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Policy Analysis for California Education
University of California, Berkeley and Stanford University

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Photos: Nita Winter Photography

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EXECUTIVE SUMMARY

It's difficult to find anyone who is happy with public education. From your neighbor next door to our political leaders, everyone is eager to reform the schools. Polls show that even if we are satisfied with our elementary school down the street, we are distressed about the quality of public education overall.

This is where the consensus begins and ends. Contention arises immediately over the next question: What's the best strategy for improving the public schools? What policies and long-term institutional changes can be implemented that will steadily boost children's learning? This PACE report focuses on school choice—one avenue of reform which has gained considerable steam in California and nationwide.

Competing Visions of School Reform

Choice is founded upon a human-scale theory of accountability. Give parents the option to exit their neighborhood school and shop from a wider variety of alternatives. Or, bypass the school system entirely and give public dollars directly to parents via vouchers, boosting their purchasing power. Then, school principals and teachers—if the theory's underlying assumptions are met—become directly accountable to parents, not to school boards or state education agencies. This market competition for parents, enacted by a more diverse set of schools, will raise the quality of public education.

This report illuminates various forms of school choice that have sprouted and grown over the past four decades. Choice is not a new issue. But a thousand flowers have blossomed in recent years: charter schools, magnet schools, and open enrollment programs are flourishing, often unable to keep pace with parents' thirst for more options. Pro-choice financing plans are being tried in a few states, including tuition tax credits and school voucher experiments. We describe how these choice mechanisms are supposed to work and what we know about their actual effects on children, parents, and local educators. One key finding is that the claims made by advocates of choice programs far exceed the hard evidence required to judge actual results. Yet sound evaluation findings are beginning to emerge.

A very different reform strategy—also aimed at holding local schools more accountable for meeting higher standards—has attracted a competing set of advocates in recent years. Governors in Illinois, North Carolina, and Texas, among others, have attempted to raise achievement standards by assessing which schools are pushing children's learning curves upward and sanctioning those that fail to meet the mark.

The thesis is that local school boards have not held their schools sufficiently accountable. It's time for state capitals to show leadership and push local educators to do better, according to these advocates. This involves a new commitment to quality and new public resources to empower teachers and principals to stretch and improve their performance. The key is not to further decentralize public accountability but to situate stronger

expectations and increase higher public investment at the state level. California's governor, Gray Davis, is banking heavily on this second reform strategy.

We are not suggesting that state-led accountability and wider school choice are mutually exclusive reform strategies. Leading advocates—from different partisan positions—have argued that government should set common curricular outcomes and then local schools should have greater discretion in arranging "inputs" and pedagogical strategies to accomplish these learning goals. Similarly, some efforts to tighten accountability have highly decentralized components, such as Governor Davis' plan for teacher peer evaluation, school by school. At the same time, decentralized choice programs can lead to increased regulation of parochial schools, as we are seeing in the Cleveland voucher experiment.

By next school year almost one-half-million California students will participate in public choice options, about nine percent of the state's enrollment.

Our opening point is simply that school choice, as one avenue toward reform, must be placed in context. Its most promising competitor is state-guided accountability programs. These alternative approaches offer sharply contrasting roles for state government, school boards, and school principals. The two strategies are founded upon different theories of action: *how* accountability can be most directly strengthened, *who* sets learning goals, and *where* authority is situated (parents or government) to sanction mediocre schools and teachers. In short, it is illuminating to compare the decentralizing basics of school choice with the centralized accountability approaches to which a rising number of states are committed.

We must emphasize that the evaluation evidence on state-guided restructuring of schools is no more plentiful than sound research on school choice. As with past generations of school reform, new policy directions and fresh programs far out-distance steady efforts to evaluate what works.

School Choice Is Already Widespread

Over the past 25 years, choice has come to inhabit much of the educational landscape. One fifth of all children—about seven million nationwide—no longer attend their neighborhood public school. In the Fall of 1999 almost one-half-million California students will participate in public choice options, about nine percent of the state's enrollment. Another ten percent will continue to attend private schools. Affluent and working-class families are most likely to exit their neighborhood school. Some of these children can afford to attend elite private schools. Many blue-collar parents send their youngsters to parochial schools or public magnet programs. In between, surveys find that the bulk of suburban parents are fairly satisfied with their nearby neighborhood school.

As we describe the five types of choice programs available to families nationwide, you will see that the policy makers have responded to parents' desire for options beyond their neighborhood school. Evidence of excess parental demand for choices continues to grow in many urban areas, notably in Los Angeles where open enrollment slots in desirable schools are becoming more scarce, relative to rising demand.

But do schools participating in choice programs—from magnet programs to charter schools—look all that different inside? In other words, are we realizing truly different, more colorful varieties of schools? Does market competition lead to more effective forms of schooling, that is, are children learning more in "choice schools"? What types of families are served best by this new education marketplace, and who is left behind under new market rules? These are the central questions addressed in this report.

At the heart of the choice debate is the difficult question of whether public schools can effectively advance fundamental public interests: offering all children a common core of knowledge, widening opportunities for all, reducing inequality, and enriching democratic participation locally. Or, can taxpayer dollars reap stronger returns by advancing the private purposes of education through a decentralized archipelago of independent schools? If government becomes less involved in setting higher standards or in regulating low-performing schools, will the direct market demands expressed by some parents ensure that all schools endeavor to improve?

How Do You Feel about Choice?

This report aims to inform your own view of school choice. For strident advocates with hard positions, our review of the research won't change many minds. But many educators, parents, civic and business leaders are simply unsure. Choice unites rather strange political bedfellows: from business leaders, to religious leaders who seek public monies for church-operated schools, to founders of ethnocentric schools seeking to build stronger cultural identity.

PACE's approach is to be clear on the ideals and policy aims wrapped up in the school choice movement. We also strive to illuminate the assumptions and organizational mechanisms which underlie how choice is *supposed* to work to better schools. And we are religiously committed to grasping the evidence at hand, and building more rigorous evaluation efforts aimed at informing the public about the effects of choice programs.

In short, we hope to inform how you feel about choice—with abundant attention to the different kinds of choice that currently operate, gray areas where a combination of government oversight and market dynamics may work, and empirical assessment of how children and parents may, or may not, benefit from choice.

Five Renditions of School Choice

This report offers a tour through five different forms of school choice. We detail the claims, scope, and known effects of these programs. This analysis aims to assess whether the claims of advocates have come to pass, almost a half-century after the movement's birth. PACE also shares an interest in trying to improve the effectiveness of the diverse schools that the movement has fueled and to ensure equal access by all families to this mixed market. We focus on California but also report on related programs and evaluation evidence from across the nation.

The five renditions of choice on which we report:

- **Magnet schools** offer programs with a distinct curricular focus, promising to build coherent and warm school communities comprised of teachers and students who share particular interests. Two sound empirical studies have now shown significant learning gains among magnet school students, relative to similar children in urban settings. Magnet programs typically spend more per pupil than neighborhood schools and often attract more highly qualified teachers. Beyond these factors, it's not clear why magnet programs appear to yield positive effects.

- **Open enrollment** allows parents to enroll their child in a public school outside their immediate neighborhood. Parents participating in unregulated transfer programs tend to be better educated, more often white, and more affluent than families who remain in neighborhood schools. Parental demand for open enrollment slots, however, is strong in many central cities, including parts of Los Angeles and San Francisco. We could find no hard evidence on whether this choice option lowers drop-out rates or raises student achievement. Nor have evaluation designs, to date, tracked how competitive pressures linked to open enrollment encourage public schools to improve.

- **Charter schools** are supported by public monies but operate semi-autonomously from local school boards. The number of charter schools has grown rapidly in California since this option was legislated in 1992. Some innovative schools have emerged. Evidence consistently shows that parents are more satisfied after choosing a charter school than with their prior neighborhood school. Evaluations of whether charter schools boost student performance are few in number and often flawed.

- **Voucher experiments** provide public or private money for children who enroll in a secular or religious private school. Initial findings suggest that low-income children who remain in voucher programs over a few years do somewhat better in mathematics but not necessarily in reading, compared to similar students or control groups enrolled in neighborhood schools. These findings came from a small number of Milwaukee private schools. Recent findings from New York City are more consistent across grade levels, raising voucher students' achievement by a few percentile points on average. Participating private schools have smaller classes, better facilities, and greater supplies of textbooks. Self-selection by eager families to apply for and win a voucher is likely correlated with positive home practices that boost their children's learning. This makes it difficult to attribute any achievement advantage of voucher students strictly to their participation.

- **Tax credits** that offset the cost of enrolling one's child in a private school now exist in a few states. This mechanism has been in place since 1997 at the federal level for subsidizing college tuition costs. These credits typically benefit affluent parents who have a significant tax liability and pay high tuition for private schools. They have no effect for low-income families who do not pay taxes. We could find no evidence to support the argument that tax credits spur the creation of more private school spaces or higher quality public schools, stemming from market competition.

Bright Hopes, Empirical Darkness

The promise of school choice is irresistible: wider options for parents and a more diverse array of schools. We do find evidence of institutional diversification. Innovative and mostly small schools are being nurtured by magnet and charter initiatives. Vouchers move public monies to private and religious schools. But it's not clear that vouchers or tax credits spur innovation or any discernible change in the effectiveness of private schools. Early studies show promising, though modest, achievement effects for some local programs, especially for magnet programs and two small voucher experiments.

Will political leaders and education interest groups pause to support long-term research on choice and pay careful attention to emerging findings?

Perhaps in a democratic society parental demand is a sufficient reason to channel taxpayer dollars into new forms of schooling. Parents' thirst for safer, more innovative or effective schools is clearly contributing to policy action around the choice issue. But is there not also a public interest in more carefully determining whether children actually learn more when they attend a charter school or use a voucher to enroll in a parochial school? Will political leaders and education interest groups pause to support long-term research on choice and pay careful attention to emerging findings? This PACE report builds on our faith that they will.

Finally, the simultaneous push for school accountability from state capitals *and* the decentralization of governance via choice is leading to costly contradictions. We urge policy makers and local interest groups to think about accountability reforms along side the desire to spawn more diverse forms of schooling. For example, the overcrowding of school facilities, resulting in part from California's class size reduction initiative, has led to fewer open enrollment slots in urban districts. San Francisco faces a related issue as new magnet schools are attracting neighborhood families. On another front, placing charter schools under the state's testing and accountability system could stifle real innovation. Remedies for these countervailing forces are not easy. But these contradictory policy thrusts must be addressed more carefully at all levels of school governance.

We conclude this report by summarizing major findings and recommending specific policy action and research. We aim to enrich the debate over choice while advancing the positive effects felt by children and their families.

SECTION 1.
The School Choice Movement

Two Competing Reform Strategies

The question that now preoccupies many parents and policy makers is not *whether* to reform the public schools but *how* to best carry out this urgent project.

A scarcity of political will is no longer the problem. Some argue that a lack of resources is less of a constraint than it used to be. If economic growth cools, state budgets will grow tighter. Yet per pupil spending has tripled since 1965, adjusting for inflation (Hanushek, 1996). The pivotal question thus becomes: How can schools be better governed to hold them accountable in meeting higher standards? Governance, power relations, and scarce information about school and teacher effectiveness are some of the barriers to reorganizing statewide school systems.

This is where school choice advocates come on stage. The governance problem is two-fold, from their perspective. The cookie-cutter "one best system" of schooling, born in the early 1900s, has led to homogeneous, uninventive neighborhood schools. By forbidding parents to exit their nearby schools, the public education "monopoly" dodges any market pressures that would force innovation and responsiveness to diverse parental demands for more effective and perhaps varied forms of schooling.

Choice activists also argue that school bureaucracies and special interests—mainly teacher unions—have accumulated the power to protect the status quo. New programs arise to serve disabled children, slow readers, or students with limited English proficiency. But this leads to administrative expansion at the center, not to higher achievement standards or increased accountability at the grassroots. At the same time, local school principals are hamstrung by rules and regulations, unable to reward inspiring teachers and rid their schools of bad teachers.

In sharp contrast, advocates of state-guided restructuring efforts argue that the center must become leaner and meaner. That is, state governments should set the core curriculum, establish higher performance standards, and provide schools with sufficient resources to get the job done. When schools don't measure up, they should be sanctioned by the state. Schools and teachers who demonstrate strong student learning gains should be awarded incentives. Under this "systemic reform" approach the state drives tighter accountability. Under school choice state and district administrators' roles are diminished, and accountability is exercised directly between consumers (parents) and competing producers (schools).

State-led reform strategies have been successfully mounted by governors in Texas and North Carolina, among others, over the past decade. These steady, bipartisan policies are yielding significant results in terms of higher student achievement (Goals Panel, 1998). In California, governors Pete Wilson and Gray Davis have advocated for a similar set of policies aimed at raising standards, ending social promotion, and holding low-performing schools more accountable.

Our aim is *not* to weigh the relative merits of choice versus state-guided reform strategies. Nor do we see elements of these two reform options as mutually exclusive. Centralizing accountability programs often have decentralized initiatives, such as Governor Gray Davis' school-by-school peer evaluation by teachers, recently approved by the state legislature. Conversely many church groups are opposed to vouchers. They believe central regulation of parochial schools will be the result. However, we do want readers to view school choice in the context of its leading contender. This helps to illuminate the theory of action underlying school choice and sharpen the criteria along which it can be judged.

This section provides a brief review of the logic behind school choice. What is the critique of public schooling offered by choice proponents? Why has the movement gained strong momentum over the past decade? How much choice already exists as the political system responds? Sections 2 through 6 then explore the question of what we know empirically about the five distinct forms of choice which have evolved over the past four decades.

School Choice: One Model for Remaking Schools

Choice advocates advance several key arguments, some of which constitute a sharp critique of how the school "system" is presently managed. Parallel arguments aim to articulate how market forces, including direct accountability between parents and school staff, would improve the quality of public (and private) education. Different mixes of the following arguments are advanced by choice advocates:

- Public school administrators have become too insular and unresponsive to the families that they are supposed to serve. Local school principals are accountable to the district bureaucracy and distant regulations, not to their immediate clients—families and children. Parents must petition the downtown schools office rather than their local school in order to file grievances and affect change.

- Professional educators and the unions are protecting the status quo and buffer attempts to hold schools accountable. One measure that would force schools to be more responsive is to allow parents, rather than school officials, to decide what school their child attends. Parents should be able to exit an undesirable school and choose a better setting for their child. Only when parents can exit their neighborhood school will the sluggish school bureaucracy respond.

- No one best system of schooling can serve the increasingly diverse array of children entering public education. Moves to make curricular standards and tests more uniform lead to a stultifying pedagogy that ignores children's individual differences. New forms of schooling and classroom instruction are required to meet the needs of an increasingly diverse, multicultural student population.

- Schools will become supportive communities for learning only when they stop trying to be all things to all people. Rather than perpetuating the myth of the "common school," a better alternative is to provide parents with a diverse array of alternative schools to match the preferences of parents and local communities.

Given this diagnosis of what ails public schools, advocates of market-oriented remedies are advancing reforms that enhance parental *voice* or parental *choice*. Amplifying parental *voice*, they say, requires radical decentralization of governance down to the school level. If schools can be detached from district offices and government regulations, the time they used to spend responding to the education bureaucracy can now be spent on educational innovation. This will make them more directly accountable to parents.

Another key constraint is what some choice advocates might call *excessive democracy*. Local school boards, advocates reason, must respond politically to all kinds of interest groups, including teacher unions, parents of particular constituencies, and business leaders. School boards then create segmented programs and funding streams in response to these fractured political pressures. In turn, principals and teachers must respond "above" to school administrators, rather than "laterally" to the demands and preferences of the parents and children they serve (Chubb and Moe, 1990). The growing involvement of federal and state education agencies places additional demands on the local school, further diminishing the voices of parents and direct accountability by school staff.

Policy initiatives aimed at widening school options available to parents represent a stronger step to amplify their *voices* (Whitty, 1997). Pro-voice strategies—in a sense a return to the one-room schoolhouse—began in the 1960s. As the federal government boosted its involvement in education during the Great Society era, the Congress mandated that school districts must set-up local school councils (LSCs) to plan how new federal monies would be spent. These councils included parents, teachers, and in some cases, students. One shortcoming of this strategy is that the LSC oversaw a very small portion of the school's budget, since federal monies only comprise 5% to 10% of any school's total budget. Nor did these LSCs have any control over personnel decisions, including the hiring and firing of teachers and the school principal. Charter schools and radical decentralization to the school level—perhaps best exemplified by the development of school councils in Chicago (Hess, 1994)—have confronted these perceived weaknesses. They do so by granting a large degree of autonomy from public authority, including LSC power over larger slices of the school budget and certain personnel issues.

The Threat of Exit

The reform that remains the most important to choice advocates, however, is simply allowing parents to leave their neighborhood school when they are dissatisfied. In economist Albert O. Hirschman's (1970) lexicon, when voice and loyalty to one's organization fail, the best way to exert power is to exit the organization and choose another. As Hirschman points out, however, the organization suffers dearly: those members who have been actively involved in seeking improvements are now no longer exercising voice inside the organization. Allowing parents to leave their neighborhood school and enter the education marketplace moves beyond the realm of parental *voice* and into the field of parental *choice*. According to choice advocates, market dynamics will then spark the following scenario:

Box 1.1. School Choice: The Basic Vocabulary.

- **Private and public purposes of education.**
  As parents, we are eager to find safe and stimulating schools for our children. We want them to do well in school—both academically and socially—so they will find a satisfying job and get ahead in life. This is a *private* purpose of schooling. In addition, public schools aim to serve *public* ideals. They do this by advancing common knowledge and values; boosting the stock of skills necessary for sustaining economic growth; and equalizing economic and social opportunities for all children.

- **Public versus private choice programs.**
  Choice initiatives, such as charter schools or open enrollment, represent examples of public school choice. Taxpayers' dollars remain in the public system and some degree of accountability is retained. Voucher programs, in contrast, allow parents to leave the public system and choose a private or parochial school, thereby minimizing government oversight.

- **Economic advantage and fairness.**
  Not all parents operate with equal agility in markets. Affluent parents typically hold stronger purchasing power than low-income parents. Even when vouchers are targeted on blue-collar and poor families, households with two parents or with better educated mothers more frequently apply to these choice programs. This means that kids who achieve at higher levels, or those with parents who are "better shoppers," tend to take advantage of increased school choices. Children who remain in neighborhood schools may fall further behind other students academically.

- **The selection effect.**
  Prestigious private schools have long understood the importance of reputation and selectivity. If a school can attract the best and brightest students, even if its "valued added effect" in raising achievement is modest, its students will still do well. This leads to a stubborn problem in evaluating different kinds of alternative schools, including charter and parochial schools. When well-known schools attract strong students and highly committed parents, these two factors will likely boost student achievement, even if the school's academic program is simply average. This is known as the "selection effect."

- **Going to scale.**
  School choice programs represent small, evolving experiments. They often attract considerable resources and attention from foundations and researchers. When small-scale experiments yield hopeful evidence of positive effects—such as has occurred in District 4 in New York City or at Vaughan Charter School in Los Angeles—advocates argue that this justifies "going to scale," or expanding the program model to more schools and school districts. But whether charismatic school leaders, extra foundation dollars, and energetic teachers can be found on a large scale remains a pivotal question.

- Once parents have the ability to exit their neighborhood school, local educators will have to become more responsive to parental preferences.
- More innovative and effective schools will evolve, since they must compete for students. Given the diversity of families, a thousand flowers will blossom as specialized schools each find a profitable market niche and attract families committed to the school's mission.
- Low-quality schools will simply go out of business as families exit these unresponsive institutions.
- Costs will be controlled or decline as school leaders face pressures to keep prices low, aiming to expand their enrollments and financial health.

Market Values and the Common Good

Choice advocates bring to the fore a centuries-old debate over the private and public aims of education. All democratic societies struggle with the dilemma of how to balance economic liberty and private interests while promoting the common good. Democratic government has long been dedicated to maintaining public services and institutions that serve the entire society—a public commons represented by public roads, hospitals, libraries, and universities. But at the same time pro-capitalist governments seek to ensure minimal constraints on the choices of producers and consumers—in short, to advance free market rules.

In the education sector this dilemma plays out around the question of whether Government should play a more effective *regulatory* role in reforming public schools, or whether more radical *decentralization* and *market strategies* will solve the reform puzzle. On the former, some argue that national or state curricular standards, uniform student promotion standards, or a single approach to bilingual education will lead to gains in student achievement. Under the latter strategy, school choice advocates argue that the education system will never effectively reform itself. Instead it must be disassembled and devolved into a market network of individual providers (schools) who will be responsive to individual consumers (parents). This will best serve the common good.

These are two fundamentally different approaches for how to improve the public schools—and whether the education system should remain "public" in terms of promoting a common cause and a core set of values and skills. If schools were to evolve over the next century based on individual choices and market preferences, would a common set of American commitments and basic standards be maintained? Conversely would the common good, idealized within the "common school" over the past century and a half, be advanced under the current form of governance and limited accountability reflected in many public schools? These are pivotal philosophical issues that will be only partially informed by empirical evidence.

Historical Perspective: The Rising School Choice Movement

The choice movement has historically been advanced by a number of diverse local groups. Early on this included activists on the political Left who had grown frustrated with dysfunctional urban schools or what they saw as unengaging forms of teaching and learning. On the Right, reformers were market-oriented and yearned for the idealized local firm that would innovate and respond competitively to parental preferences—or disappear from sight. The movement has received major support overseas, most notably from the Thatcher Government's successful push in the 1980s to implement "grant maintained schools," whereby capitation grants are driven by open enrollment and schools' ability to attract new students. Local school authorities in England must now compete with private groups to contract for teacher training and other support services (Stearns, 1996).

In recent years the press for new forms of schooling has come from well-financed corporate activists or via bipartisan legislative efforts in the case of charter schools. The CEO Foundation has identified wealthy donors to fund voucher programs in several cities around the country including Los Angeles, Oakland, and San Francisco. A few companies, such as the Edison Project, are attracting capital and winning contracts to manage charter schools and failing public schools. Similarly, state policy leaders have exercised centralized political power to legislate decentralized experiments, including voucher experiments and open enrollment plans.

Let's walk through a brief history of the choice movement (Box 1.2). This evolving story helps to clarify what choice proponents have attempted to combat and what they promise to deliver.

Economist Milton Friedman in the 1950s applied the idea of portable vouchers to the problem of how to push school districts to be more responsive and accountable to parents. This idea—by the 1970s—would influence government funded child-care programs, college scholarships, and public housing subsidies. In each case, direct aid to public institutions was supplemented with new monies awarded directly to clients via portable vouchers.[1]

In the 1960s the political Left grew more interested in radically decentralizing school governance. They wanted to empower disenfranchised minority and low-income communities who were not being heard by local governments and school boards. These progressive policy makers—including Great Society architects and their Harvard University advisors—designed the first school voucher experiment in the Alum Rock School District on the outskirts of San Jose, California (Jencks, 1970; Catterall, 1984). The district accepted the program, as local educators and anti-poverty activists were voicing concerns over the conventional schools' inability to address issues of human values, nurture a "critical consciousness," and empower district parents to participate (Wells, 1993). But Alum Rock never truly implemented the regulated compensatory voucher model developed in Cambridge—private schools were not included and the loss of enrollment in a school had no impact on teachers' and administrators' jobs. Alum Rock became a "within district" system of open enrollment.

Box 1.2. Milestones: Public Ideals and the School Choice Movement.

1830s Massachusetts activist Horace Mann pushes for a network of local "common schools." His goal was to equalize the effect of schooling on a society that he felt was fracturing into distinct social classes. Common schools would bring all children together under one roof and advance the virtues of justice and piety.

1894 Philosopher and educator John Dewey establishes a laboratory school at the University of Chicago, arguing that education is "the fundamental method of social progress." By developing a series of schooling experiments, Dewey seeks to "overcome the divisions between families and schools, nature and daily life... and different classes of people, especially those classified as 'cultured' and as 'workers.' "

1924 Labor and education leaders found the Manumit School in Pawling, New York, an alternative school based on the principles of A.S. Neill's Summerhill School in Leiston, England. The Manumit School seeks to personalize education and allows teachers and students to govern the school democratically. The school later inspired the rebirth of alternative schooling and the fight against "authoritarian public schooling" in the 1960s.

1950s School districts in the South develop "freedom of choice" plans that permit white parents to leave desegregated neighborhood schools and select another school for their children. These plans eventually are struck down by federal courts during the 1960s because the plans circumvented *Brown v. Board of Education* and were therefore unconstitutional.

1962 Economist Milton Friedman, concerned over the inefficiencies of what he sees as a highly bureaucratized system, pushes for school vouchers. Friedman's role for government: "insuring that schools meet certain minimum standards, such as inclusion of minimum content in their programs," rather than getting involved in every aspect of the education process.

1966 Black activists in New York City push for community control of schools. They are motivated by frustrations over the failure of open enrollment, bussing, and re-zoning to advance desegregation. The United Federation of Teachers opposes this proposal, arguing that a strong city school system would better serve parents' and teachers' interests.

1970 Sociologist Christopher Jencks helps to galvanize support for alternative schools and recommends that schools experiment with tuition vouchers. Concerned over sluggish local political structures, the Office of Economic Opportunity under President Nixon begins the first-ever voucher experiment in San Jose's Alum Rock district.

1981 Magnet schools become widely accepted as a device for voluntary desegregation. The federal government begins providing financial support. By the early 1990s, over 10,000 magnet schools are operating.

1982 District 4 in East Harlem moves to open enrollment, allowing parents to leave their neighborhood schools and select another. The district creates smaller junior high schools in an effort to personalize the school environment and to provide principals greater latitude in recrafting educational programs.

1985 Minnesota approves an open enrollment scheme that allows high school students to enroll in higher education programs. The state expands the initiative in 1987 to allow students in any grade to move to another public school and take their state aid with them.

1989 The Wisconsin legislature approves a small voucher experiment in Milwaukee that allows parents to move their state aid to nonsectarian private schools. The program is later expanded to include parochial schools, but this part of the program is appealed. In 1998 the U.S. Supreme Court decides not to review the case, allowing the voucher program to continue.

1991 Minnesota approves the first charter school law, followed shortly by a similar measure passed by the California legislature in 1992. In 1996, President Clinton offers federal support for charter schools, and Congress quickly passes a bill approving financial aid for technical assistance and start-up grants to charters.

Sources: Ravitch (1974), Wells (1993), Fuller and Elmore (1996).

Other policy innovations also sprouted during the Great Society era in the areas of compensatory education, Head Start and state preschools, and support for decentralized community action agencies. The rising distrust of big institutions, including Government, would bring both sides of the political spectrum to experiment with decentralized policy remedies in the field of school reform and family poverty (Katz, 1996). Pushed by political liberals, school site councils and community action agencies represented ways of bypassing conservative or bureaucratic agencies of local government. The logic would later be borrowed by conservatives to advance school choice.

For Washington and in many state capitals, the 1970s represented a time of maturation and further expansion of highly regulated education programs, what some have dubbed the "hardening of the categoricals." This included the rapid growth of Title I compensatory programs; enactment of the massive special education program; rising support for bilingual education; and growth of preschool and child-care initiatives. By the end of this decade, California would witness the proliferation of over 80 regulated categorical programs, and then a successful move to consolidate many into less regulated block grants to local school districts (*EdSource*, 1997). The common good of public education had become segmented into a plethora of segmented causes.

The 1970s also saw sharp contests over desegregation and decreasing government authority to push strong measures, such as mandatory busing. This prompted two organizational innovations that have exerted lasting effects on the school choice movement. First, magnet schools were developed in an attempt to stem white flight. Modeled after Boston Latin or San Francisco's Lowell High School, these schools aimed to build a reputation of excellence around a coherent curricular mission. Section 2 examines this choice strategy.

Second, "controlled choice" plans were developed, one of the first being in Cambridge, Massachusetts, where civic leaders feared that Boston's violent protests against busing would spread across the Charles River. A variety of open enrollment programs evolved from this innovation, including both managed and unregulated transfer programs. Section 3 explores open enrollment programs, including the pivotal issue of how public authorities balance parental choice with a shared commitment to maintaining ethnic diversity within schools (Willie and Alves, 1993).

The 1970s witnessed other policy shifts as centrists selectively applied market principles to education programs. In 1972 the Congress recast student financial aid in the form of portable Pell Grants. Its objective was to advance student choice, rather than continuing to channel aid to colleges. In a handful of urban states child-care vouchers were created in hopes of separating assistance to low-income families from entanglements with local welfare bureaucracies (Holloway and Fuller, 1996). The earned-income tax credit, created during the Ford Administration, used the federal tax system to help guarantee a minimum income for working-poor families. Again, the innovative policy goal was to target direct assistance to the family instead of channeling it through local service or school administrations. A related aim was to simplify procedures and paperwork to ensure that if new programs were created, they would not require larger administrative structures. Critics argue that families need helping hands and richer information in their neighborhoods, not only vouchers or tax credits.

The Choice Story Takes a Turn

The 1980s marked a crucial shift in the school choice debate. Ronald Reagan ran against Big Government in his race for the presidency. Pro-choice education policies were pulled into this anti-state agenda. The leading edge consisted of tax credits to offset education expenses, including tuition costs at private or parochial schools. The Democratic Congress never let this proposal see the light of day. But 15 years later, in April 1998, the Senate approved similar tax credits. The legislation quickly passed in the House, then was vetoed by President Clinton.

In 1993, 24% of all respondents supported granting parents the right to choose a private school funded through a taxpayer supported voucher. This level of support climbed to 48% in the 1998 Gallup poll.

Other strong choice initiatives, however, have been enacted at the state level, at times backed by wide coalitions of progressive reformers and pro-market advocates. Minnesota's 1985 "postsecondary enrollment options" program became the first plan of its type. It allows high school students to attend college-level courses while their K–12 school districts pay for tuition costs. Minnesota would later pass the first charter school legislation, expand tax credits for private schooling, and enact K-12 open enrollment, abolishing the tradition of neighborhood schools (Wells, 1993).

In 1989 the Wisconsin legislature approved a taxpayer-financed school voucher experiment for Milwaukee. Importantly, the program focused on low-income families, setting aside the earlier Republican emphasis on portable credits or vouchers for middle-class and affluent parents. This proved to be a crucial turning point for the politics and substance of the school choice debate.

The choice movement has gained further momentum during the 1990s. Legislation enabling the creation of charter schools—which can sever most ties to state regulations and union contracts—was approved first in Minnesota (1991), followed closely by California (1992). Over 27 states and the District of Columbia have since followed suit. The Ohio legislature enacted the nation's second taxpayer-financed voucher experiment in Cleveland, allowing parochial schools to receive participating students and their public vouchers. The CEO Foundation and other corporate backers have organized several private "scholarship" programs, including voucher experiments with parochial school involvement in San Francisco, Los Angeles, New York City, and Washington, D.C. (Moe, 1996). California voters defeated a ballot proposition in 1993 that would have created a statewide voucher system. But Republican leaders in California continue their push for a large voucher experiment focused on poor families. A handful of states, most recently Colorado in 1998, have defeated ballot initiatives aimed at creating tuition tax credits for families with children attending private schools.

Strong Public Support for School Reform

Widespread concern over the quality of public schools helps to power the school choice movement. Popular worries also energize efforts to centralize some elements of the system along the lines of state-led restructuring. Californians are certainly worried about the quality of public education. Similar to national patterns, California voters are supporting political leaders who promise major school reforms. The *PACE School Reform*

Poll, conducted in 1998, found that 61% of the 1,003 Californians interviewed felt a "major overhaul" of the public schools was required (Fuller et al., 1998). Earlier surveys have revealed that 10% to 20% of all citizens hold their neighborhood schools in higher esteem, relative to the education system overall. Still, it is this degree of general dissatisfaction that helps to generate the momentum for various reform agendas.

The annual Gallup poll on education reveals rising support for school choice programs. In 1993, 24% of all respondents supported granting parents the right to choose a private school funded through a taxpayer supported voucher. This level of support climbed to 48% in the 1998 Gallup poll (*Phi Delta Kappan*, 1998).

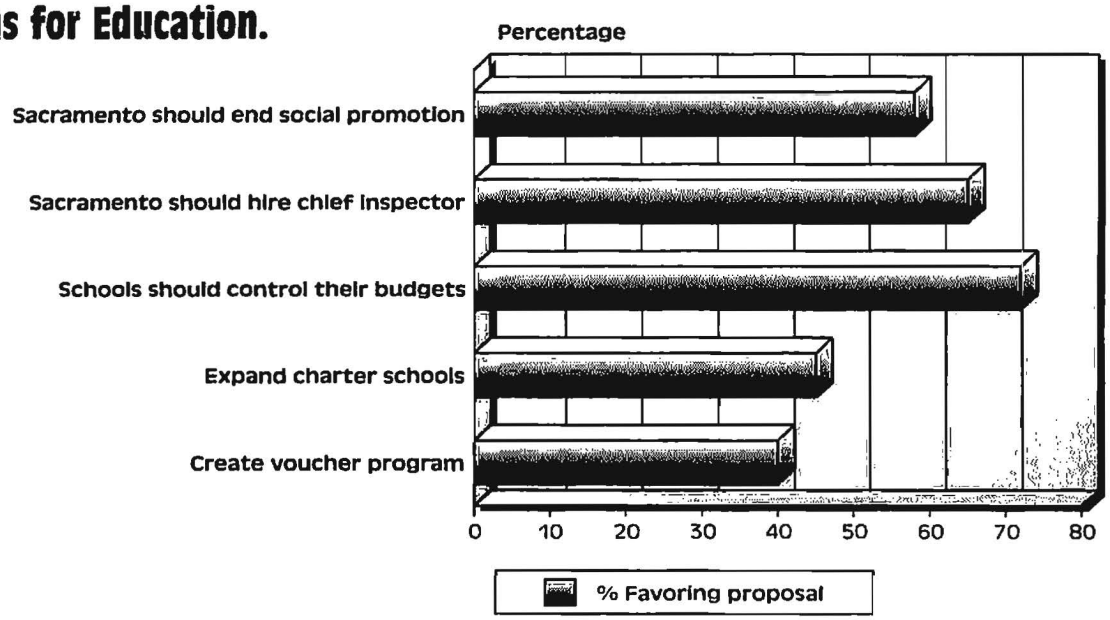
Equally important, a majority of citizens are eager to see state government step in and approve strong policies which they believe will boost the quality of public education. The 1998 PACE poll did reveal significant support for vouchers and charter schools, expressed by just under half of those interviewed. Even stronger support was voiced for former Governor Wilson's proposal to move power and budgets down to school-level councils that would include parent representatives (similar to decentralized governance in England or Chicago). But the strongest support was voiced for measures that would concentrate *more* authority in Sacramento. These included:

- ending social promotion of students by setting statewide grade promotion standards, enacted in a version that requires district standards;
- strengthening curricular standards and requiring schools to meet higher benchmarks,
- raising the requirements for new teachers entering the profession; and
- creating a state schools inspector who could take over ineffective schools.

The PACE poll also revealed differing views of school choice reforms across various groups. Figure 1.2 details partisan and ethnic differences in how voucher and charter school proposals are viewed. On vouchers, 52% of all Californians continue to be opposed, almost the exact level of opposition presently observed nationwide. Latinos were split evenly; 60% of all blacks interviewed were opposed to vouchers. Other evidence shows that many urban families are the most supportive of school choice programs, since they are often faced with low-quality schools (Lee, 1996). Affluent families essentially make their school choice by deciding on the community in which to live. Republicans strongly favor voucher experiments, while Democrats are equally vociferous in their opposition. No partisan differences are observed when it comes to charter schools. Voters from both parties are tepid in their support, with about one-fifth unsure about this new form of choice.

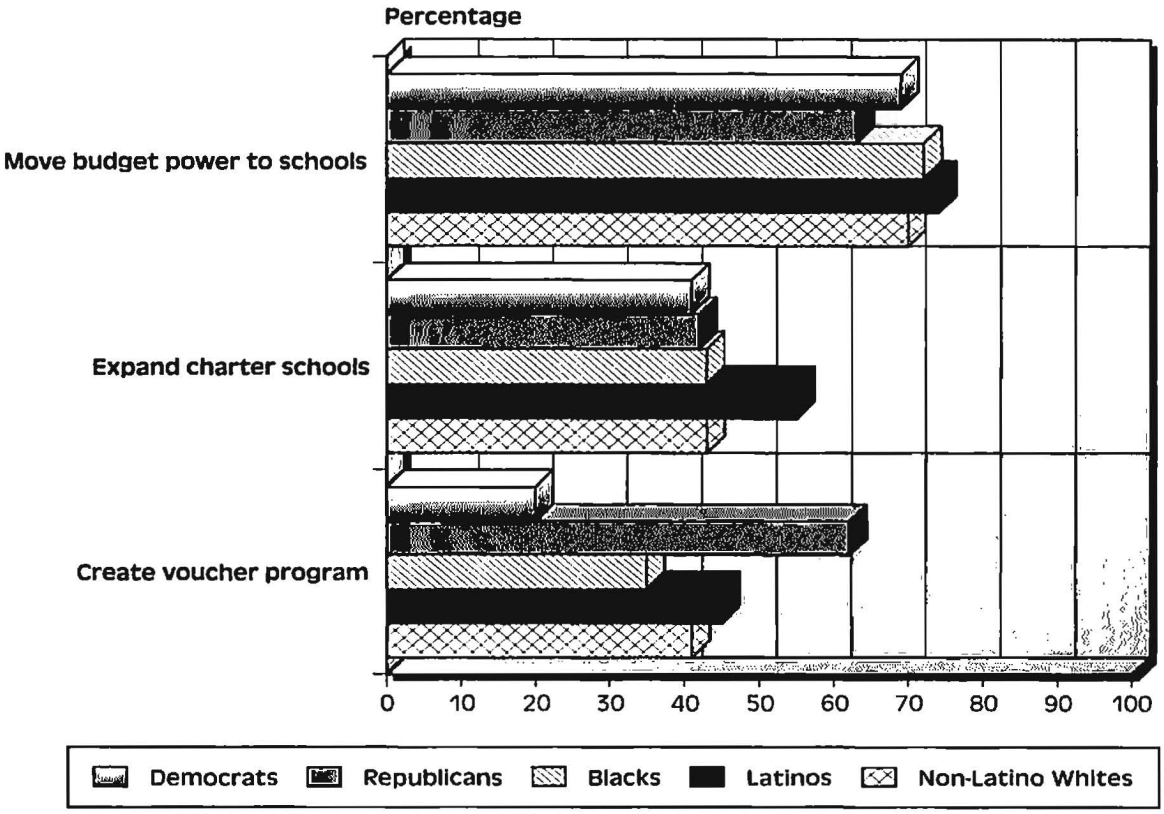
Market-oriented reforms may become more accepted as they continue to be debated by political leaders and as experimental programs grow. California citizens and voters nationwide certainly want to see major changes in the quality and organization of the public schools. Many citizens continue to trust their own local schools while looking to Sacramento to shake up the system, pushing for more accountability and stronger

Figure 1.1. How Californians View Centralizing Versus Market Oriented Reforms for Education.



Source: PACE School Reform Poll (1998), conducted by the Field Institute, San Francisco. Sample size=510 adults. Margin of error is +/- 4.5 percentage points.

Figure 1.2. How Different Groups View Market and School Choice Reforms.



Source: PACE School Reform Poll (1998). Sample size=510 adults. Margin of error is +/- 4.5 percentage points.

performance. The PACE poll suggests that voters look to market-oriented reforms and radical decentralization as one part of the solution—but not as substitutes for stronger policy action at the state level.

School Choice Already Marks the Education Landscape

Nationwide one-fifth of all children attend a "choice school," that is, a school selected by their parents which is not their assigned neighborhood school. Of these children, 55% attend a public school of choice. The remaining 45% attend private schools. Black students are more than twice as likely as whites to attend a public alternative school (19% and 8%, respectively). This reflects the large number of magnet schools and other alternatives created by voluntary desegregation programs. In contrast, three times as many white students attend private schools as do black children (10% and 3%, respectively). Among Latino students nationwide, 14% attend public schools of choice and 7% attend private schools (National Center for Education Statistics, 1997).

Table 1.1 sketches the size and scope of school choice programs in California. Estimates of how many California families participate are rough. One irony of the decentralized character of the choice movement is that public agencies have very poor data on how many and which types of families participate. Table 1.1 does provide counts on how many California students participate in magnet schools, open enrollment plans, charter schools, and privately funded voucher experiments. We estimate that in 1997-98 over 400,000 California students (8%) were attending a public school of choice, a figure similar to nationwide shares. More work is required to document with greater precision how much choice already exists, and whether parental demand is outpacing available options.

Contested Political Philosophies

Long before the market metaphor was earnestly applied to school reform, the organization and substance of public schooling was powered by two sets of ideals. These public philosophies continue to shape how schools are organized. They help to further frame the choice issue.

First, the common school movement, sparked by Protestant reformers in the 1830s, emphasized local control of a nationwide network of schools which would help unify the fledgling states. The common school aimed to do away with an elite private school system and ensure access to a quality public education for all American children regardless of their family's social class. The liberal democratic movement that followed the late nineteenth-century surge in European immigration encouraged a totally different agenda. This movement included progressive impulses from the New Deal era and later accelerated during the reforms of the 1960s. It emphasized government's broad role in reducing inequality, legislating programs for disenfranchised children, and later, setting higher achievement standards, either from Washington or state capitals (Tyack, 1974; Ravitch, 1983).

Table 1.1. Students Participating in School Choice Programs in California.

PROGRAM	STUDENT ENROLLMENT
Magnets	207,893[a]
Charter Schools	37,436[b]
Vouchers	4,433[c]
Open Enrollment	238,598[d]
Private Schools	615,011[e]
Other	165,380[f]
TOTAL	1,030,153[g]

a. Source: California Department of Education (1997)

b. Source: Charter School Effectiveness Study, SRI-International (1997)

c. Source: CEO (1997). Enrollment includes students in CEO Southern California and Oakland voucher programs. Over 6,000 students are currently on waiting lists for CEO vouchers. The San Francisco Independent Scholars program awarded 100 vouchers for students enrolling in Fall of 1998. The Children's Scholarship Fund awarded 3,750 vouchers in Los Angeles for students enrolling in Fall of 1999.

d. Source: Nyberg and Garcia (1997). Figure was calculated using survey data from a 50% probability sample of districts required to participate in California's open enrollment program. Enrollment by choice program was not recorded for purposes of the study, thus the total contains a duplicated count because some students may be classified as participants in more than one choice program. Provisions in the original legislation(AB 1114) did not require districts nor the California Department of Education to record number of students participating in open enrollment programs.

e. Source: California Department of Education (1997)

f. Source: California Department of Education (1997). Figure includes students participating in other choice programs, including independent study programs, home study programs, opportunity programs, continuation classes, pregnant and parenting programs, etc.

g. Figure does not include open enrollment count because of overlap with other choice options. Total amount may be significantly larger.

Given these strong, persistent influences, it seems unlikely that America's long running debate over how to improve public schools and which level of public authority can best govern will be settled by evidence alone. Much of the debate on choice is rooted in these deeper political philosophies over how public institutions are run and whether the broad interests of society, narrower interests of teachers, or the private interests of each family should take precedence in policy strategies. The underlying debate over choice is really one between competing logics of faith. The ideological questions are fundamental:

- Who should benefit most from public schools—private individuals and their economic desires, or social priorities which serve the wider community?

- What values and skills are most important, and how can the school best help parents in socializing their children?
- How can government stimulate more effective forms of schooling and teaching?
- What is government's proper role in reducing inequality? Can schools offset the broad and negative effects of family poverty and stratification that mark the wider society?

Evidence can inform such philosophical disputes, but empirical facts alone will not resolve these wider questions.

A Thousand Flowers Blossoming—in Empirical Darkness

Despite rising interest in school choice, policy makers and activists have demonstrated little interest in studying the movement's long-term effects. For instance, there is little reliable data on how participating families benefit from choice, or whether kids who remain in mediocre neighborhood schools may be worse off than before. Proponents don't really know which elements of the choice movement truly represent new forms of *effective* schooling. Do classrooms inside charter schools look all that different? Do vouchers boost the learning curves of students who transfer to parochial schools? Why do some magnet schools appear to raise achievement levels?

In short, the choice movement is blossoming largely in the dark—for the most part ignoring the lessons gained from past educational successes and failures, and proceeding without a clear research agenda to evaluate the effectiveness of new incarnations. The lack of conclusive results—and the abundance of shaky evaluation designs—has led to contentious interpretations of early results.

PACE's role is not to sit safely behind ivy-covered walls and scold policy makers or denounce school reforms. Our analysis, however, does reveal a wide gap between the hope expressed in decades of choice experiments and the paucity of evidence that has emerged on actual results. We hope to enrich the civic debate over choice by reporting what we do know and illuminating the empirical darkness which remains.

As we review the five types of school choice that have evolved from this history, we revisit basic "theories of action" of how each choice program intends to yield positive effects. Assumptions live within each of these causal claims. For example, advocates assume that charter schools—presumably the result of market dynamics—offer more innovative classroom instruction and thus boost achievement more effectively than do traditional neighborhood schools. But not all firms are equally efficient or deliver products of high quality. Organizational processes inside firms, as well as their market niche, drive their longevity and product quality. We will return to these micro processes that are essential to the claims made by school choice advocates.

Going to Scale and Pivotal Assumptions

Our research review begins by highlighting each choice program's theory of action and its underlying assumptions. For instance, charter school advocates assume that deregulation

"naturally" leads to a thousand flowers blossoming, creating a variety of innovative and effective schools. To understand whether the intended effects of choice are realized, these causal processes must first be articulated, then assessed.

Spanning all forms of choice—as these programs expand beyond their experimental stage—are crucial assumptions. We urge you to weigh these suppositions as you consider the five forms of choice explored below:

- Do private or independent schools organize instruction more effectively, on average, relative to public schools? Choice advocates assume that allowing entry to parochial and other private schools is a desirable public goal, since these schools are allegedly more effective than typical neighborhood schools.

- Can charter, magnet, or private schools attract higher quality teachers? There is some evidence that magnet schools are pulling in teachers with higher qualifications or simply a stronger commitment to their profession, relative to regular public schools. But if choice programs go to scale, do we then assume that somehow they will draw the top layer of a fixed pool of teachers? Under conditions of shortage, can "choice schools" hold onto the best teachers? What are the effects for equity?

- Do choice programs result in more cost-effective forms of schooling? Advocates argue that choice programs can be more efficient with education dollars. Yet whether costs go down or whether schools can be run more efficiently under quasi-market choice systems remains a wide open question empirically.

- Will parents choose the most effective schools? Advocates assume that parents are wise shoppers. Yet parents may make choices based on school reputations or the ethnic composition of students, not on sound evidence of a school's discrete effect on learning. Very few schools gather evidence on their specific "value added" effect on children's learning curves, after controlling on their families' attributes.

As we dissect these assumptions, you will see that some evidence is beginning to emerge. At the same time, we don't really know how the dynamics would play out as choice programs try to go to scale, beyond the experience with magnet schools and open enrollment initiatives, as discussed below.

Organization of the Report

Next, we turn to the five major forms of school choice that continue to grow incrementally in California and nationwide. For each, we look carefully at the following:

- the origins of the policy or programmatic innovation;
- the claims and assumptions underlying the choice strategy, including anticipated effects and organizational mechanisms;
- the size and scope of the choice program and the families participating;
- the empirical evidence on student achievement and other child-level outcomes, parental satisfaction and participation, and school or classroom innovation.

Part A

Widening Options in Public Education

SECTION 2.
Magnet Schools

Origins

Unlike voucher experiments and charter schools—which are proving to be quite controversial—magnet schools have become an accepted part of American education. Magnets typically focus on a particular curricular theme, such as performing arts or math-science, or a pedagogical approach, like Montessori instruction or team teaching. Magnet schools contribute to the choice movement by providing options for parents, and by encouraging competition inside the public education system. In concept the magnet school harks back to distinguished secondary schools, including the Boston Latin School, founded in the 1600s, or Bronx School of Science (Doyle, 1984). Yet unlike their predecessors, magnet schools became a popular policy device within the context of school desegregation: a hopeful alternative for expanding higher quality schooling in urban centers, acting as magnets to attract a diverse mix of committed students and parents.

Beginning in 1954 with the Supreme Court's landmark decision in *Brown v. Board of Education*, the federal courts and educators sought a viable method for integrating America's schools. During the mid-1970s, a sharp public backlash rose in opposition to mandatory reassignment policies, where students were involuntarily bused to schools outside their neighborhood in order to meet integration goals. This resulted in violent protests and white flight to the suburbs, first in Boston and then in other major cities. To help curb the unrest, educators introduced magnet schools. Soon federal courts were approving magnet schools as a key piece of districts' desegregation plans. By offering attractive instructional programs, magnets successfully courted many white families.

Today, magnets continue to advance ethnic diversity in thousands of urban schools. They increasingly offer "centers of excellence" in suburban schools as communities which encircle central cities become more diverse. Smaller magnet programs often called "schools-within-schools" or "academies" operate inside existing public schools. Although magnets were initially seen as a temporary solution, over time they have become an institutionalized part of public school choice (Steel and Levine, 1994).

Proponents of magnets maintain that typical neighborhood schools, with their uniformity, are not compatible with increasingly diverse families and one-size-fits-all curricula. Developing schools with distinct missions, advocates argue, ensures a better fit between student interests and course content. A tighter, more supportive community develops when students are committed to a coherent curricular focus with like-minded teachers.

The evidence regarding the effects of magnet schools remains both scarce and mixed. Some researchers have found that such schools do promote a strong sense of community cohesion not often found in comprehensive schools, especially at the secondary level (Heebner and Si, 1992; Gamoran, 1996; Crain et al., 1998; Stern et al., 1992). In

Figure 2.1. Magnet Schools at a Glance.

Claims and Assumptions	Size and Scope	Empirical Questions
■ Facilitate desegregation **Assumption:** Magnet schools enroll a diverse student population by using regulated admission practices. ■ Expand access to quality education for all students. **Assumption:** Increasing the availability of school options allows all families to exercise their right to choose. ■ Raise student achievement **Assumption:** Distinct educational programs and practices of magnet schools improve student achievement.	■ Approximately 2,400 magnet schools, serving more than 1.2 million students, were operating in 230 districts nationwide in 1991. ■ From 1982 to 1991, the number of schools providing magnet programs more than doubled, and the number of students enrolled in magnets tripled. ■ Approximately 93% of 173 districts reporting maintain waiting lists for magnet programs. ■ In California, 207,893 students were enrolled in magnet programs during the 1996-97 school year. ■ In Los Angeles alone, for the 1996-1997 school year, 70,000 people applied for 13,000 magnet school openings. The number of openings is declining due to reductions in class-size.	■ Are magnet schools achieving desegregation goals? ■ Who enrolls in magnet schools? ■ Do magnets and conventional schools differ in climate, practices, and teacher characteristics? ■ Are magnets raising student achievement?

addition, since magnets attract students from outside neighborhood attendance zones, advocates contend that they will encourage voluntary integration. Here the criteria for judging magnet schools is linked to enrollment patterns: the diversity of families they attract as well as achievement effects. Figure 2.1 displays the major claims advanced by magnet school proponents and the size of this movement.

Critics argue that magnets are elitist. Through selective admissions, they say, magnets skim off and enroll the brightest and most motivated students. Magnets have created a dual system of public education which diverts energy and resources from neighborhood schools, thereby harming students who remain behind, contend the opponents. They

suggest that magnet programs have resulted in income-based segregation, and that non-magnet schools end up with a higher share of poor children (Yu and Taylor, 1997). We explore below the evidence on these claims.

Few contemporary proponents of school choice talk about magnet programs, although they are widespread in many urban school systems. Los Angeles Unified, for example, offers 13,000 slots in magnet programs. Prior to the 1997–98 school year, 70,000 Los Angeles parents applied for these precious spaces (Pyle, 1998). San Francisco has opened new magnet programs to broaden access to quality schooling and to advance desegregation. The district recently reserved additional enrollment slots for families living close to each school, given the skyrocketing popularity of some school and magnet programs.

Claims and Assumptions

Proponents of magnet schools advance a set of interwoven claims which are linked by two overriding concerns: how to build more effective and cohesive schools, and how to broaden parental choice. Both policy aims are couched in the historical goal of furthering ethnic and social-class integration. Key assumptions are contained within claims advanced by magnet proponents. To empirically assess the efficacy of this choice strategy, we should delineate these assumptions.

Magnet programs facilitate desegregation. Magnet programs are intended to encourage diversity in several ways. To stem white flight, magnets offer distinct educational programs and practices as an incentive for urban parents seeking alternatives within the public system. Districts use a variety of outreach techniques to publicize their programs, sometimes establishing magnet offices or distributing brochures to inform parents about their options. To facilitate transfers, districts often subsidize transportation costs. Magnets represent a version of "managed choice," balancing parental bids against the aim of ethnic and individual diversity. Through the federal Magnet Schools Assistance Program (MSAP), districts receive funding to support the expansion and development of magnet programs to advance integration and effective forms of schooling.

In many cities, race-based admissions criteria have come under attack. Lawsuits have been filed in Buffalo, Charlotte-Mecklenberg, Houston, Louisville, New Orleans, and San Francisco (Hendrie, 1998). In Virginia the courts have prohibited magnet schools from using race as a factor (Hendrie, 1997). Boston was forced to end its explicit quota system in 1996 under which 35% of magnet spots were reserved for black and Latino students, after a white student challenged her rejection from Boston Latin. In November 1998, when another white student was turned away, a panel of the U.S. Court of Appeals for the First Circuit found no sufficient legal justification for Boston's continued use of race as one criteria in admissions decisions.

Magnets boost student achievement. Often absent from regular schools is a clear curricular or instructional focus. America's common school or "one size fits all" tradition sharply conflicts with the diverse educational preferences expressed by parents. When schools offer distinct curricular themes or instructional methods, students and teachers share a commitment to their magnet program. This helps to deepen

relationships between teachers and students. Proponents who reject the one-best-system approach to public schooling point to magnets as an effective way of improving student achievement by building cohesive school communities.

Size and Scope

Over 2,400 magnet schools or programs currently operate nationwide, serving more than 1.2 million students in 230 districts (Yu and Taylor, 1997). Magnet schools remain concentrated in large urban districts (those with more than 100,000 students) and districts with large minority populations (those enrolling at least 50% ethnic minority students). Only 10% of all magnet programs are located in smaller districts (Steel and Levine, 1994).

Magnet *schools* most frequently serve elementary school students, but smaller magnet *programs* located within conventional schools more often serve high school students. Some magnets target specific groups, such as gifted students, or students with strong interests in the performing arts or computer sciences. But Steel and Levine (1994) estimated that only one in eight schools have selective admissions procedures. Many schools, including some in Los Angeles, pick new students through a lottery system. Box 2.1 summarizes the characteristics of the Los Angeles Unified magnet program.

About 90% of 173 reporting districts and more than half of all magnet schools nationwide report a greater demand for spaces than availability.

The number of districts and schools offering magnet programs has steadily increased since the 1970s. Between 1982 and 1991 the number of districts providing magnet programs increased from 138 to 230 (Levine and Steel, 1996). Over this same period, the number of schools providing magnet programs more than doubled, and the number of students enrolled in magnets tripled. In California the number of students enrolling in magnets increased from 141,000 in 1991–92 to 207,893 in 1996–97 (CDE, 1997).

Still, relative to the rate of charter school expansion, the number of magnets is rising at a modest rate. Nor has the supply of magnet schools always kept pace with rising parental demand. About 90% of 173 reporting districts and more than half of all magnet schools nationwide report a greater demand for spaces than availability. Two numbers are worth repeating for Los Angeles: 70,000 parents applied in 1996–97 for just 13,000 magnet school openings (Pyle, 1998).

Career academies, the newest type of magnet school program, have gained considerable attention of late. Like many magnet programs, career academies are organized within existing public schools and center instruction around a particular theme. Initially, academies focused exclusively on career fields such as business, journalism, and the health professions. It was hoped that these fields would attract high school students at risk of dropping out. Career academies often aim to help students with the transition from school to work by providing live work experiences in the community. They do not share magnet schools' historical links to desegregation efforts. More than 500 career academies are now operating throughout the country (Kemple, 1997). In 1997, the Oakland, California district began establishing career academies in each of its public high schools.

Box 2.1. Magnet Schools in Los Angeles.

The Los Angeles Unified School District magnet program operates under a two-decade-old desegregation plan. The district currently operates 135 magnet school programs. The most common programs are "gifted and talented" magnets (26%), where an applicant's prior academic performance is a primary factor in admissions. Other popular magnets emphasize math and science (15%), the arts (10%), and basic skills (10%).

The application process for families seeking admission to magnet schools is complex. Rather than competing on a first-come, first-served basis, parents enter a lottery system, under which admission is determined by "priority points." The most points are awarded to parents who already have a child enrolled in a magnet program, and they may earn additional points if a second child applies to the same school. Parents may also garner points if they are currently on a waiting list for a magnet, if their local school is crowded, or if it serves a predominantly minority population.

Each year parents receive a brochure from the district office that outlines specific magnet programs and admissions requirements. Limited factors include the number of available spaces at each school and the number of priority points needed to qualify.

Some concerns have been raised about the complexity of the system. Parents who are unfamiliar with the magnet program or have limited English skills may be unaware of the strategies available to them, and which other more savvy parents are already using to compete for limited magnet school spaces. For example, some parents apply to programs with no available openings simply to have their child placed on the waiting list, for which they receive additional priority points.

Los Angeles' magnet programs are advancing diversity relative to conventional public schools in a district whose student population is predominantly Latino. Magnet schools enroll half as many Latino students, and about 10% more African-American, Asian, and white students than non-magnet schools (Pyle, 1998).

Funding and Costs

Districts fund magnet schools in the same manner as other public schools, based primarily on their enrollment levels. In some states, including California, districts with magnet schools receive state desegregation funds. Substantial support for magnets has flowed from Washington, especially since 1984 when the Magnet Schools Assistance Program (MSAP) was introduced. Between 1984 and 1994, 138 districts nationwide received a total of $955 million under MSAP to expand and develop magnet schools.

Districts receiving MSAP funds spend roughly 10% more per student on average than districts without magnet programs (Levine and Steel, 1994). Magnet schools also spend an additional $200 more per student on average, compared to conventional public schools (Yu and Taylor, 1997). In St. Louis, for example, during the 1986-87 school year, magnet elementary schools spent 42% more per student than conventional elementary schools, a financing arrangement recently undone in the courts. Middle and high school magnets were spending about 25% more per student than neighborhood schools (Nathan, 1996). In short, categorical aid is provided by government to advance two public interests: choice and racial integration.

Empirical Questions and Evidence

Next we consider the available evidence on the effectiveness of magnet schools. What effects have magnet programs had on desegregation and student achievement? What are the characteristics of students who enroll in magnets, and do they differ from their peers in conventional public schools?

Desegregation effects. We begin with one national evaluation that compared the characteristics of the 1.2 million students attending magnet programs with the ethnic composition of their host districts (Blank et al., 1996). These researchers found that in local districts where the majority of students come from minority groups, magnets enroll a smaller proportion of minority students than their district average. This implies that these districts are enrolling significant numbers of white urban children.

In 1997 the Citizens' Commission on Civil Rights (CCCR) evaluated magnets in three cities to determine whether they were promoting desegregation. They also compared the characteristics of students in magnets with those attending neighborhood schools in their respective districts. In Cincinnati, St. Louis, and Nashville the authors report that magnets have encouraged racial desegregation. In the St. Louis district, for example, African-American students comprised, on average, 78% of the total school population, while magnet enrollments were just 58% African-American. In Cincinnati enrollment in non-magnet public schools was 70% black, whereas in magnets it was 62% African-American. In both cities, magnets were operating in districts utilizing intra- and inter-district choice plans. Whether the magnets or the district-wide choice program was responsible for desegregation remains unclear. But together these efforts were modestly advancing desegregation goals.

Magnet schools receiving MSAP grants are required to "reduce, eliminate, or prevent" isolation of minority students. One comprehensive study of MSAP-supported schools was conducted by the American Institutes for Research, a Palo Alto-based research group (Steel and Levine, 1996). The researchers looked at the ethnic make-up of 615 magnet schools that aimed to reduce minority isolation. Among the 85% of schools that sought to reduce minority isolation, 44% were successful. Among the 13% of schools attempting to prevent minority isolation, 73% achieved their objective.

Many magnets are located in districts undergoing rapid demographic changes, often making it more difficult to enroll a diverse body of students. And since magnet schools are usually enmeshed with other district-wide efforts to desegregate, such as open enrollment or voluntary busing, it is difficult to isolate the discrete effect of magnet programs. However, the evidence does suggest that magnets are encouraging desegregation relative to conventional public schools.

Which families choose magnet programs? Families choosing magnets are somewhat different from other residents based on family income, education, and family structure. The CCCR survey included 60 magnet and non-magnet schools in three cities. In Cincinnati and Nashville, students attending magnets are less likely to be eligible for free or reduced-price lunch programs and more likely to live in two-parent households when compared to their peers in neighborhood schools. Similarly, magnet students are more likely to live with two parents who are both employed and with parents who have earned college or graduate degrees. This is only partly the result of white families choosing magnets. It appears that magnets are attracting black and Latino families with relatively higher socio-economic status compared to other families in neighborhood schools.

Two additional studies lend support to these patterns. Archbald (1996) examined one district in a large, midwestern city that has been operating under a desegregation plan since the 1970s. To promote racial balance, the district implemented a transfer program. Under the plan, all families may apply to any school where students of their race are in the minority. Of the district's 102 elementary schools, 13 are magnets. Archbald examined various characteristics of families in each of the district's 89 attendance zones to determine if certain neighborhoods were more likely to send children to magnets. He concluded that parents of children attending magnets are much more likely to hold

Table 2.1. Types of Families Participating in Magnet Programs.

Magnets are attracting children from middle-class families in three cities (Cincinnati, St. Louis, and Nashville).

	Income <$15.000	Both Parents Unemployed
Magnets	16.6%	6/5%
Non-Magnets	43%	21.5%
	College Degree	**Married**
Magnets	25.3%	65.6%
Non-Magnets	15%	46.1%

Source: Citizens' Commission on Civil Rights (1997)

college degrees than parents of students in neighborhood schools. The recent national evaluation also revealed that low-income families and students with limited English are underrepresented in magnet schools (Blank et al., 1996).

Magnets versus neighborhood schools. Next we turn to studies that examine the curriculum and learning environments of magnets and non-magnets to determine whether magnet schools are as distinctive organizationally as advertised. For instance, Smrekar and Goldring (in press) conducted an additional study during the 1993–94 school year which examined magnet and non-magnet schools in Cincinnati, Nashville, and St. Louis.[2] Evidence from two of these cities is mixed. On the one hand, significant differences existed between magnets and neighborhood schools along several variables, such as teacher background, teachers' work, and curriculum and instructional methods. Teachers in magnets were slightly more likely than non-magnet teachers to have earned graduate degrees and to have chosen to work in a particular school. African-American teachers were over-represented in magnet schools. Magnet teachers reported more influence over curriculum, more autonomy, and greater access to resources than non-magnet teachers.

Overall these findings indicate that magnet schools may not be as distinct from neighborhood schools as their explicit curricular themes would suggest.

On the other hand, the researchers concluded that magnets and non-magnets are actually more similar than different. In both types of schools instruction occurred in self-contained classrooms. No differences were apparent in the extent to which schools offer extracurricular activities. Magnets and non-magnets were quite similar in measures of school cohesion, vision and leadership, and access to inservice training.

A second study reached very similar conclusions. Gamoran (1996) analyzed data from the National Educational Longitudinal Survey (NELS) which surveyed 24,000 students in eighth grade in 1988, then again in tenth grade. Gamoran constructed scales to measure *academic climate* (staff morale and student and teacher motivation), *student social bonding* (student reports of teachers and peers), and *course-taking patterns* among different types of schools, including magnet and neighborhood schools. He found no significant differences between magnets and regular schools, as reported by principals or students. Course-taking patterns in magnets reflected more challenging pathways for math and science courses, less in social studies, and similar in English. Overall these findings indicate that magnet schools may not be as distinct from neighborhood schools as their explicit curricular themes would suggest. Additional research involving more systematic observations in magnets and neighborhood schools might yield clearer contrasts.

Achievement effects. A number of studies have examined student outcomes in magnet schools. In his nationwide study, Gamoran employed statistical techniques to control for family characteristics and students' previous test scores, both of which typically predict current achievement levels. He also looked at the three factors related to school context mentioned above (academic climate, student social bonding, and course-taking patterns). This was done to determine whether any achievement gains could be attributed to these organizational factors. His analysis is based on a subset of the NELS data set, consisting of 48 magnet and 213 conventional high schools. After adjusting for family background and prior test scores, Gamoran found that students in magnet schools significantly outperformed their peers attending non-magnets in social studies, science,

and reading. Yet when he examined the context of organizational factors, he determined that they were not consistently responsible for students' achievement advantage. Therefore, the mechanisms responsible for boosting achievement in magnet schools remain somewhat mysterious.

Crain et al. (1998) conducted an equally sound study of career magnet schools and programs in New York City. Because students in the magnet programs were selected at random from three different groups according to their seventh grade reading test scores, they could be compared with their counterparts who remained in regular schools. The researchers found that career magnet students had slightly lower test scores than their peers in regular high schools, and there were no significant differences in reading test scores. However, the researchers emphasized that the eight programs studied vary in quality and design, and the results cannot therefore be generalized across all magnets. The results also were blurred by the fact that one-third of all applicants to magnets chose instead to return to neighborhood schools. This work does offer a strong methodology which could be emulated in other school choice evaluations.

In St. Louis, students attending magnet schools achieved higher scores on state assessments in math, reading, science, and social studies than a comparable sample of students in neighborhood schools (Yu and Taylor, 1997). Another study compared achievement differences in various alternative schools situated in San Antonio (Martinez, Godwin, and Kemerer, 1996). This study focused on three groups: students enrolled in multilingual thematic schools (magnets); students denied admission to such schools due to space limitations; and students in conventional neighborhood schools. The researchers concluded that students in magnet programs scored significantly higher on math and reading assessments than students who applied to magnets but were not admitted, and higher than students in non-magnet schools.

These studies vary in the extent to which they took into account the influence of such factors as family structure or parental income which likely influence the decision to choose magnet schools. The Gamoran study was the most thorough in this regard. We return to this crucial issue of whether government-funded evaluations of school choice are adequately addressing this selection effect.

SECTION 3.
Open Enrollment

Origins

The idea of open enrollment—where parents may leave their neighborhood school and select another within or outside their district—stems from the alternative schools movement in the 1960s. In Boston, Los Angeles, and Milwaukee, open enrollment was coupled with the advent of new magnet schools. During the 1980s city-based and regional experiments with intra-district and inter-district choice continued to grow. Open enrollment efforts also were crafted as a key piece of metropolitan-wide desegregation plans, involving an urban center and surrounding suburban districts. Open enrollment among schools within a single district has become popular among many middle-class suburban parents in California since the early 1990s when enabling legislation was approved.

Minnesota became the first state in 1987 to enact legislation allowing open enrollment statewide.[3] By 1997, 16 states had comprehensive statewide open enrollment programs (Education Commission of the States, 1997).

The PACE analysis focused on programs in three states where evaluation evidence is beginning to emerge: Minnesota, Massachusetts, and California. Although similarities exist among the programs' goals and intentions, stark differences and varied empirical effects are emerging. Three empirical questions guided the review:

- Which families participate in open enrollment options and why?
- Do open enrollment programs increase demand for quality schools and force neighborhood schools to adopt competitive market behaviors?
- What are the effects of open enrollment on student achievement?

Claims and Assumptions

Figure 3.1 outlines the basic arguments advanced by advocates of open enrollment. They track closely against other forms of public school choice, such as magnets and charter schools. Listed below are the specific claims advanced by open enrollment proponents, followed by assumptions contained within these claims.

Open enrollment will provide all families greater access to select the public school of their choice. Proponents argue that by eliminating bureaucratic barriers that limit the ability to choose schools, all families will be able to participate in school choice. This claim assumes that the most popular schools will have the capacity to entertain all admission requests. Eliminating the mandate to attend one's neighborhood school is often assumed to be a sufficient condition to equitably extend parental choice to all families.

Figure 3.1. Open Enrollment Programs at a Glance.

Claims and Assumptions	Size and Scope	Empirical Questions
■ Provide all families greater access to select the public school of their choice. **Assumption:** All families will have an understanding of public school choices. ■ Improve all schools by increasing demand for quality schools, and forcing substandard schools to improve their academic programs in order to survive. **Assumption:** Schools that lose enrollment will react to market competition and improve their academic program in order to retain and increase enrollment. ■ Increase student achievement since schools must improve academic programs in order to compete for students. **Assumption:** Students will make achievement gains as a result of their transferring to schools of their choice.	■ **Minnesota:** It was the first state to pass statewide open enrollment legislation in 1987. Currently, almost 20,000 students participate in the state's open enrollment program. ■ **Massachusetts:** It passed inter-district choice legislation in 1991. Participation is limited to 2% of the statewide student population. In 1996, 6,793 students participated. ■ **California:** It passed both intra- and inter-district choice legislation in 1993. Participation in the inter-district choice program is very low. However, 238,000 students statewide participate in intra-district programs. ■ **Nationwide:** 16 states have implemented open enrollment programs since 1987.	■ Which families participate in open enrollment options? ■ Do schools and districts begin to behave competitively due to market forces and compete for students? ■ What are the effects of open-enrollment on student achievement, both for students who leave their neighborhood school and for those who remain behind?

Open enrollment improves all schools by increasing demand for quality schools. This forces mediocre schools to improve their academic programs in order to retain students. Proponents claim that if families are allowed to choose, they will select the most effective schools for their children. Thus, schools that suffer enrollment losses will be forced to make necessary program improvements in order to compete for students.

Open enrollment will increase student achievement since all schools will have to improve their academic programs to compete for students. This claim assumes that students transferring to a new school will experience marked achievement gains. It also

assumes that as unpopular schools lose students and financing, not only will they be motivated to strengthen the quality of their program, but also they will still have the capacity and resources to do so.

Size and Scope

Minnesota. The Minnesota legislature enacted the first statewide open enrollment program in 1987. Initially it was a voluntary program that allowed districts to choose whether to participate or not. In 1990 the original legislation was amended requiring all districts to participate.[4] During the first year of mandatory participation (1991-92) about 3,200 students, or 1% of all Minnesota students, took advantage of the program (Walsh, 1992). However, the number of students increased in subsequent years, with 8,314 participating in 1992 rising to almost 20,000 students in 1997.

Three key features distinguish the Minnesota open enrollment legislation. First, the program covers transportation costs for low-income students.[5] Second, even though all districts are required to participate, schools operating under desegregation plans are not required to accept transfer requests that would adversely affect a district's racial balance. Third, the legislation requires that only state aid follows transferring students. In some instances this places an unfair financial burden on receiving districts that take on students whose parents do not contribute to the local tax base, since this is the source of most local school funding.

Massachusetts. The legislature enacted liberal inter-district enrollment programs in 1991, allowing students to seek enrollment anywhere in the Commonwealth. Participation was limited to 1% of total public school enrollment during the first year, then raised to 2% in 1997. The law does not require districts to receive transferring students. Districts choosing to become receiving districts can only deny incoming transfers if limited capacity exists. The law does not stipulate racial restrictions nor recognize possible conflicts with desegregation efforts. It allows students to move freely among districts, provided there are vacancies in schools which they seek to enter. Five years after enactment of the law (1996), 6,793 students participated in the statewide choice program. Some districts, such as the Lexington School Committee, refused to participate, arguing that the program could have the net effect of shifting state aid from poor to more affluent districts.

In June 1992, just nine months after initial implementation, the state legislature enacted important amendments to several school finance provisions. Originally, sending districts would reimburse receiving districts the full per-pupil apportionment as determined by the receiving district. This became a contentious issue, since sending districts with low per-pupil expenditures were losing students to more affluent districts with higher per-pupil spending. Low-wealth districts who lost students in the program's first year experienced significant financial losses.

Recognizing these revenue inequities, the state legislature passed a resolution providing schools a "reimbursement of up to 50% of a district's state aid losses due to choice"

(Armor and Peiser, 1997). In subsequent years, however, the controversy over tuition reimbursement policies continued. Sending districts continued to experience financial losses, even with partial state reimbursement. During 1993, attempting to further address the issue, the legislature capped receiving-district tuition rates at 75% of the actual per-pupil spending amount of the receiving district, not exceeding $5,000 (Massachusetts, 1993).[6]

Responding to criticisms that mostly white students were participating in the inter-district choice program, the Education Reform Act of 1993 provided transportation aid for low-income students. Even so, the program continues to serve primarily white families who move their children from poor and blue-collar communities to middle-class districts (Armor and Peiser, 1997)[7].

California. The school choice wave swept over California in the early 1990s. In 1993 Californians considered but voted down Proposition 174, a voucher initiative that would have provided $2,600 to all California parents with school-aged children. Vouchers would have been redeemable at a public or private school, including religious schools. This ballot proposal garnered support from only 30% of all voters statewide. As the debate heated up over the voucher initiative, the California legislature passed two school choice bills providing intra-district and inter-district enrollment options. All districts are required to participate in the intra-district choice program, but participation in inter-district choice remains optional.[8]

Similar to the Minnesota program the California plan recognizes the issue of racial balance among schools and districts, and allows districts operating under desegregation orders to manage transfer bids made by parents. The California program does not provide transportation for students who elect to participate. Nor do receiving districts receive tuition expenses from sending districts. Instead, the receiving district receives state aid for transfer students at its own funding level.[9]

Family participation in inter-district choice has been quite low. In 1996 the California Department of Education estimated that only 10 districts offered such programs. This may stem from the program's voluntary nature and from other inhibiting factors. In this regard, the Institute for Education Reform in Sacramento voiced "concerns about [districts] being overburdened with special education students, lack of capacity, and sentiment among some districts that inter-district choice protocols under existing law prior to Assembly Bill 19 are adequate" (Institute for Education Reform, 1996). In contrast, participation in the *intra-district* choice program has flourished since its inception in 1994. An estimated 238,000 students statewide exited their neighborhood schools but remained within their district in 1996 (Nyberg and Garcia, 1997).

Empirical Questions and Evidence

Which families participate in open enrollment programs? Who chooses to participate is a central question around open enrollment programs. The Massachusetts evaluation demonstrates that inter-district choice programs yield differential effects across

ethnic groups. During 1995–96 minority families participated in inter-district choice at a rate below their representation in the state's student population; whites participated at a higher rate. For example, black students make up 8% of the student population, but only 2% participated in the open enrollment program. The participation rate for Latinos was even lower (Armor and Peiser, 1997).

When all choice options available in the state were considered, the participation rate for black families increased to 27%, and 9% for Latino students. Yet the increase is accounted for by the METCO program, a large and highly regulated inter-district transfer program providing Boston minority students the opportunity to transfer to suburban districts or charter schools. METCO grew out of Boston's contentious debate over desegregation. It is inappropriate to use this voluntary desegregation effort to argue that it offsets the resegregation effects of the Commonwealth's open enrollment program. The authors concluded that "inter-district choice students tend to be more affluent, more academically skilled, and less minority then the average sending school population."

The authors concluded that "inter-district choice students tend to be more affluent, more academically skilled, and less minority then the average sending school population."

A recent study by Nyberg and Garcia (1996) examined the effects of California's intra-district choice program.[10] Data collected from sampled districts indicate that in 1995–96, both black and Latino students utilized intra-district choice at a rate slightly higher than their state representation: 41% for Latino students compared to their state representation (39%), and 10% for black students compared to their state representation (8%). In contrast, white students utilized intra-district choice at a rate considerably lower than their statewide representation: 26% compared to their state representation (40%). This confirms other research showing that parent demands for school options is strongest within urban school districts.

In Minnesota ethnic minority students appear to utilize open enrollment plans at a rate similar to white students. In 1991–92 just 9% of all minority students utilized the option, compared to only 4% of all white students. Funkhouser and Colopy (1994), examining the impact of Minnesota's open enrollment program on low-income districts, found that 94% of all participating students were white. It is important to note that Minnesota's student population is predominantly white: only 9% of all districts have a minority enrollment of 10% or more.

What motivates families to leave their neighborhood school? When parents were surveyed during the first year of Minnesota's open enrollment program, they cited academics most often as the primary reason for transferring their children to a new school. In descending order of frequency, other reasons given included proximity, educational services, and learning climate (Rubenstein et al., 1992). In a follow-up study, Funkhouser and Colopy (1994) surveyed administrators of those districts most affected by open enrollment plans. Administrators were asked why students in their district transferred to other districts. Responses were similar to parent reports, including proximity, academics (a stronger or different academic program), and learning climate (smaller class sizes, more extra-curricular offerings, a tighter discipline policy, and school size).

Armor and Peiser (1997) surveyed 309 parents in Massachusetts from 10 receiving districts. Parents were asked to select from among 13 possible reasons for transferring their

children to a new school. As in Minnesota, higher academic standards was the reason chosen most often, followed by curriculum, facilities, and safety. Students also were surveyed, and responded similarly to parents, indicating higher academic standards as the major factor in their decision to transfer, followed by curriculum, safety, and teacher quality

Does open enrollment push school managers to raise quality in order to compete for students? The financial burden felt by districts that lose students is a crucial sanction under the logic of market competition. Proponents believe that when parents are given the ability to choose schools, they will opt for more effective schools and force low-performing schools to improve or close. Opponents argue that schools are unlike other market producers and may not respond. They say it not clear whether sufficient information exists for parents to discern which schools are truly more effective. They fear that low status schools that lose enrollment may be left with low performing students and depleted funds. And finally, opponents argue that under current conditions where teacher shortages beset many states, more attractive incumbent teachers are migrating to wealthier suburban districts, further constraining the ability of poor urban schools to bounce back.

During the first two years of the Massachusetts inter-district choice program, sending districts were required to pay full fare to receiving districts. These stiff losses that poor sending districts encountered prompted the legislature to amend the law and provide partial reimbursements to less wealthy sending districts, as discussed above. But this resulting cushion has been criticized by market advocates, since subsidies for reimbursements given to sending districts diminish the incentive to improve. Yet sending districts confronted with significant numbers of existing students continue to report some cuts in resources, staff posts, or facilities as a result of the remaining chunks of state aid which are lost.

Funkhouser and Colopy (1994) in their Minnesota study also examined whether the market competition theory is applicable to schools. Some administrators surveyed did report significant negative effects resulting from the open enrollment program: 26% reported laying off teachers or staff; 16% reported canceling or reducing academic courses; and 8% reported school closings. In addition, 25% of the administrators from sending districts said that they actively responded to enrollment losses by taking steps to "draw students in or discourage them from leaving." Yet the majority of administrators reported that open enrollment was not the causal factor that led to program improvements. Funkhouser and Colopy conclude that "findings are mixed regarding the validity of the supply and demand theory of educational choice."

How does open enrollment affect student achievement? If schools in Massachusetts and Minnesota are responding to enrollment losses by strengthening their academic programs to lure back families, then we should expect these improvements to yield achievement gains. And if transferring students are finding stronger academic offerings, their achievement should rise. The research to date, however, does not reveal any significant achievement gains that can be attributed solely to participation in open enrollment

Box 3.1. Choice with Equity in Seattle.

In Seattle, a new public school choice program that allows parents to choose schools beyond their assigned neighborhood schools has set off a marketing frenzy. Schools are now scrambling to attract students. The choice program is driven by a school funding formula that bases school budgets on individual characteristics of the student body, and allows money to follow students to their new school of choice.

Traditionally, most school districts in the U.S. have allocated monies to individual schools based upon per-pupil funding formulas that pay equal dollars for each student enrolled in a school. The Seattle schools, however, previously used a different formula that based school budgets on the number of on-site staff. Seattle's new funding formula provides all schools with a basic foundation grant for administrative operating costs. The remainder of the school budget is built upon a weighted student formula. Those students identified as having the greatest needs—such as special education, limited English proficient, and students with low test scores—are assigned a higher funding factor. As a result, schools with greater numbers of special needs students receive more money per student than schools with greater numbers of other students.

Giving parents the option to choose new schools for their children provides an incentive for schools to participate in the new, student-driven market. Almost from the outset, schools have felt the effect of the new open enrollment plan. Many schools have launched advertising campaigns to attract students. The district also provides all parents with a booklet that lists each school's mission, and outlines its academic and extracurricular programs, and special facilities or services.

Some schools are finding this new, highly competitive atmosphere difficult. Schools in older, dilapidated buildings complain that the physical condition of their schools has put them at an unfair advantage compared to newer schools with similar academic standings. Other schools which have traditionally drawn students from middle- and upper-class neighborhoods now find themselves near the bottom of district funding because their enrollment consists of students with the lowest funding weights.

WEIGHTED STUDENT FORMULA FOR FUNDING SEATTLE PUBLIC SCHOOLS

	Elementary	Middle	High School
Basic	1.0	0.87	0.88
Mildly Disabled	1.57	1.57	1.57
Severely Disabled	8.76	7.70	7.70
Limited English Proficiency	1.26	1.41	1.42
Low Test Scores	1.05	1.05	1.12
Poverty	1.087	1.18	1.109

Source: Seattle Public Schools, 1998.

Schools in low-income neighborhoods with a high density of poor and limited English proficient students are now at the top of the district funding scale, and suddenly have the "wherewithal to pay for benefits like small classes and beefed-up curriculum" (Murphy, 1988). District officials report that although no schools have closed since the changes were first introduced in Fall 1997, some schools have ended the year in a precarious situation due to low enrollment figures and their inability to attract students.

There is no question that the market dynamic introduced into Seattle's public schools has already had a major impact on school enrollments, individual school budgets, and the responsibilities of school principals. However, it is too early to tell whether Seattle's open enrollment program will significantly raise student achievement and improve schools across the district.

Source: Seattle Public Schools (1998); Murphy (1998).

programs. The closest case is District 4 in East Harlem but it is difficult to attribute these gains solely to intra-district choice, relative to the effects of strong leadership and an infusion of outside resources (see Box 3.2).

In Minnesota some administrators from receiving districts noted that open enrollment resulted in the ability to implement positive changes to their academic programs, including hiring more teachers and counselors, and increasing course offerings. However, discrete effects on student achievement were not measured (Funkhouser and Colopy 1994). Armor and Peiser (1997) found that students participating in the Massachusetts inter-district choice programs saw declines in their grade point average during the first year in their new school. The evaluators interpreted the decline as a positive consequence of school choice, explaining that it "lends further validity to the argument that

Box 3.2. School Choice in East Harlem.

One widely recognized public choice program in the country operates in New York City's District 4 in East Harlem. Beginning in 1974, middle school teachers were granted the autonomy to redesign school curricula and create new alternative schools, and parents were allowed to choose schools beyond their neighborhood boundaries. Today, neighborhood middle schools do not exist. All parents must choose from among the 44 alternative middle schools in the district.

East Harlem's choice program has been credited with student achievement gains. Before the program was implemented, the reading scores for District 4 students were the lowest of the 32 city districts. By 1982, East Harlem reading scores ranked fifteenth (Carnegie Foundation, 1992). By 1988, 63% of District 4 students were reading at or above grade level, nearly equal to the citywide average of 65%. From that point on, however, scores began to decline, and by 1992, only 38% of District 4 students were reading at or above grade level, compared to 46% citywide (Carnegie Foundation, 1992).

School officials recognize that choice has not been the only factor responsible for the success of District 4, and disagree with the poster-child image that choice proponents have created for District 4. Former district superintendent Anthony Alverado explains:

> There has been an enormous amount of myth making about choice in District 4. Choice is just one arrow in the strategic quiver. District 4 did not succeed just because of choice. We got loads of money to deal with innovation. Bold leadership was an extraordinary factor. At the same time, District 4 employed some very traditional principals, some of whom had the biggest test score gains.

Source: Carnegie Foundation, 1992.

higher or harder standards of grading do indeed exist at the receiving districts." But standardized measures were not employed to assess whether the learning curves of participating students rose.

In California, possible effects of intra-district choice on achievement have yet to be detected. Over 70% of districts reported that there had been no change in student achievement or that it could not be determined, while 13% reported positive changes (Nyberg and Garcia 1997).[11] The paucity of evidence and inconclusive nature of current data illustrates the pressing need for more careful research. Future evaluations should examine outcomes other than student achievement, such as attendance, graduation, college attendance and college graduation rates. Longitudinal tracking of students in sending and receiving schools is necessary to understand not only those who participate in choice options—and their learning trajectories—but also those who remain in low-performing or low-status schools.

SECTION 4.
Charter Schools

Origins

Minnesota became the first state to enact charter school legislation in 1991. Thirty-one states and the District of Columbia have followed suit. Procedures for establishing charter schools vary widely from state to state, including the extent to which they are held accountable to demonstrate their effectiveness. Charter schools do share a number of distinguishing characteristics.

- All charter schools are publicly funded and operate under contract with a public agency.
- Schools operate largely free of state regulations and union contracts.
- The charter to run a school may be granted to parents, teachers, for-profit or non-profit management organizations.
- Specific terms of the charter often are negotiated between school boards and local founders.
- In exchange for significant autonomy, charter schools are held accountable for fulfilling the terms set forth in their charter—typically after five years—before the charter can be renewed by its sponsoring agency.

About half of all charters are "start-up" schools, created from scratch. Others are pre-existing public or private schools that have converted to charter status ("conversion schools"). California's law precludes such conversions by existing private schools. But New York's new charter law may allow parochial schools to become publicly funded charter schools.

Most charters are small. Many use thematic-focused instruction and have programs emphasizing technology, math, and science; the arts; or school-to-work programs. Some adopt home schooling approaches. Several charters in California and Michigan are committed to ethnocentric curricular themes. A few focus on serving low-income students or those considered "at-risk." Many use nontraditional grade configurations, such as combining grade levels. Indeed, rather than centered around any shared set of principles, charter schools represent a cornucopia of educational programs and practices. The common hope is that by severing many (but not all) ties with district or state bureaucracies, a thousand flowers will blossom. Beyond widening parental choice, charter advocates claim that innovative, more effective schools will flourish.

The ideological origins of charter schools are a matter of debate. They represent a moderate approach to choice, rooted in traditions of public accountability and shared public interests. Charter schools are close cousins of alternative schools from the 1960s and magnet schools. Typically, charter schools are tied to other school choice policies. Minnesota, for example, introduced its statewide open enrollment program three years before enacting charter legislation (Wohlstetter et al., 1995). Charter school initiatives also were influenced by England's experience with grant-maintained schools (GMS), which

were granted latitude over admissions policies and personnel decisions traditionally reserved for state agencies (Wohlstetter and Anderson, 1994). Yet simultaneously Margaret Thatcher centralized control over a uniform curriculum and national performance standards.

Charter schools also sprouted from the soil of popular organizational strategies aimed at improving school effectiveness, such as site-based management, local school councils, and state-guided school restructuring efforts. In 1991, for example, one year before adopting charter legislation, California approved SB 1274. The bill provided selected schools with additional funds and greater flexibility from state regulation. The measures were intended to facilitate the schools' local efforts to restructure teaching and learning. (Little, 1997). Thus, charter schools have originated in part from earlier attempts to decentralize budget and personnel rules down to the school level (Hess, 1995; Bryk et al., 1998).

Claims and Assumptions

Detaching schools from state and local agencies will empower teachers and principals to pursue innovative teaching, curricula, and governance arrangements. Under the current system, decisions regarding curriculum and resource distribution often are made by administration at state and district levels. Proponents of charter schools argue that this top-down arrangement stifles teachers' and principals' freedom to innovate. Advocates also claim that by requiring schools to conform to a host of rules and procedures, schools become more insular and less efficient. The purpose of charter schools is to move the locus of decision making closer to the principal and the classroom. Figure 4.1 sketches the basic claims and issues underlying the charter school movement.

These aims stem from a decades-old movement to decentralize authority to individual schools. In the 1930s, drawing on John Dewey's ideas for progressive education, researchers conducted an eight-year study. It involved restructuring 30 high schools through the use of innovative pedagogy that placed students in more active learning roles. The basic tenets of the experiment were centrally crafted, but efforts were made to democratize school management down to each school (Cuban 1993). In the 1960s similar efforts to democratize school management were mounted through the use of school site councils. The federal government mandated their use to empower parents and teachers in school decisions regarding compensatory education programs.

Research conducted during the 1970s on "effective schools" concluded that school-site management and parent involvement were among the characteristics associated with high-performing schools (Purkey and Smith, 1983). Following the Reagan Administration's *A Nation at Risk*, in 1983, researchers focused on the effects of school leadership and context on teacher professionalism and pedagogy (Elmore 1990; Talbert and McLaughlin, 1994). One of the assumptions underlying this research was that severing a school's ties to the downtown school administration, then altering the school's organizational structure, would somehow touch and improve classroom practices. Charter schools represent the latest effort aimed at radical decentralization, or very local democratization.

Figure 4.1. Charter Schools at a Glance.

Claims and Assumptions	Size and Scope	Empirical Questions
■ Detaching schools from the public school bureaucracy empowers teachers and principals to adopt innovative teaching and governance arrangements. **Assumption:** Parents and educators will have the time and resources required to carry out these new management responsibilities. ■ Increasing the availability of school options makes schools more accountable by injecting competition into the public system. **Assumption:** Public school officials will feel competitive pressure, and ineffective schools will be forced to improve or shut down. ■ Charter schools serve as laboratories for innovative practices that traditional public schools can then replicate. **Assumption:** Collaborative relationships will develop between charters and public schools that will permit practices to transfer across schools.	■ As of April 1998, 31 states and the District of Columbia have passed charter school legislation. ■ According to 1998 figures, nearly 800 charter schools serving more than 160,000 students are operating across the nation, and at least 230 additional charter schools have been approved. ■ The majority of charter schools are concentrated in only three states. Arizona has approved 268 charter schools, while California and Michigan have approved 137 and 114, respectively.	■ What types of parents, students, and teachers are choosing charter schools? Is there evidence that charters are drawing away the top students from other schools? ■ Are parents more involved in the activities of charter schools? Are they more satisfied? ■ Are charters impacting other local public schools? Is there evidence of system-wide reform? ■ Are charter schools improving student performance?

Recent evidence suggests, however, that devolving authority to local schools and neighborhoods does not always lead to pedagogical improvement. The most extensive experiment on decentralization continues to unfold in Chicago. In 1990 each school was instructed by state mandate to create a local school council (LSC) composed of parents, teachers, community members, and the principal (Hess, 1995). These councils were responsible for adopting a school improvement plan and budget, while overseeing curricular and other policy matters. The results have been mixed thus far. While some schools appeared to be making progress, the majority were unable to innovate successfully, with some simply reproducing the institutional arrangements found under the old system. In some schools parents seemed reluctant to assume new responsibilities, teachers focused on their teaching, and principals continued to control budgets.

A recent evaluation of student achievement in Chicago (Bryk et al., 1998) reveals that some schools have responded with staff changes and organizational innovation. How school leadership and decentralized school-level dynamics are related to classroom innovation and student performance is just beginning to be untangled. Student test scores have risen in Chicago, but only after centralized steps were taken to end social promotion and require summer school for children who don't make the grade. The Chicago experience suggests that decentralizing authority may not, in itself, lead to creative school organizations and more effective pedagogy. (Hess et al., 1998).

Increasing the availability of charter schools will make schools more accountable by injecting competition into the public system. Under the current system, those parents who have the financial means to move into middle class or affluent neighborhoods are the ones who most freely exercise school choice. Charter proponents maintain that expanding the number of alternative schools will extend new options to parents who are otherwise excluded from the education marketplace. And across all types of communities, rich and poor, unpopular public schools will be compelled to improve or risk being shut down. In turn, this will lead to systemwide accountability and reform.

Expanding the availability of alternative schools, however, does not guarantee that all parents have an equal opportunity to choose. Research cited above shows that parents with more education, higher incomes, stronger social networks and information are more likely to exercise choice (Fuller and Elmore, 1996). The reasons why parents choose to leave their neighborhood school vary as well. Some parents are more concerned with their children's safety or cultural familiarity than with the particular program or curriculum at a given school. Under these circumstances, low-performing schools will not necessarily be forced to innovate and improve. It's also difficult to see how the relatively few charter schools currently in operation will create a market environment that will force the other 108,000 conventional public schools nationwide to compete. On the other hand, if charters become more widely available and parental demand grows, then competitive pressures may push school officials. Or, if government were to effectively target assistance on charters in low-income communities, where school choice is most constrained, then equitable access could be advanced. Conventional and under-subscribed schools would be forced to adjust.

Charter schools serve as laboratories for innovative practices that will inform and be replicated by traditional public schools. When freed from cumbersome regulations and union agreements, charter schools will experiment with innovative pedagogy, curriculum, and democratic governance, claim the advocates. Districts and conventional schools will then assess these practices and try to replicate these improvements within schools and classrooms.

The specific mechanisms through which public schools will learn from and replicate charter innovations remain unclear. If charters inject more competition into the public system, will conventional schools and charter schools forge collaborative relationships? Many charter school founders are overwhelmed with the site- and district-level administrative responsibilities involved in simply sustaining their schools. The onus may be on conventional neighborhood schools to seek out charter programs, an additional responsibility which few may be willing to accept. Below we review one initial study that looks at the limited effects charters are having on their local districts (Rofes, 1998).

Holding schools accountable to objectives set forth in their charter will make them more accountable than traditional public schools. Outcome-based accountability is a cornerstone of the charter school concept. Public schools have rarely been held accountable for anything beyond assembling teachers and curricula. In most cases, if schools conform to state regulations and parents' expectations they continue to operate whether they boost children's' learning or not. Since charter schools must enter into a written contract with their sponsoring agency before being approved, their survival depends on how well they meet their objectives. If charters schools are unable to perform, they will not be renewed. This is the stated theory.

In practice, however, we found very few charter schools that have been thoroughly evaluated by their sponsoring agency; it is unknown whether charters will be held accountable in a vigorous manner. Many of the objectives delineated in charters are qualitative, making them difficult to measure precisely. Sponsoring agencies' ability to act impartially must also be questioned, given the political popularity of charters. PACE's qualitative study of several charter schools suggests that rechartering can be a symbolic process, based on very little hard evidence. (Fuller, in press).

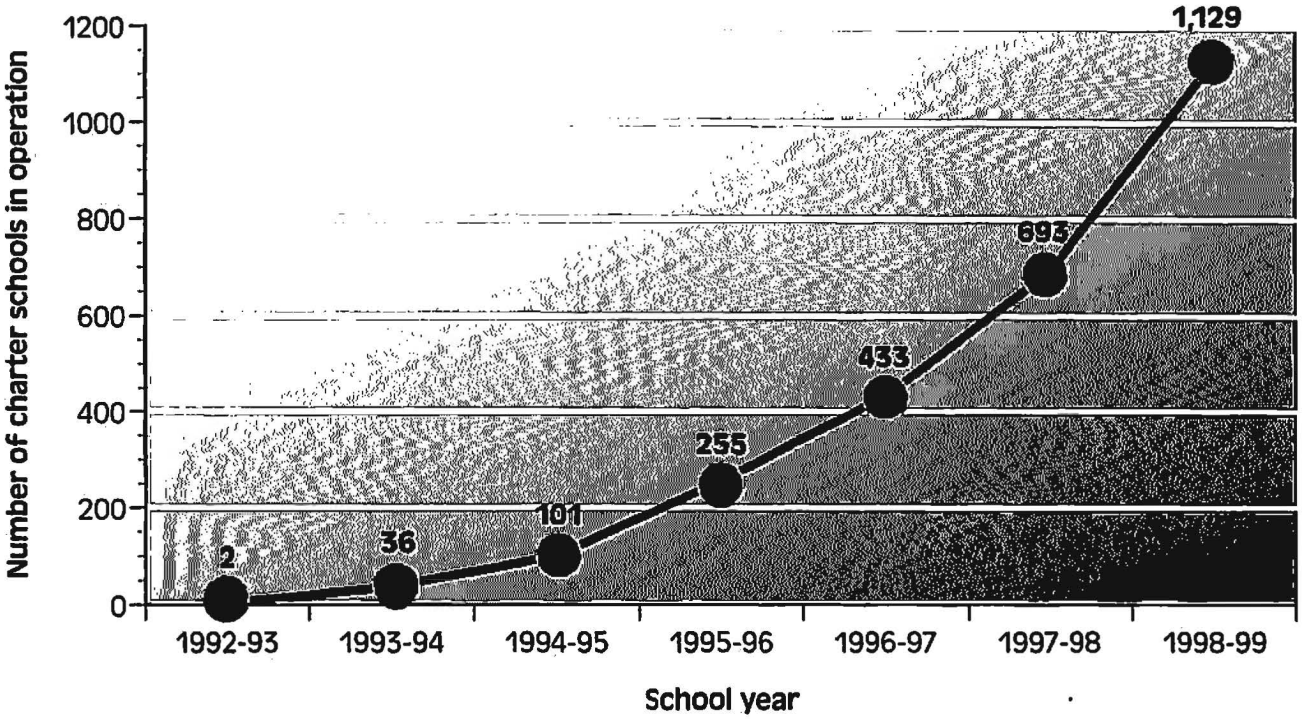
Size and Scope

Several states have seen a steady rise in the number of charter schools over the past five years. Arizona educators and parents opened more charter schools in 1997 alone than the total number operating in any other state except California (CER, 1998). Colorado, Michigan, and Wisconsin adopted charter school legislation in 1993. The number of charter schools in each of these states has more than doubled since 1996. New Jersey opened 13 charter schools in 1997. Since that time, the state has approved at least 26 new charters (CER, 1998). Figures 4.2 and 4.3 summarize the growth of charter schools.

Parental interest in charter schools continues to be strong. The Center for Education Reform, a non-profit advocate of school choice, conducted a survey of 500 charter

Figure 4.2. Nationwide Growth in Charter Schools.

A recent survey shows the dramatic increase over just the past few years in the number of charter schools operating around the country.



Source: American Legislative Exchange Council. Education Week (1999).

schools in 1997, finding that among the 300 schools who responded to their survey, 119 maintained formal waiting lists averaging 135 families in length (CER, 1998).

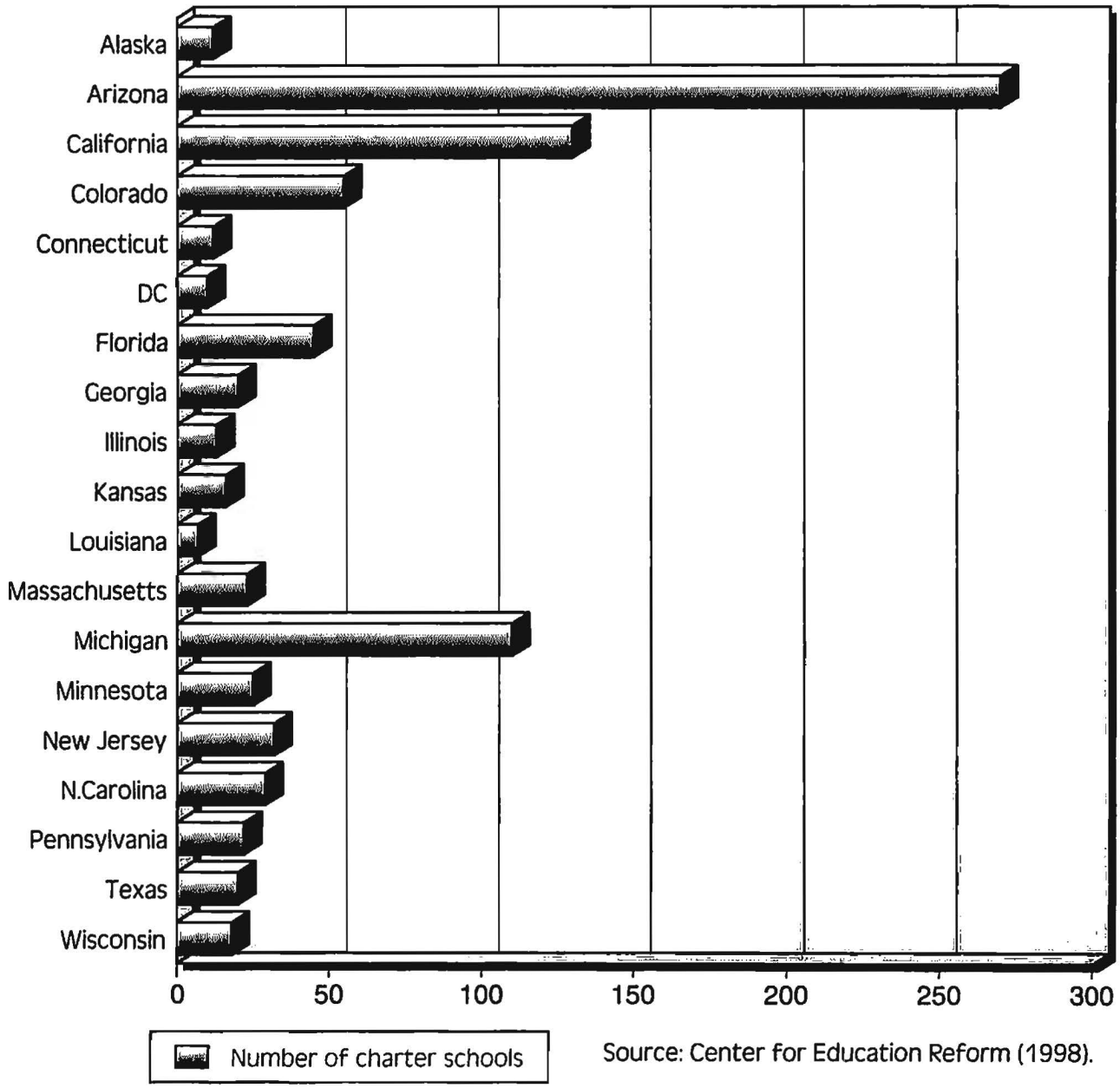
SRI International (1997), an independent research institute, reports that nearly two-thirds of the 98 California charter schools responding to their survey had more applicants than they were able to admit. The fact that the number of charter schools in California has leveled off recently may be due to the original state legislation, which capped the number of charters at 100. In 1998, however, the law was amended, raising the ceiling to 250 charter schools statewide. We will see whether local and corporate interest in charter growth leads to a second generation of new schools.

Political and Public Support

Charter school proponents form an eclectic group of national and state policy makers, activists, and community groups. The federal government first endorsed the idea of charter schools when President Bush included them in his America 2000 agenda as one means for advancing the six national goals for education (Wohlstetter and Anderson, 1994). President Clinton has eagerly supported charter schools: states may now use

Figure 4.3. Charter Schools State by State.

States with more than five operating or approved charter schools in 1998



Source: Center for Education Reform (1998).

federal funds allotted for school reform to boost charters. Since 1994, federal spending to assist states with planning and start-up costs has increased substantially from $6 to $80 million. In his 1999 State of the Union addresses, President Clinton again called for the creation of 3,000 charter schools by the year 2000. Charter schools have enjoyed bipartisan support from various state leaders (Wohlstetter et al., 1995.) Home schooling

advocates have joined charter activists in recent years. At least 28 home school charters currently operate in California alone (SRI, 1997). For-profit companies also continue to develop charter schools (Schnaiberg, 1997).[12]

It is unclear whether widespread political support for charter schools is resonating with the public at large. In California public opinion seems mixed. Among the 510 adults who responded to the recent 1998 PACE education poll, 49% favored expanding the number of charter schools, while 37% opposed the idea, and 14% held no clear opinion (Fuller et al., 1998). It is possible that as understanding of the charter concept grows, so may public support.

Funding

All charter schools receive public funds, but financial arrangements vary among states and the local districts that grant charters. In a few states, such as Arizona and Minnesota, charter schools receive funding directly from the state. In a majority of states, including California, they receive funds through their sponsoring local district. Charter schools are free from most state and district regulations, but the actual extent of financial support and autonomy differs. District administrators vary in their willingness to share categorical funds, including class-size reduction, special education, and bilingual monies.

California charters are entitled to 100% of the base revenue limit apportioned to their sponsoring district, but each school must negotiate for categorical funds. These funding channels add up to a sizable portion of a school's budget, but districts can choose not to pass it through to charter schools. In some cases charter schools have chosen not to take special education monies, given their frequent reluctance to serve disabled students. Disputes have arisen over how districts calculate per pupil spending levels and which figure is used to set local allocations to charter schools.

Unlike other public schools, charters do not have access to capital funds, nor can they issue bonds, so many are forced to use their base revenue to meet facility costs (Bierlein, 1996). In fact, according to a U.S. Department of Education report (1997), a lack of start-up funds has been the primary obstacle facing charter founders. In California, since funding arrangements for charter schools are decided through negotiations with districts, the financial knowledge and bargaining skills of the charter leader is crucial. SRI reports that 24% of all California charter directors surveyed did not even know whether they were eligible for federal Title I funds.

Some charters attempt to conserve resources by contracting out services, and well-connected schools are able to garner additional resources from private donors. In contrast, schools unable to obtain resources independently must enter agreements with their sponsoring district. The recent UCLA evaluation emphasized that several charters in low-income communities are struggling to stay afloat while those in affluent areas enjoy ample outside funding (Wells et al., 1998). In exchange for services such as bookkeeping, staff salaries, payroll, and budget preparation, districts often withhold a portion of base charter school revenues. Only 27% of the 97 California charter school respondents report having full control over budgetary expenses (SRI, 1997).

To alleviate some of the burden associated with start-up costs, the California Department of Education (CDE) offers assistance in two ways. Through the federal Improving America's Schools Act, CDE received $3.2 million in 1997–98 to assist charter developers with planning and start-up costs. Charter schools must compete for these funds. CDE also has created a revolving loan fund to help new schools with start-up and operating costs, such as leasing and improving facilities or purchasing instructional materials. Loans are interest-free and there is currently $395,000 available.

Questions have been raised about home school charters. Parents who home school their children may now enroll in a charter program which generates full state support and free instructional material, even when no credentialed teachers are involved in this process. Home school charters have little overhead: they do not hire many teachers or "learning coordinators," nor do they maintain facilities for large numbers of students.

In some cases districts and their home school charters enter into profit-sharing agreements, using excess revenues from the home school operation to fund conventional school programs. So, while school boards are supposed to hold charters accountable, home school programs generate additional revenues for districts, creating a conflict of interest for the local school board.

Private Contracting for School Management

The charter school movement is sparking interest in private contracting for school management. A dozen for-profit companies are already running about 10% of existing charter schools (Schnaiberg, 1997). Among these are Education Alternatives, Inc. (EAI), now known as the TesseracT Group, The Edison Project, Educational Development Corporation, and Advantage Schools, Inc. (Nelson, 1997). An intriguing parallel movement, arising in Chicago and New York City, is the likely conversion of parochial schools to publicly funded charters.

Education Alternatives, Inc. (EAI) was the first private company to take over a public school. Its stated mission is "to partner with schools to develop effective learning environments and improve students' performance in a cost-effective way" (EAI, 1997b). Since 1987 EAI has contracted with public schools including the Hartford and Baltimore school districts and private schools in Arizona, Minnesota, New Jersey and Indiana. Beginning in 1998, EAI contracted with charter schools in Arizona, New Jersey and Texas. The company currently runs 37 schools in seven states, serving over 5,000 students from preschool to postsecondary education.

The Edison Project is a private company which operates public schools through district or charter contracts. The company takes responsibility for management and implementation of educational and technology programs, and promises to raise student performance. Continuation of contracts is based on the ability to produce results, including higher student achievement, parent involvement, and teacher satisfaction. Christopher Whittle, the company's founder, initially envisioned Edison as a network of for-profit

Box 4.1. Private Versus Public Interests: An Islamic Charter in Fremont.

Charter schools can well serve particular types of ethnic or religious communities. At issue is whether taxpayer dollars should advance schooling and child rearing for distinct types of families.

According to a recent article in the San Jose Mercury News, an Islamic school in Fremont is operating under an unusual arrangement that skirts the boundaries of California's charter school laws and blurs the line between religious institutions and the state.

In the mornings, 74 students in kindergarten through eighth grade learn academic subjects through their publicly funded charter school housed in, but distinct from, the Islamic Society of East Bay mosque. For the rest of the day, most of these students attend the Annoor Islamic Institute in the same classrooms, receiving the religious material of Islam.

"They're pushing the envelope," said Colin Miller of the state Department of Education, adding that it is unclear if any laws are being broken. The case illustrates the gray areas of California's newly revised charter law which went to effect in January 1999.

The Fremont charter school illustrates how religious communities can convert existing home schooling parents or private schools into publicly financed operations. Many home schoolers around the state are fundamentalist Christians whose religious beliefs drive them to pull their kids out of public schools. According to UCLA professor, Amy Stuart Wells, "The California law doesn't let private schools become charters, but there's all these... and home school networks which are becoming charters."

Fareeda Rajabally, acting principal of the Fremont Islamic school, originally said that the morning session was a school operated by the Sierra Summit Academy, a distance learning charter based north of Sacramento. But Ms. Rajabally's husband and board member, Mohamad Rajabally, claims that the school is operated by a nonprofit organization, One2one Learning, that operates three schools in northern California.

Under this arrangement parents are supposed to come in each morning and work with their children. A paid "facilitator" attends the morning session to help supervise lessons. Either the One2one Learning organization or the Islamic mosque is drawing full state aid from the state, equaling about $5,200 per student. Parents of the 74 students pay an additional $230 in monthly tuition.

Source: adapted from Howton (1999)

private schools. In 1995, however, Edison shifted its mission and began partnerships with four public schools. By the 1998-99 academic year Edison had expanded to 51 public schools—11 of these schools are charters.[13]

It is not clear whether these companies are delivering on their promise to improve classroom effectiveness and boost student achievement. Critics are asking whether public accountability will be sufficient to conduct objective evaluations of these experiments. Both EAI and Edison have touted student achievement gains from their own analyses. However, independent evaluations of EAI report no gains relative to comparable schools. Additionally, the AFT released their own analysis of Edison testing data which they claim does not represent the positive picture of achievement painted by the company (AFT, 1998). Edison's second annual report appears to show achievement gains for some students and impressive levels of parent satisfaction. However, since there was no control on selection effects, and the evaluation represents a point in time instead of longitudinal tracking, the picture is incomplete. (Edison Project, 1999). These initial evaluations fall short of providing conclusive evidence regarding the potential effects of private management on achievement. While these evaluations were qualitatively and quantitatively different, the central point remains that the lack of evidence and the obvious problems with bias posed by self-evaluation by the companies and by teacher unions illuminates the pressing need for *independent* research and evaluation in this area. Substantial investments are being made in these companies by private investors, and by taxpayers through school districts, despite the lack of solid evaluation evidence regarding school and child-level effects.

When considering the merits of private contracting, it's important to question whether the profit motive conflicts with the broader purposes of public education. Edison claims in their mission statement that they provide "all students, regardless of economic or social circumstances, with an education that is rooted in democratic values, that is academically excellent and that prepares them for productive lives." But one recent report illustrates the potential conflict between corporate values and educational priorities. The director of National Heritage Academies, a for-profit company managing charter schools in Michigan, admitted that their schools provide limited special education services and encourage parents of children who need these services to simply not apply (Toch, 1998). More research is needed to assess such unanticipated effects, the issue of public accountability, and whether such risks are eclipsed by performance gains.

Empirical Questions and Evidence

A growing body of evidence shows that most parents who enroll their children in charter schools are enthusiastic and satisfied with their schools. Yet little evidence has been gathered on other pressing questions:

- Which families choose charter schools?
- Is there evidence that neighborhood schools are losing their strongest students and most involved parents to charters?
- Who teaches in charter schools?

Box 4.2. The Edison Project in San Francisco.

Of the 51 schools currently run by The Edison Project, only five are currently operating in California. Until recently, the company avoided contracting with California schools. This is because the state spends less than the national average on per-pupil expenditures, which would make it difficult for the company to replenish its costs. However, due to a recent $25 million pledge from the Donald and Doris Fisher Family Foundation, up to 15 schools could elect to become Edison partnership schools. Donald Fisher, the founder of Gap, Inc., has promised the $1.3 million per school that Edison itself would normally invest in its partnership schools to buy computers for all its students, rewire the schools, and train teachers in its proprietary curriculum (Asimov, 1998).

In Spring 1998, the San Francisco Unified School District (SFUSD) was beset with controversy over Edison's proposal to take over the Edison Elementary School (the school name is unrelated to the company) and the Tenderloin Community School set to open in fall 1998.

Edison Elementary, already reconstituted, had been struggling with achievement, management, and discipline problems. As of January 1998, the school had seen four principals in a 12-month period. The latest principal, Barbara Karvelis, voiced enthusiastic support for the proposed contract with Edison, and over 50% of teachers signed its charter petition.

The situation was markedly different at the Tenderloin Community School, where parents and community activists had worked since 1990 to raise $1 million to establish their neighborhood school. They were staunchly opposed to the school district's proposed partnership with the private company, since such a partnership would have been counter to their vision (Salter, 1998b; Seligman and Salter, 1998). Amid the controversy, the Edison Project withdrew its proposal for the Tenderloin-Edison school.

Meanwhile, the Board of Education's curriculum committee voted to reject the charter petitions for Tenderloin Community and Edison Elementary Schools. While this defeat was a victory for the Tenderloin community, it was met with mixed reactions at Edison Elementary, where some teachers supported the petition. Nevertheless, in spite of the curriculum committee's vote, SFUSD Superintendent Bill Rojas still sought the full Board of Education to approve the Edison-Edison partnership (Salter 1998a). In the end, Superintendent Rojas' position triumphed. On June 24, 1998, the San Francisco Board of Education voted 5-2 to approve the Edison-Edison partnership.

Box 4.3. A Poor School District Looks to Private Managers.

After pumping big foundation grants into East Palo Alto schools and attempting several different strategies to pull them out of the academic basement—with little success—school officials decided on a more radical approach: charter schools run by a for-profit business.

With support from the East Palo Alto Board of Education, Superintendent Charlie Mae converted two of the district's poorest-performing schools into one charter school run by the Edison Project. Knight said she has been interested in bringing Edison to East Palo Alto for four years, but did not have the board votes to support the move until this year.

Private contracting of public schools has worked elsewhere. Near San Diego, Feaster-Edison Elementary School in the Chula Vista School District completed its first year being managed by the Edison Project in June 1998. District officials say the community response has been enthusiastic. The school is located in one of the poorest areas of the 21,000-pupil district. It had been performing so poorly for so long that although test scores were abysmal, no one ever complained, said Lowell Billings, district business manager.

The school was gutted, renovated with district money, and then Edison took over, helping to raise $1.5 million in contributions from other sources for teacher training, textbooks, and computers. In the first months of the conversion, student attendance and parent participation have gone up, said District Superintendent Libia Gil. Other schools in the district have adopted some of the Edison school's techniques—such as the 90 minutes spent on reading instruction every day. The district used to send cleaning crews to the school every day to remove graffiti. This past year, the crew has only been needed once, Gil said.

Some Feaster teachers who resisted Edison's involvement have left. In East Palo Alto, the issue of teachers losing their union contract, plus longer school days in order to provide extra time for reading instruction may have contributed to some teachers rejecting the proposal. California law requires that charter schools be approved by 50 percent of the teachers in an existing school, or 10 percent of all the district's teachers. The vote in East Palo Alto initially met the 50 percent mark, but then, for reasons that are unclear, some teachers removed their support. A districtwide vote garnered the necessary 10 percent approval.

Every California school that contracts with Edison must raise outside money to help cover costs. That's because the amount of state support for education is so low it would be impossible for Edison to recoup its costs within its corporate time frame, said Kathy Hamel, Edison's West Coast coordinator. In most other states, where support is higher per pupil, Edison can invest more of its own money and still expect a return on its investment.

Source: adapted from Wykes (1998).

- Are parents involved in the activities of charter schools, and are they more satisfied than with their previous school?
- How do local districts respond to competitive pressures represented by charters?
- Does student achievement rise in charter schools?

Which families choose charter schools? Some charter schools use competitive admissions criteria to select students. State laws commonly require that schools enroll a student body that is representative of the population living in their particular district. Charter schools in California that have refused to admit students most often report doing so because "parents are not committed to the school's philosophy" or because "parents cannot fulfill involvement requirements" (SRI, 1997). Very few charters report making decisions based on an applicant's prior academic performance. But when the number of applicants exceeds available space, it is not known how new entrants are selected. Nor do we yet understand how informal contacts between parents and school staff may influence which children are admitted.

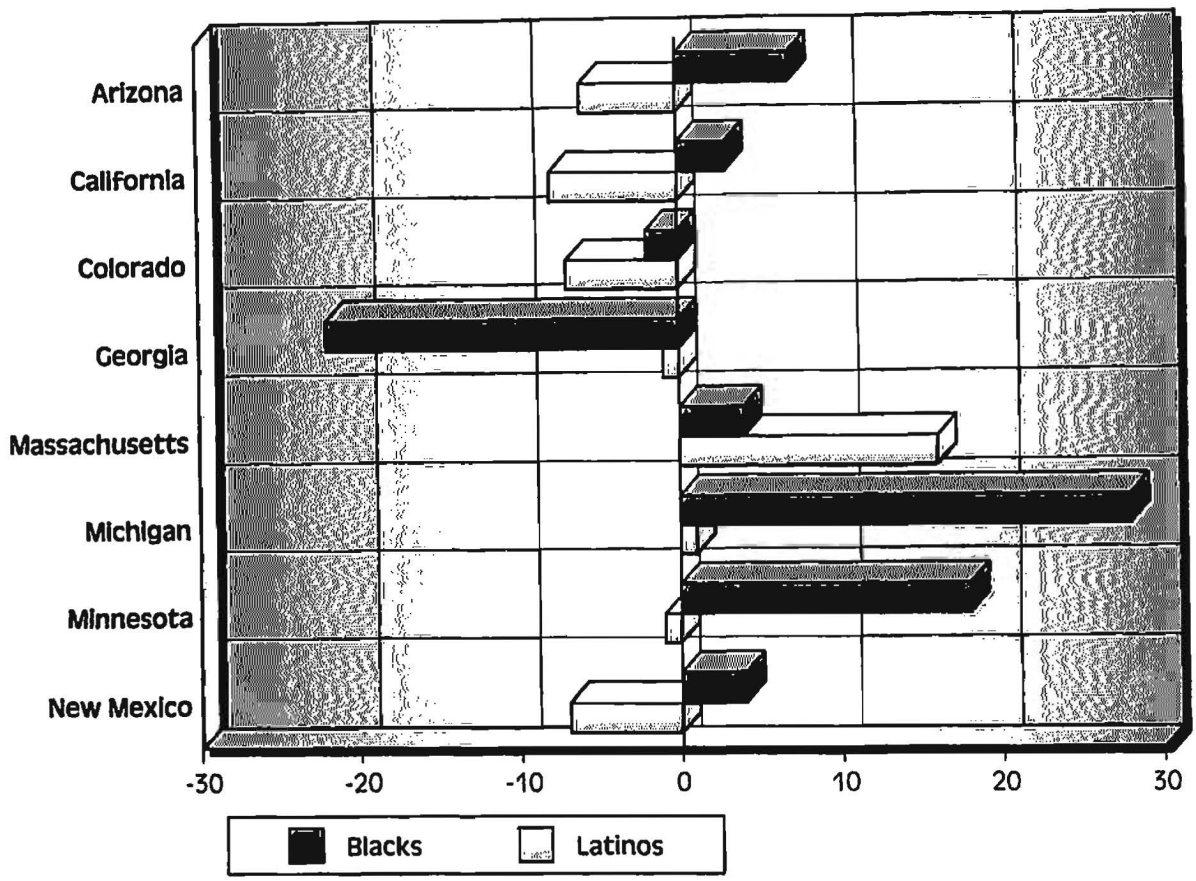
The U.S. Department of Education's annual inventory of charters attempted to look at which families are being served. These researchers recently surveyed 224 charter schools operating in 10 states (RPP, 1997). They concluded that both charter schools and conventional public schools are serving a similar percentage of minority students and children with disabilities. In seven states, charter schools are actually serving a higher percentage of African-American students than their statewide average. In one state, Massachusetts, Latino students are over-represented in charter schools.

Three state reports have included district-level comparisons. These analyses in two states show that charters are underserving ethnic minority groups relative to their public school counterparts. The Clayton Foundation (1997) conducted a study of Colorado charter schools for the state education department. They show that 19 of the 24 charters surveyed serve a lower percentage of students of color than the corresponding district average. In California roughly 75% of the 98 charters studied serve a smaller percentage of LEP students than their respective district (SRI, 1997). In contrast, Minnesota charters are serving a proportionally greater percentage of minority students (CAREI, 1996).

Like many conventional schools, charters often serve heavy concentrations of one ethnic group. The federal inventory indicates that in California, Colorado, and Arizona, there is a greater percentage of charter schools that enroll at least 80% white students than their statewide average. In Colorado, 11 of the 24 charters studied enroll just slightly more, the same, or a smaller proportion of students of color than the *lowest* percentage in their district range. Nineteen percent of California's 98 charter schools serve at least 25% more white students than their district average, and nearly 40% reported serving at least 10% fewer LEP students than their district average (SRI, 1997). It appears that the racial and social-class isolation of students, already characteristic of many urban public schools, is being reproduced in an equally stratified network of charter schools.

Is there evidence that neighborhood schools are losing their strongest students and most involved parents? One criticism of charter schools and other choice options is that they

Figure 4.4. Ethnic Minority Representation in Charter Schools.



Note: Positive values indicate that charters enroll a higher share of blacks or Latinos reactive to statewide public school enrollment. Negative values indicate that minority students are underrepresented in charter schools.
Source: RPP International and the U.S. Department of Education (1997).

siphon off higher performing students from conventional public schools. Family income is one factor that strongly predicts student performance. It is possible, therefore, to gain a rough idea of whether charters are drawing away the strongest students by looking at the proportion of students from low-income families in both charter and regular public schools. This method fails to capture known variability in home practices that support student achievement within social classes.

The initial federal study suggests that charter schools and conventional public schools are, on average, serving a similar percentage of students who are eligible for free or reduced-price lunches (34% and 37%, respectively; RPP, 1997). Again, however, aggregate comparisons are not sufficient. Data from two states indicate that many charters are not serving the same proportion of low-income students as their respective districts.

Of the 73 California charter schools providing free or reduced-price lunch data, 74% (54 schools) serve a smaller percentage of students than their district average. In addition, 36% serve at least 20% fewer of these students than their district average, while 12 schools serve no such eligible students (SRI, 1997).

In Colorado 18 of the 24 charters studied serve a smaller percentage of low-income students than their district average, and 10 serve the same or a smaller proportion than the *lowest* percentage in their district range (CDE, 1997). More thorough research is required to determine the magnitude of this "creaming" of stronger or more advantaged students. It holds enormous importance in assessing the discrete impact of charters, after fully taking into account family practices that may instead influence achievement differences.

Who teaches in charter schools? Charter laws vary from state to state regarding who can teach and under what personnel rules. In Arizona, Michigan, and Minnesota, for example, teachers working in charter schools need not be certified. They may remain under or opt out of collective bargaining agreements. In contrast, all or the majority of teachers in North Carolina, Louisiana, and New Jersey charter schools must be certified. These teachers are usually covered by union agreements, but in some circumstances they can be excluded.

Current data indicates that charter and conventional public schools are hiring teachers with similar characteristics. Few charters surveyed for the national study report difficulties finding teachers who meet state certification requirements (RPP, 1997). Charter teachers in California reflect the racial and ethnic composition of teachers statewide. About two-thirds report hiring some teachers who are still covered by union agreements. The average starting salary is roughly the same for teachers in charters and conventional schools. Start-up charters are somewhat less likely to hire certified teachers than conversion charters (66% and 77%, respectively). In general, charters are hiring the same number of certified teachers as a percent of all teachers employed, compared to regular schools.

Are parents more involved in the activities of charter schools, and are they more satisfied with their previous schools? A consistent empirical finding is that parents who enroll their students in charters are quite satisfied and often enthusiastic about their new schools. In several surveys parents report being quite involved in their schools. Most charters include parents on their governing boards and often require parents to participate in various ways. This cooperative spirit, combined with attempts to lower labor costs, stem from the alternative school days of the 1960s.

The study of Minnesota charters included 560 parent respondents. Nearly 90% of all parents reported being satisfied with their school's teachers, academic expectations, curriculum, and home-school communication. When asked for an overall rating, a similar proportion gave a grade of A or B to their school. Parents who did express dissatisfaction usually were unhappy with their school's infrastructure, resources, or transportation services (CAREI, 1996). In Colorado nearly every charter school studied provided information about parent participation and satisfaction, revealing that parents in most charters are very satisfied and often commit several hours of work per month (CDE, 1997).

The pattern is similar in California, where parents report being very involved in their charter schools (SRI, 1997). Researchers found that parents serve on governing boards in 88% of all California charters studied. About 40% of charters require parents to attend meetings, join committees, and participate for a set number of hours. Whether participation excludes certain families, such as single-parent households, is a question on which we have no data.

How do local districts respond to competitive pressures represented by charters? Advocates suggest that charter schools will push the public system toward serious reform. They contend that conventional schools will either learn from innovative charters or be compelled to improve on their own as a response to market pressure. To assess these and other claims, one recent PACE study examined the impact charters are having on their local districts in eight states and the District of Columbia (Rofes, 1998). Over 200 interviews were conducted with district officials, principals, teachers, and other stakeholders in conventional and charter schools. Key actors in about half the 25 districts—a majority being large urban districts—reported no or a mild impact from charter schools. Few district officials, principals, or teachers in conventional schools perceived charters as laboratories for educational innovation. Rarely did they adopt charter programs or practices for their own schools. This finding was confirmed in the recent UCLA assessment of charters and their communities (Wells et al., 1998)

In some locales charters are encouraging the types of structural reforms that proponents envision. Nearly one-quarter of the districts studied by Rofes reported specific responses to charter schools in positive ways. Several districts reported opening schools centered around a specific curricular philosophy. Most common are the development of back-to-basics and core knowledge schools to compete with similar charters that were reportedly drawing families away from district schools. Charter schools also have prompted selected districts to create all-day kindergarten programs, extend after-school services, and expand access to community-based activities.

Do charter schools boost student achievement? No valid evidence is yet available on this bottom-line question. The U.S. Department of Education recently contracted with a consortium of research organizations to assess whether student performance has improved in charter schools. To date, we only have unsystematic evaluations of charter school effectiveness. Results on fourth grade reading and writing tests are available for 9 of the 24 charter schools studied in Colorado. Five schools scored above their district average in reading proficiency, and four did so in writing. However, four schools scored below their district average in both reading and writing. No controls for family background or student composition were taken into account.

No valid evidence is yet available on whether charter schools boost student achievement.

In six of eight Massachusetts charter schools studied, students' academic achievement has reportedly improved more than would be expected in conventional public schools (NCSL, 1998). In Michigan, however, students in conventional public schools outperformed their peers attending charters on the state's assessment program (Hudson Institute, 1997).

The discrete ability of selected charter schools to boost children's learning curves, and on steeper inclines than typically realized in neighborhood schools, appears quite

Box 4.4. Do Charter Schools Spark Market Competition?

Advocates have long argued that one of the greatest benefits of charter schools is their potential to spur change in nearby schools and districts. But a California researcher, in a study that looked at independent public schools in eight states, found that such schools in a majority of cases do not prompt school reform in the districts where they operate.

The study by Eric Rofes, a doctoral student at the University of California, Berkeley, is one of the first to examine the impact of charter schools on districts. Most studies have focused on the charters themselves, looking, for example, at the students' demographic makeup or achievement scores. Rofes spent the better part of a year interviewing teachers, district officials, and charter school founders and leaders in 25 districts and eight states.

Supporters often claim that charter schools will foster competition by forcing districts to implement reforms or lose students. But only 24 percent of the districts Rofes studied had accelerated their reform efforts in response to charters. "The majority of districts had gone about business as usual and responded to charters slowly and in small ways," he writes. Some districts reported losing financing as students left traditional public schools, while others characterized the financial loss as minimal. In other districts, officials were relieved to see the charters drawing away disgruntled parents or troublesome students. In some places, staff morale dropped when charters opened. The districts hit hardest by the arrival of charters also tended to be those that had actively responded to them. But they were not necessarily the districts that had made the most dramatic changes.

Rofes says the fact that, several years into the movement, the charters had spurred stepped-up reform efforts in fewer than a fourth of the districts was not necessarily bad news for the charter approach. "If you know the history of school reform, that is in fact a really impressive statistic," he says. "The fact that there are a handful of superintendents who view charter reform as something they can use strategically to undertake their own reforms is also, I think, an exciting finding."

Source: Viadero (1998).

encouraging at first glance. One Boston charter school, managed by the Edison Project, showed impressive learning gains by students, compared to a comparison group of similar students. Students in a second charter school in Lawrence, Massachusetts advanced students by one and a half grade levels during one academic year (National Conference 1998). In Los Angeles, a recent independent evaluation claimed that at least two charter schools—Fenton and Vaughn schools—are able to move student learning upward at rates significantly higher than comparison schools which serve similar children (Izu et al., 1998).

These early studies are commendable in that they attempt to look at learning growth over one year, rather than simply taking one-time snapshots of achievement. These evaluators also attempted to compare learning curves for children in charters with similar youngsters attending neighborhood schools. Yet even these better studies suffer from serious methodological flaws. Very few expert evaluators with sufficient funding have been able to enter this field and study the long-term effects of charter schools.

The weaknesses in the extant evaluations represent mistakes that have been repeatedly made over the past three decades of evaluation research. First, no studies have yet to control on so-called selection bias. Like private schools, charters attempt to admit a select number of children who show promise and have parents who are committed to the mission and culture of a particular school. We know that the "best shoppers" are parents who are better educated, more strongly committed to education, and, like hawks, watch carefully over their children's homework and school performance. So, when the learning curves of charter students look steeper than those attending neighborhood schools, is this advantage due to the school or the special push provided by the parents? The recent L.A. evaluation attempted to minimize this source of bias by selecting comparison schools which appear to serve students of similar family background, as signaled by typical measures like ethnicity or eligibility for free lunches. But if charters are working according to their theory, they will spur migration of families from other communities into the charter school. And this market migration likely involves a select, nonrandom set of parents. So, we can easily mistake the achievement advantage of charter students for an effect of the school, when in fact learning curves are simply steeper for kids with more involved parents.

Second, evaluators have yet to track children over more than a year to assess whether achievement differences are sustained. At least recent work on voucher experiments has attempted to do this. Foundations and government could do a tremendous service by seriously supporting longitudinal evaluations of how well children fare over 3-5 years as they move through charter schools. This is not without methodological hazards, especially for working class and poor families who move frequently. Finally, no evaluations have considered outcomes other than achievement as measured by tests, such as graduation rates and college attendance rates.

We can easily mistake the achievement advantage of charter students for an effect of the school, when in fact learning curves are simply steeper for kids with more involved parents.

Third, the research game to date has focused on establishing, or contesting, that charter schools writ large are more or less effective than the average neighborhood school. We could find no evaluation which seriously asked the question: What are the ingredients of a charter school which contribute to steeper learning curves for children? It is understandable why government wants to know whether the overall charter school movement is yielding promising results. But don't we really want to know why the strong charter schools are able to boost achievement, after taking into account the characteristics of families being served?

Fourth, few policy makers and researchers are even asking whether the cost-effectiveness of charter schools out paces that of neighborhood schools. It may be, for instance, that highly visible charter schools—such as, the Vaughn Learning Center in L.A.—are

effective in raising achievement levels. But they also are likely spending more per pupil than neighborhood schools, displaying entrepreneurial skills which will be difficult to replicate on a grand scale. The achievement returns to other attempts at reform—class size reduction, inservice teacher training, or open enrollment plans—may be greater for each additional dollar spent, relative to charter school expansion. But current approaches to evaluation will not give us the answer to this pivotal issue.

Fifth, charter school studies do reveal that parents are very keen on placing their children in institutions that are safe, enforce clear discipline standards, and socialize their children according to the norms by which parents live. This may involve a charter school that teaches black nationalist ideology, the tenets of religious fundamentalism, Scientology, or the virtues of the performing arts. Indeed recent national surveys reveal that parents are at least as concerned about socialization processes inside their child's school as they are with standardized test scores (Education Week, 1997). But evaluators to date focus either on parental satisfaction or student test scores, disregarding parents' keen interest in socialization outcomes.

Finally, descriptive evaluations have detailed the enormous variety observed across charter schools. Colorado's recent statewide assessment of their charter schools reported on the share of students eligible for free lunches, across schools. This proportion ranged from 33% at Pueblo School to zero percent at Cherry Creek Academy. The share of children proficient in reading and writing, pegged to new state standards is equally variable (Colorado Department of Education, 1998). Evaluators can do much more in learning about the ability of charter schools to narrow gaps in student achievement, as well as detail how the universe of charter schools is leading to the resegregation of ethnic or social-class groups (Fuller and Elmore, 1996).

Part B

Public Support of Private School Choice

SECTION 5.
Vouchers and Private Scholarships

Origins

Milton Friedman first proposed vouchers in the mid 1950s. He writes in *Free to Choose: A Personal Statement* (1980):

> One way to achieve a major improvement to bring learning back into the classroom, especially for the currently most disadvantaged, is to give all parents greater control over their children's schooling, similar to that which those of us in the upper income classes now have. Parents generally have both greater interest in their children's schooling and more intimate knowledge of their capacities and needs than anyone else.

Friedman painted a vision of school vouchers as an effective mechanism for providing families with the opportunity to choose the most appropriate schooling opportunities for their children at private, parochial, or public schools. He argues that by awarding parents a voucher, to be used at an approved school, the "monopoly" of public education will be challenged. Placing funds directly in the hands of parents will inject greater efficiency and direct accountability into the system as schools vie for consumers' education dollars. The highly bureaucratized and inefficient role of government in administering schools, voucher advocates claim, will diminish. The proliferation of alternative schools will then cause school quality to rise as educators compete for students.

Publicly Funded Vouchers

Parts of Friedman's original vision of choice through vouchers are being realized in several cities around the nation. Milwaukee started the first publicly-financed voucher initiative in September 1990. When it first began, the program provided vouchers for up to 1.5% of all students in the Milwaukee public schools who were from low-income families. A 1998 Wisconsin Supreme Court decision allowed the participation of parochial schools in the voucher initiative (Walsh, 1998b). As a result, the program now may serve up to 15,000 students or 15% of the city's student population. The dollar value of the voucher is tied to average per-pupil spending in the public system.

The Cleveland Scholarship and Tutoring Program began in September 1996. Enacted by the Ohio Legislature, it provides close to 3,000 low-income students in grades K–4 with publicly financed vouchers, equaling $2,250 for use at a private or religious school. The Cleveland program was the first tax-supported voucher program to include parochial schools and the first to allow low-income students already enrolled in private schools to participate (Murphy et al., 1997). The state courts are increasingly divided over whether vouchers violate church-state separation provisions of their constitutions. Most recently the

Vermont Supreme Court struck down eligibility of parochial schools. But courts in Ohio and Wisconsin have ruled that religious purposes are not to be advanced unconstitutionally.

If California's Proposition 174 had passed in 1993, it would have provided eligibility for every resident child of school age to receive a "scholarship" worth one half the state's per-pupil spending level (PACE, 1993). After the Proposition failed passage, former governor Wilson and Republican leaders tried to revive legislation to support vouchers or "opportunity scholarships." This policy shift, targeting voucher aid on low-income communities, where parents' worries about the neighborhood schools are most intense, would have granted funds for 15,000 students from the state's lowest-performing schools to attend private schools.

Privately Funded Vouchers

Business executives and private groups in over 30 cities nationwide have created privately funded voucher or scholarship programs. The first was *The Golden Rule Program* in Indianapolis, created in 1991 by the Educational Choice Charitable Trust. After the Indiana legislature defeated a voucher proposal, J. Patrick Rooney, CEO of the Golden Rule Insurance Company, created this program. It provides vouchers equivalent to 50% of the average private school tuition to about 1,000 low-income Indianapolis students (Moe, 1995). Recipients include children who are already attending a private school. Parochial schools are allowed to participate in this privately funded venture.

Since 1991 several other private voucher programs have emerged. They vary in the number of students served, the target population, income requirements, and award levels. The following are examples of these varied programs:

- The *New York City School Choice Scholarships Program* began awarding 1,300 scholarships of up to $1,400 in 1997 to low-income students entering grades 1–5. A weighted lottery system was used to give preference to students from the lowest performing schools.

- *ABC-Giffen Scholarship Program* is the first privately funded voucher program to provide scholarship opportunities to all the students from one school. In 1997 ABC-Giffen extended to every child at Giffen Elementary in Albany, New York, the opportunity to apply for scholarships worth 95% of tuition (capped at $2,000) at the private or parochial elementary school of their choice.

- *San Francisco Independent Scholars* (SFIS) began offering merit scholarships of $2,000 to 100 students in fall 1998. Recipients must be enrolled in the eighth grade in a San Francisco public school to be eligible. SFIS takes into account grades, test scores, teacher recommendations, essays, but not income in selecting voucher recipients.

- *Horizon Scholarships* of San Antonio is the first privately funded voucher program to offer scholarships to all low-income students in one school district. The $50 million ten-year program began in 1998. It offers 93% of the 14,000 students in the Edgewood school district vouchers worth up to $3,600 per student for grades K–8 and $4,000 per student for grades 9-12 (Walsh, 1998c). Students may use the vouchers to attend a secular private or parochial school.

- *The Children's Scholarship Fund* is the nation's largest private scholarship program. Created in 1998 with $200 million from venture capitalist Theodore J. Forstmann and Wal-Mart heir John T. Walton, the program aids the expansion of new voucher programs for low-income children across the country. For the 1999-2000 school year, 40,000 vouchers were awarded (Colvin, 1998b).

Claims and Assumptions

Proponents claim that greater parental empowerment and student achievement will result from the introduction of public or private vouchers. However, only limited evidence on the multi-faceted effects of vouchers is available at this time. The major claims and assumptions advanced by proponents are delineated in Figure 5.1, including the market mechanisms through which vouchers are supposed to yield intended effects. Our analysis focuses on three basic claims which can be informed by empirical evidence.

Voucher programs will increase student achievement. Proponents argue that vouchers lead to more effective educational experiences for students who in the past have been limited to neighborhood schools. Especially low-income and minority students will display higher levels of academic achievement at private and parochial schools. The assumptions here are that parents will select more effective schools and become more involved in their children's schooling.

By empowering low-income families to choose from wider options, parents will be more satisfied with their child's schooling. Parent satisfaction with and involvement in their children's schooling will be higher when families can actively choose, according to advocates. This claim assumes that low-income families have sufficient information and resources to identify, qualify for, and utilize voucher programs. We have certainly observed parental demand for vouchers within low-income and blue-collar communities. Whether and how parent satisfaction translates into higher student achievement remains unknown.

Vouchers offer a more cost-effective method of financing schools. Proponents argue that voucher programs are more efficient than other models of school finance. By injecting market competition into the educational arena, schools must deliver a higher-quality product at less cost. Schools that fail to show clear and positive effects, or operate at high costs, will simply not attract students.

Advocates often assume that private schools will boost achievement levels more effectively than public schools. They also assume that competition will push public schools to contain teacher salaries and other instructional costs while raising achievement levels. But little is known on whether private schools operate at lower unit costs. In addition, high cost students with special needs often are excluded from private or charter schools.

Size and Scope

Public and Political Support. Despite limited evidence regarding the effects of voucher programs, support for this form of choice has been growing . The mix of constituencies

Figure 5.1. Voucher Programs at a Glance.

Claims and Assumptions	Size and Scope	Empirical Questions
■ Increase student achievement **Assumption:** The learning opportunities at private and parochial schools lead to higher test scores and strong socialization outcomes. ■ Empower low-income families with choice and increase parental satisfaction **Assumption:** The most disadvantaged families will readily identify, qualify for, and utilize available voucher programs. ■ Inject competition into public schools and promote educational reform. **Assumption:** Voucher programs, if they serve large enough numbers of students from public schools, will produce school reform in the public schools. ■ Provide a more efficient use of school dollars **Assumption:** The costs of administering public voucher systems are less than current systems.	**Publicly-Funded Voucher Programs:** ■ The Milwaukee Parental Choice Program serves 1,500 students at a cost of $7.2 million for the 1997–1998 school year. Parochial schools can now participate. ■ The Cleveland Scholarship and Tutoring Program serves close to 3,000 students at a cost of $7.1 million for the 1997–1998 school year. **Privately-Funded Voucher Programs:** ■ As of 1997, there were 32 privately funded voucher programs in 31 cities across the country. They served 12,141 children, with another 45,668 children reportedly on waiting lists. From 1991 to 1997, over $45 million has been invested through these programs. ■ As of 1997, California had three private voucher programs. They are located in Los Angeles, Oakland and San Francisco.	■ Do voucher programs raise student achievement? ■ Are voucher parents and students more satisfied with their choice schools? ■ Are public schools reforming in response to a "competitive threat" from voucher programs? ■ Are vouchers a more efficient use of tax-payer dollars? ■ Are students who remain in the public schools worse off than before in terms of student achievement?

in favor of vouchers reflects diverse agendas. Conservative groups and some business leaders have long favored vouchers. Yet many low-income families and local leaders also have come to support vouchers as a strong medicine for the public system. School choice for these groups is defined by some to be "the civil rights movement of education" (Shokraii, 1996). Poor and minority parents often see vouchers as their children's ticket to better educational opportunities—a way for them to leave schools that are simply unsafe or ineffective.

Many opponents of vouchers are white, affluent families who exercise choice either by paying for private schools or moving into school districts with quality public schools. They see no pressing need to spend taxpayer dollars on private and parochial schooling. Also opposing vouchers are the teachers unions, local school advocates, and national groups concerned with the separation of church and state. These groups view vouchers as a threat to the health of the traditional public school system.

The annual Phi Delta Kappa/Gallup Poll of Americans' views of education indicates a growing trend in support of vouchers. The question, "Do you favor or oppose allowing students and parents to choose a private school to attend at government expense?" was first asked in 1994 and again in 1996. Of those polled, 45% and 43% expressed support, respectively. In 1997 pro-voucher sentiment improved slightly, with 49% in favor. The 1997 poll reveals that proponents tend to be non-white, under 50 years of age, and with annual incomes under $50,000. Geographically, residents of the South were the most supportive of vouchers. Groups in opposition tended to include people over 50 years of age, suburban residents, people with incomes over $50,000, and those living in the West (Rose et al., 1997). PACE's 1998 education poll found that a majority of California residents continue to oppose school vouchers (52%) (Fuller et al., 1998).

Costs. Looking first at taxpayer supported programs, the Milwaukee program provides vouchers equivalent to the full state grant per pupil. State and local spending was budgeted at $7.2 million for the 1997–98 school year. Public budgeting for vouchers works similarly to public school grants and employs a statutory formula. There is no incentive to contain costs: private schools are guaranteed a certain amount of revenue per student whether or not they seek higher cost-effectiveness.

The Cleveland program was funded at $5.25 million by the Ohio state legislature in 1996–97. The budget was increased to $7.1 million for 1997–98. This initiative provides vouchers worth up to $2,250 per student. Funding for the Cleveland program comes from the Cleveland public school district's share of the state's Disadvantaged Pupil Impact Aid Program. An American Federation of Teachers (AFT) analysis indicated that a large share of students receiving vouchers was already enrolled in private or parochial schools before the program began. The cost burden faced by these parents has been lessened with the substitution of public funds.

It is important to note that vouchers, both publicly and privately funded, do not necessarily cover all instructional costs associated with private or parochial school attendance. Some programs, such as those in Milwaukee, Cleveland, and San Francisco have a fixed

dollar maximum which may or may not meet actual tuition levels charged by private schools. Other programs such as ABC-Giffen, Golden Rule and the new Childrens Scholarship Fund provide only a percentage of private school tuition and require that families cover the difference.

Empirical Questions and Evidence

Are vouchers actually increasing student achievement, empowering low-income families with greater choice, and raising parental satisfaction? Are vouchers encouraging effective reform in the public schools and leading to greater efficiency in both public and private sectors? These are key questions. But surprisingly, after almost a decade of experimentation with voucher programs, only limited evidence exists. And this evidence sketches a mixed picture.

Do voucher programs raise student achievement? Important evaluations of the Milwaukee and Cleveland programs have been conducted. Although these studies show mixed results, two studies of low-income children report modest gains for voucher students in math but not in reading. Methodological weaknesses beset this early work. Let's turn first to the Milwaukee case.

Milwaukee. John A. Witte at the University of Wisconsin, Madison, concluded from his annual evaluations of the Milwaukee program that, "...there is no systematic evidence that choice students do either better or worse than MPS (Milwaukee public schools) students once we have controlled for gender, race, income, grade, and prior achievement..." (Witte et al., 1994).

In contrast, Jay P. Greene at the University of Houston, along with his Harvard colleagues, observed test score gains for the 62 students participating in the Milwaukee program over a four-year period (and for whom limited family background data were available). The Greene team compared students who participated in the program with students who applied to the program but did not participate. They found that after four years, voucher students' math scores were 10.7 percentile points higher and reading scores 5.8 percentile points higher than the comparison group (Greene et al., 1997). The latter increase was not statistically significant and could be due to sampling error.

Critics of the Greene study argue that they did not account for the attrition of voucher recipients which may have biased the results in favor of the voucher program, since surviving voucher students may have been stronger or come from families which differed from those who left the program during the four years. As the Witte fourth-year report states regarding attrition, "Those who left the program did have lower prior test scores, lower scores in the private schools, and lower change scores than students who returned" (Witte et al., 1994).

A third analysis of the Milwaukee data was conducted recently by Cecilia Elena Rouse (1997) at Princeton University. Her study compared annual gains for a larger sample of voucher students with both general MPS students and students who applied but did not enter the program. She found a modest gain of 1.5 to 2.3 percentile points per year in

math for the voucher students, but no statistically significant differences in reading scores. This study did overcome several weaknesses of the earlier Greene analysis. It could not, however, fully compensate for selection bias. That is, not enough was known about the students' families and home practices to rule out the possibility that these factors, not the voucher schools, led to the gain in math scores.

Cleveland. Two evaluations of the Cleveland experiment have now been completed. The first by Jay P. Greene and colleagues is an analysis of first-year test scores of K–3 students enrolled at just two voucher-supported private schools (Hope Academy and Hope Ohio City) that started in response to the Cleveland program. The California Achievement Test (CAT) was administered to these students in the fall and spring of the 1996–97 school year. The Greene team found that the K–3 math scores increased by 15.0 percentile points and reading scores by 5.4 points. Language test scores declined by 19.0 points for first graders, but improved by 2.9 points for second graders and 12.9 points for third graders (Greene et al., 1997).

A strong critique was leveled against this study by the AFT. They noted the bias of the fall-to-spring testing approach by pointing out that most students' scores will improve if given the same test at the beginning and end of the school year. The AFT also questioned combining test scores across grades 1-3, since this could obscure poor test results in particular grades. Additionally, they noted that nearly one-fourth of all students receiving vouchers were not tested, which may also have skewed the findings (AFT, 1997).

The Ohio State Department of Education commissioned a study led by Kim K. Metcalf at Indiana University. He concluded that vouchers have yet to raise test scores in Cleveland. The Metcalf team found that after controlling for families' socioeconomic characteristics, "There are no significant differences in achievement between scholarship students and their [school district] peers" (Walsh, 1998a). The Metcalf analysis, like the Greene study, also has been criticized for assessing a small proportion of all children in the voucher initiative (Viadero, 1998).

New York City. The 1,200 private voucher winners in New York are participating in a careful experiment, aimed at avoiding the methodological weaknesses of earlier evaluations. First-year effects are promising but inconsistent across grade levels. For example, voucher students' reading and math scores were up by 2-7 percentile points, relative to the control group of youngsters. However, scores of third-grade voucher students were lower by two points in reading and math (Peterson, 1999). Harvard's Paul Peterson and colleagues at Mathematica Policy Research also showed that the private schools had smaller classes, more stable teaching staffs, and lower enrollments than nearby public schools (Peterson et al., 1998). This leads to the policy question of whether voucher programs should be expanded to serve more low-income students, or whether public schools should be reshaped to resemble smaller, effective private schools.

Other learning outcomes. Despite the lack of consistent evidence that voucher programs affect test scores, additional findings point to other benefits that may result from attending private or parochial schools. The Witte team, for example, found that Milwaukee voucher students' attendance rates were slightly higher than their public

school peers (Witte et al., 1994). At Stanford University, Henry Levin, conducted a review of voucher evaluations and similarly found that urban minority students who attend Catholic high schools have higher graduation and college attendance rates than their peers in public schools (Levin, 1997).

What about students who remain in public schools? Important questions should be considered regarding the potential effects of vouchers on the achievement of students who remain in the public schools. If school funding is drained from the public schools, how will this affect the learning opportunities of remaining students? If families and students that participate in voucher programs are indeed more educationally and economically advantaged, then could vouchers actually exacerbate inequities in educational preparation to the detriment of those students who remain in public schools? Do students participating in voucher programs lose the common core of values that bind our system?

Most voucher programs now target low-income families to broaden their school choices. This is an important shift relative to the 1980s when the push for tuition tax credits—benefiting the upper middle-class—comprised the major policy goal of school choice advocates. But whether such targeting results in the most disadvantaged families benefiting from voucher programs remains a pivotal question. Identifying, qualifying for, and utilizing these programs requires the time and wherewithal that only a portion of families may possess.

Identifying, qualifying for, and utilizing voucher programs requires the time and wherewithal that only a portion of families may possess.

For example, the Greene, Howell, and Peterson (1997) evaluation found that many families who applied and qualified for vouchers did not receive them because the program office was unable to reach them. In some instances, this may be due to the high mobility prevalent among low-income families, many of whom depend on family and friends for telephone and mail contacts.

Some voucher programs only cover a share of the tuition charged by private schools, requiring families to make up the difference themselves. For example, the 40,000 families recently selected for the Childrens Scholarship Fund must agree to provide an average of $1000 a year toward their child's education. Private and parochial schools may have additional expenses for transportation, books, meals, and activities not covered by the vouchers. Since many families cannot afford these extra costs, they are unable to use vouchers even if they receive them.

In addition, obtaining vouchers demands a certain level of initiative and discretionary time for parents to learn of the opportunities and follow through on the application processes. Initial evaluations reveal that even when voucher programs are targeted on low-income and working-class families, the most educated parents are more likely to participate (Fuller and Elmore, 1996).

This latter point is supported by several studies. While the Witte fourth-year report found that 60% of all voucher families were receiving AFDC (similar to Milwaukee public school parents), they also found that voucher parents—and especially mothers—had fewer children and higher school attainment. Participating parents expressed higher educational expectations for their children (Witte et al., 1994). Witte also found that the main reasons for families leaving the program were "transportation problems, difficulties in reapplying to the program, [and] problems with extra fees charged by some schools" (Witte et al., 1995).

An initial report by the Harvard-Mathematica team also concluded that those families who utilized their scholarship award in New York City tended to have higher incomes and were less likely to be dependent on welfare assistance (Peterson et al., 1998). This experiment targets privately funded vouchers on low-income and working-class families. Even within this range of parents, those who are better educated and pushing their children in school are more likely to participate.

These early studies consistently show that parental satisfaction with their children's schooling is generally higher among voucher parents than for those who remain in neighborhood schools. For example, the Witte fourth-year report states that parents' attitudes toward their choice schools "were much more positive than their evaluations of their prior public schools" in all areas questioned, including teachers, principals, instruction, and discipline (Witte et al., 1994). The Greene analysis similarly found that parents who participated in the Cleveland study were generally more satisfied than parents who did not receive vouchers. They found that two-thirds of new voucher parents reported being "very satisfied" with the academic quality of their schools, compared to less than 30% of the parents whose children remained in public schools. Sixty percent of all voucher parents were very satisfied with school safety and 55% of this group was very satisfied with discipline compared with 25% and 23%, respectively, of the public school parents (Greene et al., 1997).

Box 5.1. Do Vouchers Skim Off Top Students?

In ***Private Vouchers*** (1995), Terry Moe of Stanford University writes about the "skimming effect" of private voucher programs. Moe criticizes the programs for engaging the least disadvantaged of low-income families:

> If social equity is the primary concern, the place to start is by underlining the most fundamental feature of these programs: they are restricted by design to the most disadvantaged members of society. Not surprising, then, compared with the population as a whole, the families who participate are significantly lower in income, more likely to be minorities, less likely to have two parents, and so on than the general population...

A rather different picture emerges if we compare program participants, not with the population-at-large, but with other low-income families... The "most advantaged of the disadvantaged" may be the ones who disproportionately take advantage of private vouchers. The Golden Rule-type programs tend to attract parents who are somewhat more likely to be white, married, and have fewer children than other low-income families...but the most consequential difference by far is that voucher parents tend to be much better educated than other low-income parents and to have higher expectations for their kids.

Are public schools reforming in response to a "competitive threat" from voucher programs? There is little evidence that voucher programs are as yet affecting systemic change or schoolwide reforms in the public system. One could speculate that this is due to the small size of these programs. If vouchers continue to grow, perhaps the public system will feel a significant threat from private and parochial schools. How this would lead to positive change in the public schools is not clear.

Several voucher programs are struggling to keep pace with rising parental demand. This issue of the "supply response" is crucial to the theory of action put forward by voucher advocates. The Milwaukee program was set up to serve 1,000 students, then expanded to serve 1,500 in 1994. The program, however, has yet to be fully subscribed, as applicants are having trouble finding openings in approved private schools. In 1995 the legislature expanded the program to serve up to 15,000 students and include religious schools. The terms of this expansion were approved last year by the U.S. Supreme Court.

The ABC-Giffen Scholarship Program may be more indicative of the potential of voucher programs to impact particular schools. In the spring of 1997 the program offered vouchers worth 95% of tuition, or up to $2,000, to all students at Giffen Memorial Elementary. The vouchers allowed students to attend a private or parochial elementary school. Since July 1997 the public school has acquired a new principal, two other administrators, and new teachers. They have instituted an improvement plan aimed at increasing parental involvement, professional development, and improving student behavior. The school board also increased the school's budget by $125,000 (Archer, 1998).

The cost question: Are vouchers a more efficient use of taxpayers' dollars? Voucher proponents argue that voucher programs use educational dollars more efficiently than public schools, in part because the unit costs of private and parochial schools are sometimes lower than district per-pupil spending. In addition, private schools can choose not to admit children with disabilities or special learning needs. Such children contribute to higher costs in the public system.

The Cleveland program highlights such difficulties in making strong claims about cost effectiveness. State reports from Ohio indicate that the average voucher payment is $1,763 dollars. This figure, however, does not include costs for transportation ($629 per child), administration ($257 per child), and state aid already given to private schools through two other legislative programs ($543 per child). This brings actual unit costs to $3,192, which is roughly comparable to the cost of *regular* education in the Cleveland public schools (AFT, 1997). The Greene, et al. study (1997) estimated per-pupil costs in Cleveland public schools at $6,507. However, this amount would reflect the average of K–12 expenditures after costs have been factored in for expensive categorical programs, like special education or compensatory reading programs—efforts which don't operate in voucher-supported private schools.

Economist Henry Levin (1997) argues that the costs of shifting to a public voucher system may actually exceed the present system's cost. Detailing additional expenses, Levin suggests that the state's additional regulatory costs would be great, since government would have to monitor individual schools and students, including students now

enrolled in private schools. For example, California would have to follow voucher payments for 6 million students instead of 1,000 districts. Additionally, to shift to a system completely based on vouchers, the state would need to develop and maintain (1) a system of parent information centers, (2) an adjudication system to keep track of funding during mid-year transfers and to settle disputes between schools, and (3) a monitoring and assessment system to determine the eligibility of students for different types of vouchers. State certification of schools would likely be expanded and pressure to publicly fund families' transportation costs would likely rise. And how the state's curricular priorities and performance standards would be enforced would be a daunting task to say the least.

A PACE report (1993) examined the large-scale cost implications of a California voucher initiative and found that they are heavily dependent upon the number of students utilizing vouchers. For example, large numbers of students transferring to private schools would reduce schools' revenue. Individual schools may be able to cut back expenses as they lose pupils, but on larger scale, fewer resources would inhibit the ability of public schools to improve. Additionally, the gap in revenues between rich and poor school districts would increase proportionate to the number of student transfers to voucher-redeeming schools. At the same time, states could save public costs of school construction depending on how many students choose vouchers.

A related question is how private schools would respond to a large scale voucher program. Private and parochial schools could attempt to expand their current enrollments and build new schools, or schools could simply raise their tuition levels to capture new public monies contained in the voucher. This is intertwined with the cash value of the voucher. To keep down the program's overall cost, the California initiative capped the voucher at $2,500. But this amount would not likely affect the decision-making of affluent parents. Nor would it provide sufficient aid for low-income families who could not afford to supplement the voucher with their own money. Very few private schools could operate on $2,500 per year, especially those attempting to serve children with special needs.

In contrast, Milwaukee vouchers are pegged to the total per pupil state aid, equaling $4,900 in 1998-99. Parochial schools have expanded capacity to a modest extent. But they have had to cope with increased government regulation of how they select new students and report financial information. They may also face state accountability standards. Since voucher students take their state aid to their new school, offsetting savings do accrue. That is, support for public schools dwindles as more children participate in the voucher program. It is not known whether applicants to parochial schools in Milwaukee or Cleveland are squeezed out of spaces by voucher students who represent a more steady source of revenue.

SECTION 6.
Tax Credits to Finance Parental Choice

Origins

Proposals to advance parental choice via tuition tax credits surfaced at state and federal levels in the late 1960s. At the federal level, early proposals focused only on tax credits for parents of college students. Prior to 1978 six tuition tax credit proposals had passed the U.S. Senate. In 1978 the House passed a proposal for the first time. Yet none of the bills ever became law. In 1978 the Packwood-Moynihan bill moved forward, providing a $500 tax credit for tuition and educational expenses at private schools, as well as offsetting college costs. But this bill eventually floundered.

The Reagan Administration proposed various K–12 tax credit plans, all of which were defeated by the Democratic Congress. Then, surprising some, the Clinton Administration backed a college tax credit in 1997, embedded within the omnibus Taxpayer Relief Act. Benefits of this new federal program are limited to higher education expenses and exclude K–12 education expenses.

During the 1960s and 1970s a total of 13 state legislatures enacted tuition tax credits to aid families with children attending private schools or colleges. However, most of these plans were overturned as state courts ruled that they directly provided public aid to religious schools. In 1974 the Minnesota tax credit that had existed since 1971 was overturned in the courts. Left standing was a Minnesota tax deduction law that has existed since 1955, enduring court challenges at every judicial level, including the U.S. Supreme Court.[14] The program was recently revamped to include an increase in deduction levels and added an education tax credit component. We review its effects on parental choice and private schools below.

Iowa enacted a program in 1987 that granted taxpayers an education tax credit or deduction. The law provided a credit of up to $50 to offset textbook and tuition expenses. Challenged in a federal lawsuit, plaintiffs charged that the plan violated the Establishment clause since benefits went to parents of children enrolled in religious schools. In 1992 the law was upheld by the federal district court, ruling that the Iowa law was similar to the Minnesota statute and did not provide direct aid to religious schools, nor did it create a relationship between the state and parochial schools (Walsh, 1992). The program continues to benefit taxpayers in Iowa.

It is important to clarify differences between tax *credits* and tax *deductions.* Although both credits and deductions effectively lower a parent's net schooling expenses, a credit is directly subtracted from one's tax bill and provides a larger benefit in proportion to tuition and educational expenses paid by parents. In contrast, tax deductions reduce tax liability indirectly by reducing net taxable income, before tax rates are applied.

Embedded within these tax credit programs are important equity issues pertaining to which families benefit most from tax programs and deductions. Proponents argue that tax subsidies will provide all families with the necessary financial means to exercise school choice. Opponents point out that such subsidies typically benefit higher income families who have larger tax bills and whose children may already have entered a private school. This leads to the question of whether tax subsidies broaden choice for more parents or simply provide tax relief to families who already can afford to choose.

Another important point is that tax credits are expanding in other education-related sectors, beyond the new federal tax credit and college IRAs. For example, the federal government and many state legislatures have created tax credits to offset the private cost of child-care and preschool programs. Tax expenditures linked to the federal child-care credit now equal about $3.5 billion annually. The more general Earned Income Tax Credit (EITC), providing refundable cash credits for working-poor families, pays out almost $20 billion to households. In this context, the Congress' present push to enact a K–12 tuition tax credit is not surprising, although the actual effects of these various tax plans on parents' behavior and choices is not well understood (Fuller and Holloway, 1996).

Claims and Assumptions

The claims of tax subsidy proponents are similar to those of voucher proponents. They contend that awarding school aid directly to parents—rather than to local school bureaucracies—will set in motion market pressures that encourage competition among private and public schools, and push educational quality upward. One major difference, however, is that most voucher experiments are now targeting aid to low-income families. Tax credits, in contrast, usually benefit parents with significant tax liabilities, as detailed below. The following claims are advanced by proponents of tuition tax subsidies and contain pivotal assumptions:

Tax subsidies will enhance school choice by making private school tuition more affordable for all parents. This claim assumes that tuition tax subsidies offer an adequate economic incentive to offset the price of private school tuition for all families. That is, the credit allows additional parents to exit their neighborhood school and enter a private school. It assumes that all parents will understand tuition tax laws and will be adequately informed to use increased after-tax income for private schooling.

Tuition tax subsidies increase competition between public and private schools, leading to increased quality and efficiency among all schools. This claim assumes that private schools are effectively luring students from public schools at such a rate that all schools must compete for clients. More liberalized tax benefits could increase the demand for private schooling. But whether private schools will respond by increasing their capacity to educate greater numbers of students is an empirical question. Private schools might respond, instead, by boosting tuition levels and the quality of education, rather than admitting additional students.

Figure 6.1. Tax Credits at a Glance.

Claims and Assumptions	Size and Scope	Empirical Questions
■ Enhance school choice options for all parents by making private school tuition more affordable. **Assumption:** Tuition tax subsidies offer an adequate economic incentive to offset the high price of private school tuition for all families. Parents are well informed about complicated tax breaks and have the means necessary to benefit from tax subsidies. ■ Increase competition among public and private schools, and lead to increased quality and efficiency in all schools. **Assumption:** Private schools have the capacity to serve an influx of new students and will be able to maintain current tuition levels if enrollment increases.	■ **State Level Policies:** **Minnesota:** Allows a tax credit for all families, regardless of income, for educational expenses and private school tuition. A second tax credit is available to families with a yearly income of less than $33,500. **Iowa:** Allows a $100 tax credit for textbook and private school tuition expenses. **Arizona:** Offers a $500 tax credit for contributions to charitable organizations that distribute private school scholarships or grants, as well as a $200 credit for extra-curricular expenses.	■ Which families benefit from tuition tax subsidies? Are subsidies reserved only for middle- and higher-income families that itemize deductions, thus benefiting primarily higher income families? ■ Do tuition tax subsidies influence families to transfer their children to private schools? ■ Will tuition tax subsidies encourage private schools to raise tuition, effectively limiting the policy's intended effects, and benefiting those families whose children are already enrolled in private schools?

Size and Scope

Minnesota. Introduced above, the Minnesota legislature made substantial changes in 1997 to the existing tax subsidy program. The legislature voted to increase existing tax deductions, nearly tripling the deduction amount and creating a more progressive credit component. Minnesota law now allows families with an annual income below $33,500 to take a $1,000 per child ($2,000 per family) education expenses credit. The credit is fully refundable and eligibility does not require families to itemize returns. Families with an annual income greater than $33,500 are eligible for a tuition and expenses deduction in the amount of $1,650 per child in grades K–6 and $2,500 per child in grades 7-12. Expenses qualifying for the tax deduction and credit include: tutoring, educational enrichment programs, academic summer camps, transportation expenses, textbooks and materials used during the normal school day (excluding religious textbooks), and computer equipment. However, the cost of private school tuition can only be offset by a deduction, not by the credit feature of the program.

The effort to increase Minnesota's tax subsidies was led by Governor Arne Carlson, who in 1997 repeatedly vetoed education bills which lacked the expansion of tax benefits. Governor Carlson, a staunch supporter of vouchers, clearly voiced his wish that poor children be afforded the same opportunity to attend private schools that he was given as a child. He vowed to veto any bill that did not include a "package of tax credits and deductions that parents could use to offset the cost of sending their children to private schools" (Bradley, 1998). The new education bill reached Governor Carlson's desk in June of 1997, after being approved by the state legislature, controlled by Democrats. Upon signing the bill, Carlson jubilantly stated that "through the expanded deduction and new education tax credit, all families will have the opportunity to take advantage of additional educational choices" (*School Reform News,* 1997c).

The Governor's efforts were supported by parent organizations and parochial schools such as the Minnesota Catholic Conference. Various polls indicated that the majority of Minnesota voters favored higher tax benefits for private school tuition (*School Reform News,* 1997a; Johnston, 1997). But teacher organizations and the Minnesota School Boards Association strongly opposed the bill, arguing that expanded deductions and new credits would hurt the public schools (MEA, 1997). The estimated cost of the final bill was reduced to $53 million: $38.5 million for the credit and $14.5 million for deductions (Minnesota, 1997c).

Iowa. The state legislature voted to increase the state's existing tuition and textbook subsidy in 1996. A law enacted the following year allowed a deduction of up to $1,000 in textbook and tuition expenses for taxpayers who itemized their returns, and a credit of up to $50 for taxpayers who submitted simple returns. The new tuition tax credit eliminated the deduction component and enacted a tax credit. This doubled the eligible credit to 10% of the first $1,000 (amounting to a maximum of $100 per child) of tuition or textbook expenses paid by parents. All taxpayers with children enrolled in grades K–12 are eligible, regardless of income level. The credit is not refundable and requires a tax liability to reap its benefits.

In 1996, soon after the new program was enacted, the Iowa Catholic Conference launched a new campaign aimed at further increasing the tax credit mechanism. The campaign focused on increasing the maximum credit from $100 to $500 per child in K–8 education and $1,000 per child enrolled in high school. The Catholic Conference's proposal would make the credit refundable for families without a tax liability, extending the credit to blue-collar families who might migrate to parochial schools. Backed by Governor Branstad, the proposal advanced through the legislature during the 1997 session. But legislative debate over the bill's cost resulted in a delay, and the bill was held over for the 1998 session. The final legislation was scaled back to increase the tuition tax credit to a maximum of $250. It does not include language allowing a refundable credit, but does expand credits for public school expenses beyond textbooks.

Arizona. The legislature first passed a tax credit plan in 1997. The legislation established a $500 tax credit for taxpayers who choose to make a charitable cash contribution to an organization that provides "choice scholarships or tuition grants" (vouchers) to

help cover private school expenses. The policy strategy was to encourage capitalization of private voucher programs. The credit is limited to contributions that do not benefit the taxpayer's own child. The law also allows a credit of up to $200 in expenses paid to a public school for classroom materials, such as laboratory materials or extracurricular activities that require a fee, even including music and sports programs.

The bill was strongly supported by Governor Symington who stated that the bill "would provide more choice for Arizona children, because competition is the driving force behind quality in education" (*School Reform News*, 1997b). During legislative debates a fierce battle ensued over the bill's cost. Initial estimates from the Arizona Department of Revenue pegged the program's costs at between $60 and $80 million, including both the private and public school credits. However, more conservative estimates put the cost at $13 million.

In December 1997, five months after the bill was approved, the Arizona Education Association filed a brief challenging the new tax credit on grounds that the new law "violates both the Arizona and U.S. constitutions by creating a means of funneling public tax money into private religious schools" (Schnaiberg, 1997). The brief was accepted, blocking the program that was to go into effect in January 1998. But in January 1999 the Arizona Supreme Court voted 3-2 to uphold the tax credit bill. The court rejected arguments that the tax credit violated constitutional prohibitions of using tax dollars for religious education. The Arizona Education Association is considering an appeal.

National perspective. Legislatures in several other states have entertained similar tax credit proposals, including Illinois, California, and Michigan. In Illinois, both the House and Senate approved a tuition tax credit proposal that would provide a $500 credit for K–12 expenses, including private school tuition. After a year of debate, Governor Jim Edgar, worried over the bill's cost, vetoed the legislation. In Michigan, a widely inclusive tax credit program was proposed by the Mackinac Center for Public Policy in 1997. Soon after announcing the proposal, public opinion polls indicated that the majority of Michigan voters supported education tax credits and would support a constitutional amendment allowing public aid to private schools (Johnson, 1997). But a campaign to place the issue on the November 1998 ballot failed (Mastio, 1998). Under the proposal, all families would ultimately be eligible for a non-refundable credit of up to 80% of private school tuition.

At the federal level, the House passed a measure in fall 1997 which would allowed families to establish tax-free savings accounts to be used for K–12 educational expenses, including home schooling and private school tuition. A similar bill was approved by the Senate in April 1998, yet average tax benefits would initially have been very low, about $30 per family. President Clinton vetoed the bills in the summer of 1998. The Taxpayer Relief Act of 1997 included tax subsidies for higher education. Known as Hope Scholarships, lifetime learning credits, and education IRAs, the plans provide tax breaks for families and are aimed at expanding access to college by making tuition more affordable.

Empirical Questions and Evidence

Which families benefit from tax credits? Do credits advance parental choice? Initial evidence on these basic questions was provided by Darling-Hammond and colleagues (1985) in a study of Minnesota's program on parental behavior. New evidence provided to PACE by the Minnesota and Iowa revenue departments also sheds light on these empirical questions. These data detail which families are benefiting from these state programs and at what cost. These analyses speak to how subsidies affect parental choice, how tuition prices react to tax subsidies, and which families benefit most.

Minnesota Tax Deductions. To identify which families benefit most from tax subsidies, it is necessary to review how credits and deductions are allocated to different types of families. Prior to the expansion of tax benefits, using 1995 data, the state estimated that 89,000 taxpayers in Minnesota filed for an education tax deduction.[15] The figure was not broken down to determine whether deduction expenses were used for private tuition or public school expenses. This analysis indicated that 80% of families filing for the deduction in 1995 had incomes above $40,000 per year (Minnesota, 1997a). These families received $3.1 million of the total $3.6 million allocated in tax benefits.

About 304,000 additional families are expected to participate in the expanded Minnesota program, increasing total participation to more than 375,000. An estimated 50% of the 375,000 families have annual incomes below $40,000, reflecting a more equitable distribution of beneficiaries relative to the earlier plan. Yet 89% of the program's dollar benefits flow to families earning over $40,000: $12.9 million of the $14.5 million in expanded benefits under the new program.

In Minnesota parents who take a deduction for private school expenses will gain a benefit averaging five times greater than families who file for public school expenses.

Cost estimates for the new deduction are also broken down between private and public school students and their families. The figures indicate that an estimated 51,000 families will file for private school expenses, compared to 252,800 filing for public school expenses. Parents who take a deduction for private school expenses will gain a benefit averaging five times greater than families who file for public school expenses ($185 compared to $35)[16].

Darling-Hammond et al. (1985) reached a similar conclusion in their case study of the Minnesota deduction plan. Using information provided by the revenue department for the 1978 and 1980 tax years, they reported that parents' propensity to use the tax deduction increases with income, as does the size of the claim. They concluded that "rather than expanding choice for those parents at the margin, the deduction appears to subsidize the choices of those who have already selected private schools and who can profit from this type of subsidy."

Minnesota tax credits. One could argue that the large number of families projected to benefit from the new tax *credit* would offset the unequal distribution of new *deduction* benefits. It is estimated that $38.5 million dollars in tax credits will be shared by 192,500 families, an average benefit of $200 per family. But regardless of the eligibility status of a low-income family, several hurdles exist that may limit their ability to benefit from the credit. It is unlikely that families with annual incomes of less than $33,500 will have sufficient disposable income for their children's supplemental educational expenses.

Disseminating tax information. Thorough dissemination of eligibility information is an equally important issue that may determine whether eligible taxpayers actually file for these benefits. This issue is especially important for low-income parents who may not be able to afford tax advice or may have limited access to information. Darling-Hammond et al. (1984) found that "knowledge about the deduction appears to be the main factor influencing utilization rates."

Unequal utilization rates for the federal EITC are pertinent to how low-income families will react to the education tax credits. An estimated 20% of low-income taxpayers eligible for the EITC do not file for the credit and this rate varies widely among states and communities (Scholz, 1994). Utilization rates likely depend on the amount and quality of information that is disseminated.

Do tax credits and subsidies encourage families to shift their children to private schools? Predicting how families will react to tax deductions or credits is difficult. Darling-Hammond et al. (1985) report that "the tuition tax deduction, by itself, appears to have little or no effect on parental choice." Instead, parents and private school administrators surveyed for the study reported that direct aid to private schools was more important then the tax deduction. In Minnesota, for example, there are several other state subsidies that provide aid to both private schools and families. The additional subsidies provide funds for student transportation, textbooks, instructional aides, health services, education for LEP children, guidance and counseling services, and subsidized lunch programs. Most private school administrators indicated that without such subsidies, private schools would have to increase tuition.

The transportation subsidy, the most costly to the state, was found to be of particular importance to both parents and private school administrators. Of the parents benefiting from the transportation subsidy, 22% indicated that they would not have chosen a private school had the subsidy not been available. In contrast, when parents were asked about the benefits of the tuition tax subsidy, "98% of those who had ever claimed the deduction said they would still have sent their children to private schools, even in the absence of the deduction." Darling-Hammond et al. (1985) concluded that "the deduction does not appear to be a powerful tool for equalizing school choice-making ability."

An analysis of private school enrollment trends provides further evidence of the influence that tax subsidies might have on parental choices. Data from Iowa reveal that over the last 10 years, private school enrollment has dropped steadily by an average rate of 1% per year, from 47,373 students in 1989 to 43,417 in 1998 (Iowa, 1997). In Minnesota records indicate a similar trend. Minnesota's private school enrollment has decreased slightly, from 85,043 in 1987 to 83,955 in 1996.

A closer look at how private school enrollments responded to creation or expansion of tax subsidies is telling as well. The Minnesota tuition tax deduction, originally enacted in 1956, has been increased twice: in 1976 and in 1984. In 1976, the Minnesota legislature also passed the Minnesota School Aid Bill which provided many of the additional private school subsidies discussed above. A close review of the years prior to and following hikes in the deduction reveal very small changes in private school enrollment.

Although enrollment data is not available for the tax years immediately following 1976, a comparison of enrollment figures from 1975 to 1980 indicates a 1% *drop* in enrollment. Review of enrollment figures following the deduction increase in 1986 (from 1983 to 1985) indicates a subsequent 2% drop in enrollment. If the liberalization of tax benefits is aimed to serve pent-up family demand for private schooling, it has yet to prove its effectiveness.

A review of Iowa's private school enrollments indicates a similar pattern. In 1996 Iowa eliminated an earlier deduction plan and increased the credit from $50 to $100. Yet between 1985 and 1988, during the years surrounding initial implementation of the original tax credit and deduction program, enrollment decreased by 5%. In the years surrounding the 1996 credit increase, private school enrollment decreased by another 2% statewide.

More research is required to understand how parents' behavior is altered by tax incentives. Yet this evidence indicates that tax subsidies appear to exert a minimal effect on parents' decisions to exit public schools and enter private schools. The programs do provide tax relief to parents who have already enrolled their child in a private school; these families are disproportionately middle-class and affluent taxpayers. We do not know whether these tax benefits encourage parents to exit their neighborhood school for another public school.

Part of the question turns on whether private schools and public schools appear to differ much in the eyes of parents. Box 6.1 summarizes evidence on how private schools may differ from their public counterparts.

Do tuition tax subsidies encourage private schools to raise tuition? Evidence describing the effects of tax subsidies on the so-called elasticity of tuition prices is limited, due to limited data on the few state programs that exist. Evidence from Minnesota indicates that a tuition increase would result if public subsidies to private schools declined. Several researchers have estimated the effects of tuition subsidies on tuition increases (Jacobs, 1980b; Augenblick and McGuire, 1982; Longanecker, 1982; Gemello and Osman, 1982). Most conclude that making private school tuition more affordable through tax subsidies would increase the demand for private schooling, and that schools would respond by raising tuition.

Even if only a few additional families enter private schools, higher tuitions ensure that schools capture state tax benefits for currently enrolled children and families. For example, reviewing the implementation of a national tax credit plan, Augenblick and McGuire (1982) explain how "the larger the tax credit, the larger would be the price-response of private schools, since the schools would be able to raise tuitions without adversely affecting the net tuition cost to parents." Similarly, Longanecker (1982) argues that "under a generous tuition tax credit plan, schools would remain a principal beneficiary because they could charge appreciably higher tuitions without increasing the net price to families with children in their schools."

Box 6.1. How Different are Private from Public Schools?

Over 2,700 private elementary and secondary schools currently operate in California, serving about 615,000 children. These schools are typically quite small, averaging fewer than 200 students in elementary schools and about 460 youngsters in private high schools.

Many private schools mainly serve children from affluent families. In 1992 one survey found that over half of all children came from high-income families in 30% of all secular private schools in California. Less than 10% of all private schools report that a program is available for special education students (Diana and Corwin, 1993).

Nationally, Catholic schools have become less Catholic and more affluent over the past 25 years. The old image of inner-city parochial schools serving Italian, Irish, and, most recently, Latino immigrants is becoming less representative of suburban areas where many Catholic schools are now located. Less than one-fifth of all Catholic families send their youngsters to a parochial school. These schools serve only 4% of all families in their dioceses nationwide. The proportion of Catholic enrollment that comes from affluent families has doubled since 1972: one-fifth of all children live in households where the parents earn more than $75,000 annually (Baker and Riordan, 1998). The fact that parochial schools in California serve a more working-class and middle-class clientele may be a function of their heavily Latino enrollment. Catholic enrollments have climbed 60% in Los Angeles County since 1970, in part due to rising Latino population. Just under half of all Catholic school children are Latino in L.A. (O'Connor, 1998).

Average salaries for private school teachers fall one-third below the typical salary of public school teachers. The gap in earning is even wider for school principals. In 1993 the average public school principal earned $54,900, compared to just $32,000 for the mean private school principal. Half of all public school teachers have received a graduate degree, compared to just 37% of all private school teachers. Only 60% of all private school teachers gain health insurance benefits as a part of their compensation package. These figures help to explain why private schooling is sometimes less costly compared to public schools (U.S. Department of Education, 1995).

Debate has been heated in policy circles and universities over whether kids fare better when enrolled in Catholic schools. The achievement advantage appears to be significant, though modest, in most parochial schools. Variability in school quality among private institutions mirrors the widely variable quality of public schools (Willms, 1985).

The most comprehensive study of Catholic school organization, led by University of Chicago professor Anthony Bryk, does offer clear lessons for the public schools. Bryk and colleagues discovered that Catholic schools place a much higher share of students in high academic tracks, exposing students to more challenging curriculum and higher achievement standards, compared to a national sample of public schools. In parochial schools with many teachers who have remained loyal to the school, students do even better. And teachers at Catholic schools report being broadly committed to the social development of children, not just to raising their cognitive skills. Many Catholic schools invite extensive parental involvement and parochial school teachers tend to assign more homework. Both factors contribute to higher student performance. Taken together, these motivating elements of Catholic schools tend to moderate the negative effects of working-class family backgrounds, in contrast to public schools which less often overcome the negative effects of poverty and family background (Bryk, Lee, and Holland 1993).

Differences blurred when a Stanford-Harvard team sampled a broader array of private schools, not just parochial schools. Methods for evaluating teachers and inservice training programs were quite similar, according to Professor Martin Carnoy and colleagues. Teachers in both private and public schools enjoyed a good deal of autonomy in what and how they taught. Parents in sampled private schools did report that they believed these settings were safer than their community public schools. Teachers in private high schools also had more frequently majored in the subjects that they taught—in English, math, and the foreign languages—compared to public school teachers who more frequently were not teaching in their area of specialization (Carnoy et al., 1998).

Another relevant issue is whether private schools have the capacity to respond to increased family demand—the supply response if tax subsidies were to be scaled up. A recent report published by pro-school choice parent organizations in Minnesota reveals that in 1996, private schools were enrolled at 83% of capacity. An estimated 10,180 vacant spaces were available. Considering that an estimated 304,000 families will file for the new tuition tax deduction, private schools will be limited to serving only 3% of all beneficiaries, assuming no expansion of student places. This is a safe assumption, given the lack of gains in marginal demand resulting from earlier boosts in tax subsidies.

Even though researchers have predicted the effects of education tax subsidies on tuition, the issue remains largely unstudied in the context of existing subsidy programs. Whether private tuitions have increased as a result of subsidies, and whether private schools will be able to serve an influx of new students, are questions which require further investigation.

SECTION 7.
Key Findings and Recommendations

Advancing the Benefits of School Choice

Millions of parents nationwide have responded eagerly to the creation of more diverse school options. In California alone, over a half-million children will be participating in public choice programs next year. Many families are welcoming the option to leave their neighborhood school and shop for new options—be they schools that take kids "back to basics," experiment with new pedagogies, or press ethno-centric curricula. There can be little question that a thousand flowers are indeed blossoming as the choice movement gains wider support.

A second major finding is that ensuring meaningful choices involves not only severing the traditional tie between families and their neighborhood schools—it also requires determined support for and design of innovative schools. Simply legislating *parental choice* does not guarantee that wider *institutional options* arise in local communities. The jury is still out on whether options such as charter schools or magnet programs offer alternatives which, on average, are consistently more effective in boosting achievement, relative to regular schools.

Much work remains to better inform parents of their options and to develop solid information about the discrete influence of public and private schools on student achievement. In addition we must devise more sustainable "institution building" strategies if parents are to truly realize a more diverse panoply of school organizations from which to choose. The issue of sustainability is especially pressing for charter and magnet schools which serve low-income families.

The summary and recommendations that follow are motivated by two central questions: How can we advance the benefits of school choice programs? And how can policy help to equalize opportunity for all parents to find more effective schools? Citizens expect to have choices within affluent democratic societies. The pressing issue is *how* to structure options that nurture higher quality schools and distribute opportunities and benefits more fairly.

First, we summarize major lessons learned from the empirical work conducted to date across the five types of school choice. Generalizing from diverse local programs, especially small experiments, is difficult. Local conditions and student composition interact with the character of particular schools. Yet patterns are emerging.

Second, we recommend how major sponsors of choice programs might proceed more carefully in adjusting program designs and evaluating concrete effects. We speak to state governments, school districts, foundations, and individual benefactors who back choice

experiments. We separate two distinct policy agendas: expanding public choice programs versus moving public monies into private and parochial schools.

Finally, we place the choice agenda alongside the second major avenue for school reform: state governments' pursuit of greater accountability for local schools. One emerging issue is whether a state-guided reform strategy—also aiming to make local schools more responsive and effective—will constrain or widen school options.

Major Lessons Learned

Evidence should matter as key actors pursue school choice—be they policy makers, local educators, or parents. In part the movement raises fundamental philosophical questions that empirical research can *not* answer: Should public funds advance private individual interests or balance these against wider public interests? To what extent should professional educators shape the form of schooling available, relative to market demands from diverse parents? How should government respond to the exodus of better educated and involved parents from the public schools, which serves to further stratify a system already marked by unequal resources and teacher quality? Should public monies support parochial schools? These are fundamental questions that will be informed by our basic values, through open and democratic debate.

Still, many of the claims declared by choice advocates—as well as those made by their counterparts who are rallying behind state-guided approaches to reform—*can* be assessed empirically. Do choice programs work locally in the ways envisioned by their proponents? Which families are more likely to participate? What are the benefits and negative effects of unregulated or managed choice programs? On these pivotal questions, empirical work can greatly inform the public discourse. It requires policy makers and educators who can set aside the polemics and study empirical results. It requires a more thoughtful, long-term investment in careful research.

The scarcity of sound evidence on the five forms of choice is troubling. Even when public authorities commission evaluations, they often are under funded or result in research designs that yield questionable results. The former is exemplified by the California legislature's 1997 attempt to evaluate charter schools with an inadequate budget. It yielded rich descriptive data but no hard evidence on achievement effects. The state's 1998 charter bill does call for a more careful, longitudinal assessment. We have detailed several other evaluations, funded by taxpayers, which have yielded data describing charters but little evidence on their effects.

Despite these shortcomings, our review does suggest several important lessons.

Information for parents to judge school quality is scarce. We know that the quality of choice programs—just like neighborhood schools—is highly uneven be they public or private. Exactly how parents learn about the quality of alternative schools and how they weigh certain factors is not well understood. We know that little information is available on the discrete effects of different public schools, including charter and magnet programs. Markets can work to raise the quality of services or products when con-

sumers have sound information about differing producers. But given the current lack of information, parental demand may be driven by school reputations or simply the social-class composition of student bodies.

Given the current lack of information, parental demand may be driven by school reputations or simply the social-class composition of student bodies.

The push for stronger accountability requirements by state governments, as witnessed in California, North Carolina, and Texas, is spurring the development of new data on how the performance of schools and students changes over time. In California the state department of education will have the capacity to track learning gains of individual children once the statewide STAR test settles into a form that matches new curricular guidelines. This then allows a parent or policy maker to focus on *growth* in student achievement, not simply snapshot test scores, of any individual school. In sharp contrast, the new Florida accountability and voucher initiative fails to look at change in student performance, thereby providing no incentives and severe penalties for schools serving low-income families.

The next step is to get this technical information into a user-friendly format for parents and local educators. Who will take the lead in such an effort, even on a pilot basis, remains to be seen. The interests of individual schools, including those with strong reputations and those of mediocre quality, may not be served. This is an interesting problem where the shared public interest in developing better information is in opposition to the individual interests of certain schools. Private firms, like the Edison Project, who do support evaluations (although sometimes refuse to make the data public) may have an interest in developing stronger consumer information.

Alternative schools' actual costs are variable and financing is often unfair. One huge hole in the research literature pertains to the actual operating and capital costs associated with choice programs. Costs should be viewed independently of public spending per pupil, and cost structures likely vary among the differing types of choice. Public spending for charters, open enrollment, and magnet programs remains tied to regular apportionments that states and districts make per pupil. So, children enrolling in a charter school draw the same capitation grant (or "revenue limit") and categorical funding that any other similar student would draw into his or her neighborhood school. Two spending issues have arisen in the few studies reviewed above. First, districts at times withhold normal allocations for participation in pooled financial services, such as health insurance plans for charter school staff or liability insurance programs. This has the net effect of lowering revenues flowing to choice schools which regular schools typically enjoy.

Second, the actual costs of some choice schools may fall below typical public schools. In fact advocates argue that market competition *should* lead to lower costs and more efficient "production" of higher student achievement. One case in point involves the growing number of home school networks that have gained charter school status. Even though students are schooled by their parents, school districts draw full per pupil allocations attached to students attending regular schools. Districts should benefit from incentives when their innovations yield tangible results. But this does not mean that public monies should generate a questionable profit for school authorities.

Other inequities are arising in the finance area. The recent UCLA evaluation of charter schools points out that those located in affluent communities tend to have greater success in raising outside money from corporations, wealthy individuals, and foundations (Wells et al., 1998). Charters in low-income communities, with less access to private funding and no public funding for capital facilities, appear to suffer from quality gaps in the short run and questionable sustainability in the long run. A decades-old tradition in the school finance arena ensures stronger per pupil funding for children from low-income families, including equalization formulae and categorical aid targeted on schools serving impoverished families. Beyond targeting funds on magnet schools, government has yet to focus support of alternative schools in poor and working-class communities.

Public accountability mechanisms are loose and uninformed. One irony continued to arise as we reviewed the empirical literature on school choice: Despite the fact that the entire movement is founded upon the idea that *direct accountability* between parent and school spurs more effective schooling, we found little evidence that alternative schools were striving to meet stronger accountability standards. Part of the blame rests with government agencies, like school boards, which are charged with holding magnet and charter schools accountable in raising student achievement levels. But the schools themselves often engage in symbolic or ritualized reporting practices that rarely answer the bottom-line questions: Are children's learning curves pushed upward, relative to regular public schools?

Federal and state governments are now spending hundreds of millions of dollars on choice programs, including long-running magnet programs, charter schools, open enrollment plans, and a handful of tax credit programs. Yet these central agencies very rarely support careful assessments of whether these experiments are delivering on their promises. Often scarce funding and political constraints fatally limit the validity of the evaluations which are mounted. Below we recommend a long-term evaluation strategy that would encompass alternative forms of choice and yield more definitive evidence on bottom-line effects.

Local schools are rarely learning from choice experiments. Many choice advocates highlight the pressing need to experiment with new forms of schooling and pedagogies. Indeed school administrations, often penned in by regulations and personnel agreements, have been sluggish in offering bold and more effective programs.

But it remains unclear whether the competitive pressures allegedly stemming from choice are encouraging school districts to assess what can be learned from charter or magnet schools. We reviewed Eric Rofes' (1998) study which found that only a small slice of district officials report that they pay much attention to the innovations advanced by new schools. Despite all the interest a decade ago in documenting "best practices," school officials have been slow to engage the choice movement to see what alternative schools are up to. On the other side, educators and parents involved in charter or magnet programs have yet to display much interest in affecting the conventional system.

It remains unclear whether the competitive pressures allegedly stemming from choice are encouraging school districts to assess what can be learned from charter or magnet schools.

Inequities mark which families choose and which do not. Market rules encourage stronger participation by better educated parents who already press their children to do

well in school. This finding has emerged from research on voucher programs and magnet schools. Charter evaluations to date have largely ignored the question. The counter point is that some choice experiments are now targeting benefits on children from low-income families. This does channel aid to families with the least ability to move from economically depressed neighborhoods where dissatisfaction with the public schools is often intense. Certainly it's in the public interest to reward parents who are pressing their youngsters to do well in school and eager to find better schools.

We detailed how untargeted and unregulated choice programs lead to highly unequal participation between well educated parents and low-income families. Massachusetts' statewide open enrollment program and the two state tax credit programs analyzed above suffer from these unfair effects. Florida's new voucher effort will likely punish schools in poor communities even when achievement rises.

When vouchers or magnet school slots are targeted on low-income families, the selection process can still lead to inequities in terms of which families benefit. Typically, better educated, more committed parents apply for the vouchers, relative to a random cross-section of working-class and low-income parents. The Cleveland voucher program essentially provides tax relief for many families who have already chosen to enroll their child in a parochial school. This may be a progressive tax policy, but it doesn't exert the intended effect of encouraging wider school options for families.

We must also weigh the gains made by students participating in choice programs against possible losses sustained by students who remain in regular schools. There are benefits and costs to almost any public policy change. However, the empirical question of whether participating students are better off in terms of achievement, and whether those left behind are worse off, requires future investigation.

Evidence on student achievement is scarce and mixed. The research is clear that parents are motivated by several factors when they exit their neighborhood school. Many parents simply seek a safe, calm, and supportive school environment. Some parents also are attentive to proxies for quality, such as the social class and ethnic composition of students or the appearance of school facilities. Undoubtedly parents who shop the education marketplace study the test scores of students attending various schools. A sizeable industry generates test scores for real estate agents who eagerly try to document the quality of local schools.

Despite the obvious import of the bottom-line effectiveness of magnet, charter, and private schools participating in voucher experiments, few solid evaluations have been conducted of achievement advantages. Even corporate sponsors of voucher experiments and charter schools have been slow to invest in sound assessment of achievement. And public agencies often seem disinterested or lack sufficient capacity to commission sound evaluations.

Recent findings represent important exceptions to this paucity of hard evidence. The most recent evaluation of New York City's voucher program, a careful random assignment experiment, does show modest gaines in mathematics and reading for children

from low-income families who enrolled in a private school (Peterson et al., 1998). Similar, yet limited, findings emerged from Harvard and Princeton studies of the Milwaukee voucher program, as detailed in Section 5. All studies to date, with the exception of the New York study suffer from the possible effects of selection bias, that is, achievement advantages may stem from positive facets of participating families which are confused with unknown discrete effects stemming from the private schools they select. In other cases, it is clear that private schools accepting choice students have lower class sizes, more orderly classrooms, and stronger academic programs than typical public schools. This leads to the question of how public schools might replicate the influential features of private schools, within resource and bureaucratic constraints. We are back to the knowledge transfer that rarely occurs between choice programs and regular schools.

Even less is known about how *public* school choice may or may not yield achievement gains, relative to neighborhood schools. We could not find one solid study on the value-added effects of charter schools. Individual charters have been evaluated and shown to raise the slopes of children's learning curves. Yet broader studies, looking at the variability in charter quality and average achievement effects, have yet to be conducted. And the next question is whether the factors that advantage some charter students could be replicated in a wide range of public schools. The small number of individual charter schools that have demonstrated positive effects often benefit from substantial outside funding, selective admission processes, and enthusiasm among a teaching staff which may or may not be sustainable on a larger scale.

Two sound studies—both studying a widely representative sample of magnet programs—have now been conducted. Both show modest, yet significant learning gains, relative to similar children attending neighborhood schools. These studies are not entirely satisfying since they could not pinpoint what elements of the magnet programs explain the fact that children do better. In many cases teachers are more qualified and hold stronger expertise in their subject areas, given that they were hired to fit the more focused curricular mission of the magnet program. Some magnet programs also receive higher funding per pupil, relative to regular elementary or secondary schools. Much more work remains to figure out why magnets, after two decades of growth, appear to be making a difference.

Recommendations for Strengthening Equitable Forms of Choice

Moving from these basic lessons, we put forward four recommendations for how the choice movement could yield better and more equitable results for children, parents, and educators.

Some supporters of parental choice and alternative schools will limit their work to public school choice. Others will move from the assumption that market pressures will be more influential if public monies support students who elect private schools. Whether your pathway is public or private, the following recommendations urge you to reflect on how to best craft school choice initiatives. PACE's aim is to advance the positive effects of choice, mitigate against inequities, and enrich the amount of evidence which can inform policy debates.

1. Building a consensus about positive pathways. PACE recommends that all advocates of choice programs—legislatures, education departments, school boards, foundations, and individual donors—attempt to reach a consensus about basic principles.

A clear articulation of shared principles could help to de-politicize the debate over choice and build a more effective marketplace: [a] Choice programs and alternative schools should pool resources to honestly assess the discrete achievement effects of their programs. This would better inform parents and perhaps reveal other benefits, such as more democratic participation in school management. [b] Programs should be designed to open options for children attending the most ineffective schools, some of which include mediocre schools situated in middle-class and blue-collar communities. [c] Benefactors should work to support diverse forms of schooling and pedagogical programs, rather than assuming that market finance mechanisms (like vouchers) or parental demand alone will nurture truly innovative schools. [d] Benefactors should set aside an amount equal to 10 percent of their operational financing to soundly evaluate the effectiveness of their programs, perhaps working with independent scholars and research firms.

Advocates of all partisan positions assert that school choice can boost student achievement. But is it possible that choice could constrain the ability of schools to instill the common core of values that binds our nation? Although socialization outcomes are difficult to measure, any long-term evaluation of choice programs should look at their impact on children's values.

2. Developing simple consumer information. PACE recommends that government and foundations come together to develop on a pilot basis consumer information for a set of schools, including each school's discrete ability to boost parental involvement, raise children's learning curves, and lower dropout rates over time. We keep coming back to this essential element of any responsible market. If parents and school funders operate on hunches and rough proxies of school quality, market competition will *not* push average school effectiveness upward. Only when parents know the discrete benefits of the school itself, after removing the prior effects of student background, can they judge the relative quality of alternative schools.

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Similarly, policy and budget choices are being made by governors, legislators, and school board members—pumping billions of public dollars into choice programs—with very little hard evidence on the relative effectiveness of the five forms of choice. Political faith in markets and the hope of improvement presently eclipse a long-term focus on knowledge development.

3. Facing the devil in the details. PACE recommends that those pushing to expand choice programs be attentive to crucial design details. First, programs should be targeted on families who now can afford the fewest school options. Second, children who meet minimum criteria should be selected through a lottery to reduce the danger of further sorting of children into low and high quality schools. Third, sponsoring agencies, including state governments and districts, should assess actual costs of instructional programs, allocate existing categorical funds fairly, and hold alternative schools strictly accountable. As state governments begin to hold districts more accountable for

boosting the performance of neighborhood schools, they should include choice schools to evaluate their claims of superior effectiveness.

The dilemmas around ensuring equitable forms of choice must be confronted. Private and quasi-public schools (including charters) should be monitored carefully to avoid skimming-off the strongest students. Nor is it in the public interest to allow these schools to exclude children with special needs, from those with disabilities to those with behavioral problems. This is already the subject of law suits, and it bedevils researchers as they assess the effectiveness of choice programs that screen applicants. Finally, state governments must determine the sustainability of choice options in low-income urban and rural communities. The laissez-faire philosophy of some charter advocates, for instance, has led them to oppose special support for new schools in poor communities. This will only exacerbate the inequitable effects often observed within unregulated choice programs.

4. Initiating longitudinal tracking of student migration. PACE recommends that state agencies and a consortium of foundations explore the possibility of tracking students who are participating in different choice programs. Over a five to ten year period students in many urban districts will participate in a variety of choice options, including charter schools, magnets, open enrollment, or private voucher initiatives. By systematically tracking these and similar children who remain in neighborhood schools, we could learn much about which families pursue alternative pathways and the learning and socialization effects realized from different choice programs.

The current patchwork of evaluation activities will fail to yield comparative evidence on competing forms of choice and likely fail to disentangle achievement effects stemming from schools or families. Many schools in California, for instance, have participated in the national charter school evaluation. Last year the legislature mandated a new evaluation of charter schools. No serious evaluation of magnet schools or open enrollment programs is currently underway in California. Private contracting for school management is growing throughout the state, involving several charter schools. This fragmented picture could be remedied through a coordinated effort that focuses on students' own pathways, as they enter or avoid a variety of school options.

Two Conflicting Reform Strategies? School Choice in Context

We close with a word of warning, a point raised at the beginning of this report. California, along with many other states, is pushing for greater school-level accountability. State capitals are strengthening achievement expectations, crafting a common curriculum, ending social promotion, even mandating certain pedagogical practices (e.g., teaching exclusively in English). This drift toward state-led reform, while yielding impressive achievement effects in states like North Carolina and Texas, is in direct conflict with basic market principles. Can one gardener ensure that a thousand flowers will blossom? How *centralized* leadership will mesh with school choice and experiments in *radical decentralization* is an intriguing question. Pulling together advocates and policy makers from both sides of this great divide would be a useful first step. How we blend accountability and choice has become a pressing question for our democratic society.

ENDNOTES

[1] The 1950s also witnessed a less rational, more violent form of school choice, namely the attempt by southern states to circumvent the *Brown v. Board of Education* decision which had mandated that districts desegregate their public schools. In response to *Brown*, southern states created "open enrollment" plans, tacitly encouraging white parents to exit desegregated neighborhood schools and enroll in remaining all-white schools. This practice was later struck down in the federal courts (Orfield and Ashkin, 1991).

[2] The findings discussed below are from 46 schools in St. Louis and Cincinnati because the evidence from Nashville is not yet available.

[3] Open enrollment options had existed among some Minnesota school districts since 1985, but the 1987 legislation made open enrollment a statewide option.

[4] Districts operating under court-ordered desegregation plans are not required to honor transfer requests in or out of the district if transfers would upset the racial balance of the district.

[5] It is important to note that transportation costs for those students who do not qualify for free or reduced price lunches may be covered under the Minnesota Education Tax Credit and Deduction Program.

[6] The tuition rate for transferring special education students remained at 100% of per-pupil expenditures.

[7] Financial revisions continued until the legislature passed the Education Reform Act of 1993. It established a "foundation budget, defined as the minimum per-pupil expenditure for a quality education" (Armor and Peiser, 1997). The new policy worked to further equalize the financial burden that low-wealth districts experienced when having to fund students who left their districts.

[8] One-school districts, grade-specific districts, and schools operated by county offices of education are exempt from participation in the intra-district choice program.

[9] Because of the $300 equalization band in state aid for California schools, the issue of tuition reimbursement is not as prevalent as in other states.

[10] As mentioned above, participation in the state's inter-district choice program is very low, and because the Department of Education does not track information from districts, data is unavailable.

[11] The results from this finding were based solely on district administrators' responses to the following question: "Do you feel that students' achievement has improved as a result of open enrollment?" The authors stress such results are "compromised" because so few districts actually monitor academic achievement resulting from open enrollment.

[12] Over the past decade, the number of students who are taught by their parents at home has tripled. This has resulted in millions of dollars in taxpayer funds being used to support instruction that involves few credentialed teachers (Sanchez, 1997).

[13] Cities with Edison schools include: Chula Vista, East Palo Alto, Napa, San Francisco, and West Covina California; Colorado Springs, and Denver, Colorado; Hamden, Connecticut; Washington, DC; Miami, Florida; Wichita, Kansas; Boston and Worcester, Massachusetts; Battle Creek, Detroit, Flint, Lansing, Mount Clemens, and Pontiac, Michigan; Duluth, and Minneapolis, Minnesota; and San Antonio and Sherman, Texas.

[14] In *Mueller v. Allen* (1983) the Court upheld the Minnesota education tax deduction law, ruling that the plan did not violate the Establishment Clause of the First Amendment. The Court explained that the law allowed "aid to parochial schools only as a result of decisions of individual parents rather than directly from the State to the schools themselves" (*Mueller v. Allen*, p.399).

[15] The Minnesota Department of Revenue does not keep records of the exact number of taxpayers that actually take the education tax deduction. Deductions are not coded individually by the Department of Revenue, but rather are recorded as a sum of all deductions. The estimate is based on a random sample of returns where deductions are coded by deduction category and then recorded.

[16] These estimates for Minnesota are consistent with several reports that estimate the distribution of benefits from national tax proposals considered by the Congress. For example, Catterall (1983) concluded that affluent families would disproportionately benefit from federal tax subsidies. Similarly, Jacobs (1980) explains how families with annual incomes greater than $25,000 (in 1980 dollars) are over-represented in the private school population, a rate five times higher than families with an annual income of less than $5,000. According to the Jacobs report, children from families with annual incomes greater than $25,000, "would generate a share of credits roughly twice as large as their representation in the school-aged population."

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