performance. Edison has therefore developed systems to train, inform, support, supervise, reward, and control its schools. Some of these systems are automated and centralized, but others are face-to-face activities and decentralized. When Edison schools are clustered geographically, Edison enjoys economies of scale at the system level. A single trainer or supervisor can cover more schools at less cost, using automobiles instead of airplanes, taking minutes for travel instead of hours.

It so happens that it is easier to achieve economies of scale serving disadvantaged students than serving others. Disadvantaged students are concentrated in the densely populated cores of urban areas. These students are also served by school systems that tend to include large numbers of schools. Each of the fifty largest school systems in the United States includes over one hundred schools.³¹ School systems are Edison's most common clients. Edison has the potential to negotiate deals to operate multiple schools in a large system. In a small school system, Edison could not operate more than a single school if parents are to be given a choice. Therefore, because of economies of scale, Edison prefers contracts, such as it has in Dallas and Las Vegas, to operate six or more schools in a single urban area. Disadvantaged students, heavily represented in such locations, benefit from Edison's economic self-interest.

³¹National Center for Education Statistics, U.S. Department of Education, *Digest of Education Statistics* 2000.

A fourth supply-side consideration is the economic margin of the school itself. Because Edison's program and design are constant, the economics of local school systems tend to shape the economic viability of any Edison school. Edison schools generally adopt local salary levels, and then supplement them for the 200-day school year that Edison normally runs. Edison schools also generally adopt local class size norms.³² Taken together, these two factors—teacher salaries and class sizes—determine most of a school's budget. Because Edison follows local custom, its core school budgets are essentially determined by the practices of local school systems. For an Edison school to yield an economic margin—to pay for Edison's support costs or overhead and to contribute to the company's profit—local school systems must themselves have "margins" or revenues that are not spent directly on teachers and classrooms.

Of course, school systems do have support or overhead costs of their own. The interesting fact is that these costs tend to be proportionately greatest in large urban school systems.³³ Although school finances vary considerably from state to state, as a general rule, Edison stands the best chance of operating schools with acceptable economic margins if the schools are part of large urban systems, or are charter schools located within large urban systems. This economic incentive likewise favors economically disadvantaged students.

³²Edison does this for many reasons. First, even small reductions in class size are expensive (a one-student reduction in a typical 24-classroom school costs \$168,000—in a school receiving a typical \$7,000 per student) and provide no reliable education benefits. Large reductions in class size are simply not feasible with locally determined revenues. Second, increases in class sizes are bad for business—and often bad for instruction—because they discourage enrollment among families who, very commonly, see smaller classes as a sign of better schools.

³³In large urban school systems the proportion of the budget spent on teacher salaries is 52 percent and the proportion spent on administration and support is 15 percent. The remainder goes for transportation, food service, utilities, and other operating costs. See John E. Chubb, "The System," in Terry M. Moe, ed., *A Primer on America's Schools* (Stanford: Hoover Institution Press, 2001), 39–40.

A fifth supply-side consideration is the distribution of funding within local school systems. Because public schools are typically not funded on a per-pupil basis, there is a tendency for schools serving the most disadvantaged students to, in effect, receive fewer dollars per student than schools in the same district serving less-disadvantaged students. This disparity occurs principally through the ability of teachers using seniority rules to transfer schools, a process that tends to concentrate veteran high-salaried teachers in economically better parts of town and beginning low-salaried teachers in worse parts of town.³⁴ When Edison is given the opportunity to run a school in a poor part of town, and is paid the average per-pupil revenue in the district to do so, the deal will often bring greater financial resources to the school than it has received in the past. This reallocation of funds benefits the economically disadvantaged students who choose to attend.

Finally, there is a supply-side consideration that would seem to have little to do with economics. This sixth consideration is politics—and it has a major impact on Edison's economics. Where in public education can suppliers like Edison do business most efficiently? Ultimately, the answer depends a great deal on politics. Politics can change, of course. But for the last decade the dominant movement in education politics has been *accountability*: setting standards, giving tests, and rewarding or punishing schools for their performance. The accountability movement has proved to be one that political conservatives and liberals can find reasons to unite behind.³⁵ Every state but one now has explicit academic standards, and most states back up their standards with tests and sanctions. These systems vary enormously in quality and consequence, but one consistent effect of them

³⁴See Hill, in this volume.

³⁵Among the many fine works on this subject, see: Diane Ravitch, *National Standards in American Education* (Washington, D.C.: Brookings Institution Press, 1995), and The Koret Task Force, *Accountability* (Stanford: Hoover Institution Press, 2002).

has been to focus public attention on schools that are clearly failing. In state after state, schools can find themselves placed on "low-performing lists," and threatened with various penalties including closure and state takeover.

The accountability movement has been good for Edison. Superintendents under pressure to get schools off of lowperforming lists are interested in using Edison to spur academic turnarounds. States faced with the prospect of taking over local schools are coming to Edison looking for a partner. Edison's business was spurred in 2000 by both of these developments. Dallas Independent School District contracted with Edison in 2000 to manage seven schools, including three of twelve on its low-performing list that year. The Maryland State Board of Education contracted with Edison to manage three schools it had taken over from the Baltimore City Schools for low performance. The state of Pennsylvania in 2001 contracted with Edison to run ten of eleven schools in Chester-Upland, a highly disadvantaged school system on the state's "empowerment" list. In August 2001, Governor Tom Ridge of Pennsylvania hired Edison to formulate a plan for improving the academic and financial performance of the entire Philadelphia public school system, also on the state's empowerment list. The accountability movement has heightened government interest in Edison, and prospectively other firms like Edison. In the process, the movement has made it better business for providers of education to focus on the needs of the disadvantaged.

LOOKING AHEAD

As policymakers consider the use of school choice to improve the quality of education, they would do well to look at the hard data on how school choice has actually worked in the United States in recent years. There is much that is not known about the costs and benefits of school choice. And there are good theoretical reasons to be hopeful as well as concerned. Until recently, one could only infer how choice might work as a broad strategy of school reform. Private schools, schools of choice in other countries, urban magnet schools, and other imperfect approximations of a system of school choice have been used by scholars and partisans for a generation to debate the merits of this systemic reform. Reliance on weak imitations should begin to come to an end.

With the advent of charter schools, contracting, and even widespread experiments with vouchers, hard evidence on systems much closer to the systemic reforms being proposed for the United States is becoming available. Arguments that heretofore could only be settled indirectly with evidence can now be confronted head on. Perhaps the most important of these arguments is that over student selectivity. Does school choice lead to creaming—to increased inequity and segregation? This is a vital question, all the more so because public education aspires to provide equal opportunity to all Americans.

The experience of Edison Schools is a large and instructive one. In nearly one hundred schools of choice the traditionally disadvantaged—the poor, children of color, low achievers—did not fail to choose. They found their way to Edison schools in larger numbers than did their more advantaged peers. This occurred, moreover, whether the schools were filled entirely on the basis of choice or through choice constrained by district policy. And on close inspection, it turns out there are good reasons why this may be so. The demand for alternatives may favor the interests of the most disadvantaged, at least in the short term until the risks of changing schools are reduced. The supply of alternatives may also be tilted toward the disadvantaged. Edison serves those families and communities who want to be served; it is also good business to do so.