

Expanding Choice in Elementary and Secondary Education

A Report on Rethinking the Federal Role in Education



© Reuters/Jason Reed - U.S. President Obama meets with elementary school children in Silver Spring.

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Education choice exercises a powerful pull on parents of school children: Twenty-four percent report that they moved to their current neighborhood so their children could attend their current school; 15 percent of public school students attend parent-selected rather than district-assigned schools; the charter school and homeschooling sectors have grown from nothing to 2.6 percent and 3 percent of total enrollment respectively; private schools capture 11 percent of enrollment; and virtual schooling is poised for explosive growth. Consistent with these behavioral manifestations of the desire of parents to choose their children's schools, schools of choice consistently generate more positive evaluations from parents than assigned schools.

Arguments for school choice include improving school quality and efficiency through competition among schools for students; enhancing opportunity for students from disadvantaged families who may otherwise be trapped in ineffective schools; and spurring innovation through the greater administrative autonomy likely to exist in schools of choice. Opponents of choice theorize that it will stratify students by family background, result in niche schools that do not convey the nation's common heritage, provide taxpayer support for religious instruction, and nullify the advantages of standardization in curriculum, teacher preparation, and management that accrue when schooling systems are designed to deliver a common educational experience across a universe of schools. Opponents of choice also argue that many traditional public schools perform superbly and that those that do not can be improved through better resource allocation and management.

Advocates and opponents of choice typically lock horns over idealized systems of schooling that do not presently exist in the U.S. Thus choice advocates frequently espouse voucher systems that would be similar to federal Pell grants at the postsecondary level. Parents would be able to choose any school they wished for their child, public or private, with government writing the check. In contrast, advocates for traditional schooling envision a system in which every school is good enough to ensure that families' place of residence and income no longer correlate with the quality of the schools to which their children have access.

It is important to note that both the hopes of the advocates of idealized versions of choice and the fears of the detractors diverge from empirical reality. Charter schools and voucher programs are strongly favored by advocates of choice, but studies of the effects of charter schools on student achievement tend to show that on average charters nationally are performing in the same ballpark as traditional public schools, notwithstanding demonstrations that oversubscribed charter schools in Boston and New York City have generated above average academic gains. Studies of voucher programs, including those in Milwaukee, New York City, Dayton, and the District of Columbia, have found some positive effects, but the differences are not large or across the board. At the same time, concerns that voucher programs or charter schools would deplete the budgets of traditional schools, or result in skimming of the most qualified students, or destroy cultural

cohesion or learning of common academic content have been unrealized.

The corresponding reality of public schooling is that the quality of schools is substantially correlated with geography and parental income and likely to remain so in the foreseeable future. While there have been improvements in performance in some large urban school districts and prospects for more, not even the strongest advocate of traditional public schools can maintain that we are close to a point at which a parent living in a low-income area can consign her child to the closest neighborhood school with confidence that the school will be as good, on average, as any other school within a reasonable geographic radius of her home, much less good enough to secure her child's educational future.

We think the situation on the ground with respect to choice is so different from the idealizations that it warrants a new and different perspective on policy. Choice is most frequently realized within the public sector using the mechanisms of residence, magnet schools, and open enrollment systems, whereas the voucher-like systems applauded by choice advocates and feared by opponents are extremely rare. Further, the charter sector is neither large enough nor sufficiently prepared to go to scale to represent a threat to the traditional system of public schools.

Our policy recommendations are framed within the realities of large variation in the quality of public schools, widespread selection of schools by choice of place of residence, and choice being exercised predominantly within the public sector. These realities offer opportunities for common ground between advocates for choice and advocates for public schools. The goals these communities can share are providing more educational opportunity for children from disadvantaged backgrounds and reducing the number of low performing schools. The mechanisms they can share are: a) a system that affords parents as much choice as possible within the universe of taxpayer supported students and schools, b) portals by which parents can readily access rich information on the performance of schools that is framed to be useful in exercising choice, and c) a funding system that supports the growth of parentally preferred schools and school systems, including virtual education programs.

Specifically, to support the expansion of choice we recommend that:

- choice be exercised through systems in which parents have more options than at present (with the expansion of virtual education programs being a promising means to that end);
- admission into particular schools within choice systems be open;
- selection into oversubscribed schools and programs be determined by lottery (which could be conducted using weights to enhance socioeconomic or geographic balance when that is a desired goal);
- choice systems not include a default (all parents would have to choose);
- all schools supported with public funds within choice systems be subject to the same standards and assessment regimen under which traditional public schools within a state are required to operate in order to provide transparency for choice;

- the popularity of schools as revealed through parental preferences be reflected in funding formulas so that more popular schools garner additional resources to meet enrollment demand; and
- substantially undersubscribed schools be restructured or closed.

In order to ground the exercise of choice in valid and easily used information on the characteristics and performance of education programs, we further recommend that:

- school systems be required to provide timely and relevant information to parents to support choice;
- one or more choice navigation websites be developed with the support of federal funds that would be independent of education providers; and
- school systems be incentivized to link these choice navigation websites to their parental choice systems.

The choice navigation sites would provide substantially more information on the performance of individual education programs than is presently available to parents (via expanded data collections and enhanced investment in an information infrastructure by the federal government); allow parents to create rankings of programs based on the parents' own dimensions of preference; and give parents access to decision support tools that would aid in considering dimensions of the performance of schools and education programs that have been linked empirically to better student outcomes.

We recognize that meaningful choice and competition can be constrained even when nominal choice is available, for example because all the schools in a district are low performing, or because transportation to higher performing schools is unavailable, or because all schools are homogeneous. We also recognize that both nominal and meaningful choice are constrained in school districts with small populations, many of which are rural. We suggest means for enhancing meaningful choice, for example, by having multiple operators of schools within urban areas, expanding inter-district choice, subsidizing transportation costs when parents choose schools out of the neighborhood, stimulating the formation of quality charter schools, and fostering virtual education by a variety of operators, including nationally chartered providers.

To support the enhancement of meaningful school choice, we recommend:

- the development of a metric of the extent of choice at the school district level that would be available to the public and policymakers; and that
- school districts with both low levels of choice *and* low levels of performance be especially encouraged at the federal level to increase their levels of choice.

Our recommendations do not represent advocacy for any particular type of education institution or program. Rather, school choice should be a democratic process that benefits from the informed participation of parents. Our recommendations are suitable to a range of schooling designs, from a school

district in which there are no choices other than district-run public schools, to a system of charter schools, to a division of courses between traditional and virtual schools, to a voucher-based open market in which all providers are on an equal footing, and to many variations in between.

A traditional school district could follow our recommendations by instituting an open enrollment plan at all of its schools, giving additional funding for expansion to oversubscribed schools, closing manifestly unpopular schools, providing transportation to students so that residence does not prevent the exercise of choice, making accredited virtual courses fully count towards graduation, and linking the choice system to a high-quality choice navigation website. Our recommendations are equally applicable to an open market in which public, private, charter, and virtual schools compete on an equal footing for students and the tax revenues that are attached to them.

Our position is that whatever the education delivery design the public has chosen to put in place in a particular school jurisdiction, parents should be afforded the maximum degree of choice, provided with valid information on the performance of the education programs that are available, and have their preferences for education programs reflected in the funding of those programs.

We believe the best evidence suggests that a) parents, including those with low levels of education, can make choices of schools for their children that are sensitive to school performance; b) students from low-income backgrounds benefit from their parents' decision to send them to higher performing schools; c) the form in which information is presented to parents has important effects on their choice of schools; and d) parental choice can create a competitive market for better schools if the growth of preferred schools and the closure or restructuring of unpopular schools is provided for.

Evidence also suggests that there will be substantial variation in the impact of choice systems on parental behavior, student outcomes, and competition among schools depending on the design of the choice systems and the education options that are available. Poorly designed systems may create greater stratification of schools, reduce educational opportunity for disadvantaged students, and have no systemic competitive effects. Thus, the power of choice to increase educational achievement and opportunity is very much in the details of the design and implementation of choice systems. Because the knowledge base on which to construct school choice systems is far from mature, our final recommendation is that:

the federal role in advancing choice be carried out in a learning context – thoughtful variation in the design of choice systems should be encouraged, systematic data on effects should be collected, and redesign should follow naturally from what has been learned.

Expanding Choice in Elementary and Secondary Education

Education choice exercises a powerful pull on parents of school children: Twenty-four percent of parents report that they moved to their current neighborhood so their children could attend their current school;¹ 15 percent of public school students attend parent-selected rather than district-assigned schools;² the charter school and homeschooling sectors have grown from nothing to 2.6 percent³ and 3 percent⁴ of total enrollment respectively; private schools capture 11 percent of enrollment;⁵ and virtual schooling is poised for explosive growth. Consistent with these behavioral manifestations of the desire of parents to choose their children's schools, schools of choice consistently generate more positive evaluations from parents than assigned schools.⁶

Making Choice More Available

Rationales for School Choice

Schools of choice consistently generate more positive evaluations from parents than assigned schools.

Several rationales have been offered in support of the view that parents should be given greater opportunities to choose their children's schools. The economic theory, first offered by Milton Friedman, proposes that district schools with exclusive rights to provide education within a particular territorial domain operate as inefficiently as do most monopolistic enterprises.⁷ Administrators have few incentives to identify ways of enhancing their product or providing it at a lower cost. But if parents are given publicly funded vouchers that cover the tuition at the school of their choice, schools will be forced to compete for paying customers. Levels of productivity, efficiency, and consumer satisfaction will increase in education, just as they have in industries governed by the market economy.

The social capital theory, initially proposed by James Coleman and his colleagues, says that schools of choice (in their case, Catholic schools) form supporting communities among students, parents and teachers that generate social capital – networks of educationally productive relationships – that enhance student learning.⁸ As Bryk, Lee, and Holland put it: “Catholic schools benefit from a network of social relations, characterized by trust, that constitute a form of ‘social capital.’ ... Trust accrues because school participants, both students and faculty, choose to be there.”⁹

A third rationale for school choice, innovation, links choice to a greater variety in providers of education and designs for education programs. This variety encourages innovation in a way that a monopolistic system in which students are assigned to schools would not. For example, Chubb and Moe have argued that schools run by districts, and thus under the control of elected officials, do not have the independence and autonomy to develop and sustain an educational mission to the degree of private schools.¹⁰ Advocates for charter schools point to the capacity of such schools to be laboratories for innovations, such as restructured school calendars, that could eventually serve as widespread reforms.¹¹

A fourth rationale, social equity, is based on the belief, frequently encoded in state constitutions and statutes, that all children should have access to comparable public education resources. In other words, the quality of public schools should not vary substantially based on the socioeconomic status of the families they serve. That 70 percent to 80 percent of the variance in student achievement between schools can be accounted for by the average socioeconomic status of the students served by those schools suggests that school quality is far from independent of family income and background.^{12,13} For example, on the resource side, there is substantial evidence that schools that serve the lowest income neighborhoods receive a disproportionate share of inexperienced teachers.^{14,15} Beginning teachers are paid less than more experienced teachers. Since teacher salaries are the largest part of school budgets this means that such schools receive much less funding per student than schools with more experienced teachers in higher income neighborhoods.

Choice creates greater immediate educational opportunity for students who live in neighborhoods served by weak schools.

That schools vary substantially in quality with consequences for children is an intuition shared by parents who shop for schools by choice of residence, and it is reflected in the sensitivity of housing values to publically available information on school performance.¹⁶ Based on studies of the public school choice system in the Charlotte-Mecklenburg school district in North Carolina, parents are right to be concerned about where they live when children are assigned to schools based on their neighborhood of residence. When court-ordered school busing came to an end in that district, it instituted a district-wide choice program that allowed parents to express their preferences for their child's school assignment. Many schools had more students seeking admission than slots. In those cases a lottery was used to determine who gained admission. Students from low performing school zones who won a lottery to attend a higher performing school benefitted significantly compared to students who lost the lottery. For example, males were 13 percentage points more likely to graduate from high school¹⁷ and significantly less likely to have been arrested or incarcerated.¹⁸ In light of such data, one can support choice because it creates greater immediate educational opportunity for students who live in neighborhoods served by weak schools. These students will be predominately from low-income and minority backgrounds.

The economic, social capital, and innovation theories of choice anticipate beneficial consequences from choice for students in general. For the economist, competition provides incentives to improve all schools. For the social capital theorist, schools of choice create social networks that serve all students. For the advocates of innovation, having multiple autonomous providers of education programs allows new and potentially more productive models of education to be developed and tested under fire. In contrast, the equity rationale for choice expects the benefits to flow primarily to disadvantaged students – schools may not get better but access to them is fairer. These positions can co-exist in terms of support for enhanced parental choice, but they have different implications for the design of choice systems and their long-term consequences.

Concerns about School Choice

Consistent with the equity position, other scholars also expect uneven consequences for students when choice is introduced. However, they fear that the effects will be negative.^{19,20,21,22} In their view, choice stratifies students by ability and family background. The more talented students, hailing from the better educated, more engaged families, will enjoy advanced educational opportunities in restricted settings. Those left behind will see their educational experience spiral downwards. Competition can be expected to spur disparity, not improvement.

It is also feared that in a choice-based system schools will provide highly differentiated curricula as each identifies a particular niche in the marketplace. At risk are the nation's common cultural and political heritage and its sense of commitment to democratic institutions. Racial, ethnic, and religious divisions can be expected to harden, as schools cater to families from particular cultural backgrounds.²³

Discussions of school choice typically consider the long-term consequences of a more or less unregulated system of choice that has persisted over long periods of time. For example, Friedman's economic theory assumes that competition will gradually lead to more productive schools, as good schools expand and weak schools are winnowed out. Those who fear educational disparities will emerge expect that in the long run the best – or most prestigious – schools will be able to select the highest quality or the wealthiest students, much as happens in higher education today.

Current Forms of School Choice²⁴

Can any of these long-term consequences be detected in school choice systems now operative? Even though no full-scale school choice program has been put in place anywhere in the U.S., school choices have expanded noticeably in the past 20 years, giving researchers an opportunity to obtain some information as to the positive and negative consequences of expanding choice opportunities. The types of school choice now available include choice among traditional public schools within districts (intra-district choice), choice between school districts (inter-district choice), charter schools, school vouchers, virtual schools, and, finally, the oldest and most pervasive form of school choice – choice of school when selecting one's residence.

Residential choice

Residential choice has operated at scale for more than a century, so it is now possible to estimate its consequences with a fair degree of precision. Admittedly, residential selection is a crude form of school choice, as the choice of school is limited by other considerations that families must keep in mind when selecting a place of residence, such as the location of the workplaces of the parents. Also, changing residences is expensive in time and money, making it difficult to change

schools if families are dissatisfied with their initial choice. Surveys indicate that 24 percent of all parents say they considered the quality of the school serving their neighborhood when choosing their place of residence,²⁵ and a number of studies show that school quality has an impact on housing prices, independent of other factors.²⁶ Residence has an impact on student learning, at least for students who live in neighborhoods with low performing schools, as demonstrate by the previously described research on choice lotteries in Charlotte-Mecklenburg.²⁷ This supports the equity argument for choice. It may be the case that students perform better on tests of achievement in metropolitan areas that have more choice by virtue of the existence of smaller and more numerous school districts,²⁸ although this conclusion has been challenged.²⁹

Residential selection is almost certainly the most inequitable form of school choice. Average student performance at a school is highly correlated with the income and educational levels of parents living within school attendance boundaries.^{30,31} The relationship is due in part to instruction children are receiving directly from their parents (as is indicated by the strong correlation between family background and student performance within schools). But the correlation between school performance and neighborhood characteristics is almost certainly affected by school factors as well, such as teacher quality, peer group quality, and the tax base for the school. In short, there is a great deal of evidence that residentially based school choice stratifies the educational experience along socioeconomic and racial lines.

Magnet schools and other forms of intra-district choice

Many school systems seek to ameliorate the inequalities associated with residential selection by allowing families to choose schools outside their immediate attendance boundary. Magnet schools have been created, each with their own curricular emphasis, as a way of attracting clientele from outside the local community. The purpose of most magnet school choice programs has been to create more balanced enrollment along racial lines rather than to enhance competition among schools. In some cases, quotas have been set at each school so that an appropriate racial balance is achieved. In other cases, the racial balance at a school is set to remain close to the average balance in the district as a whole. In 2006, the United States Supreme Court, in *Parents Involved in Community Schools v. Seattle School District No. 1*,³² ruled such racial balance plans unconstitutional on the grounds that they discriminated among students on the basis of race. The implications of that decision for intra-district choice programs have yet to become fully apparent, but before the decision was handed down, magnet schools numbered over 5000, and within district racial segregation had fallen substantially, suggesting that district boards were using choice schemes to foster pupil assignments that crossed traditional neighborhood boundaries.³³ In Milwaukee, Wisconsin, for example, school busing programs are citywide, and in the Raleigh, North Carolina metropolitan area, district-wide busing is being used to enhance

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socioeconomic integration.^{34,35}

Intra-district school choice programs have become so generally accepted that it was the one form of choice that Congress could agree upon when it passed the No Child Left Behind reauthorization of the Elementary and Secondary Education Act (ESEA) in 2001. Students at schools that fail to make “Adequate Yearly Progress (AYP)” toward full proficiency by the year 2014 for two consecutive years are to be given the choice of any other school in the district.

The intra-district transfer option in ESEA turns out to be more promise than reality. It has been utilized by only 1 percent of the more than 5 million students who are eligible. The very low uptake rate is thought to be a result of lack of parental knowledge (only 27 percent report that they received notification of their right to transfer), lack of availability of other public schools that are not also identified as in need of improvement, late notification of eligibility, Byzantine procedures for exercising choice, and district discouragement in the form of communications intended to keep children in their assigned schools.³⁶

From the perspective of the economic model of choice, the school productivity benefits that might flow from intra-district choice programs are constrained by the lack of financial consequences for schools that are unpopular with parents or lose enrollment. Public school districts rarely allow funds to follow children or provide over-subscribed schools extra funds to expand. Instead, the staff of schools that lose enrollment may be shielded in a number of ways from competitive pressures. At the extreme they may operate under hold harmless provisions that have the perverse effect of generating smaller class sizes for teachers and more resources for administrators as enrollment declines. In districts in which school staff are tenured or have bargained job security, the effects of choice would be limited to staff being reassigned within the district if their school was closed because of loss of enrollment. Thus, the competitive effects of choice are muted in most intra-district choice programs. It is possible, however, as we later recommend, to increase competitive effects by tying school funding more closely to parental preferences that are revealed through parent choice systems, and by closing or restructuring schools that are manifestly unpopular or under-enrolled.

Recent high-quality evidence from studies of the intra-district choice program in Charlotte-Mecklenburg indicates strong impacts of access to higher performing schools for students whose neighborhood schools are low performing.³⁷ The effects are particularly strong for black males. However, many district choice programs do not use open enrollment and lotteries to determine school admission, as is the case in Charlotte-Mecklenburg as well as in New York City, Boston, and a few other districts for specialized schools. Instead, they allow schools to select students based on academic ability. Others facilitate self-selection by the most astute parents by admitting students on a first-come, first-serve basis. Even when the choice system is formally open enrollment, the tendency for better educated parents to be more strategic in using the system may result in greater school stratification.³⁸ Thus from the point of view of equity, intra-district school choice

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programs have to be carefully designed to achieve their intended goals. This is true as well for the realization of Friedman-like competitive effects. For example, in the early years of the school choice program in Charlotte-Mecklenburg the district chose to expand popular schools to handle the demand for admission from parents, and choice was available annually. In later years, fixed caps were placed on popular schools and choice was limited to major transition points, e.g., between middle school and high school. The original system provided more access to better schools for disadvantaged students and consequences for both popular and unpopular schools. The later system limited the availability of choice substantially and lessened competition among schools for students.

Inter-district choice

If choices among schools within districts have been carried out on a fairly wide scale, the same cannot be said for choice opportunities among public schools involving more than one school district. Plaintiffs filed lawsuits compelling districts to require racial integration on a metropolitan-wide scale during the 1960s, but the U.S. Supreme Court, in *Milliken v. Bradley*,³⁹ ruled de facto segregation – accidental racial separation induced by the private choices of neighborhoods made by individuals – was beyond judicial scrutiny. The majority ruled that since there was no inter-district violation of the equal protection clause of the Constitution, there was no constitutional basis for court-ordered metropolitan-wide desegregation. The amount of inter-district racial segregation has increased substantially since *Milliken* was decided.⁴⁰ White families have left central cities for the surrounding, predominantly white, suburban school districts.

A number of school districts in New York, Massachusetts, Missouri, California, Connecticut, Indiana, Minnesota, Wisconsin, and Nebraska have nonetheless fostered racial integration by participating in voluntary inter-district plans.⁴¹ One close observer⁴² estimates that approximately 500,000 students are participating (roughly one percent of the public-school population) in such programs. Inasmuch as district participation is voluntary, the terms and conditions under which it takes place vary from one setting to the next. In Rochester, New York, for instance, it appears that students are carefully selected before being admitted to the program so as to minimize friction between the sending and receiving school districts.⁴³ Other inter-district choice programs that do not have an explicitly integrative focus appear to attract the participation of more advantaged students.⁴⁴

Research on the effects of inter-district programs is limited. An older study of Hartford Project Concern, now called Hartford Open Choice, randomly selected elementary school students from predominately non-white Hartford schools to either: attend a suburban school with support services, attend a suburban school without support services, attend a Hartford school with support services, or attend a Hartford school without support services. Parents were able to choose whether to accept the offer of transfer of their child to a suburban school and were encouraged to do so by the program administrators. Students, particularly in the

lower grades, benefitted academically from being placed in the suburban schools.⁴⁵ There are suggestions that the benefits were larger for students who were in the suburban setting the longest. Another randomized experiment, "Moving to Opportunity," involved a change in both the school and the residence of low-income families, who were given housing vouchers. Researchers found minimal effects on academic achievement, but this is not a study of inter-district choice in that most of the recipients of vouchers moved to other neighborhoods within the same large urban school district in which they originally resided.⁴⁶

Although the research on the effects of inter-district choice is limited, we are willing to venture that the findings from other research demonstrating that low-income families benefit academically from placement in higher performing schools can be generalized to choice across district boundaries. It should not make a difference whether the higher performing school is a traditional public school in a far corner of same district in which the family resides, as in Charlotte-Mecklenburg, a charter school, a private school being attended under a voucher, a virtual school, or a traditional public school across a district boundary. The principle is that it is better to be in a good school than a bad one.

Charter schools

Since Minnesota authorized the first charter in 1989, charter schools have gradually acquired a growing acceptance and popularity. Forty-one states have authorized charters, over 5,000 charter schools have been established, and over one million students, approximately 2.6 percent of the public school population, are attending charter schools.⁴⁷

Charters have an ambiguous pedagogical identity. The best known of the paternalistic charter schools, Knowledge is Power Program (KIPP), the Seed School, and Uncommon Schools, created highly-structured routines with uniforms, strict rules, and numerous drills familiar to earlier generations.^{48,49} Charters take many other forms—single sex schools, schools for the performing arts, schools for science and technology, bilingual schools, schools for the disabled, schools for drop-outs, and virtual schools where learning takes place online.

Charter schools tend to attract a disproportionate number of students eligible for free or reduced lunch as well as minority students, especially African Americans. Initial test scores of students at charter schools are usually well below average.

The variety of charter schools is consistent with their original mission to stimulate new thinking about ways to organize a school and deliver a curriculum. But that same variety makes it particularly difficult to draw strong conclusions about charter school effectiveness relative to that of their school district counterparts.

Research findings on charter effectiveness vary widely, depending on the schools studied and the research methodology employed. A few studies have estimated charter school effects using a randomized control trial (RCT), the “gold

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standard” for measuring program impacts in educational research. All of these RCTs have found positive charter school impacts on student achievement.^{50,51,52} But these studies are necessarily limited by the fact that the schools they study are those that are oversubscribed. A larger number of studies have used matching analyses, which make strong assumptions about the comparability of students at charter and district schools. Many of the matching studies show no effects, or negative impacts or positive impacts for some but not all students or grades.^{53,54,55} In contrast, a matching study of charter school students in New York City found strong positive effects, consistent with those reported from a RCT involving mostly the same schools.⁵⁶ All of the matching studies compared students who changed from regular public schools to charter schools to similar students who remained in the public schools. Critics of these studies point out that students who change schools differ in important respects from those who do not, even though they may appear to be similar in terms of gender, ethnicity, and income. They also note that the very act of changing schools can produce short-term negative effects on learning.

Given the diversity in schools that are organized as charters and the tendency for the performance of charter schools to look similar to the performance of regular public schools when compared in aggregate, we believe the focus with respect to student achievement and parental choice has to be narrower than traditional public school vs. charter school – there are good, bad, and mediocre schools in both sectors. Going forward, parents will need to consider information on the performance of individual schools to make an informed choice.

Charters probably have had less of an impact on district schools than supporters have hoped or opponents have feared. Nationwide, charters serve no more than 3 percent of the public-school population, hardly enough market share to constitute formidable competition. Despite the wide-ranging pedagogy in charter schools, there is little evidence that district schools have made systematic efforts to learn from the charter schools in order to improve their own operations. In the New York City area, for example, a well-designed charter study suggests – though it does not quite establish – that schools with a longer school year have higher impacts on student achievement.⁵⁷ Yet the New York City school system has not made any effort to extend its own school year, probably because of the financial and collective bargaining challenges that would accompany any such policy innovation.

Charter schools have a student population that is disproportionately disadvantaged and minority in background, and little evidence has emerged that charters systematically skim the “best and the brightest” from the public schools.^{58,59}

Fiscally, charters generally operate on a tighter budget than district schools do, receiving from the government only about 80 percent of the per pupil amount received by district schools.^{60,61} In many states, local districts can spread their own locally generated tax dollars across fewer students if enrollment declines take

place.

In sum, charter schools have been experiencing steady, if decidedly less than exponential, growth in the 20 years since the idea was launched. But their impact is still limited, and their quality is mixed. An expansion of the charter school sector offers more choice to parents, but the parental motive of getting their children into better schools will not be served unless charter schools are of high quality. Nor will the potential for charter schools to create improvements in regular public schools through competition be realized unless funding equitably follows students to charter schools and regular public schools have the flexibility to innovate in response to competition.

School vouchers

School vouchers are the canonical form of school choice, as they provide the maximum in choice and competition in education. Although no voucher initiative in the U.S. has yet approximated the full-scale plan Friedman advocated, voucher and voucher-like programs have been enacted by a number of states and by Congress. All of the programs in the U.S. have focused on disadvantaged populations by giving to a disadvantaged group a voucher that will pay a part or all of the cost of attending a private school.

The nation's first urban school voucher program was begun in Milwaukee, Wisconsin in 1990. Although initially a tiny program limited to around 1,000 students from low-income families who were given a small voucher limited to attendance at non-sectarian private schools, the program was later expanded to include 120 schools, a majority of them with a religious affiliation. Student enrollment expanded to over 19,000 students, and the maximum size of the voucher increased from the initial \$2,500 in 1990 to \$6,607 in 2009.⁶² Although a 22,500 limit is placed on the number of students that may enroll in the program, the Milwaukee voucher program still provides the best available evidence of the potential impact of a large-scale voucher program of the kind that Friedman envisioned.

The voucher idea has had only limited success in other state and federal policy contexts. In 1996, the Ohio state legislature approved a voucher program for low-income students in Cleveland, which provided the basis for the landmark U.S. Supreme Court decision, *Zelman v. Simmons-Harris*.⁶³ The Court found the program did not violate the establishment of religion clause of the First Amendment of the U.S. Constitution, and Ohio later expanded the program to include a number of other Ohio cities that had very low performing school systems. In 1999, vouchers were offered in Florida to students at schools that twice failed to meet proficiency standards set by the state's accountability law. The program remained in effect until 2006 when the state Supreme Court found it violated the Florida State Constitution's uniform education provision.⁶⁴ A voucher initiative was passed by the Colorado legislature in 2003, but it, too, was declared unconstitutional by a state court, which said that all Colorado public schools must

be under school board control.⁶⁵ Other attempts to establish voucher programs for low-income families have failed to gain legislative enactment or have been rejected in statewide referenda. Congress in 2004 approved such a program for the District of Columbia, though funding was terminated in 2009 for all students other than those already matriculated in the program.⁶⁶ So, as of 2010, voucher programs serving low-income applicants are limited to Milwaukee, a few cities in Ohio, and the District of Columbia.

The voucher idea has nonetheless spawned a variety of related programs. In Florida vouchers are available to families with children in need of special education, and 20,500 students currently participate in that program.⁶⁷ Similar programs have been approved in Georgia⁶⁸ and Utah.⁶⁹

Florida has also established a program whereby corporations and individuals may receive a tax credit for contributions to a foundation that provides private-school scholarships to students from low-income families. Over 24,000 students are participating in the Florida tax credit program.⁷⁰ Variations on this kind of program have been established in Pennsylvania, Illinois, Indiana, Arizona, Rhode Island, and Minnesota.⁷¹ Altogether, it is estimated that approximately 160,000 students nationwide are participating in either a school voucher program or receive a fellowship funded by tax credits that enable them to attend a private school.⁷²

Given the small size of most voucher programs, one cannot draw strong conclusions about how they would operate at scale. But impacts on participants in these small programs have been estimated in a number of randomized control trials. The congressionally-mandated evaluation of the D. C. voucher program, for example, found that after three years students who had the voucher opportunity performed higher in reading, though no statistically significant impact on math performance was identified.⁷³ A study of privately funded voucher programs in New York City, Washington, D. C., and Dayton, Ohio detected positive school sector impacts on the student achievement of African American students but not for white or Hispanic students.⁷⁴ Negative impacts on social cohesion have yet to be identified; on the contrary, most evaluations indicate positive consequences of choice interventions on social engagement and political involvement.^{75,76}

Given its size and longevity, the impacts of the Milwaukee voucher program are of particular interest. Unfortunately, the only information from a randomized trial is from one conducted during the first four years of the program, when it was still limited to a few secular schools, from which few generalizations can be made. Although impacts in math and reading were in the positive direction, they were small.^{77,78,79} More recent studies, using less strong methodologies, have found no detectable impact of the program on participant test scores, but they have found that students attending private schools are more likely to graduate from high school.^{80,81,82} The studies were not designed to evaluate whether there have been systemic changes to the school system as a result of the introduction of a choice system (i.e., all schools are performing better as the result of choice.) As for fiscal

impacts, it does not appear that the voucher program drains the public schools of its most advantaged students. Nor has the Milwaukee public school district suffered financially. Most budgetary analyses conclude that the district has received at least as much in revenue per pupil as it would have received had the voucher program not been established.⁸³

Studies of voucher systems in other countries indicate that intended effects on equity of access to good schools and student achievement can be defeated by pervasive self-selection. Chile implemented a Friedman-like voucher system in 1981 which, unlike the U.S. voucher programs, provided vouchers to any student who wished to attend a private school. The voucher program increased private school enrollment from 20 percent to 40 percent within the first seven years. However, student achievement did not rise. Researchers attributed the lack of effect to increased social stratification due to middle-class students being much more likely than poor students to leave the public schools for private schools.⁸⁴ This is evidence for one of the negative consequences that opponents of choice have posited. The Chilean experiment illustrates that choice systems have to be carefully designed to achieve greater social equity if that is their goal. Solely introducing choice without supports for parental decision making may generate unintended negative consequences.

*Virtual education*⁸⁵

According to a 2008 report by the North American Council for Online Learning,⁸⁶ twenty-five states had statewide or state-led virtual education programs, and 173 virtual charter schools had established themselves. The number of K-12 students involved with virtual education was estimated at over a million, a 47 percent increase over that number in 2006.⁸⁷ If the numbers and trajectory are accurate, virtual enrollments will soon rival those of charter schools. One (admittedly speculative) projection has half the high school courses in 2019 being taught online.⁸⁸

Traditional forms of schooling are labor intensive and offer few economies of scale. To the extent that financial resources are critical to education outcomes, the only way to improve the U.S. education system in its current configuration is to spend more. Yet we currently spend more per student on education than any other country in the world, and the appetite for every increasing levels of expenditure has been dampened by changing demographics and ballooning government deficits. The monies that can be reasonably anticipated in the next decade or two will hardly be enough to keep the quality of the system, as currently designed, from eroding. The game changer for education productivity will have to be technology, both in lowering labor costs and in introducing competitive pressures to improve traditional schooling.

Virtual education today. Even now, online education at the college level is proving itself competitive with the classroom experience. According to a survey of colleges and universities, nearly 3.5 million students in 2006, about 20 percent of all

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students in post-secondary schools and twice the number five years previously, were taking at least one course online – that is, a course where at least 80 percent of course content is provided over the internet.⁸⁹ Growth is particularly rapid – an average yearly compound growth rate of 24 percent – in junior and community colleges where most students are pursuing a two-year program and are usually commuting to school either from their homes or job sites.

Most colleges and universities are not drawing artificial distinctions between their online and on-site student bodies. Instead, students can choose to mix the two to suit their individual needs and predispositions. College and university administrators that provide a variety of good quality courses online gain a competitive advantage over those that do not. Among other things, they can extend their reach into geographical markets previously unavailable to them.

In K-12 education, virtual education is developing more slowly, but policy makers in nearly every state are intrigued by its potential. For one thing, the cost per student of virtual education is, in the long run, almost certainly less than that provided in brick-and-mortar classrooms. In its assessment of one of the country's leading virtual schools, Florida Virtual School (FLVS), Florida TaxWatch, a private foundation, concluded in 2007 that the state taxpayer saved money as a result of its operations, because FLVS state funding was less per pupil and the school received no funds for capital purposes. Even though it mainly served a secondary school population, which generally is more expensive to teach than are those in elementary school, its average per pupil operating costs in 2006 were about \$5,243 as compared to about \$6,291 in schools statewide.⁹⁰ Other virtual schools are yielding higher cost savings. According to one survey of 20 such schools in 14 states, the average per pupil cost of online learning in 2008 was \$4,300 as compared to an average per-pupil cost of \$9,100 at a traditional public school in 2006.⁹¹

Of course, reduced costs means little if the quality of the educational experience is adversely affected. On this topic, little definite is known, as high-quality RCT evaluations have not been conducted. The studies that have been carried out often find little difference in the amount learned by students online and that learned by students in classrooms. FLVS students score higher on AP exams as well as the state's accountability examination, but not enough is known to tell whether that is due to the instruction or the type of student who enrolls at FLVS.^{92,93} There are also equity concerns related to access to virtual education. Students must have access to a computer with the required software and a faster internet connection, which are not available to all students.⁹⁴

Even if online education is not as good as the best classroom instruction, it is almost certainly better than very bad education or none at all. And there are many situations where bad or nothing is the only alternative. Consider the talented person in a rural community who would like to take an Advanced Placement course in physics, chemistry, or trigonometry. Few students at the school want to take the course, and the school district has decided it cannot afford – probably cannot even find – a capable teacher for esoteric subjects only a few will take. For

that young person, online education is better than nothing. Much the same can be said for the high-school dropout, who has come to hate his local school but still wants to get a high school diploma. Online education may be the only kind of education realistically available for a person with a physical or emotional disability that precludes regular attendance in a classroom.

Obviously FLVS and other virtual schools increase choice, can serve an especially important function for under-served populations, and may save on instructional costs. What about their potential to increase quality and productivity within traditional schools? The funding model is likely to play an important role. In Florida, a student who takes a high school course through FLVS in lieu of a course credit through the local high school generates income for FLVS and a loss of revenue for the local school district. Theoretically, there is a strong incentive for the local district and high school to compete with FLVS by making the brick and mortar experience superior to the online experience. In contrast, a funding model that holds districts harmless for the loss of student instructional hours to online courses would not generate competition. And a model in which districts contract for online courses or create their own would tend to create incentives around cost savings but not necessarily around quality.

No evidence is available on the functions of different forms of control over and funding of virtual education for quality and productivity. It will be important going forward to conceptualize systems that are likely to create the most pressure for improvements in quality and productivity, and to carefully assess their results.

We see local and, to a lesser but real extent, state control of the certification of virtual schooling as a serious impediment to the rapid growth of high-quality virtual education and to the positive competitive pressure it can bring to bear on traditional schooling. The development costs for virtual courseware that takes full advantage of the newest technologies and advances in knowledge in cognitive science and instruction are very high—much higher than the costs for traditional textbooks and instructional materials. These development costs can only be rationalized if the potential market for the resulting product is large. But under current K-12 models of virtual education, a state or, more typically, the local school district is able to determine whether the virtual schooling meets its standards and is acceptable as a credit towards graduation. At the local district level, this places the bureaucracy that may be most disrupted by the introduction of virtual education in the position of gatekeeper. These same local self-interests can easily manifest themselves at the state level through routine political processes.

To address this challenge, K-12 virtual public education could benefit from the model of accreditation that exists in higher education. Post-secondary institutions that qualify for federal student aid and other subsidies must be accredited by regional or national bodies that themselves must be recognized by the federal government. The accrediting bodies (e.g., the New England Association of Schools and Colleges, the Accrediting Council for Independent Colleges and Schools) are membership organizations that set their own standards within broad guidelines

K-12 virtual public education could benefit from the model of accreditation that exists in higher education.

set by the U.S. Department of Education with the involvement of the National Advisory Committee on Institutional Quality and Integrity, appointed by the House, the Senate, and the Secretary of Education. Once an institution is accredited, students residing anywhere can take coursework from that institution with the benefit of federal and often state student aid, and there are increasing pressures to make course credit transferrable among those institutions.

Recommendations for Expanding Choice and Competition

As described above, there are several models and forms for providing K-12 students with an education at public expense, from traditional neighborhood public schools to virtual schools chartered nationally. We do not advocate for a particular model or form for the provision of education. Indeed most evidence suggests substantial variability in performance among schools and programs within a given category of schooling. Instead we advocate for parents having the maximum degree of choice among education programs and schools. Further, we recommend that communities that are failing to provide parents with meaningful choice through the traditional public school system, i.e., choice that includes successful and accessible schools, should expand choice to include multiple providers, for example charter schools and virtual schools. With the presence of multiple providers, we also recommend that all schools supported with public funds be subject to the same standards, assessment, and accountability system under which traditional public schools within a state are required to operate. The requirement would provide additional transparency with respect to school performance and support informed choice by parents.

We recommend that funding mechanisms be changed to provide more competition among the education programs and schools from which parents can choose. The current funding system often rewards poor performing, undersubscribed schools instead of encouraging the expansion of popular schools. The funding problem permeates intra-district choice programs such that enrollment in over-subscribed schools is capped and those schools receive no extra funds to expand. When combined with first-come, first-served policies and neighborhood preference points, the effect is that the pool of effective schools remains small and disproportionately serves more advantaged families. Not only should funding follow students, it should also follow revealed parental preference. Thus schools that are oversubscribed should have funding available to expand, with incentives to the administrators of those schools to do so. Likewise, schools that are unpopular with parents should see their resources shifted in order to open up access to more preferred education programs. Without competition for funding and the possibility for expansion or contraction, schools do not have an incentive to adapt to the preferences of parents.

We believe the virtual schooling category is a potentially powerful avenue for increasing choice, competition, and education quality. To support the development of that sector of schooling, we recommend that Congress authorize

the establishment of accrediting bodies for online K-12 education, incentivize states to participate in these accrediting efforts, and extend the Elementary and Secondary Education Act provisions for school choice for students in low performing Title I schools to virtual schools. Thus students in persistently low performing schools would be able to avail themselves of accredited virtual education at the district's expense. A similar extension to virtual education could be applied to federal AP incentive programs. This would make AP courses available to students in underserved schools and would likely lower the cost of a service that is very expensive when delivered in a traditional classroom. We recommend that Congressional authorization of regional or national accrediting bodies for virtual education include clear language requiring such accrediting bodies to place a high priority on credible evidence of the effectiveness of virtual education programs and coursework as a condition of accreditation.

We recommend that the federal government provide funding for a metric of the extent of choice and competition at the school district level. This would make available to the public information about the extent of choice in school districts and the degree to which parental preferences are reflected in the funding of individual education programs. The index could be the basis of a web-based tool allowing the comparison of school districts on choice and competition quality, which would provide valuable information to parents, practitioners, policy makers, and the voting public.

As organized in a list our specific recommendations for expansion of choice are that:

- choice be exercised through systems in which parents have more options than at present (with the expansion of virtual education programs being a promising means to that end);
- admission into particular schools within systems of choice be open;
- selection into oversubscribed schools and programs be determined by lottery (which could be conducted using weights to enhance socioeconomic or geographic balance when that is a desired goal);
- choice systems not include a default (all parents would have to choose);
- all schools supported with public funds within a choice system be subject to the same standards and assessment regimen under which traditional public schools within a state are required to operate in order to provide transparency for choice;
- the popularity of schools as revealed through parental preferences be reflected in funding formulas so that more popular schools garner additional resources to meet enrollment demand;
- substantially undersubscribed schools be restructured or closed;
- a metric of the extent of choice at the school district level be developed that would be available to the public and policymakers; and

Students in persistently low performing schools would be able to avail themselves of accredited virtual education at the district's expense.

- school districts with both low levels of choice *and* low levels of performance be especially encouraged at the federal level to increase their levels of choice.

Reducing Information Constraints on Education Choice

Our recommendations to expand education choice and to link parental preference for education programs to funding can only achieve their intended effects if parents choose schools based on their performance. Standard economic theory assumes that people act rationally, that is in ways that maximize their self interest. When making a choice, a person considers the possible outcomes, calculates their probability, and selects the option that makes the decision maker better off. To fully exercise education choice, parents must collect information about the various schools in which their child might be enrolled, weigh the costs and benefits of each option, and select a school that seems to best optimize the outcomes they desire.

We later document many inconsistencies between this model of the rational actor and actual choice. However, even if parents were prepared to be fully rational actors the quality of their decisions would still be affected by the quality of the information about schools that is available to them. Currently parents operate under severe information constraints and information asymmetries that hamper their ability to maximize the outcomes they seek. The only information parents are presently entitled to is from district and school report cards that are required under the ESEA. As detailed later, this information is insufficient to allow parents to make the best decisions for their children. Some of the missing information is not currently available, but much of it is held by districts and states and not released to parents and the public. This information asymmetry allows the education bureaucracy to manage choice in ways that serve its interests, rather than those of students and parents.

Even if all information on schools were readily available to parents there is a large literature in psychology and economics demonstrating that people are frequently not rational actors and systematically make errors in exercising choice. In this context, Thaler and Sunstein advocate “asymmetric paternalism,” which is “taking steps to help the least sophisticated people while imposing minimal harm on everyone else.”^{95,96} Asymmetric paternalism acknowledges that people do not always make choices in their best interests and advocates that “choice architects” create systems that encourage, or gently nudge, people to make better decisions without going so far as to make the choice for them. Because of the complexity of educational choice and the importance of its outcomes, a mechanism to nudge parents towards empirically rational decisions could be justified.

The challenge of enhancing parental choice in education is multi-faceted: how to provide parents with information to support decision making related to choice; how to construct the choices so that parents use the information in a way that promotes their child’s best interests; and how to structure such systems so they can

be managed effectively. The following sections provide some background on decision making theory, particularly focused on the common errors in decision making. We will highlight some dimensions of decision making that are likely to affect parental choice of schools and that are relevant to constructing choice architectures for parents.

Who Should Design and Implement Choice Systems?

Local school districts are presently responsible for designing and implementing the choice system, if the district allows any form of school choice. There are incentives for school districts to hoard information and to present it in a self-serving manner in the context of a choice system. For instance, they may wish to present themselves as attractive, spread enrollments across school facilities, minimize transportation costs, achieve certain demographic mixes, and reduce the influence of actors outside the management bureaucracy.

A sample North Carolina parent letter illustrates how information may be distorted when the district is the speaker. The letter informs parents about their right to transfer their child to another school due to the failure of the current school to meet Adequate Yearly Progress goals under ESEA. The letter informs the parents of the name and achievement information for all available schools, which is good. But the letter also includes language discouraging transfers by stating: “staff members at [the child’s present school] have a relationship with your child and want to continue serving your child” and “the many successes at [the child’s present school] cannot be measured in one test and we appreciate your past and continued support.”⁹⁷

Consistent with the hypothesis that school districts are self-serving in their presentation of information, the delivery of information to parents is often untimely, even when required by law. A federal study found that in the 2004-05 school year, 49 percent of all districts required to offer school choice due to low performing schools reported notifying parents approximately five weeks after the school year had already started.⁹⁸ There is also a question of whether parents are notified at all. The same study reported that a survey of parents in eight urban school districts found that only 27 percent with a child eligible for the Title I school choice said they had received notification about this option from the school district.

Because school districts are interested parties in the choice transactions made by the population they serve, we recommend that they should not be the architects of the system of information dissemination that would be the primary resource for parents who want to exercise school choice. The federal government might fund one or more independent entities to construct such a system. Alternatively, the federal government could perform this task itself if it did so through an office with enough independence to have no political incentive to shape the presentation of information to parents so as to serve policy outcomes favored by the administration. Or it could require that states provide this function under tightly

We recommend that [school districts] should not be the architects of the system of information dissemination that would be the primary resource for parents who want to exercise school choice.

circumscribed boundaries. The federal government would also serve a valuable role by funding research to determine how the various methods of presenting information to parents on school performance affect their choices.

Information – Content and Presentation

Two minimal requirements for the presentation of information on the performance of education programs to parents are relevance and comprehensibility. The ESEA report cards, which are the common core of the information architecture to support school choice, are deficient on both grounds. The participation rate in state examinations, for example, is of questionable relevance in informing parents of the quality of the school but is required on school report cards. Proficiency rates without an adjustment for student growth or background characteristics may be misleading. Teacher quality information points to variables such as degrees and types of certification that have been shown to have minimal effects on student outcomes, while ignoring factors such as experience that are demonstrably important. The designation of a school as low performing may be misleading to parents if the designation is due to the performance of a particular subgroup of which the parent's child is not a member.

Among the important categories of information about schools that are ignored in the report card requirements are: percentage of inexperienced teachers; popularity of the school in districts that offer open enrollment or as measured through parental satisfaction surveys; tenure of the principal and past performance of schools in which that principal has served; transfer-out rate for students; absentee rates for teachers; absentee rates for students; curriculum focus in key subjects; availability of extracurricular and afterschool programs and rates of student participation in those programs; annual operating budget of the school expressed as per pupil expenditure; rates of detention and disciplinary actions; gain scores on district-wide assessments; availability of accelerated and advanced coursework, e.g., AP courses, and levels of student participation and performance in advanced courses; and for high schools, graduation rates and college enrollment and persistence rates.

Comprehensibility of information is as important as its relevance. It is commonsensical to provide information in a way that people can more easily understand, for example by eliminating technical jargon and providing verbal explanations of numerical data. However, a 2007 federal study of Title I implementation found that most school choice notification letters to parents omitted key types of information, e.g., the schools parents could choose, and most were difficult to understand: the average notification letter was written above the 11th grade reading level.⁹⁹

To begin to develop useful parental choice systems, findings from the cognitive sciences and behavioral economics are useful as they have revealed a number of principles that affect the ability of people to make choices. These findings go beyond common sense to provide the scientific foundation for much

more useful parental choice systems than are currently available.

Heuristics – mental short cuts – often play a role in decision making and by presenting information in ways that recognize these heuristics, decision making error will be reduced. For example, research on framing and decision making in health care demonstrates that treatments whose benefits are described in terms of relative risk reduction, e.g., a 25 percent reduction in the likelihood of having a stroke, are viewed much more favorably than treatments whose benefits are described in absolute terms, e.g. a change from an incidence of 4 to 3 strokes for every hundred patients. Such framing may be similarly powerful in presenting information to parents regarding education choice, e.g., school achievement relative to other schools vs. absolute standards for proficiency. It will be important to determine which frames for education information draw parents to decisions they would make if they were fully informed and acting rationally.

Anchoring, a heuristic used to estimate value or size from the starting value, may affect parental choice of schools. For example, a school choice system that asks parents to begin by rank ordering the dimensions of school performance that are important to them may generate a different pattern of choice than a system that begins with the neighborhood school as the default choice to which other schools may be compared. Likewise, a choice system that uses the highest performing school in the district as the default choice or comparison point may generate different choices than one that uses average district performance as the anchor.

Personalization is another principle for increasing the usefulness of information. In the area of health care, research has indicated that providing general information to consumers to help them select high-quality and/or low-cost plans is ineffective¹⁰⁰ whereas personalized information can help consumers make better decisions.¹⁰¹ A 2008 study provided a sample of seniors enrolled in Medicare a letter comparing the individual's current plan and its predicted annual cost to the lowest cost plan and calculated the individual's potential cost savings for the year. The letter also included a printout from the Medicare Plan Finder that included costs and other data on all available plans. In the year following the letter, 28 percent of seniors who received personalized information switched plans, compared to 17 percent in the comparison group who did not receive personalized information. Also, 9 percent of the seniors who received personalized information switched to the lowest cost plan, while only 2 percent of the comparison group switched to the lowest cost plan. Personalization of information could be easily designed into systems to support education choice.

Defaults have strong effects on choice. Choosers frequently stick with the status quo when that is the default option. In the area of education, a default of the neighborhood or district assigned school means that parents are less like to engage in active choice. Although there may be legitimate reasons for remaining in a neighborhood school, such as lack of transportation to another school, parents should be considering such factors in the context of active choice rather than as a district-imposed default.

To encourage parents to actively engage in choice, a forced choice system could be employed. A study of the employee participation in retirement plans illustrates that by adopting a simplified, forced choice option instead of an opt-in policy employee participation in retirement plans is increased.^{102,103} Forced choice programs for school choice are currently in operation in Boston and New York. In these cities parents are not provided a default option at transition grades, such as for kindergarten and ninth grade. Instead, parents are given the opportunity to visit schools in the area and are required to rank the schools according to their preferences. Student assignment is then determined by a matching algorithm that considers the parent's preferences and the student's place on a lottery list. The matching system reduces outside influence on placement decisions so that, with the exception of a few specialized schools, school personnel cannot decline to enroll a particular student based on the student's characteristics. This reduces "creaming," i.e., the frequent practice of more successful schools of selecting more advantaged students.¹⁰⁴ The requirement of mandatory choice removes the default component of the closest neighborhood school at least for the years when students would naturally be attending new schools and can help in identifying schools that are underperforming from the perspective of parents.

School Choice Navigators

As we have indicated, there is a need to improve the relevance and comprehensibility of the information that is made available to parents to support school choice. Findings from cognitive science and behavioral economics can inform the design of how information is displayed and choices are structured. Findings from the education sciences on the aspects of schools that are associated with higher performance can guide the identification of data elements that should be available to parents to support choice. Principal among these data elements will be the past performance of the school since that is the best predictor of future performance.

We recommend the development with federal support of a new generation of web-based tools to support informed choice by parents of education programs. The web-based choice tools would incorporate more relevant information on school performance than is presently available, would incorporate design principles that nudge parents to consider higher performing schools when selecting a school into which to enroll their child, and would be independent of the education programs among which the parent is choosing.

A partial model of such a web-based tool program offered by U.S. Department of Education to support post-secondary school choice is College Navigator. It allows a prospective student or the student's parents to search for colleges based on a number of characteristics including geography, major, campus setting, tuition, achievement test scores, selectivity, etc. The College Navigator then returns a list of schools fitting the criteria. While it lacks the cognitive science elements that nudge towards more rationale choices, it includes rich information and is

The requirement of mandatory choice removes the default component of the closest neighborhood school and can help in identifying schools that are underperforming from the perspective of parents.

independent of post-secondary institutions.

Consider a K-12 analog called School Navigator. Like College Navigator it would allow users to enter their own preferences into a search engine that would return lists of individual schools and their characteristics, but unlike College Navigator and the several existing K-12 school search engines, it would include a choice architecture derived from research in behavioral economics and cognitive psychology that would help parents consider dimensions of schools that are empirically associated with better student outcomes.

In order to maximize the utility for parents and provide the greatest degree of choice, the School Navigator should not just list schools managed by the local public school district. Instead, it should include all schools and education programs to which students are entitled to enroll and receive credit towards graduation, such as charter schools, private schools, and virtual schools. Any fees associated with the programs should be clearly indicated, and parents should be easily able to restrict their choice options to public schools with no tuition or fees.

The data used to construct the School Navigator would be available to other entities so that they could construct competing portals with different architectures. Competition among choice portals would spur innovation, whereas the presence of a federal School Navigator site, with high requirements for data quality and comprehensiveness, would provide a check on irresponsible or misleading presentation of the federal data by competing sites.

Recommendations for Reducing Information Constraints on Choice

Our specific recommendations for improving the information available to parents to support choice are that:

- Requirements for school report cards and notification of school choice options under ESEA should be improved to assure that information is timely, relevant to decision making, and presented in a clear and readable manner. One way to achieve this end would be for the U.S. Department of Education to provide a model report card and school choice letter, and require that states and local education agencies justify a decision to substitute their own template.
- The reauthorization of ESEA should incentivize districts to establish open enrollment plans such as those currently in place in New York City and Boston. Key elements of such plans should be that they require choice rather than allowing school assignment through a passive default and that they employ lotteries to prevent creaming of more advantaged students by more popular schools.
- The reauthorization of ESEA should include requirements for school districts to report additional data elements on individual school performance. These are data elements that would enhance parental

information for school choice, that are empirically linked to improved student outcomes, or that are valued by parents. Examples of new data elements include: percentage of inexperienced teachers; popularity of the school in districts that offer open enrollment or as measured through parental satisfaction surveys; tenure of the principal and past performance of schools in which that principal has served; transfer-out rate for students; absentee rates for teachers; absentee rates for students; curriculum focus in key subjects; availability of extra curricular and afterschool programs and rates of student participation in those programs; annual operating budget of the school expressed as per pupil expenditure; rates of detention and disciplinary actions; gain scores on district-wide assessments; availability of accelerated and advanced coursework, e.g., AP courses, and levels of student participation and performance in advanced courses; and for high schools, graduation rates and college enrollment and persistence rates.

- A School Navigator should be created as a parent portal to the federal data warehouse on school performance. It would make available to parents any information in the data warehouse to which they are entitled as a basis for a search of schools – and its comprehensiveness would be unique. But its defining feature would be a choice architecture that would gently nudge parents to consider information about schools that is associated with better outcomes for students and that would likely be considered by the most sophisticated and informed parents. In so doing it would create a better market place for school quality and advance equity in parents’ choice of schooling for their child.
- In order to maximize the utility for parents and provide the greatest degree of choice, the School Navigator should include all schools and education programs to which students are entitled to enroll and receive credit towards graduation, not just schools managed by the local public school district. This would include charter schools, private schools, and virtual schools. In the case of education programs that have fees, these should be clearly indicated, and parents should be easily able to restrict their choice options to public schools with no tuition or fees.
- Any data made available through School Navigator would also be available to non-profit organizations, commercial entities, and state and local governments interested in constructing choice portals. Competition among choice portals would spur innovation and provide checks on the quality of all school choice sites.

The federal government should provide significant funding for research and development on the factors that affect school choice and the design and evaluation of choice tools.

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