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Can Vouchers Reform Public Schools?

Lessons from the Milwaukee Parental Choice Program

By
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Introduction

This paper addresses concerns about the efficacy of school vouchers that have been raised recently because of disillusionment among some school choice advocates over the limited academic improvements that voucher competition has produced in the Milwaukee Public Schools. That has prompted questions about whether vouchers are indeed capable of reforming public schools.[1]

The issue is addressed by using Milton Friedman's descriptions of charity vouchers and universal vouchers to draw a distinction between different types of voucher programs: "rescue" efforts that simply offer school choice to parents but do not spur system improvement, and "reform" efforts that offer school choice as a means of galvanizing system improvement.

Since existing voucher programs are limited largely to charity vouchers, or rescue efforts, it is not surprising that they have produced no dramatic improvement in the public schools. Thus, before writing off universal vouchers, it would seem prudent first to actually try them.

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However, charity vouchers should not be dismissed too quickly, either. The lack of substantial improvements in student achievement in the Milwaukee Public Schools has led commentators to overlook many other improvements that are a direct result of the competition introduced by the Milwaukee Parental Choice Program. These improvements include a higher graduation rate, a narrowing of the graduation gap between white and minority students, a reduced dropout rate, before- and after-school programs, more Montessori schools, improved teacher selection procedures, decentralization of budgeting authority to local schools, and greater influence of parents in local school councils. Even charity vouchers can add considerable clout to school reform efforts.

While even a low level of competition for students can produce a range of modest benefits, significant public school improvements are less likely to occur when vouchers are not universal, when voucher competition is muted, when the voucher has a low monetary value, when public schools suffer few financial consequences from voucher competition, and when enrollment does not decline as a result of voucher competition.

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On the latter point, analysis of K-12 enrollment data for Milwaukee shows the Milwaukee Public Schools experienced no obvious voucher-related reduction in student enrollment for most of the 18-year period from 1990-91 to 2007-08. Only in the past two years did MPS enrollment fall below the 1990-91 level of 98,371 students.

But it is important to note that during this 18-year period, total publicly funded K-12 enrollment in Milwaukee increased by almost 20,000 students. Milwaukee's voucher program increased its enrollment by almost 19,000 students, and independent charter schools increased their enrollment by more than 5,000 students. The voucher program thus absorbed most of the enrollment increase.

Now, however, overall K-12 enrollment in the city is falling and for MPS this enrollment decline is being exacerbated by the ongoing loss of about 1,500 students each year to voucher schools. The next few years are likely to reveal the reforming power of the Milwaukee Parental Choice Program on the Milwaukee Public Schools, since only now is the success of voucher schools posing a genuine competitive threat to existing public schools. The city's public schools may begin to improve more rapidly in response to this enhanced competitive environment.

1. Milton Friedman's Vision

Like long-time women's rights pioneer Susan B. Anthony, who died before her vision of women's suffrage became a reality, long-time voucher advocate Milton Friedman also died before his vision of a free market in K-12 education could be realized. It's unfortunate that Friedman is no longer around to respond to school choice supporters, like John Stossel,[2] who are now turning away from vouchers and arguing that tax credits are a better education reform strategy; to others, like Sol Stern,[3] who are disillusioned with how little improvement vouchers

have produced so far in public schools; and to those like charter school advocate Chester Finn, Jr., who said recently that he had "erred in thinking that competition *per se* would trigger great changes in traditional schools."[4]

But we can get a good indication of how Friedman probably would have responded to these latest skeptics of market forces based on what he said about vouchers and school choice during the last decade of his immensely productive and influential life.

His most likely rejoinder would have been to ask: Where's the market? Where's the competition? Do you want school choice programs that simply rescue children from failing public schools, or do you want school choice programs that generate the kind of competition necessary to reform the public school system? He likely would have argued, as he did consistently, that only vouchers can reform the public schools. He never argued tax credits could do that ... because tax credits cannot do what vouchers do.

Vouchers level the competitive playing field between K-12 public schools and alternative education providers. They achieve this by eliminating the financial disincentive inherent in the present system, where the alternative providers must charge individual parents for educational services that the public schools provide to individual parents for free because they charge the costs to taxpayers in general. As Friedman put it, "If you're trying to go into the business of selling chocolate and somebody down the street is taking money from you in order to give chocolates away, then you've got a difficult time making a business out of that."[5]

Vouchers, Friedman argued, should be "universal" – i.e., available to all parents – and contain few restrictions on their use for educational purposes.

With vouchers, explained Friedman in a 2005 interview[6] with *Reason* editor Nick Gillespie, the government would give every parent a piece of paper to cover the full cost per student at a government school or "x dollars" towards the cost of educating their child at a non-government school – parochial, private for-profit, or private nonprofit. Vouchers, he argued, should be "universal" – i.e., available to all parents – and contain few restrictions on their use for educational purposes.

"As to the benefits of universal vouchers," said Friedman, "empowering parents would generate a competitive education market, which would lead to a burst of innovation and improvement, as competition has done in so many other areas."

That's what school reform advocate Stern thought would happen, too, after seeing the initial effects of vouchers in Milwaukee.[7] But in a recent article in *City Journal,* he said he had become disillusioned about vouchers being able to improve the public schools and now favored pursuing instructional reforms involving rigorous curricula and better-prepared teachers.[8] While agreeing that voucher students certainly are benefitting from the Milwaukee Parental Choice Program, Stern said there had been "no 'Milwaukee miracle,' no transformation of the public schools" as a result of vouchers. He granted there were some early system reforms and initial test score gains but said the evidence showing that vouchers improve public schools "is pretty meager."

"Fifteen years into the most expansive school choice program tried in any urban school district in the country, Milwaukee's public schools still suffer from low achievement and miserable graduation rates, with test scores flattening in recent years," noted Stern. Is this description of Milwaukee accurate? What are the "facts on the ground," as he terms them?

2. Milwaukee, by the Numbers

Based on published reports, "miserable" is an apt description of Milwaukee's public high school graduation rate. It is one of the lowest in the country, according to a recent Manhattan Institute study[9] of 2003 graduation rates of the 100 largest school districts in the United States. (See Table 1.) The study ranked the Milwaukee Public Schools 95th out of 100 with a graduation rate of just 45 percent.

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Sharing bottom-place honors were city school districts whose own education reforms – mainly mayoral control – also have yet to produce notable transformations in the outcomes of their public school systems:

88th place: City of Chicago School District, with a 50 percent graduation rate;
96th place: Cleveland Municipal School District, with a 45 percent graduation rate;
97th place: New York City School District, with a 43 percent graduation rate; and
98th place: Detroit City School District, with a 42 percent graduation rate.

A more recent study[10] of 2004 graduation rates in the 50 largest cities in the United States also reports a very low rate for Milwaukee (46.1 percent). The study, from America's Promise Alliance, reports similar low graduation rates for Chicago (51.1 percent) and New York (45.2 percent) while giving even lower rates for Cleveland (34.1 percent) and Detroit (24.9 percent).

Figure 1 illustrates Stern's point about low achievement in the Milwaukee Public Schools (MPS). Reading proficiency scores achieved by MPS students from 2002 to 2006 were significantly lower than Wisconsin state averages.[11] It also confirms his point about MPS's flat test scores in recent years.

At the state level, reading proficiency scores improved at all levels between 2002 and 2006, but they improved most markedly at the 10th-grade level, where the percentage of students reading at Proficient or Above increased by almost 4 points to 74.9 percent over the four-year period. In the MPS, 8th-grade students showed a marked improvement in reading proficiency over the same period but this improvement did not carry through to the 10th grade, where students showed no change in reading proficiency from 2002 to 2006.

Stern's description of Milwaukee's voucher program, the Milwaukee Parental Choice Program (MPCP), as "the most expansive school choice program tried in any urban school district in the country" is also on target. Florida's McKay Scholarship Program has a slight edge over Milwaukee in terms of participating students,[12] but it is a statewide, not single-city, program.

Table 1: Graduation Rates for the 100 Largest U.S. School Districts

Rank	Graduation Rate	School District
1	89%	UT Davis School District
2	84%	TX Ysleta ISD
3	83%	LA East Baton Rouge Parish School Bd
4	83%	CO Cherry Creek 5
5	82%	UT Jordan School District
6	82%	CA San Juan Unified
7	81%	VA Fairfax County Public Schools
8	81%	UT Alpine School District
9	80%	CA Garden Grove Unified
10	80%	MD Howard County Public Schls System
Less than 80% of students graduate:		
11	79%	MD Baltimore County Public Schools
12	78%	UT Granite School District
13	77%	MD Montgomery County Public Schools
14	77%	TX Fort Bend ISD
15	77%	OR Portland Sch Dist 1J
16	76%	MD Anne Arundel County Pub Schls
17	76%	CA San Francisco Unified
18	76%	TX North East ISD
19	76%	VA Chesterfield County Pub Schools
20	76%	TX Plano ISD
21	75%	MD Prince Georges County Pub Schools
22	75%	TX Northside ISD
23	75%	CA Elk Grove Unified
24	75%	WA Seattle School Dist 1
25	74%	NC Wake County Schools
26	74%	CO Jefferson County R-1
27	74%	TX Cypress-Fairbanks ISD
28	71%	GA Cobb County
29	71%	TN Knox County School District
30	70%	AZ Mesa Unified District
Less than 70% of students graduate:		
31	69%	VA Virginia Beach City Public Schls
32	69%	VA Prince William County Public Schls
33	68%	FL Seminole County School District
34	68%	TX Garland ISD
35	68%	TN Shelby County School District
36	67%	KY Jefferson County
37	67%	AZ Tucson Unified District
38	67%	CA Capistrano Unified
39	66%	NC Guilford County Schools
40	66%	NV Washoe County School District
41	66%	NC Forsyth County Schools
42	66%	TX Pasadena ISD
43	65%	FL Brevard County School District
44	64%	CA San Diego Unified
45	64%	GA Fulton County
46	64%	TX El Paso ISD
47	64%	TX Arlington ISD
48	64%	FL Pasco County School District
49	64%	AK Anchorage School District
50	63%	GA Gwinnett County

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Table 1: Graduation Rates for the 100 Largest U.S. School Districts (continued)

Rank	Graduation Rate	School District
51	63%	LA Orleans Parish School Board
52	63%	FL Lee County School District
53	63%	NC Cumberland County Schools
54	62%	TX Austin ISD
55	62%	FL Volusia County School District
56	62%	NE Omaha Public Schools
57	60%	FL Palm Beach County School District
58	60%	CA Long Beach Unified
59	60%	KS Wichita
Less than 60% of students graduate:		
60	59%	FL Broward County School District
61	59%	FL Hillsborough County School Dist
62	59%	TX Fort Worth ISD
63	59%	AL Mobile County Sch Dist
64	59%	TX San Antonio ISD
65	58%	PA Philadelphia City Sd
66	58%	FL Orange County School District
67	58%	NC Charlotte-Mecklenburg Schools
68	58%	FL Polk County School District
69	58%	CA Fresno Unified
70	58%	TN Nashville-Davidson County SD
71	57%	FL Duval County School District
72	57%	LA Jefferson Parish School Board
73	56%	NV Clark County School District
74	56%	TX Houston ISD
75	56%	GA Dekalb County
76	56%	CO Denver County 1
77	56%	OH Columbus City SD
78	56%	CA Santa Ana Unified
79	55%	FL Dade County School District
80	54%	TX Dallas ISD
81	54%	FL Pinellas County School District
82	54%	NM Albuquerque Public Schools
83	54%	TX Aldine ISD
84	52%	MA Boston
85	52%	MN Minneapolis
86	51%	CA Los Angeles Unified
87	51%	TN Memphis City School District
88	50%	IL City of Chicago School Dist 299
89	50%	MO St. Louis City
Less than 50% of students graduate:		
90	49%	GA Atlanta City
91	48%	MD Baltimore City Pub Sch System
92	48%	CA Sacramento City Unified
93	48%	CA Oakland Unified
94	46%	GA Clayton County
95	**45%**	**WI Milwaukee**
96	45%	OH Cleveland Municipal SD
97	43%	NY New York City Public Schools
98	42%	MI Detroit City School District
99	42%	CA San Bernardino City Unified
100	n/a	SC Greenville County School Dist

Source: Greene & Winters (2006)

Figure 1: Trends in Reading Scores for Public Schools in Milwaukee and Wisconsin, 2002-2006

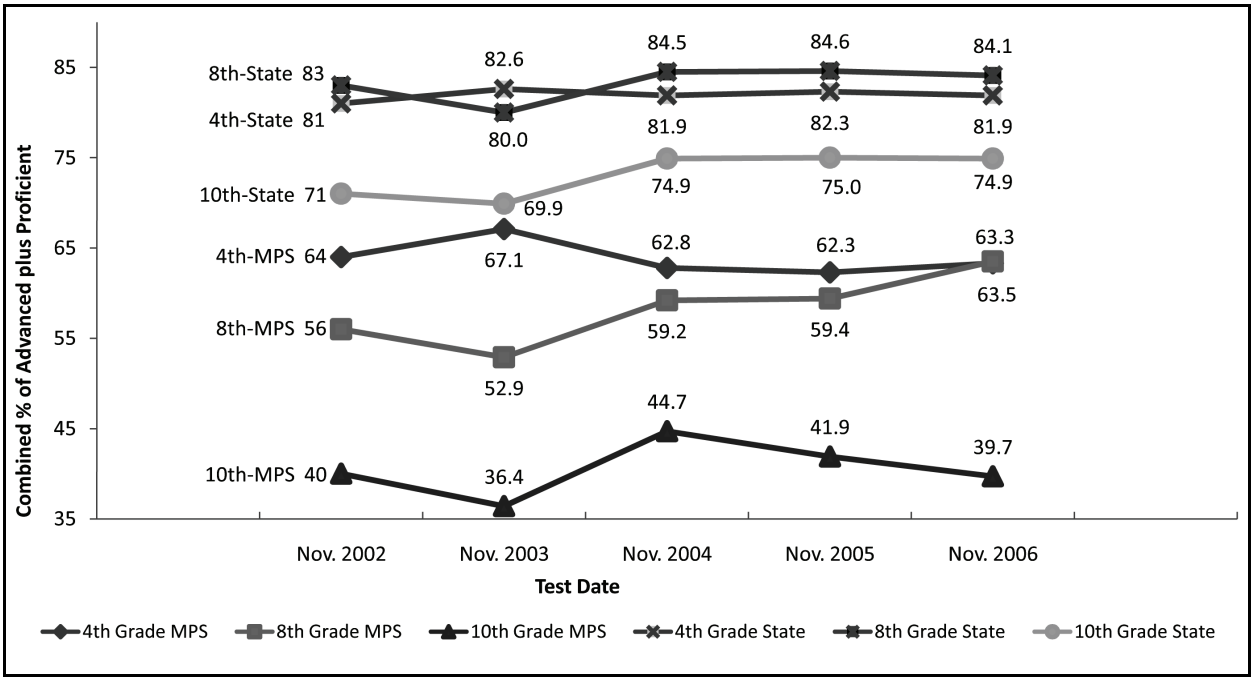
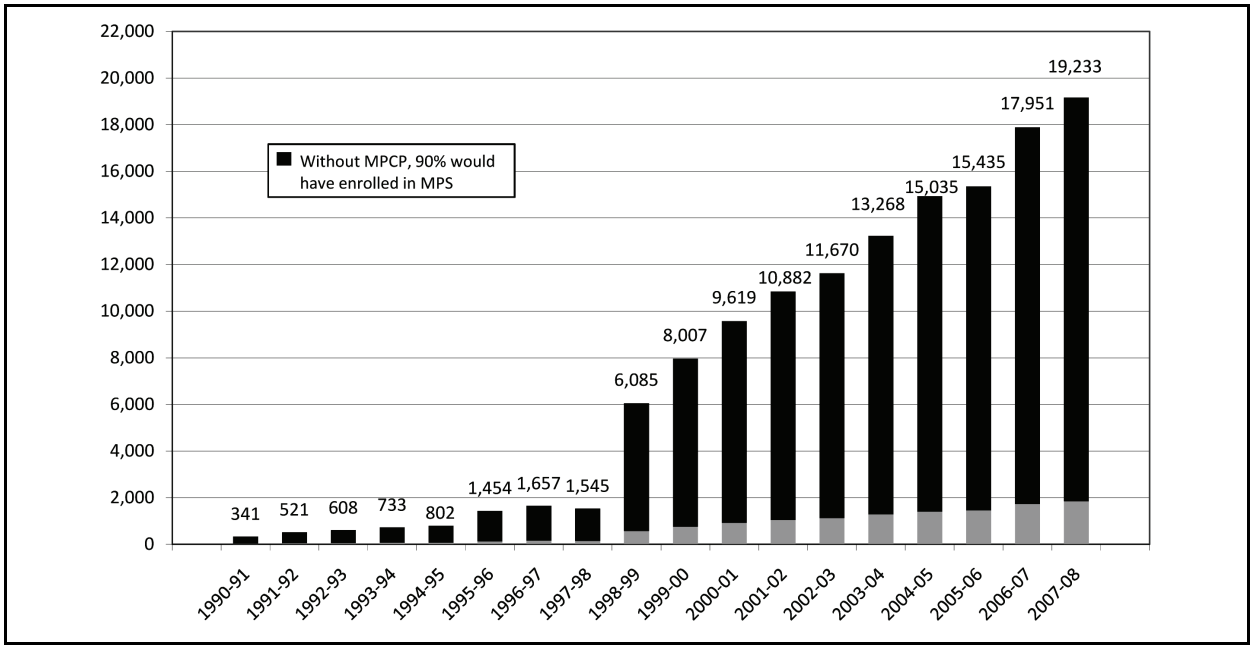


Figure 2: Growth in Enrollment (Headcount) of the Milwaukee Parental Choice Program, 1990-2008



Participation in the Milwaukee program, as measured by fall headcount, has grown from just 341 in the 1990-91 school year to 19,233 in 2007-08.[13] (See Figure 2.) According to one of five baseline studies of the program published in February 2008, an estimated 90 percent of these voucher students would have enrolled in the Milwaukee Public Schools had the parental choice program not been available.[14] (Again, see Figure 2.)

That baseline study, authored by University of Arkansas education reform professor Robert M. Costrell, is a detailed analysis of the fiscal impact of the MPCP, and it provides details of the changing state and district funding mechanisms since the inception of the program. Costrell uses the state-provided MPS per-pupil revenue limit – which is based on a three-year rolling average of enrollments – to assess the financial impact of this loss of enrollment on MPS.

The city's voucher program caused substantial and ongoing reductions in enrollment and revenues for the Milwaukee Public Schools.

Based on a revenue limit of $8,833 per pupil for 2006-07, Costrell calculates MPS's revenue loss for 90 percent of 17,000 full-time equivalent (FTE) students to be $135.1 million.[15] For the 18,550 FTE students in 2007-08 with a revenue limit of $9,141, a corresponding calculation produces an estimated revenue loss of $152.6 million – or a total revenue loss to the Milwaukee Public Schools of $287.7 million for the most recent two school years.

It is clear from Costrell's analysis – published just after Stern's *City Journal* article – that the city's voucher program caused substantial and ongoing reductions in enrollment and revenues for the Milwaukee Public Schools.

Vouchers certainly had a large effect on MPS, but did MPS improve as a result? Stern claims there's little evidence of that in recent years, and he concludes that vouchers have not worked as a tool to reform the public schools.

Although Stern's search for evidence of MPS improvement could have been more extensive, Friedman would not have been surprised by Stern's conclusion. Despite his belief that universal vouchers would generate competition and improve education, Friedman did not have very high expectations for current programs, which do not involve universal vouchers and thus do not create much competition.

3. Charity Vouchers

Existing vouchers are mostly what Friedman called "charity vouchers," targeted programs intended to help low-income families. Admirable though the programs may be, their effects are largely limited to program participants. Universal vouchers, not charity vouchers, catalyze reform.

"Charity vouchers help the poor," Friedman told Gillespie, "but they will not produce any real reform of the educational system. And what we need is a real reform."[16]

That sounds much the same as Stern's assessment: Existing voucher programs do rescue children from dysfunctional schools, but they don't spur significant system reform. They function primarily as rescue operations, not as reform catalysts.

Other proponents of market competition in K-12 education – such as Andrew Coulson,[17] Myron Lieberman,[18] and John Merrifield[19] – have repeatedly warned that the results from voucher programs like Milwaukee's are not instructive as to what would likely ensue from vouchers in a free-market system of education. Programs designed for rescue should not be evaluated as if they had been designed for reform. For example, Lieberman noted in 2002 that almost any expansion of school choice has some potential to generate competition, but this is not "market competition" in any meaningful sense of the term.

"What can be learned from today's voucher programs ... that is informative on what would happen in a competitive industry?" Lieberman asked, pointing out that existing programs were "means-tested vouchers that exclude for-profit schools, severely restrict eligibility, are under constant threat of termination, are small scale in economic terms, and are subject to anti-competitive regulations of one kind or another."[20]

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Market competition, according to Lieberman, requires "ease of entry for producers, including for-profit firms; regulation only to the extent of regulation in other industries; no control over prices by producers or consumers; a scale large enough to justify research and development by entrepreneurs; and confidence the vouchers will not be short-term."

Friedman granted that charity vouchers do benefit the families that receive them and do produce some improvement in the public schools. However, as he explained in an article[21] he wrote at the same time as the Gillespie interview, even if charity vouchers were much more widely available, they still could not create the kind of market where innovation and experimentation would improve quality and reduce costs. That's because they exclude higher-income families, who are the early adopters of new developments and innovations in the free market.

"One function played by the rich is to finance innovation," explained Friedman. "They bought the initial cars and TVs at high prices and thereby supported production while the cost was being brought down, until what started out as a luxury good for the rich became a necessity for the poor."

In the same way, universal vouchers would provide the incentives necessary for entrepreneurs to create a range of alternative schools that would use a variety of instructional methods. This would provide parents with real choices in schooling and allow market forces to winnow out ineffective and inefficient practices and promote effective and efficient ones.

4. Universal Vouchers

A universal voucher, available to all students, would help the poor much more than a charity voucher, Friedman continued, because it would bring not only more schools but a revolution in schooling – just as competition for telephone service has led not only to more phones but to a revolution in communications. A universal voucher, said Friedman, should be of reasonable size, should not impose detailed regulations, and should not prohibit parents from adding to the value of the voucher.

A universal voucher, said Friedman, should be of reasonable size, should not impose detailed regulations, and should not prohibit parents from adding to the value of the voucher.

Stern is right about the limited ability of charity vouchers to effect significant educational reform, but that is not a valid reason to reject universal vouchers, too. Universal vouchers have not yet been tried – and they won't be tried in the future if education reformers give up on them so easily, or continue to oppose them, as some do. Instead of turning to yet another reform strategy, such as instructional reform, Stern should be urging Milwaukee's school choice leaders to admit the limitations of charity vouchers and – if they really do want their public schools to improve – to rethink their opposition to universal vouchers.

It's all too easy to blame voucher opponents for the limitations placed on Milwaukee's vouchers, but the city's leading school choice advocates must shoulder some of the responsibility, too. If Milwaukee's vouchers are still limited to low-income families, then a large part of the reason for this is because key education reformers in the city want to keep it that way.

Universal vouchers are opposed by State Rep. Annette Polly Williams (D-Milwaukee),[22] who pushed the Milwaukee Parental Choice Program through the state legislature, and by school choice advocate Howard L. Fuller,[23] a former Milwaukee Public Schools superintendent and the founder of the Black Alliance for Educational Options. When Milwaukee Mayor John Norquist in 1998 proposed raising the income limits of the program in an attempt to stanch the loss of middle-income families from the city, Williams accused him of "hijacking" a program that was intended "to help poor children in Milwaukee."[24] She was later reported[25] as being agreeable to expanding the voucher program to include all children eligible for the Federal Free or Reduced Price School Lunch Program.

Fuller already is aware that the current school choice program has some limitations. Stern[26] quotes him as recently conceding that the voucher program had not produced "the deep, wholesale improvement" in the Milwaukee Public Schools that had been expected.[27] Again, Friedman likely would have responded that this is not the fault of vouchers *per se* but a consequence of the limitations that school choice leaders like Fuller himself have placed on the city's vouchers, ratcheting down their competitive effect.

While limiting vouchers largely to poor black children is understandable in light of how black children were shortchanged in Milwaukee's earlier education reforms,[28, 29, 30] these limitations

must be removed if the benefits from the reforming effect of vouchers are to radiate out to all children – including the children who remain in the city's public schools.

A phased shift towards universal vouchers in Milwaukee would change what is primarily a rescue effort – providing low-income parents with the means to remove their children from a failing school or an unresponsive school environment – into a reform movement that would bring about the "burst of innovation and improvement" in schooling predicted by Friedman. Such a development would benefit all children, not just those rescued by vouchers. Universal vouchers also would establish a broader family base of supporters to help fight off ongoing legislative attempts to cripple the program, such as the two efforts recently mounted by State Reps. Fred Kessler (D-Milwaukee) and Christine Sinicki (D-Milwaukee) that would have reduced enrollment in the program by 30-40 percent.[31, 32]

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Universal vouchers also would alleviate some of the problems that choice schools in Milwaukee currently face in trying to serve low-income families who do not qualify for vouchers. These schools often charge substantially less for fee-paying students than their actual per-pupil cost in order to make their schools available to such families, with the tuition payments subsidized by parishioners and private fund-raising efforts. When one of the city's Catholic schools recently raised its tuition from roughly $2,300 to the full voucher value of $6,501, it put itself on more solid financial footing to serve its 150 voucher students, but it also lost 35 fee-paying parishioners who could no longer afford the tuition.[33]

5. Competition in Education

Although Stern points to low graduation rates and flat test scores as evidence voucher competition hasn't improved the public schools in Milwaukee, there is a substantial body of research showing competition improves education in many ways. Even in the absence of vouchers to level the competitive playing field, competition from private schools and other nearby public schools has a small but consistently positive effect on educational quality, according to a 2002 study from the National Center for the Study of Privatization in Education.[34, 35] With vouchers, the competitive effect is more noticeable but, as Federal Reserve Bank of New York economist Rajashri Chakrabarti has shown, different voucher designs induce different responses from the public schools.[36]

In Milwaukee, a qualitative study by MPS Board Member John Gardner in 2002 reported significant systemic improvements in MPS in the late 1990s, when enrollment in voucher schools was increasing most rapidly.[37] A quantitative analysis of this same period by Harvard University economist Caroline Hoxby showed significant improvements in student achievement in lower-scoring MPS schools.[38] In addition, a recent extension of Hoxby's analysis by Chakrabarti showed an even larger MPS improvement in subsequent years up to 2002, after which the No Child Left Behind law compromised further analysis.[39]

Studies of other voucher programs also show positive outcomes as a result of competition in K-12 education. For example, in 2000, Florida's public schools responded positively to just the threat of vouchers being offered to students in schools that failed to meet the state's performance standards. A study by education writer Carol Innerst showed educators across the state adopted an array of reforms that improved their schools when faced with the possibility of losing students if they failed to improve.[40, 41] Subsequent studies conducted after vouchers were introduced showed not only that public schools improved most when they were under the most direct threat of losing students to vouchers,[42, 43] but that the vouchers spurred more improvements in public schools than did No Child Left Behind.[44]

Educators across Florida adopted an array of reforms that improved their schools when faced with the possibility of losing students.

In a recent book, *School Choice: The Findings,* Hoover Institution distinguished visiting fellow Herbert Walberg reviewed the research on school choice – vouchers, tax credits, and charter schools – and found "substantial evidence" showing that publicly funded and privately funded voucher programs have positive effects on achievement levels in public schools.

"Competition and choice create benefits beyond those enjoyed by the students who participate directly in voucher programs," Walberg concluded.[45]

With Stern calling for a focus on instructional reform, a December 2007 study of Florida's A+ voucher program from the National Research Council is particularly informative, since it provides a link between competitive pressure and instructional reform. Researchers Cecilia Elena Rouse, Jane Hannaway, Dan Goldhaber, and David Figlio found that "F"-graded schools – those schools at high risk of losing students to vouchers – immediately improved the test scores of the next cohort of students and that those test score improvements were not transitory. They also found schools changed their instructional policies as a consequence of receiving the "F" grade.[46]

"We also find that 'F'-graded schools engaged in systematically different changes in instructional policies and practices as a consequence of school accountability pressure, and that these policy changes may explain a significant share of the test score improvements (in some subject areas) associated with 'F'-grade receipt," the researchers wrote.

"[W]e find that accountability pressures have the potential to improve student test scores in low-performing schools, and that such pressures can induce school administrators to change their behavior in educationally beneficial ways," they concluded.

These findings are especially important because the use of a proven instructional approach, such as Direct Instruction, has been strongly resisted by educators because its teacher-directed structure does not mesh with prevailing pedagogical theory.[47] Adoption of such an instructional approach often depends on the willingness of a teacher to create a new school,[48] the availability of vouchers,[49] or – in the A+ case – the threat of vouchers.[50]

John Merrow, education correspondent for the "NewsHour with Jim Lehrer" and president of Learning Matters, Inc., recently provided an illustration of how instruction can be sidetracked

when educators wield more influence than parents.[51] Teacher unions in New York City and New York State successfully lobbied the state legislature to pass a law that now prevents administrators from taking student performance into account when making decisions about teacher tenure. In other words, the quality of a teacher's instruction doesn't count.

6. How Vouchers Reformed the Milwaukee Public Schools

In addition to the quantitative studies of student achievement cited above, a number of observers of and participants in the Milwaukee Parental Choice Program have identified other changes made by the Milwaukee Public Schools in response to competition from vouchers.

As early as 1999, MPS Board Member Gardner was arguing that choice and competition would make the public schools better.[52] "We have to dispose of the fatuous argument that choice will destroy them," he said, pointing out that MPS had already responded to choice by raising standards, giving parents more choices, and demanding greater accountability from public schools.

"School choice helps step up the pressure and to give more clout to the person who says, 'We have to do it right away, because we're going to lose 10,000 students if we don't.'"

Also in 1999, another MPS board member, Bruce Thompson, identified several improvements that school choice had prompted in the public schools:[53]

- creation of more local Montessori schools, made possible because choice freed up space in the neighborhood schools;
- development of a new agreement with the teacher union that allowed schools to interview and select teachers rather than having them come in on the basis of seniority;
- development of a plan to give more budgetary responsibility to the principals in individual schools; and
- creation of a new technical high school.

"[W]ithout the competitive pressure from choice, [the new technical high school] never would have gone through," said Thompson, noting that choice gives reformers more clout. "School choice helps step up the pressure and to give more clout to the person who says, 'We have to do it right away, because we're going to lose 10,000 students if we don't,'" he explained.

In a report[54, 55] issued three years later, Gardner credited the expansion of MPCP for enabling the school board to introduce systemic changes in MPS that other major urban districts had found almost impossible to implement. For example:

- Teachers now are hired by school selection committees rather than having teacher seniority be the overriding consideration.

- Under a new program, less effective teachers are retrained or terminated.
- A similar new program has been developed for ineffective principals.
- Principals now make many spending decisions since individual schools control more than 95 percent of the district's operating budget.
- Dollars follow students to schools, and so schools must actively recruit students; as a result, schools are more attentive and responsive to parents and students.

School choice means dealing with "parents as customers" and being responsive to what they are asking for.

"None of these improvements would have occurred without the impact of expanded parental options that transformed public education to a multi-sector delivery system," said Gardner.

Although voucher opponents had predicted devastating educational and financial consequences if MPCP were expanded, Gardner pointed out no such repercussions had in fact occurred, and MPS students had made significant academic gains. However, he cautioned that much more progress was needed since overall academic achievement in MPS was still "unacceptably low."

Another MPS board member, Ken Johnson, told a Chicago audience in 2006 that school choice meant dealing with "parents as customers" and being responsive to what they were asking for.[56] He explained that as part of the process of decentralizing the budget system, every school had to have a Governance Council to control the budget for the school. Fifty-one percent of the council members had to be parents of children in the school.

Chakrabarti's 2005 analysis of MPS test scores, showing voucher-induced improvement through 2002, also provides evidence of how MPCP prompted the public schools to become more responsive to parents.[57] She notes MPS had just one school with a before- and after-school program in 1995, but by 2000 there were 82 such programs. In 1995, only two MPS schools had health clinics; by 2000, the number had grown to 47.

In a 2006 book,[58] Harvard University political science professor Paul E. Peterson identified some additional changes MPS implemented during the period 1999 to 2005 with the aim of making the city's public schools more attractive to parents and students:

- the appointment in 2001 of a reform-oriented superintendent, William Andrekopoulos, and the renewal of his four-year contract in 2005;
- responding to parent preferences and increasing the number of K-8 schools from 18 to 56;
- permitting elementary schools to offer before- and after-school programs, plus full-day kindergarten;
- establishing small schools within large high schools; and

- increasing district advertising and outreach.

"While many signs are promising," noted Peterson, " we cannot be certain that the increased competition has translated into higher levels of student achievement."

One final responsive action from MPS was identified by School Choice Wisconsin in 2007: "Frequently working with private and independent charter schools, MPS has expanded facilities in central city neighborhoods, once neglected in favor of school construction at the city's periphery."[59]

7. MPS's Rising Graduation Rate

High school graduation rate is the clearest and probably most important indicator of the efficacy of an education reform program.

High school graduation rate is the clearest and probably most important indicator of the efficacy of an education reform program, and it is fortunate that several studies have been conducted of the Milwaukee voucher experience. Three studies have examined graduation rates for voucher students in the Milwaukee Parental Choice Program and found them substantially higher than those of students who attended public schools in the city.

In 2004, Jay P. Greene reported a 64 percent graduation rate for MPCP students compared to a 41 percent rate for students who attended Milwaukee's academically selective public high schools.[60] Two 2008 studies[61, 62] by University of Minnesota sociology professor John Robert Warren examined graduation data for several subsequent years and concluded that students in the Milwaukee voucher program graduated high school at a significantly higher rate – an average of 11 percentage points in the most recent study – than students in the Milwaukee Public Schools.

Warren's most recent findings are shown in Figure 3, with Greene's earlier results – adjusted for consistency – also included.

In his study, Warren posed an important education reform question: How many more high school graduates would there have been if the public schools in Milwaukee had been able to achieve the same graduation rates as the voucher schools? He calculated there would have been a 19.5 percent increase in graduates over the five years studied, or almost 3,000 additional graduates. (See Figure 4.) As School Choice Wisconsin President Susan Mitchell observed in the introduction to Warren's first report, "Given the scope of the urban graduation crisis, the implications of Warren's findings extend well beyond Milwaukee."

Figure 3: Milwaukee Graduation Rates
Voucher Schools vs. Public Schools

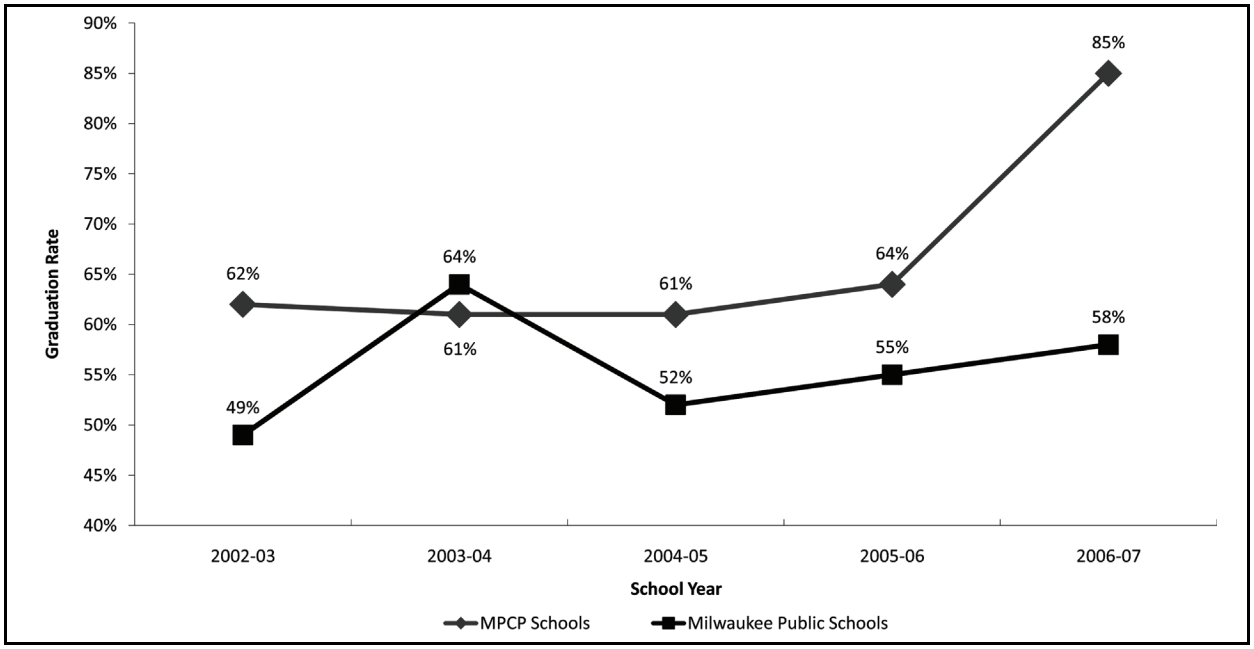
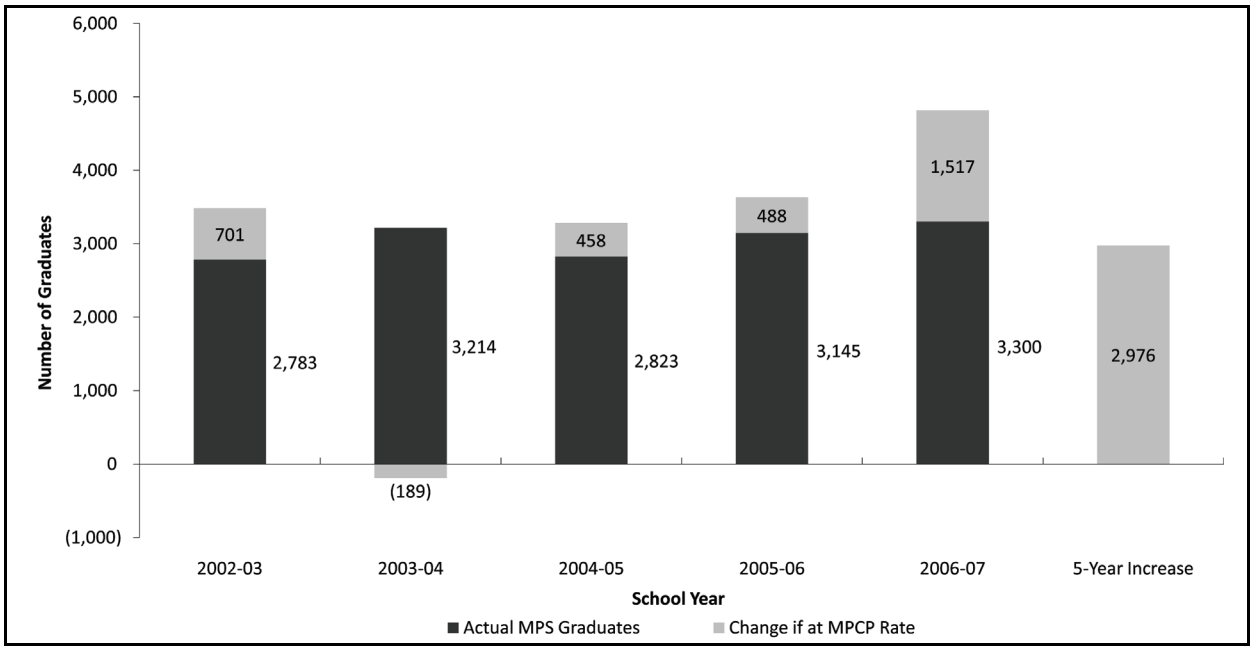


Figure 4: What if Milwaukee's Public Schools
Had Voucher School Graduation Rates?



These data do not suggest, as Stern contends, that Milwaukee's voucher program has run out of steam.[63] Warren's research shows MPS graduation rates have increased significantly during the past five years – from 49 percent in 2002-03 to 58 percent in 2006-07. With a graduation rate of 58 percent, Milwaukee would leap from 95th place in Table 1 to 65th place – a very impressive achievement. This suggests a more detailed analysis of MPS's recent performance is warranted, using publicly available data from Wisconsin Information Network for Successful Schools (WINSS).[64]

With a graduation rate of 58 percent, Milwaukee would leap from 95th place in Table 1 to 65th place – a very impressive achievement.

Figure 5 shows MPS high school graduation rates increased from 51.8 percent in 1999-2000 to 68.6 percent in 2006-07, with rates showing year-to-year gains in every year except 2004-05 – the year the state's data collection process underwent major changes. Although the rates reported by WINSS for recent years are about 10 points higher than the rates computed by Warren,[65] the improvement in rate from 2002-03 to 2006-07 is about the same for both approaches – 7.9 points for WINSS and 9 points for Warren. Based on these data, MPS's improvements have not stalled in recent years but are continuing to show year-to-year gains.

In addition, the WINSS data show MPS has significantly reduced its 12th-grade cohort dropout rate, from around 45 percent in the late 1990s to 30.2 percent in 2006-07. This means a significant number of current MPS high school seniors are students who in the late 1990s would likely have been dropouts but who now are staying in school and earning high school diplomas. Figure 5 shows how 12th-grade enrollment in MPS has increased by approximately 700 students over the past decade, up from a level of about 3,900 in the late 1990s to about 4,600 in recent years. MPS is now graduating a higher percentage of a larger 12th-grade class – another public school improvement.

If these improvements in graduation rate were part of a shared state-wide experience, then what occurred in MPS could not be attributed to the influence of MPCP. Figure 6 shows MPS graduation rates over the past decade and compares them to graduation rates at the state level and in the three largest cities in the state after Milwaukee – Madison, Green Bay, and Kenosha.

While MPS graduation rates have shown a steady and significant increase over the past decade, graduation rates at the state level, although much higher, show essentially no change during that period. Although the state graduation rate increased from 89.0 percent in 1996-97 to a high of 91.8 percent in 2002-03, the rate has fallen in recent years and in 2006-07 stood at virtually the same level as 10 years earlier, 89.6 percent. Madison Metropolitan District also showed an initial improvement in graduation rate, from 82.3 percent 1996-97 to 86.3 percent in 2003-04, but the improvement fizzled in recent years and the 2006-07 rate fell to 81.8 percent.

While graduation rates in Green Bay schools initially track the same pattern as those at the state level – increasing from 87.7 percent in 1996-97 to 91.2 percent in 2002-03 – they have dropped sharply in recent years, down to 75.2 percent in 2006-07, or not much above the 68.6 rate in MPS. The graduation rates for schools in Kenosha show a much brighter picture and initially

Figure 5: MPS Graduation Rates and 12th-Grade Enrollment, 1997-2007

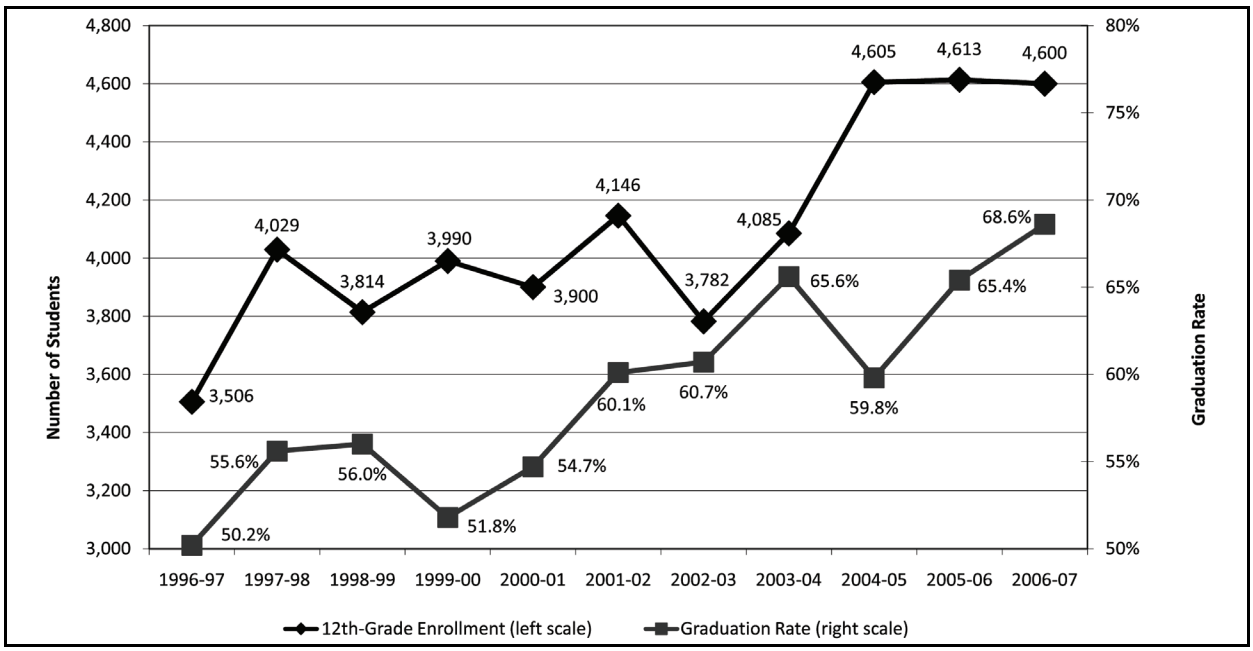
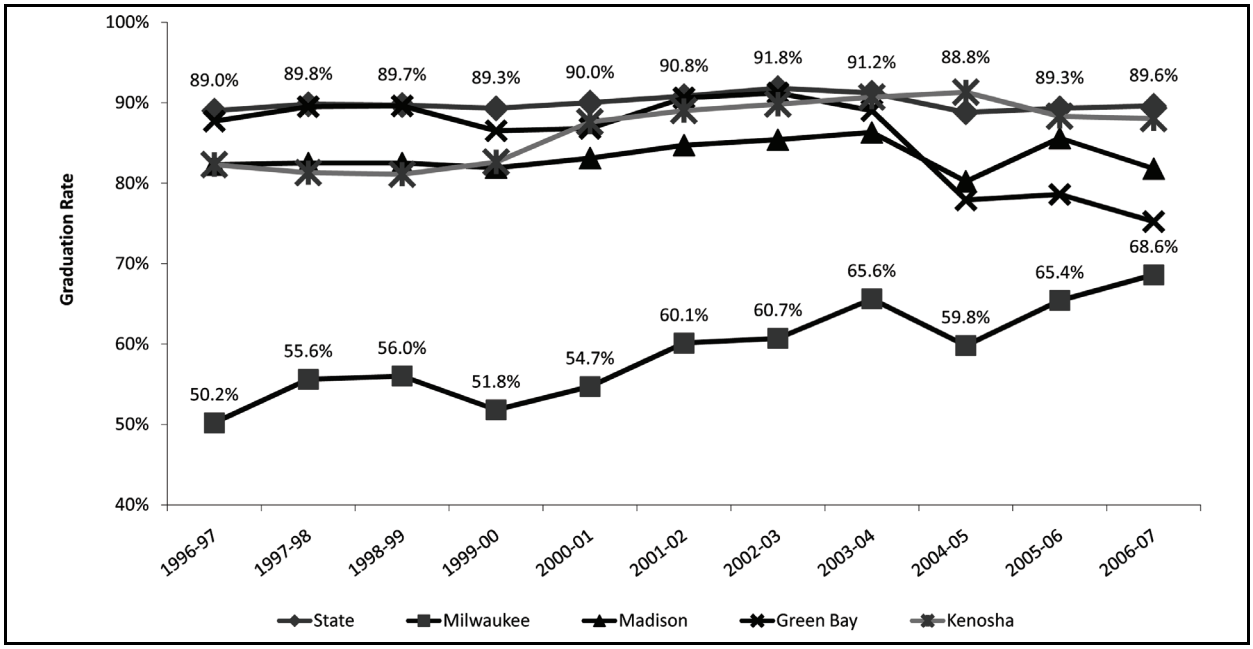


Figure 6: Graduation Rates in Wisconsin and in the State's Four Largest Cities, 1997-2007



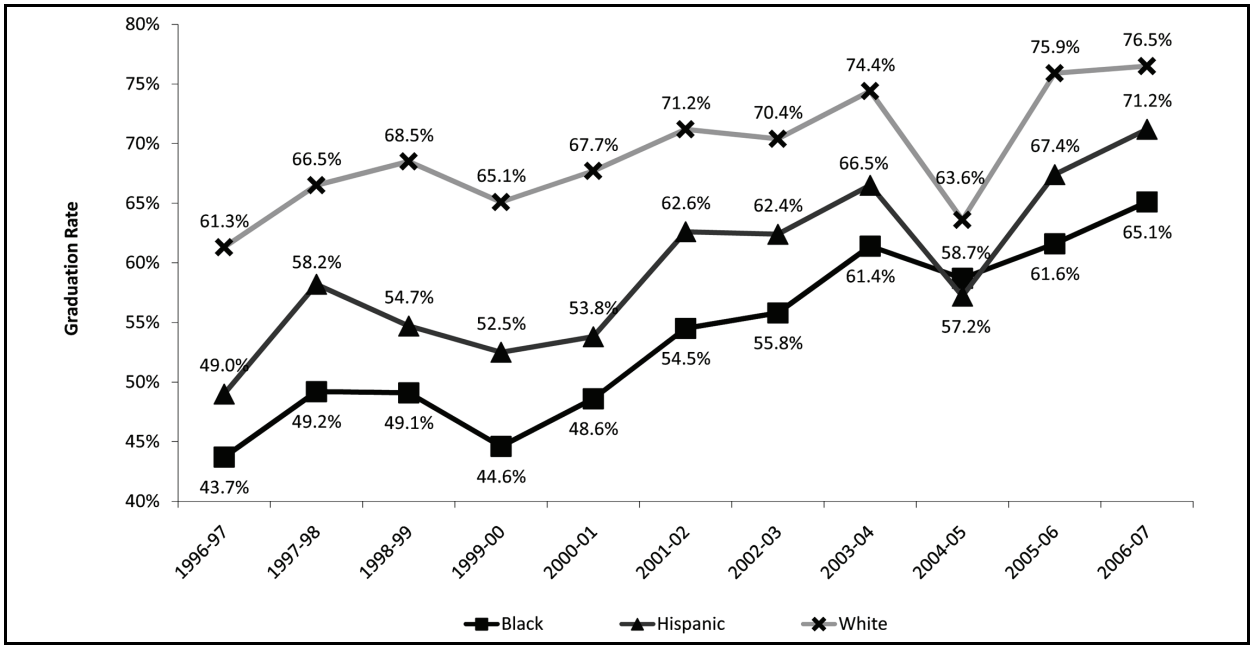
track a similar pattern to those in MPS – increasing from 82.3 percent in 1996-97 to 91.3 percent in 2003-04, almost 10 points higher. However, Kenosha's graduation rates dropped during both of the past two years, closing 2006-07 with a rate of 88.0 percent.

This comparison of MPS to the state and other major cities in Wisconsin shows MPS's decade-long improvement in graduation rates is not part of a state-wide trend but an improvement unique to Milwaukee. Although other jurisdictions showed improvements early on, all except Milwaukee have experienced reversals in the most recent few years. Only in Milwaukee have graduation rates continued to increase through to the latest reporting period. While MPS graduation rates are still not as high as they need to be, the gains MPS is making to improve them certainly have not fizzled out.

In a 2002 interview, Rep. Williams said she had always been focused on education, even prior to her election to the state legislature and her development of the MPCP legislation. "I was working with community organizations and groups to improve the schools in our community and to get a quality education for our students in the public schools," she said. "The problem was that our children—black children—were not making the grade."[66]

This prompts the question: Eighteen years after Williams initiated the voucher program in Milwaukee, are black children benefitting from the increase in MPS graduation rates over the past decade, or are they still not making the grade? The overall MPS graduation rate increased by 18.4 points, from 50.2 percent in 1996-97 to 68.6 percent in 2006-07. How was that increase distributed by ethnic group – black, white, and Hispanic? Figure 7 provides the answer.

Figure 7: MPS High School Graduation Rates by Ethnic Group, 1997-2007



The graduation rate for white MPS students increased by 15.2 points during the period 1996-97 to 2006-07, rising from 61.3 percent to 76.5 percent. The increase for black MPS students was considerably larger – 21.4 points – with their graduation rate rising from 43.4 percent to 65.1 percent. Hispanic MPS students achieved the highest gain for the period – 22.2 points – with their graduation rate rising from 49.0 percent to 71.2 percent.

Thus, all ethnic groups have shared in the increase in MPS graduation rates, but black and Hispanic students have benefitted the most. For the past two years their graduation rates have been higher than the white student graduation rate at the start of the 10-year period – 61.3 percent in 1996-97.

By outpacing the increase in white MPS student graduation rates, black and Hispanic students significantly narrowed the graduation gap between themselves and white students.

By outpacing the increase in white MPS student graduation rates, black and Hispanic students significantly narrowed the graduation gap between themselves and white students. Black MPS students narrowed the gap from 17.6 points (61.3 - 43.7) in 1996-97 to 10.4 points (76.5 - 65.1) in 2006-07. Hispanic MPS students narrowed the gap from 12.3 points (61.3 - 49.0) in 1996-97 to 5.3 points (76.5 - 71.2) in 2006-07.

Although the district still has far to go, it is clear that over the past decade MPS has made considerable progress in improving high school graduation rates for all students and in narrowing the gap in graduation rates between white students and students in other ethnic groups. Since neither the state nor other major cities in Wisconsin have shown such significant and continuing gains in graduation rates during this time period, it is not unreasonable to suggest that competitive pressure from MPCP played a role in producing these gains. Milwaukee's voucher program thus appears not only to be meeting Rep. Williams' overall goal of improving schools so that black students get a quality education in the public schools, but also providing an affirmative answer to the question posed by Hoxby in her 2002 study of MPCP: "Could school choice be a tide that lifts all boats?"[67]

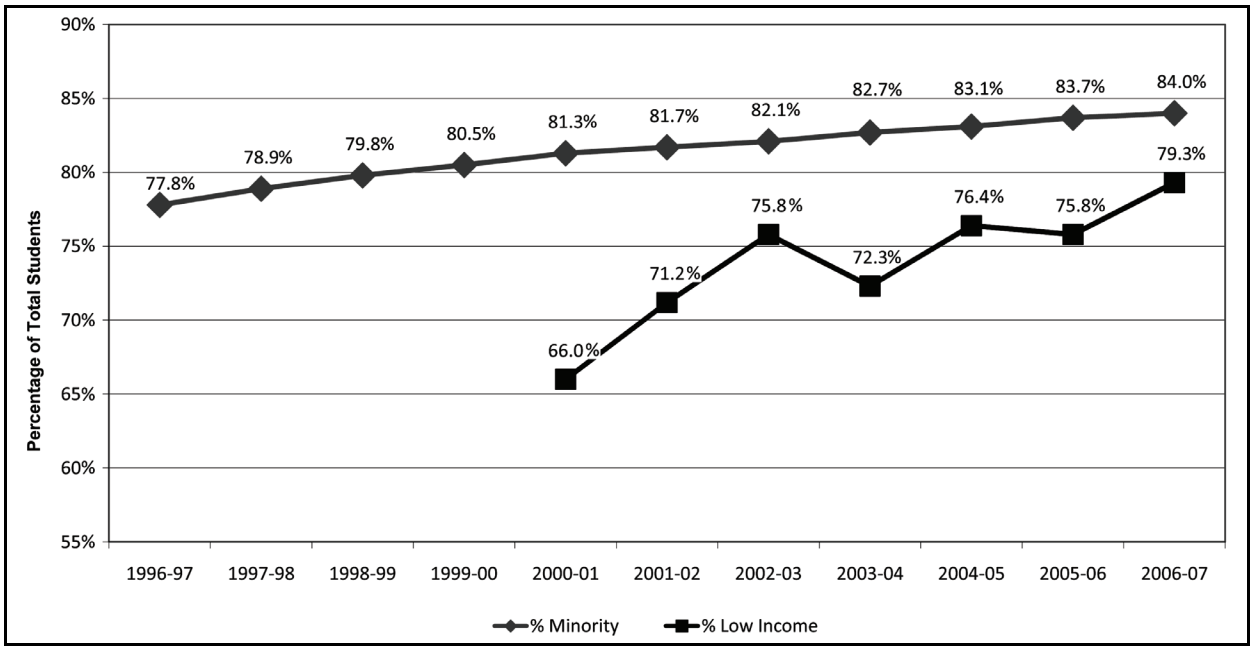
8. Why Didn't Student Achievement Also Improve?

There is still one remaining issue, one that led Stern to contend school choice wasn't enough to reform the public schools. If graduation rates are up, shouldn't 10th-grade test scores be up, too, and not flat? (See Figure 1.)

One factor that might help explain the flat 10th-grade test scores is the lowered MPS dropout rate. Most dropouts are students who, when they reach 9th grade, discover they are unprepared for the demands of high school coursework and subsequently drop out before graduation. With fewer of these students now dropping out, their growing presence in the pool of tested students means their relatively weak scores may be dragging down what would otherwise have been, based on 8th-grade scores, an increased 10th-grade test score.

Another factor that may be dragging down what would otherwise have been higher test scores is the substantial increase in both low-income and minority students in MPS. Data on the demographic changes in MPS over the past decade are shown in Figure 8.

Figure 8: Student Demographic Changes in the Milwaukee Public Schools, 1997-2007



The proportion of minority students in MPS has increased from 77.8 percent in 1996-97 to 84.0 percent in 2006-07. At the same time, low-income students also make up an increasing proportion of the MPS student body, rising from 66.0 percent in 2001-02 to 79.3 percent in 2006-07.

The presence of a large and increasing percentage of low-income and minority students in a school district is commonly associated with lower test scores. In the case of MPS, that feature of the district may be causing test scores to be flat rather than increasing.

Thus, while MPS's test scores may appear flat and unimpressive at first glance, the maintenance of flat test scores can be viewed as a more impressive achievement when we take into account that MPS is dealing with a greater proportion of low-income students and a greater proportion of minority students, and it is keeping more marginal students in school longer so that more of them graduate rather than drop out.

At this point, it seems clear that Stern's assessment of MPS's response to voucher competition is incomplete and fails to give credit to MPS for ongoing improvements the district has been making since the initial MPCP program was expanded in the late 1990s. Research studies and the statements of participants indicate these improvements would not have occurred in the absence of the competitive environment created by parental choice.

If the Milwaukee Parental Choice Program involved universal vouchers and was not inducing significant improvements in the public schools, then turning to another reform strategy like instructional reform might be appropriate. However, since Milwaukee's charity vouchers appear to be working better than expected in driving a wide variety of desirable education reforms, a more appropriate strategy would be to expand the program so that it reaches more children, and to raise the value of the voucher so that it attracts a wider range of education providers.

9. Implications for Voucher Design

The way a voucher program is designed has important consequences for its likely results. The Friedman Foundation for Educational Choice has graded voucher programs according to various design features – purchasing power, student restrictions, and school restrictions – but its treatment of tax credits as the equivalent of vouchers and its low ranking of MPCP suggest (to this author) that the grading criteria may need some further refinement.[68] Chakrabarti has explicitly addressed the issue of voucher design in two important studies.

The way a voucher program is designed has important consequences for its likely results.

In the first study, published in 2003,[69] Chakrabarti shows that fundamental differences in voucher design produce markedly different effects on public school performance. She characterizes MPCP as a "voucher shock" treatment, where low-income families are suddenly eligible for vouchers, whereas the Florida A+ Program involves a "voucher threat" treatment, where public schools are threatened with having to deal with voucher competition if they fail to meet certain quality standards. Using data from both Florida and Milwaukee, she presents strong evidence that the public school improvement under a Florida-type program is much larger than that in a Milwaukee-type program.

In the second study, published two years later,[70] Chakrabarti compares the effect of MPCP on MPS performance during its initial phase up to 1997-98 and its second phase from 1998-99 to 2002. In the initial phase, when only secular private schools could participate, the number of voucher applicants far exceeded private school capacity. In the second phase, the inclusion of religious schools in the program led to a significant increase in competition.

"While the Milwaukee voucher program in its first phase did not have much of a bite," writes Chakrabarti, "an increase in competition in the second phase through higher private school participation and an increase in per-pupil revenue loss from vouchers led to significant improvement in performance of the treated public schools." The implication of these findings, she concludes, is "that judicious choice of some of the underlying policy parameters in a simple means-tested voucher program can go a long way in inducing public school improvement."

What are some of the key features that vouchers need to possess for the competition they produce to be effective in improving the performance of public schools? Chakrabarti's research coupled with MPS and MPCP enrollment data suggests at least four requirements are necessary for voucher competition to be effective: competition must be explicit, the value of the voucher

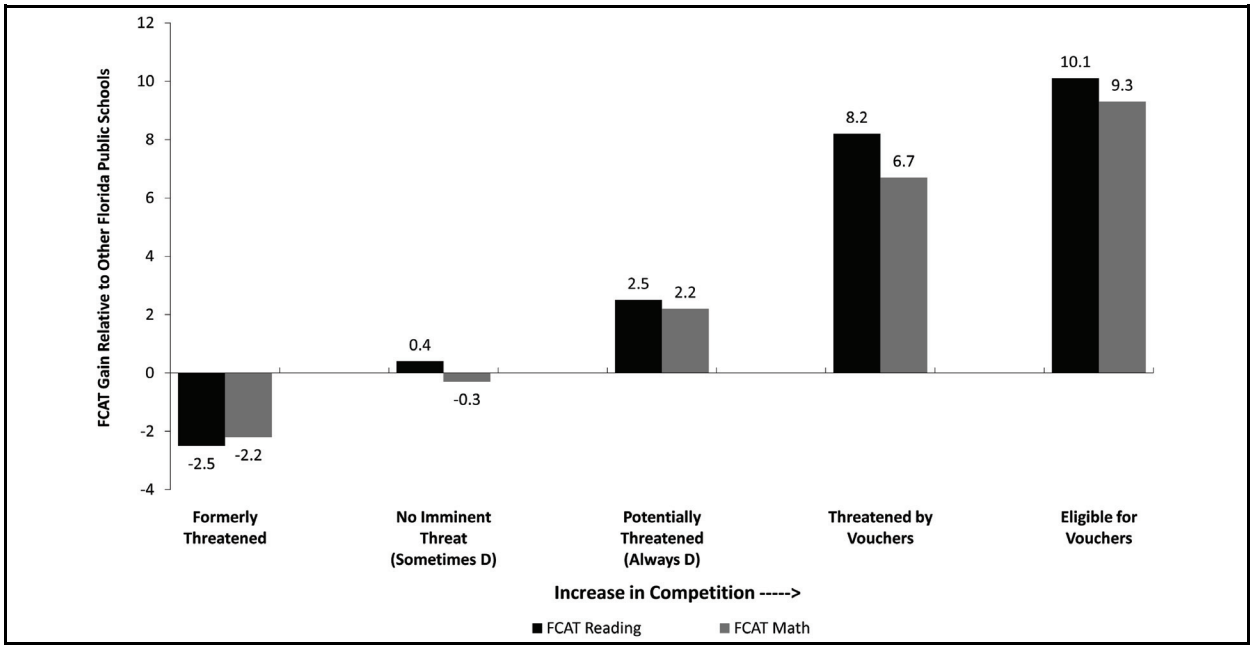
must be substantial, there should be financial consequences for the public schools, and public school enrollment should decrease when voucher students leave.

A. Voucher Competition Must Be Explicit

Three separate studies[71, 72, 73] of Florida's A+ vouchers indicate the response of a public school to voucher competition increases as the threat of vouchers becomes more imminent. Schools facing the greatest threat made the greatest improvement in student achievement.

"The more in danger a school is of having to compete with vouchers, the greater score gains they make on both the FCAT and Stanford-9 [achievement tests]," concluded Jay Greene in a 2003 Manhattan Institute study.[74] He found that schools already facing vouchers – so-called 'F schools' – made the greatest gains, with gains dropping off as the threat of vouchers diminished. When the threat of vouchers goes away, he noted, "so does the incentive for failing schools to improve." (See Figure 9.[75])

Figure 9: The Nearer Vouchers Loom, the More Public Schools Improve



In a separate analysis,[76] Chakrabarti found "strong evidence that F schools in Florida responded to the threat of vouchers" She did not observe similar improvements when Florida's previous accountability system was in effect, where schools were similarly rated but the voucher threat was absent. A third study by Martin West and Paul Peterson found the A+ vouchers were more effective than the school choice provisions in No Child Left Behind for producing improvements in test scores.[77]

The response of public schools to competition from vouchers thus appears to depend on the proximity and size of the competitive threat the vouchers pose to them. When a low-performing public school is put on notice that it could lose many of its students to vouchers at the end of the current school year, administrators at that school are much more likely to try to raise student achievement during that year than administrators at schools where student achievement is higher and the voucher threat is less. In fact, Hoxby found the schools in Milwaukee facing the greatest risk of losing students to vouchers were the schools that improved the most.[78, 79]

"In every subject, achievement grew most in the schools that faced the most voucher competition, a medium amount in the schools that faced less competition, and the least in the schools that faced no competition," concluded Hoxby after analyzing the performance of Milwaukee public schools during the late 1990s.[80]

These findings indicate public schools faced with an imminent and specific threat from vouchers will respond strongly to the competitive challenge.

These findings indicate public schools faced with an imminent and specific threat from vouchers will respond strongly to the competitive challenge. However, they also indicate that public schools, when faced with a less imminent and less specific threat from vouchers, will respond only weakly to the diffuse competitive challenge. The effect of placing a cap on participation in a voucher program, as does MPCP, is to turn off the competitive effect as the cap is approached.

B. Voucher Value Must Be Substantial

Just as school choice alone is not enough to effect education reform, universality alone is not enough, either. The "x-dollars" that Friedman mentioned as the value of a universal voucher must be sufficient for parents to purchase a private school education for their child.

Friedman addressed this issue in a 2002 *New York Times* article[81] about the Cleveland voucher program, which at the time provided a voucher worth only $2,250 per student, with an additional $250 paid by the parents.

"It is not easy, perhaps not possible, to provide a satisfactory education for $2,500 per student," wrote Friedman. Most private schools spend more than that, he noted, and so a voucher of $2,500 largely limits students to a choice of religious schools, where tuition is subsidized. Rep. Williams, founder of Milwaukee's voucher program, has also been critical of the low voucher amount provided in Cleveland.

"With a voucher worth only $2,250, what kind of school are you going to get?" she asked. "That's $2,250 to do everything – the school building, the maintenance, the education, the staffing, the supplies, and so on. You can't do it for that."[82]

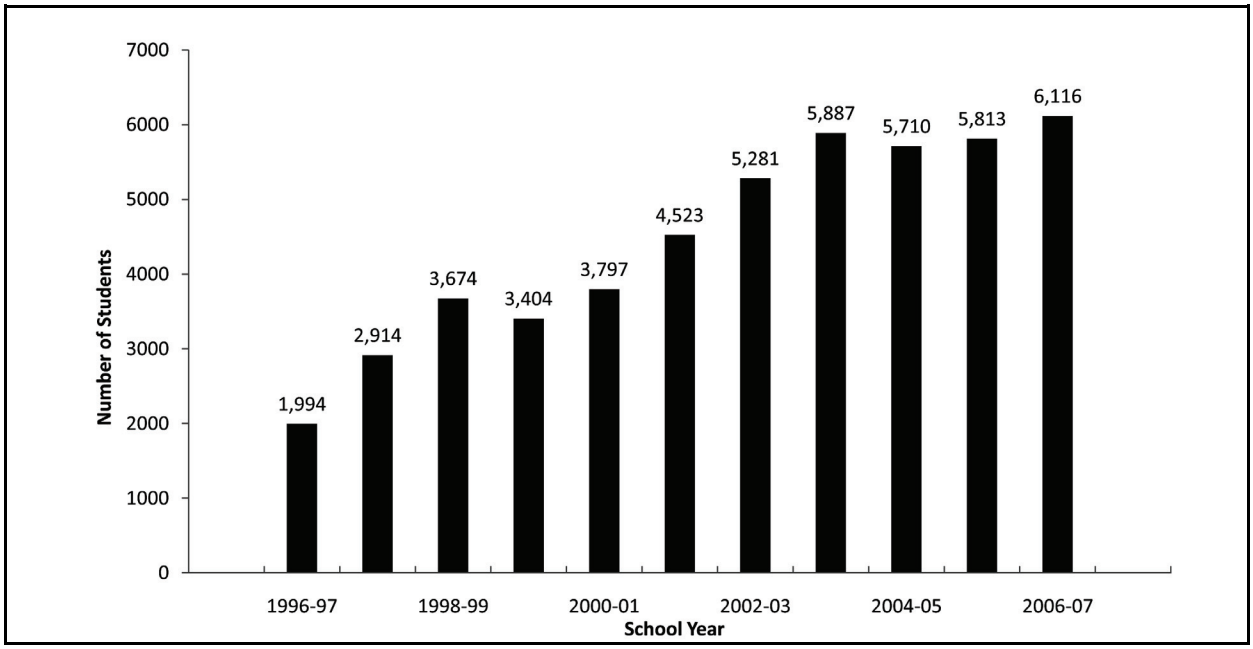
Friedman suggested raising the value of the Cleveland voucher to the amount Ohio spent per child in the public schools, which at that time was about $7,000. By 2006-07, it was more than

$10,000.[83] He also suggested making the voucher available to all students, not just those from low-income families. Such a substantial voucher would not only give students a wider choice of schools, it would also be substantial enough to attract new education providers into the market.

"A host of new nonprofit and for-profit schools would emerge," argued Friedman. "Voucher-bearing students would then be less dependent on low-tuition parochial schools." He noted that in the first 10 years of the Milwaukee voucher program, 37 new schools had opened, nearly two-thirds of which were secular. At that time, he (like Stern[84]) was impressed with the initial response of the Milwaukee Public Schools to competition.

Friedman turned out to be right about Cleveland's voucher being too low to attract many new schools. As shown by Figure 10, enrollment started in 1996-97 at 1,994, grew to 5,887 in 2003, but then fell slightly in 2004 to 5,710, rose slightly to 5,813 in 2005, and stood at 6,116 in 2006. This is during a time when the Milwaukee program is adding 1,500 students a year.

Figure 10: Enrollment in the Cleveland Voucher Program, 1996-2008[85]



The gap between Cleveland's voucher amount and per-pupil spending by Cleveland's public schools is large and growing. (See Figures 11 and 12.) In 1996-97, the voucher was capped at $2,250 while per-pupil spending in the public schools averaged $7,649. The voucher was worth 29.4 percent as much as average public school spending. By 2007, the voucher was worth $3,105 while public school spending had risen to $12,212, reducing the voucher amount to just 25.4 percent as much as average public school spending.

Figure 11: Public Spending Per Pupil for Voucher Schools and Public Schools in Cleveland, 1996-2008[86] [87]

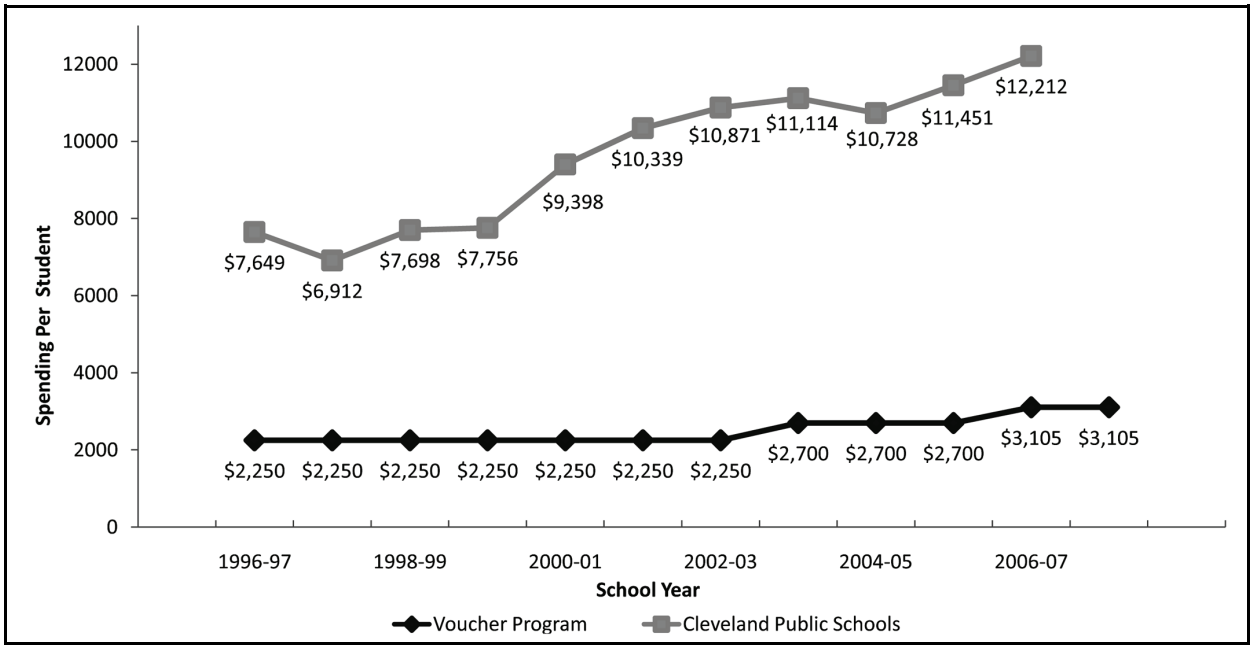


Figure 12: Spending Per Pupil Ratio: Voucher Schools vs. Public Schools in Cleveland, 1996-2008

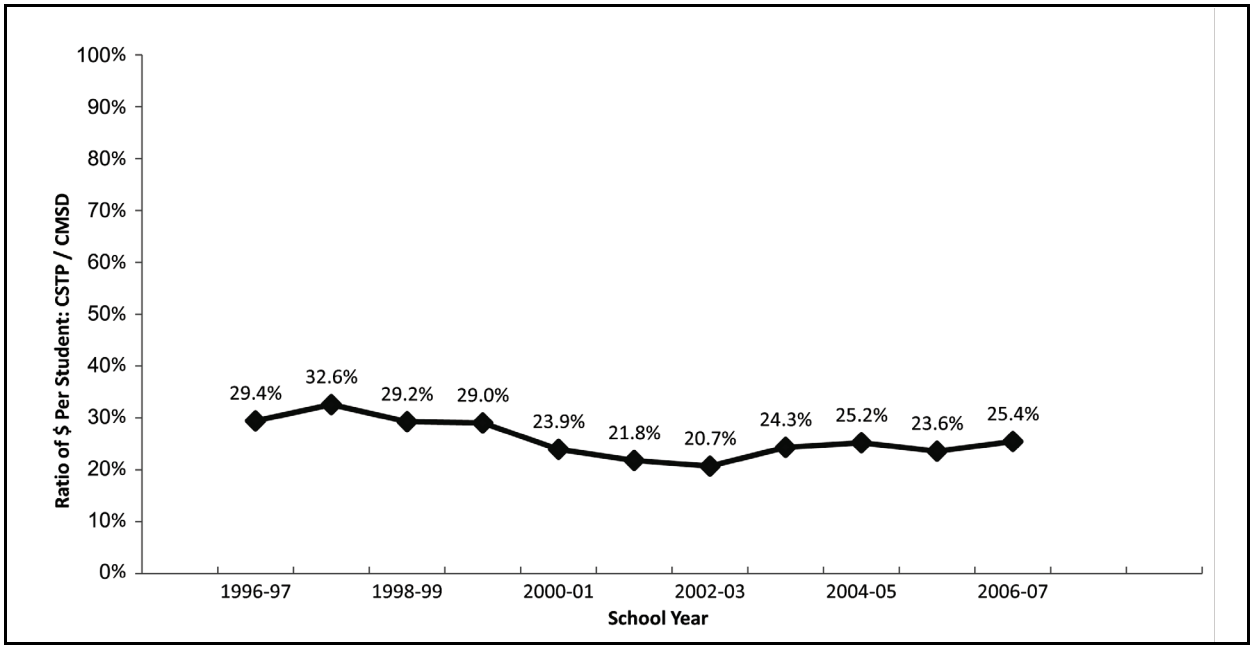


Figure 13: Spending Per Pupil in Voucher and Public Schools in Milwaukee, 1990-2008

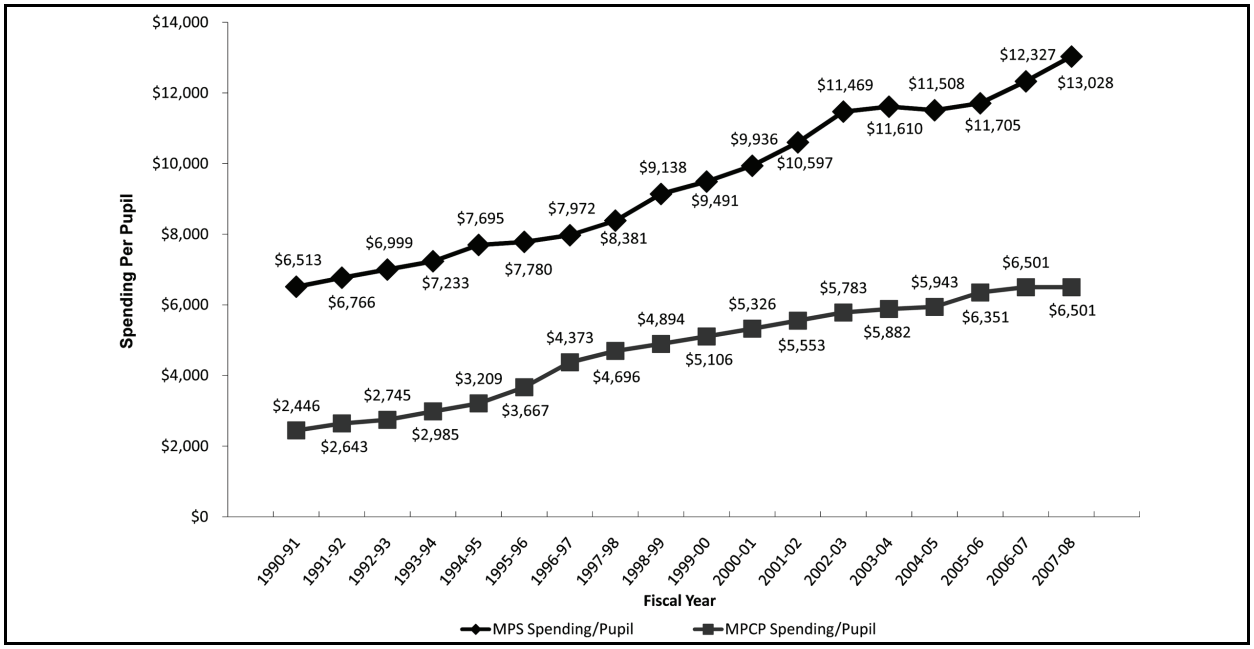
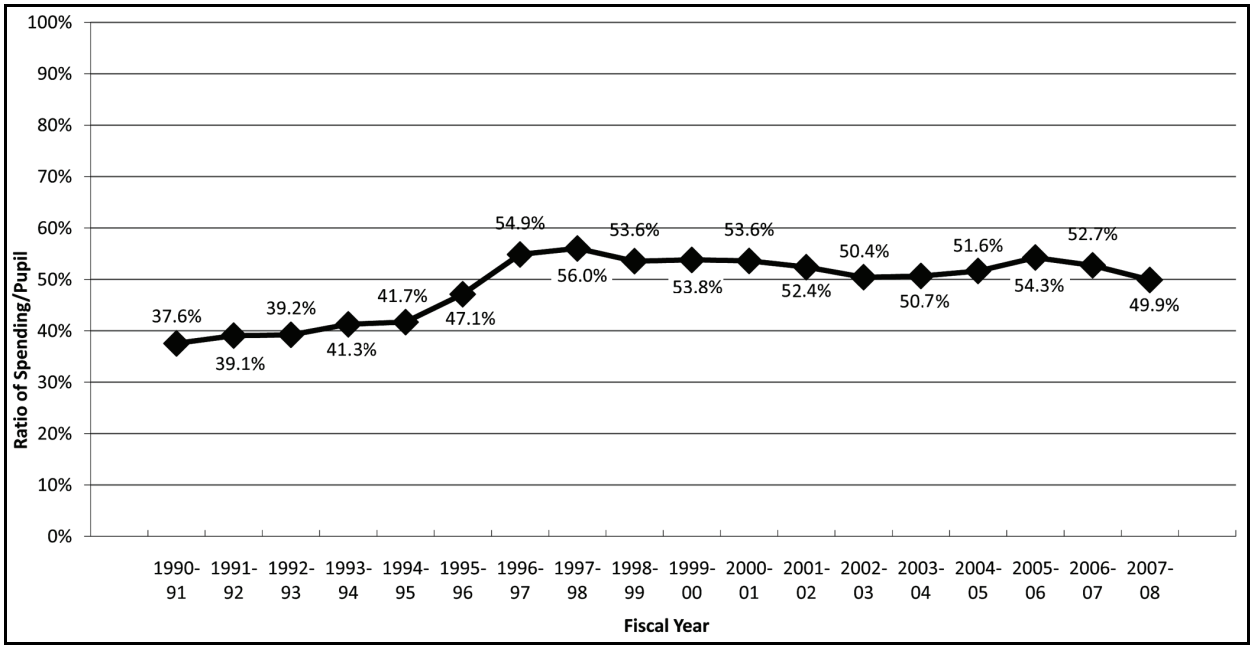


Figure 14: Spending Per Pupil Ratio: Voucher Schools vs. Public Schools in Milwaukee, 1990-2008



Although the maximum value of the Milwaukee voucher has been increased from its initial value of $2,446 in 1990-91 to $6,501 currently,[88] the current maximum value is still only half of the per-pupil spending of $13,028 in the Milwaukee Public Schools.[89] (See Figures 13 and 14.) Actual per-pupil spending on the voucher program is less than the maximum payment because many of the voucher schools – 33 percent in 2005 – charge tuition less than the maximum voucher amount.[90]

C. Public Schools that Suffer Enrollment Losses Should Face Financial Consequences

In theory, when a public school student chooses a voucher school, the public school should experience some kind of financial repercussion. However, some voucher proponents imply that public schools *gain* funding when they lose students to vouchers.

For example, here is the way the Friedman Foundation addresses a standard objection to vouchers: "Doesn't school choice drain resources from public schools?" "Absolutely not!" the foundation responds in the 2007-08 edition of *The ABCs of School Choice*.[91] "No state or city with school choice has seen its public school budgets go down. When Milwaukee's school choice program was founded in 1990-91, its public schools spent $6,316 per student; by 2003-04 that had risen to $10,375. Cleveland's public school spending rose from $6,616 in 1996-97, when its choice program began, to $10,420 in 2003-04. And these figures include only the portion of school budgets known as 'current expenditures'; figures for total education spending would be even higher."

"The Wisconsin school funding system is largely driven by enrollment, a fact that should, in principle, make it highly compatible with a system of school choice, where 'the dollar follows the child.'"

While these statistics may relieve the anxiety of public school administrators and teacher unions, they also unfortunately reflect a serious design defect in many voucher programs operating today. American Enterprise Institute scholar Frederick M. Hess noted in 2001 that such developments were not consistent with the market concept that revenues should depend on attracting or losing customers. Such conditions, he observed wryly, when coupled with increasing enrollment in the public schools, "make competition more of a relief than a threat."[92]

Spending per pupil is not, however, a good indicator of whether public schools are losing or gaining funds as a result of voucher competition. As Costrell explains in his baseline report on the Milwaukee voucher program,[93] "The Wisconsin school funding system is largely driven by enrollment, a fact that should, in principle, make it highly compatible with a system of school choice, where 'the dollar follows the child.' In addition, the savings from enrollment shifts to districts with lower expenditures are automatically shared by property taxpayers across the state."

Although the funding of MPCP does not follow this template, the funding of MPS does. This means MPS funding is a direct function of its enrollment, and the loss of any students to voucher schools translates into a real loss of the funding dollars associated with those students.

If public schools are to respond to competition, they must first feel the effect of competition.

As indicated earlier, in the past two school years alone, the loss of students to voucher schools has cost the district an estimated $287.7 million in lost funding. Thus, MPS does suffer financial consequences from losing students to the city's voucher program. However, as we shall see later, those financial consequences have not been very noticeable because the continuing loss of students to vouchers has, until recently, been balanced by offsetting increases in enrollment.

If public schools are to respond to competition, they must first feel the effect of competition. This is best accomplished by funding public schools in the same way voucher schools are funded – based on the number of students who attend the school, as is the case in the Wisconsin school funding system. Although some voucher opponents say public schools should not suffer any loss of funding from vouchers, such a "hold harmless" provision virtually ensures that vouchers will not have a positive effect on public school performance.

D. Vouchers Should Produce Enrollment Changes

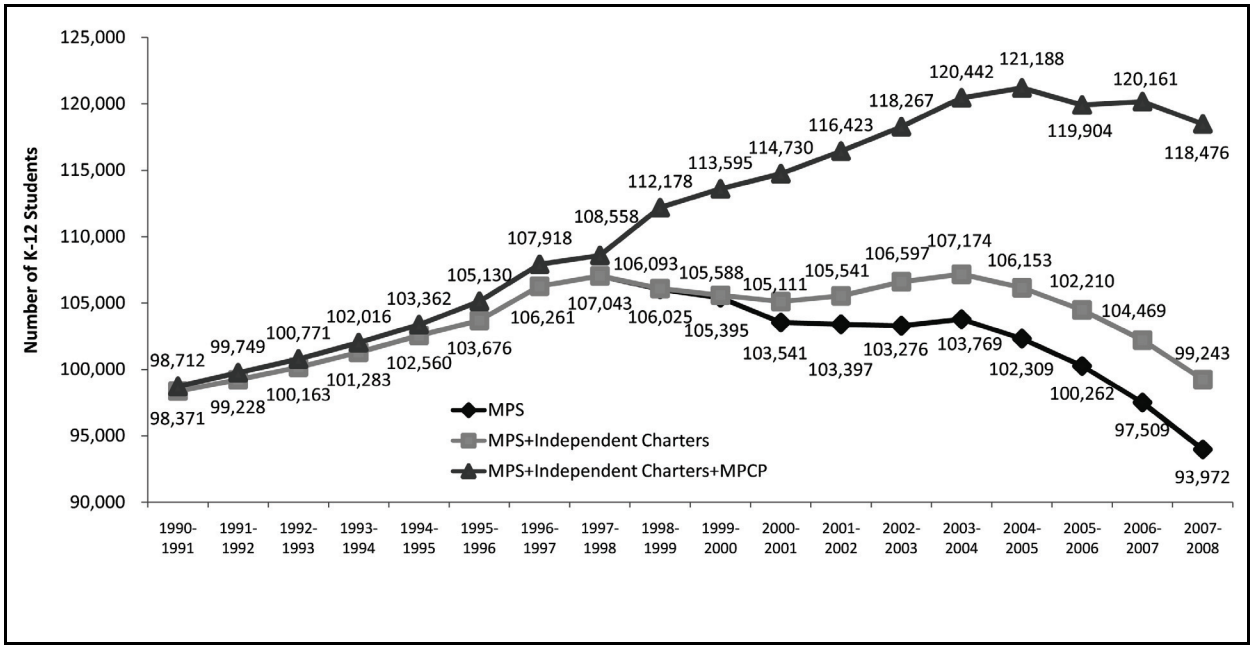
It would seem obvious that a public school system would experience a reduction in enrollment when public school students use vouchers to attend a non-public school. For example, in the case of Milwaukee, as voucher schools have increased their enrollment by 18,892 students since the 1990-91 school year, it would seem reasonable to assume that enrollment in the Milwaukee Public Schools had decreased by a corresponding amount. Reasonable, but wrong. It is only in the past two school years, 2006-07 and 2007-08, that MPS enrollment[94, 95] has dropped below the level it was at in 1990-91 when the Milwaukee Parental Choice Program started.[**]

From 1990-91 to 2007-08, MPS enrollment decreased by only 4,399 students. During most of that period, a significant increase in the city's total publicly funded K-12 enrollment effectively reduced any competitive effect vouchers had on public school enrollment. Figure 15 shows that combined enrollment in the city's public schools, independent charter schools, and voucher program rose from 98,712 in 1990-91 to 118,476 in 2007-08 – an increase of 19,764 students, not much different from the current enrollment of 19,233 students in the Milwaukee Parental Choice Program.

Clearly, there have been significant K-12 enrollment changes in Milwaukee since 1990, and these need to be understood to gain a better understanding of how the loss of students to vouchers was perceived by MPS.

[**] Enrollment data cited here are September headcounts, not FTEs; the headcounts for the Milwaukee Public Schools include all students at MPS sites – including MPS charter school students – plus Open Enrollment students in other districts and Chapter 220 students in suburban schools; independent charters are charter schools outside of MPS.

Figure 15: Total K-12 Enrollment in Milwaukee: Public Schools Plus Voucher Schools, 1990-2008



The K-12 enrollment changes in Milwaukee since 1990 can be divided into three distinct phases, which are discussed in turn below.

Phase I: 1990-91 to 1997-98: Period of growing enrollment for MPS

- 1990-91 was the first year of the MPCP program.
- 1997-98 was the peak enrollment year for MPS.

The first year of Phase 1, 1990-91, was the first year of the Milwaukee Parental Choice Program, which started with a total enrollment of just 341 students. Enrollment in the Milwaukee Public Schools at that time was 98,371 students.

For the next eight years, the voucher program was involved in continuing court challenges from opponents of school choice. With the future of the program in doubt during this period, private schools and parents alike shared a reluctance to make too big a commitment to voucher schools, since the courts might strike program funding at any time. As a result of this uncertainty – and a shortage of private school seats[96] – enrollment in the program grew very slowly, increasing by an average of only about 160 students a year and reaching a total of 1,545 students in 1997-98, an increase of only 1,200 students over the period.

In stark contrast, enrollment in the Milwaukee Public Schools increased by an average of roughly 1,100 students every year during this eight-year period, rising from 98,371 students in

1990-91 to 107,043 students in 1997-98. The effect of voucher schools on public school enrollment from 1990-91 to 1997-98 thus was negligible.

Indeed, as Hess points out in his 2002 book, *Revolution at the Margins*,[97] "MPCP may have been a blessing in disguise" for Milwaukee Public School administrators trying to cope with the huge increase in enrollment. Hess cites one principal as saying, "The [choice] program really wasn't at all bad from our point of view. I mean, we were and are hurting for space as it is." Under these circumstances, notes Hess, "a possible loss of enrollment did not pose much of a threat at all."

The uncertainty surrounding the viability of the voucher program was removed on June 10, 1998, when the Wisconsin Supreme Court upheld the Milwaukee Parental Choice Program, rejecting the arguments of voucher opponents who had challenged the program's inclusion of sectarian schools as a violation of the First Amendment of the U.S. Constitution.[98] Any remaining concerns were removed five months later, on November 9, 1998, when the U.S. Supreme Court declined to hear a challenge to the Wisconsin Supreme Court's ruling.[99]

The uncertainty surrounding the viability of the voucher program was removed on June 10, 1998, when the Wisconsin Supreme Court upheld the Milwaukee Parental Choice Program.

These two key court rulings in 1998 marked the end of the first phase of enrollment changes for the Milwaukee Public Schools. At this point, at the end of 1997-98 school year, MPS was at its peak enrollment of 107,043 students and total publicly funded K-12 enrollment in Milwaukee (MPS plus MPCP) was 108,588 students.

Phase II: 1998-99 to 2003-04: Period of flat enrollment for MPS

- 1998-99 was the first full school year after the MPCP court battles ended.
- 2003-04 was the peak enrollment year for public schools (MPS plus independent charter schools).

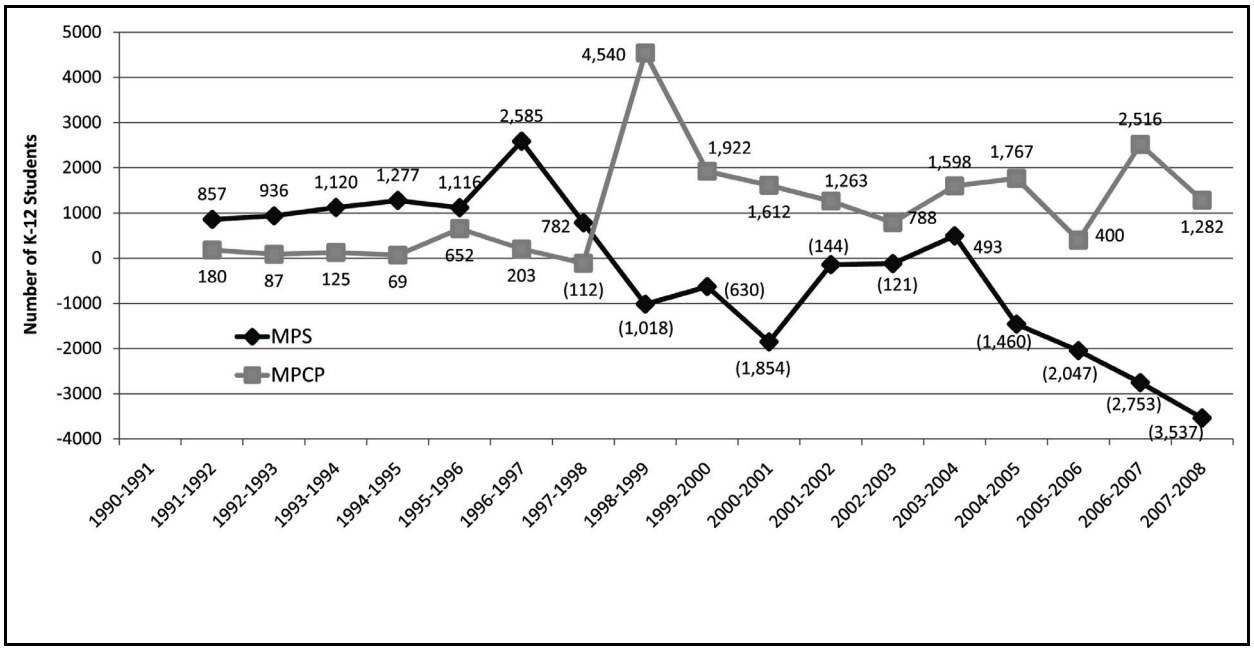
The 1998-99 school year was the first full school year after the Wisconsin Supreme Court made vouchers a permanent feature of the city's education landscape. It was also the year when independent charter schools first opened in Milwaukee. Figure 15, above, shows it was a transformative year for enrollment changes, with the Milwaukee Public Schools experiencing a decline in enrollment for the first time in almost a decade and the voucher program increasing its enrollment almost four-fold in a single year.

Figure 16, below, charts the annual enrollment changes for voucher schools and MPCP schools. It shows just how dramatic the enrollment shifts in 1998-99 were, and how they set the pattern of enrollment changes for the next decade.

Since 1998-99, the voucher program has never experienced a decline in enrollment, and its annual enrollment increases have consistently outpaced those of MPS. According to Hess,[100] the 1998-99 enrollment drop was a shock to MPS administrators and caused a reduction in

elementary teaching positions. “For the first time,” wrote Hess, “the MPS faced the loss of enrollment and funding.”

Figure 16: K-12 Enrollment Changes in Milwaukee: Voucher Schools vs. Public Schools, 1990-2008



However, the enrollment loss was short-lived, and MPS enrollment turned out to be relatively stable during most of this period from 1998-99 to 2003-04. Although the size of the student body dropped from 106,025 to 103,541 during the first two years, the city schools subsequently maintained a steady level of about 103,500 students for the next four years.

At the same time, the growth of independent charter schools from 1998-99 onwards caused total public school enrollment (MPS plus independent charter schools) also to remain relatively flat during this period. Starting at 106,093 students in 1998-99, total public school enrollment dipped to 105,111 in 2000-01 but then rose to what turned out to be its peak of 107,174 in 2003-04. This was virtually the same as MPS’s peak enrollment figure of 107,043 seven years earlier in 1997-98, at the end of Phase I.

While public school enrollment remained flat during this period, MPCP enrollment surged. After jumping by more than 4,500 students in 1998-99, MPCP enrollment rose by an average of 1,500 students a year, increasing from 6,085 in 1998-99 to 13,268 in 2003-04.

As a result of the increase in enrollment in voucher schools and independent charter schools, total publicly funded K-12 enrollment in Milwaukee continued to increase during this period, rising from 112,178 in 1998-99 to 120,442 in 2003-04. This year marked the end of the second phase of MPS enrollment changes.

Phase III: 2004-05 to date: Period of declining enrollment for MPS

- 2004-05 was the first of four years of accelerating enrollment decline for MPS.
- 2004-05 was the peak enrollment year for publicly funded K-12 education in Milwaukee.

The first year in this third phase, the 2004-05 school year, marked the peak enrollment year for publicly funded K-12 education in Milwaukee, when the combined enrollment of MPS, MPCP, and independent charters reached a total of 121,188 students. By 2007-08, combined enrollment had dropped by more than 2,000 students to 118,476.

However, neither the voucher program nor the independent charter schools suffered enrollment declines during this four-year period. Enrollment in Milwaukee's voucher schools continued to increase at an average annual rate of 1,500 students a year, rising to a total of 19,233 in 2007-08. Independent charter schools also continued to increase enrollment during this period, increasing their student body from 3,844 in 2004-05 to 5,271 in 2007-08.

The experience of MPS was just the opposite. The first year in this third phase marked the beginning of an accelerating four-year enrollment decline for the Milwaukee Public Schools. Even though total publicly funded K-12 enrollment peaked in 2004-05, MPS enrollment fell sharply, and it continued to fall in subsequent years.

Over the four-year period, enrollment in the Milwaukee Public Schools fell by an average of 2,100 students a year, from 102,309 in 2004-05 to 93,972 in 2007-08. By 2006-07, MPS for the first time had fewer students than the district had 17 years earlier in 1990-91, when the voucher program first started. From the end of Phase II in 2003-04 to the end of Phase III in 2007-08, MPS lost almost 10,000 students.

Reviewing the three MPS enrollment phases, it appears that, until the start of Phase III in 2004-05, the public schools in Milwaukee were to a large degree insulated from the competitive pressure of voucher schools because there was a sufficient inflow of new K-12 students for Milwaukee to sustain both a substantial expansion of the voucher program and increasing or flat enrollment for the public schools. After reviewing the increased enrollment situations in both Milwaukee and Cleveland in 2001, Hess commented, "Competition in most urban districts is like a gnat to a bull, there but barely noticed."[101]

In the past four years, voucher competition in Milwaukee has changed from a gnat-bite to a whack from a 2-by-4.

Over the past four years, however, the competition for students has changed dramatically, with the Milwaukee Public Schools experiencing a significant decline in enrollment not only because of a loss of students to voucher schools and independent charter schools but also because of overall declining student enrollment. In the past four years, voucher competition in Milwaukee has changed from a gnat-bite to a whack from a 2-by-4.

Even though MPS technically has "lost" more than 17,000 students to MPCP (90 percent of 19,233 students) over the 18 years from 1990-91 until 2007-08, the district has until recently not had to cope with a corresponding reduction in enrollment because the loss of students to voucher

schools was offset by an almost 20,000-student increase in publicly funded K-12 enrollment during that period. Although the result of this offset has been to shield MPS from the effects of voucher competition, the steady improvement in MPS graduation rates for all ethnic groups over the past 10 years indicates MPS has not used this shield to postpone action on improving district performance.

With overall K-12 enrollment now falling and MPCP enrollment still rising, MPS is now experiencing the full effect of voucher competition on enrollment and will need to work much harder to improve student achievement sufficiently to stem further enrollment losses. Based on past performance, it appears likely MPS will rise to this new challenge and use it to prompt the district to a significantly higher level of performance.

10. Vouchers and Public School Reform: Does It Matter?

While the expectation is that the current reduction in enrollment from voucher competition will spur the Milwaukee Public Schools to take the steps necessary to stem that loss, history tells us such a response is not always forthcoming. Declining student enrollment does not necessarily spur a public school district to improve its educational offerings to try to keep parents sending their children to the schools.

Since the 1960s, millions of families migrated from U.S. cities to the suburbs, largely because of concerns over schools, and yet public school administrators in the cities did not respond to that substantial loss of students by improving the performance of their schools. For example, in a 1997 Calvert Institute survey of families who left Baltimore for the suburbs in 1996, the poor quality of the city's public schools was cited by half of the families as one of the top three reasons for leaving the city.[102, 103, 104] Half of the families said they might have stayed in the city if they had been given access to school choice and vouchers.

There is a real risk involved in using the response of the public schools as the primary determinant of whether vouchers are effective.

Also, while the expectation is that public schools will respond to competition and work to improve their educational programs, there is a real risk involved in using the response of the public schools as the primary determinant of whether vouchers are effective. The public schools could simply choose not to respond to vouchers so that observers would conclude vouchers are not effective.

An early court ruling in the Cleveland voucher case is instructive here. In December 1999, U.S. District Judge Solomon Oliver Jr. ruled the Cleveland voucher program was unconstitutional because almost all of the participating schools were religious and thus the program did not offer a real choice to parents. However, the shortage of secular school options that Judge Oliver found objectionable was a direct consequence of the refusal of suburban public schools to participate in the program.[105] Had Oliver's ruling been allowed to stand, it would have given public schools the power to invalidate a voucher program simply by declining to participate in it.

Similarly, in the Milwaukee case, if the effectiveness of the city's voucher program were to be assessed solely by how much the public schools improved in response to competition from vouchers, then the public schools could easily sandbag that assessment by declining to respond to the competition. However, a public school district that does not respond to a continuing loss of students to voucher schools is a clear indication that parents are making the right decision in placing their children elsewhere.

Merrifield also has questioned whether the response of the public school system should be regarded as the "alleged acid test" of the efficacy of market forces.[106] If such reasoning were valid, he points out, recent advances in retailing, computers, and telecommunications could not have been achieved without improved performance by the firms who were the market leaders before those advances occurred – Sears, IBM, and the original AT&T.

"Established market leaders are only rarely up to the challenge of disruptive change," notes Merrifield. "New competition typically replaces them."

"Established market leaders are only rarely up to the challenge of disruptive change," notes Merrifield. "New competition typically replaces them."

The last word is from Stern, and it serves as a reminder that even though education reformers may not agree on how to improve the public schools, there is general agreement on why it is so important that the schools be improved.

"I was a product of the New York City public schools," said Stern in a 2004 interview.[107] "My entire experience was with public schools, and I considered myself a very strong supporter of the role of public schooling in our democracy. I cared very deeply about how the public schools inculcated the civic ethic and an understanding of the democratic system, and in moving new generations of immigrants and the poor up through the economic system by giving them an opportunity for advancement.

"That was what the public schools did for me," Stern continued. "Part of my reaction to what was going on in my children's schools was a disappointment that the schools were no longer doing that very well."

11. Summary of Findings

The following points have emerged in addressing the question: Can vouchers improve public schools, and what lessons can we learn from the Milwaukee Parental Choice Program?

A. Existing Voucher Programs Focus on Rescue, Not Reform

While Milton Friedman advocated universal vouchers as a means of reforming the public schools, he pointed out that existing voucher programs – including the Milwaukee Parental Choice Program – involved a much more constrained version that he called "charity" vouchers.

These targeted vouchers are rescue efforts to save the children of the most needy parents. They are not designed primarily to spur systemic reforms, though their supporters sometimes promise such changes. It is not surprising they have produced no dramatic improvement in the public schools.

Targeted vouchers are rescue efforts to save the children of the most needy parents. They are not designed primarily to spur systemic reforms.

B. Before Rejecting Universal Vouchers, Try Them

The limited effects of "charity" vouchers on public school systems are often pointed to as evidence that universal vouchers would not spur system-wide reforms of public school systems. Surely it would be more logical and appropriate for reform advocates to admit the limitations of charity vouchers and actually try universal vouchers before condemning them for not working.

The limited effect of current voucher programs on public school systems is more a consequence of the limitations that have been placed on those programs than any shortcoming of vouchers *per se*. If we want the benefits from vouchers to touch all children, including those in public schools, then all parents and children ought to be eligible for vouchers of sufficient amounts to create a genuine free market for educational services.

School reformers should work to expand existing voucher programs rather than reject the voucher concept. Universal vouchers have the additional benefit of creating a broader base of families willing to provide the political support necessary to achieve systemic change.

C. Even Charity Vouchers Can Produce Some Improvements

Research shows that when schools compete for students, even at a very modest level and in the absence of vouchers, small but measurable benefits ensue. Charity voucher programs provide more competition, and so can reasonably be expected to produce more benefits. However, these benefits may not be very substantial to begin with, and can be muted by other circumstances, some of which are mentioned below. The design of a voucher program to a large extent determines the likely effect on public school performance.

D. Improvements Are Less Likely When Voucher Competition Is Ill-Defined

Vouchers are less likely to produce improvements in the public schools when the competition produced by vouchers is difficult for public school administrators to assess. The response of public schools to competition from vouchers depends on the proximity and size of the competitive threat posed by vouchers. Faced by an imminent and specific threat from vouchers, public schools will respond strongly to the competitive challenge. However, when faced with a less imminent and less specific threat from vouchers, public schools will respond only weakly.

E. Improvements Are Less Likely When Voucher Value is Too Low

When the voucher value is too low, it limits the number and kinds of private schools that are willing to participate in the program. This in turn limits the number of students who take part in the program and reduces the competition for students that vouchers create.

Although the maximum value of the Milwaukee voucher is still only half the per-pupil spending in public schools, the city's voucher program has grown during the past decade by an average of 1,500 students a year. By contrast, the voucher program in Cleveland, where the voucher is worth only about a quarter of the per-pupil spending in the city's public schools, has grown very little in recent years. The voucher must be adequate for parents to afford tuition at private secular schools as well as private religious schools.

Public schools that experience no negative financial consequences when losing students to voucher schools are unlikely to improve their educational programs.

F. Improvements Are Less Likely When Enrollment Losses Have No Financial Consequences for Public Schools

Public schools that experience no negative financial consequences when losing students to voucher schools are unlikely to improve their educational programs. Voucher programs that have "hold harmless" provisions – that don't reduce funding as enrollment declines – are almost certain not to encourage public school reforms. If we want public schools to respond to competition, the public schools must feel the effects of competition. If they don't, they are unlikely to respond to competition.

G. Improvements Are Less Likely When Vouchers Produce No Enrollment Decline

Although a loss of students to voucher schools would be expected to reduce enrollment in the public schools by a corresponding amount, this is not always the case, as overall K-12 enrollment may be increasing or decreasing – cancelling out the loss of students in the one case and exacerbating it in the other. We have shown this to be the case in Milwaukee, where only in the past two years has enrollment in the Milwaukee Public Schools dropped below the level it was in 1990-91, when the Milwaukee Parental Choice Program started. In the interim, the city's voucher program has increased its enrollment by almost 19,000 students, absorbing most of the city's 19,764-student increase in publicly funded K-12 enrollment since 1990-91.

However, competition for students in Milwaukee has changed dramatically only during the past four years, with the Milwaukee Public Schools experiencing an accelerating decline in enrollment because of a loss of students to voucher schools and independent charter schools and the overall declining K-12 enrollment in the city.

12. Recommendations

My recommendations for people genuinely interested in using school choice to improve schools across the country fall out of the conclusions listed above.

First, don't give up on vouchers just because test scores aren't improving very much. Give the program time to work and check out all aspects of performance improvement – test scores, graduation rates, dropout rates, achievement gap, graduation gap, and changing demographics.

Don't give up on universal vouchers before they have been tried anywhere.

Second, don't give up on universal vouchers before they have been tried anywhere. Existing voucher programs are hobbled in various ways and do not tell us much about how a truly competitive market in K-12 education would operate.

Third, when designing voucher programs, try to make the competitive effect of vouchers as explicit as possible.

Fourth, the more closely the value of the voucher approaches the per-pupil spending of the public schools, the more secular private schools are likely to participate and thus a greater variety of educational choices is made available for parents.

And fifth, public schools should suffer some financial consequences when they lose students to voucher schools. The most effective way of doing this is per-capita school funding, i.e., have "the dollar follow the child" to whatever school he or she attends.

About the Author

George Clowes, Ph.D., is a senior fellow for education policy at The Heartland Institute. He served as founding managing editor of *School Reform News* between November 1996 and January 2005, when he stepped down to spend more time with his family. During those eight years he solicited and edited hundreds of articles reporting on the latest developments in curriculum, school choice, school finance, and other aspects of school reform.

Dr. Clowes also has been a prolific writer on school choice, producing scores of articles for *School Reform News*, writing *The Friedman Report*, and writing longer pieces such as "Still No Consensus on School Choice" (April 2004, commenting on the debate between voucher and tax credit advocates) and contributing to "The Heartland Plan for Illinois" (May 2002, an ambitious legislative blueprint for school reform in Illinois).

While he was managing editor of *School Reform News*, Dr. Clowes interviewed many of the founders and leading advocates of school choice in the U.S., including Milton Friedman, Myron Lieberman, J. Patrick Rooney, Marva Collins, Paul Peterson, John Kirtley, David Brennan, and many more.

Born and raised in England, Dr. Clowes attended public schools in Stoke-on-Trent, Staffordshire. He received a Bachelor's degree from the University of Manchester Institute of Science and Technology, U.K. in 1962 and a Doctorate degree in chemistry from the same institution in 1965. He was a Fulbright Scholar conducting postdoctoral research in biochemistry at Northwestern University in Evanston, Illinois, from 1965 to 1967. He subsequently worked as a research scientist with Unilever Research, as a director of market data systems with the Quaker Oats Company, and as a systems developer/network installer for his own independent consulting business.

Dr. Clowes is extensively involved in his community in suburban Chicago, serving as a trustee for the Village of Mount Prospect (1991-1999), commissioner of the Mount Prospect Park District (1985-1989), chairman of Teens and Parents for a Better Mount Prospect (1992-2000), and president of Northwest Tax Watch (1992-1993). He was recently appointed as an advisor to the Mount Prospect Youth Commission.

Endnotes

1. An excellent commentary on the challenges involved in creating a competitive market in education is Frederick M. Hess, "The Work Ahead," *Education Next*, Winter 2001 (Vol. 1, No. 4). http://www.hoover.org/publications/ednext/3381046.html

2. John Stossel, “With Government Money Come Strings,” TownHall.com, 7 November 2007. http://www.townhall.com/columnists/JohnStossel/2007/11/07/with_government_money_come_strings

3. Sol Stern, “School Choice Isn’t Enough: Instructional Reform Is the Key to Better Schools,” *City Journal*, Winter 2008. http://www.city-journal.org/2008/18_1_instructional_reform.html

4. Chester E. Finn, Jr., “From Checker’s Desk: Lessons Learned,” *The Education Gadfly*, Thomas B. Fordham Foundation, February 28, 2008. http://www.edexcellence.net/foundation/gadfly/issue.cfm?id=329&edition=#4

5. George A. Clowes, “The Only Solution is Competition: An Exclusive Interview with Milton Friedman,” *School Reform News*, December 1998. http://www.heartland.org/Article.cfm?artId=12013

6. Nick Gillespie, “The Father of Modern School Reform,” *Reason*, December 2005. http://www.reason.com/news/show/36333.html

7. Sol Stern, “The Schools That Vouchers Built,” *City Journal*, Winter 1999. http://www.city-journal.org/html/9_1_a1.html

8. Stern (2008),*supra*, Note 3.

9. Jay P. Greene and Marcus A. Winters, “Leaving Boys Behind: Public High School Graduation Rates,” Manhattan Institute for Policy Research, Civic Report #48, April 2006. http://www.manhattan-institute.org/pdf/cr_48.pdf

10. Christopher B. Swanson, “Cities In Crisis: A Special Analytical Report on High School Graduation,” America’s Promise Alliance, April 1, 2008. http://www.americaspromise.org/uploadedFiles/AmericasPromiseAlliance/Dropout_Crisis/SWANSONCitiesInCrisis040108.pdf

11. Wisconsin’s Information Network for Successful Schools (WINSS), Wisconsin Department of Public Instruction Web site, Data Analysis option at http://data.dpi.state.wi.us/data/selschool.asp.

12. “School Choice Yearbook 2007,” Alliance for School Choice, 2008. http://www.allianceforschoolchoice.org/New/Publications/Yearbook_Final.pdf

13. Mike Ford, School Choice Wisconsin, emails to the author, March 31, 2008 and April 18, 2008; for consistency, all Milwaukee enrollment data cited in the present report are September headcount data, not Full Time Equivalents.

14. Robert M. Costrell, “The Fiscal Impact of the Milwaukee Parental Choice Program in Milwaukee and Wisconsin, 1993-2008,” SCDP Milwaukee Evaluation Report #2, Department of Education Reform, University of Arkansas, February 2008. http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_2.pdf

15. Costrell (2008), *supra*, Note 14.

16. Gillespie (2005), *supra*, Note 6.

17. Andrew J. Coulson, *Market Education: The Unknown History*, Transaction Publishers, January 1999. http://www.schoolchoices.org/roo/market.htm

18. Myron Lieberman, “Voucher ‘Experiments’ Don’t Test Competition,” *School Reform News*, August 2002. http://www.heartland.org/Article.cfm?artId=1028

19. George A. Clowes, “More than a Lifeboat: an exclusive interview with John D. Merrifield,” *School Reform News*, January 2003. http://www.heartland.org/Article.cfm?artId=11291

20. Lieberman (2002), *supra*, Note 18.

21. Milton Friedman, "School Vouchers Turn 50," *School Choice Advocate*, November 2005. http://www.friedmanfoundation.org/friedman/newsroom/ShowArticle.do?id=15

22. George A. Clowes, "The Model for the Nation: An Exclusive Interview with Annette Polly Williams," *School Reform News*, September 2002. http://www.heartland.org/Article.cfm?artId=10124

23. George A. Clowes, "Relentlessly Pursuing School Choice: An Exclusive Interview with Howard L. Fuller," *School Reform News*, August 2002. http://www.heartland.org/Article.cfm?artId=1035

24."The Politics of School Vouchers: Analyzing the Milwaukee Parental Choice Plan," Stanford University School of Education Case Study 2006-6, 14 September 2006. http://edapps.stanford.edu/caseLibrary/pdf/Quinn_case.pdf

25. Matthew Miller, "A Bold Experiment to Fix City Schools," *The Atlantic*, July 1999. http://www.theatlantic.com/issues/99jul/9907vouchers.htm

26. Stern (2008), *supra*, Note 3.

27. Alan J. Borsuk, "Choice may not improve schools, study says," *Milwaukee Journal Sentinel*, 23 October 2007. http://www.jsonline.com/story/index.aspx?id=678202

28. Clowes (Williams interview, 2002), *supra*, Note 22.

29. Clowes (Fuller interview, 2002), *supra*, Note 23.

30. Mikel Holt, *Not Yet 'Free at Last'*, Institute for Contemporary Studies Press, September 1999. http://www.amazon.com/Not-Yet-Free-Last-Unfinished/dp/1558155104

31. "The Kessler Plan to Kill School Choice," School Choice Wisconsin, 14 January 2008. http://www.schoolchoicewi.org/data/currdev_links/Final%20Kessler%20Release1.pdf

32. "The Sinicki Plan to Kill School Choice," School Choice Wisconsin, 13 March 2008. http://www.schoolchoicewi.org/data/currdev_links/SCW_3.13.08.pdf

33. School Choice Wisconsin (Kessler Plan, 2008), *supra*, Note 31.

34. George A. Clowes, "Increased Choice Linked to Higher Educational Quality," *School Reform News*, February 2002. http://www.heartland.org/Article.cfm?artId=60

35. Clive R. Belfield and Henry M. Levin, "The Effects of Competition Between Schools on Educational Outcomes: A Review for the United States," *Review of Educational Research*, Vol. 72, No. 2, 279-341 (2002). http://rer.sagepub.com/cgi/content/abstract/72/2/279

36. Rajashri Chakrabarti, "Impact of Voucher Design on Public School Performance: Evidence from Florida and Milwaukee Voucher Programs," Department of Economics, Cornell University, October 2003.
Summary at: http://ideas.repec.org/p/ecm/nasm04/221.html
Paper at: http://www.newyorkfed.org/research/staff_reports/sr315.pdf

37. George A. Clowes, "Vouchers Dramatically Improve Milwaukee Public Schools," *School Reform News*, March 2002. http://www.heartland.org/Article.cfm?artId=2

38. Caroline Minter Hoxby, "Rising Tide?" *Education Next*, Winter 2001. http://educationnext.org/20014/68.html

39. Rajashri Chakrabarti, "Can Increasing Private School Participation and Monetary Loss in a Voucher Program Affect Public School Performance? Evidence from Milwaukee," Federal Reserve Bank of New York, 2005. http://www.newyorkfed.org/research/economists/chakrabarti/mil1-2_Chakrabarti_frbny.pdf

40. Carol Innerst, “Competing To Win: How Florida’s A Plus Plan Has Triggered Public School Reform,” Urban League of Greater Miami, Inc., The Collins Center for Public Policy, Floridians for School Choice, The James Madison Institute, and The Center for Education Reform, April 30, 2000. http://www.ij.org/schoolchoice/florida/innerstreport.html

41. Robert Holland, “Vouchers Motivate Florida Educators” *School Reform News*, June 2000. http://www.heartland.org/Article.cfm?artId=10976

42. Jay P. Greene, “When Schools Compete: The Effects of Vouchers on Florida Public School Achievement,” Manhattan Institute Education Working Paper No. 2, August 2003. http://www.manhattan-institute.org/pdf/ewp_02.pdf

43. Robert Holland, “When Schools Compete, Good Things Happen,” *School Reform News*, October 2003. http://www.heartland.org/Article.cfm?artId=12946

44. Robert Holland, “Vouchers Better than NCLB Accountability,” *School Reform News*, June 2005. http://www.heartland.org/Article.cfm?artId=17118; Martin R. West and Paul E. Peterson, “The Efficacy of Choice Threats Within School Accountability Systems: Results from Legislatively Induced Experiments,” Report # PEPG 05-01, Program on Education Policy and Governance, Harvard University, March 23, 2005. http://www.hks.harvard.edu/pepg/PDF/Papers/West_Peterson_ChoiceThreats.pdf

45. Herbert J. Walberg, *School Choice: The Findings*, Cato Institute Press, Washington, DC, August 2007. http://www.catostore.org/index.asp?fa=ProductDetails&method=&pid=1441360

46. Cecilia Elena Rouse, Jane Hannaway, Dan Goldhaber, and David Figlio, “Feeling the Florida Heat? How Low-Performing Schools Respond to Voucher and Accountability Pressure,” NBER Working Paper No. 13681, National Bureau of Economic Research, December 2007. http://www.nber.org/papers/w13681

47. David Ziffer, “Educators Ignore Proven Method of Improving Students’ Learning,” *School Reform News*, October 2006. http://www.heartland.org/Article.cfm?artId=19790

48. George A. Clowes, “The Little School on the Prairie: an exclusive interview with Victoria Martino,” *School Reform News*, February 2004. http://www.heartland.org/Article.cfm?artId=14372

49. Patrick McIlheran, “Opting for Rigor,” *Milwaukee Journal-Sentinel*, November 1, 2007. http://www.jsonline.com/story/index.aspx?id=681494

50. Rouse, *et al.* (2007), *supra*, Note 46.

51. John Merrow, “Student Tests – and Teacher Grades,” *Wall Street Journal*, May 9, 2008. http://online.wsj.com/article/SB121029630059279623.html

52. “Who Is John Gardner?” *School Reform News*, May 1999. http://www.heartland.org/Article.cfm?artId=11893

53. George A. Clowes, “Changing the Vision for Public Education: Interview with Bruce R. Thompson,” *School Reform News*, May 1999. http://www.heartland.org/Article.cfm?artId=11909

54. Clowes (Vouchers Dramatically Improve ..., 2002), *supra*, Note 37.

55. John Gardner, “How School Choice Helps the Milwaukee Public Schools,” American Education Reform Council, January 2002. http://www.heartland.org/pdf/12071.pdf

56. Kenneth Johnson, “School Choice as a Philosophy,” Educational Choice Speaker Series, sponsored by The Heartland Institute, Chicago, Illinois, February 16, 2006.

57. Chakrabarti (2005), *supra*, Note 39.

58. Paul E. Peterson, Nathan Torinus, and Brad Smith, “School Choice in Milwaukee Fifteen Years Later,” Chapter 3 in *Charter Schools Against the Odds: An Assessment of the Koret Task Force on K–12 Education*, ed. Paul T. Hill. Education Next Books, 2006.

59. “Milwaukee’s Public Schools In an Era of Choice,” School Choice Wisconsin, February 2007. http://schoolchoicewi.org/data/currdev_links/MPS_07_Final.pdf

60. Jay P. Greene, “Graduation Rates for Choice and Public School Students in Milwaukee,” Manhattan Institute for Policy Research and School Choice Wisconsin, 28 September 2004. http://schoolchoiceinfo.org/data/hot_topics/grad_rate.pdf

61. John Robert Warren, “Graduation Rates for Choice and Public School Students in Milwaukee,” School Choice Wisconsin, January 2008. http://schoolchoicewi.org/data/currdev_links/gradrates-8.5x11-FINAL.pdf

62. John Robert Warren, “Graduation Rates for Choice and Public School Students in Milwaukee, 2003-2007,” School Choice Wisconsin, May 2008. http://www.schoolchoicewi.org/data/currdev_links/Grad%20rates-2008-8.5x11.pdf

63. Stern (2008), *supra*, Note 3.

64. Wisconsin Department of Public Instruction, *supra*, Note 11.

65. Warren (May 2008), *supra*, Note 62.

66. Clowes (Williams interview, 2002), *supra*, Note 22.

67. Caroline Minter Hoxby, “School Choice and School Productivity (Or, Could School Choice be a Tide That Lifts All Boats?),” NBER Working Paper No. 8873, August 2002. http://www.nber.org/digest/aug02/w8873.html
A version of the paper presented in February 2001 at the NBER Conference on the Economics of School Choice is available at http://www.nber.org/~confer/2001/hoxby01/hoxby.pdf

68. Robert C. Enlow, “Grading School Choice: Evaluating School Choice Programs by the Friedman Gold Standard,” The Friedman Foundation for Educational Choice, February 2008. http://www.friedmanfoundation.org/friedman/downloadFile.do?id=268

69. Chakrabarti (2003), *supra*, Note 36.

70. Chakrabarti (2005), *supra*, Note 39.

71. Greene (2003), *supra*, Note 42.

72. Holland (2005), *supra*, Note 44.

73. Rajashri Chakrabarti, “Closing the Gap,” *Education Next*, Summer 2004. http://www.hoover.org/publications/ednext/3261841.html

74. Greene (2003), *supra*, Note 42.

75. “Students Benefit When Schools Compete,” *School Reform News*, November 2003. http://www.heartland.org/Article.cfm?artId=13546

76. Chakrabarti (2004), *supra*, Note 73.

77. Holland (2005), *supra*, Note 44.

78. Hoxby (2001), *supra*, Note 38.

79. Hoxby (2002), *supra*, Note 67.

80. Caroline M. Hoxby, “How School Choice Affects the Achievement of Public School Students,” in *Choice with Equity*, ed. Paul T. Hill (Stanford, CA: Hoover Institution Press, 2002), p. 150. Cited in Walberg (2007), pp. 43-44, *supra*, Note 45.

81. Milton Friedman, “The Market Can Transform Our Schools,” *New York Times*, 2 July 2002. http://query.nytimes.com/gst/fullpage.html?res=9806E6DB1631F931A35754C0A9649C8B63

82. Clowes (Williams interview, 2002), *supra*, Note 22.

83. “Rankings of the States 2006 and Estimates of School Statistics 2007,” National Education Association, NEA Research, December 2007. http://www.nea.org/edstats/images/07rankings.pdf

84. Stern (1999), *supra*, Note 7.

85. Enrollment in the Cleveland Scholarship and Tutoring Program from 1996-97 to 2006-07, email from the executive director, Center for School Options and Finance, Ohio Department of Education, March 27, 2008.

86. Maximum scholarship amount in the Cleveland Scholarship and Tutoring Program:
(a) 1996-97 to 2004-05: Cost and Fiscal Impact, Cleveland Scholarship and Tutoring Program, School Choice Wisconsin, http://www.schoolchoiceinfo.org/facts/index.cfm?fpt_id=7&fl_id=2
(b) 2005-06 to date: email from the executive director, Center for School Options and Finance, Ohio Department of Education, March 28, 2008.

87. Total Expenditure Per Pupil in the Cleveland Municipal School District from 1996-97 to 2006-07, Power User Reports, Interactive Local Report Card, Ohio Department of Education web site. http://ilrc.ode.state.oh.us/Power_Users.asp

88. “Milwaukee Parental Choice Program,” Wisconsin Legislative Fiscal Bureau, Informational Paper 29, January 2007. http://www.legis.state.wi.us/lfb/informationalpapers/29.pdf

89. “Fiscal and Enrollment Trends, Milwaukee Public Schools, 1990-2008,” School Choice Wisconsin, November 2007. Note these enrollment data exclude Chapter 220 students. http://www.schoolchoiceinfo.org/data/research/11.07_fiscal_table.pdf

90. School Choice Wisconsin (Kessler Plan, 2008), *supra*, Note 31.

91. *The ABCs of School Choice*, Milton & Rose D. Friedman Foundation, 2007-08 Edition, March 10, 2008. http://www.friedmanfoundation.org/friedman/downloadFile.do?id=277

92. Hess (2001), *supra*, Note 1.

93. Costrell (2008), *supra*, Note 14.

94. School Choice Wisconsin (2007), *supra*, Note 59.

95. Ford (2008), *supra*, Note 13.

96. Chakrabarti (2005), *supra*, Note 39

97. Frederick M. Hess, *Revolution at the Margins*, The Brookings Institution, 2002, p. 99. http://www.brookings.edu/press/Books/2002/revolution_margins.aspx

98. George A. Clowes, “Milwaukee Voucher Victory,” *School Reform News*, September 1998. http://www.heartland.org/Article.cfm?artId=13195. A copy of the *Jackson v. Benson (1998)* decision is available at http://www.wicourts.gov/sc/opinion/DisplayDocument.pdf?content=pdf&seqNo=17205

99. George A. Clowes, “U.S. Supreme Court Upholds Milwaukee Vouchers,” *School Reform News*, December 1998. http://www.heartland.org/Article.cfm?artId=12009

100. Hess (2002), *supra*, Note 97.

101. Hess (2001), *supra*, Note 1.

102. Doug Munro, “School Vouchers to Save the City,” *Intellectual Ammunition*, September/October 1999. http://www.heartland.org/Article.cfm?artId=292

103. Denis P. Doyle, David A. DeShryver, and Douglas P. Munro, “Reforming The Schools To Save the City, Part 1,” Calvert Institute, Calvert Issue Brief, Vol. I, No. 3, August 1997. http://www.calvertinstitute.org/main/pub_detail.php?pub_id=135

104. Douglas P. Munro, “Reforming The Schools To Save the City, Part II,” Calvert Institute, Calvert Issue Brief, Vol I, No. 2, August 1997. http://www.calvertinstitute.org/main/pub_detail.php?pub_id=136

105. George A. Clowes, “Judge Voids Cleveland Vouchers for Lack of Choice,” *School Reform News*, February 2000. http://www.heartland.org/Article.cfm?artId=11077

106. John Merrifield, “Dismal Science: The Shortcomings of U.S. School Choice Research and How to Address Them,” Policy Analysis #616, Cato Institute, April 16, 2008. http://www.cato.org/pubs/pas/pa-616.pdf

107. George A. Clowes, “A School Reformer’s Journey: From Parent to Journalist to Policy Analyst: An interview with Sol Stern,” *School Reform News*, May 2004. http://www.heartland.org/Article.cfm?artId=14814

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