School Choice Works: 
Evidence of Improved Academic Achievement

Updated December 2004

A significant body of high-quality research shows that school choice programs can help raise both student achievement and parental satisfaction. (On parental satisfaction, see “Parental Satisfaction with School Choice.”) The most recent good news: a new study shows school choice students in Milwaukee graduate high school at nearly twice the rate of students in the traditional public schools (see below).

Florida
So far, researchers studying Florida’s Opportunity Scholarship program have focused on its impacts on public schools. Three separate studies have found evidence that Florida’s worst public schools—those with a direct threat of losing students through Opportunity Scholarships—have made the largest achievement gains on the FCAT. (See “School Choice Improves Public Schools” for a summary of the findings.)

The best evidence that Opportunity Scholarship students themselves show learning gains comes from Escambia County, where the first Opportunity Scholarships were granted in 1999. Choice students there have had ample time to adjust to their new schools. In December 2003, the Pensacola News Journal reported the academic results so far for the 34 Opportunity Scholarship students in Escambia County Catholic Schools, based on the national Iowa Test of Basic Skills:

After four years of attending private Catholic schools on the taxpayers’ tab, Pensacola’s voucher students are showing astounding academic growth.

On average, the 34 students attending Escambia County Catholic Schools on state-funded Opportunity Scholarships have jumped more than one grade level for each year they’ve attended, and many are working beyond their grade level now.


Researchers studying Florida’s McKay Scholarship Program for Students with Disabilities found that McKay students received better service and were safer and more satisfied—all at the same or only slightly higher per pupil cost:

✓ 92.7 percent of current McKay participants are satisfied or very satisfied with their McKay schools, while only 32.7 percent were satisfied with their previous public schools.

✓ Only 30.2 percent of current participants say they received all services required under federal law from their public school, while 86.0 percent report their McKay school has provided all the services they promised to provide.

1 For a number of reasons, it is difficult to reliably measure academic outcomes for special needs students, not least because most tests are not well designed to capture the special skills and deficits of disabled students.
In their previous public schools, 46.8 percent of McKay students were bothered often and 24.7 percent were physically assaulted, while in McKay schools only 5.3 percent were bothered often and 6 percent were assaulted.

Even though the McKay program allows participants to choose schools that charge tuition above the amount of the scholarship (equal to the cost of educating the child in the public schools), 71.7 percent of current participants report paying either nothing at all or less than $1,000 per year above the voucher amount.


“Gold Standard” Research

Perhaps the best evidence linking school choice and academic achievement comes from random-assignment experiments, considered to be the “gold standard” of social science research, in five cities. Researchers summarizing the findings report:

“Although controversial, research generally shows positive effects for students using vouchers to attend private schools.”


“Rigorously controlled studies of the links between vouchers and student achievement … are mildly positive in virtually every case.”


As in medical research, students are chosen randomly — by lottery — to receive scholarships, so the “treatment” and “control” groups will be nearly identical — except that one group receives scholarships. More than with any other kind of study design, researchers can be confident that differences in outcome are attributable to scholarships and not some other, unseen factors.

Washington, D.C., New York City, and Dayton, Ohio

Researchers studying privately funded scholarship programs in Washington, D.C., New York City, and Dayton, Ohio — where students were selected for scholarships by lottery — found that combined math and reading test scores for African-American school choice students were significantly higher than those of public school students who applied for but did not receive scholarships. They reported the gains by city after two years:

- Washington, D.C.: 9.2 percentile points

Results for non-black students were not statistically significant, perhaps because African-American students are more likely to be trapped in failing public schools, and thus the vouchers had a greater impact, or possibly because very few non-black students participated in the scholarship programs, so changes in scores were difficult to detect.
Combining results from the three random assignment studies, the researchers found:

“[T]he average, overall test-score performance of African-American students who switched from public to private schools was, after one year, 3.3 NPR [national percentile ranking] points higher and, after two years, 6.3 NPR points higher ... The school voucher intervention, after two years, erases about one-third of” the difference in black and white test scores.


**Milwaukee**

In the Milwaukee Parental Choice Program—the nation’s oldest and largest urban school choice program—private schools are required to accept students by lottery when they are oversubscribed, allowing a comparison between students accepted by lottery and those denied a spot by lottery. Researchers found significant test score gains for choice students over four years:

- √ 11 percentile points in math
- √ 6 percentile points in reading


Another study of Milwaukee, conducted by Princeton economist Cecilia Rouse found similar results: a gain of 8 percentile points in math after four years for school choice students.


**Charlotte, N.C.**

A researcher evaluating a private scholarship program in Charlotte, N.C., found significant gains for students randomly selected for vouchers versus students denied a voucher through the lottery after just one year:

- √ 5.9 percentile point gain in math
- √ 6.5 percentile point gain in reading


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3 Two Princeton researchers recently (and publicly) claimed the New York results were overstated. In their analysis, they include students without baseline test score data and classify race differently—but still yield positive and statistically significant results. Only after adding new variables that may bias results do impacts become statistically insignificant. In response, Howell and Peterson re-analyzed the data, finding positive and statistically significant results in 108 of 120 separate estimates. (See Peterson and Howell, “Efficiency, Bias, and Classification Schemes,” Harvard University Program on Education Policy and Governance, June 2003.)
Other Evaluations

Cleveland

Studies of Cleveland’s school choice program also show positive effects, though no random assignment data is available, and information on background characteristics of participants is limited.

One non-random assignment study found significant gains by scholarship students over their public school peers after two years:

√ 15 percentile point gain in math
√ 7 percentile point gain in reading


Kim Metcalf of the Indiana University Center for Evaluation is the program’s official evaluator. His first study of the program compared scholarship students with a non-random sample of public school students with limited controls for background characteristics that may affect outcome. He found:

“[S]cholarship students in existing private schools had significantly higher test scores than public school students in language (45.0 versus 40.0) and science (40.0 versus 36.0). However, there were no statistically significant differences between these groups on any of the other scores.”

Metcalf concluded:

“[T]he limited, but statistically significant positive impact of the program on students’ academic achievement [in Cleveland], particularly as they progress beyond the early primary grades, is consistent with work in Milwaukee, New York, Washington, D.C., and Dayton, Ohio.”


Similarly, Metcalf’s most recent evaluation did not use a random assignment design. That evaluation found little difference in test scores for scholarship students, though it did find some evidence of an emerging, positive trend:

“Although it is not statistically significant in the data available to date, there is some evidence of a pattern of slightly greater annual achievement growth among students who have used a scholarship continuously since kindergarten. If this pattern continues, the achievement of this group of students may become noticeably, and meaningfully, higher than that of public school students. However, data over three to five additional years will be necessary to confirm or discount such a pattern.”

Milwaukee

Another way to determine the educational success of choice students is to look at their rate of graduation compared to the traditional public schools. In Milwaukee, where school choice has been in place for 13 years, researchers recently did just that. They found:

“Choice students in Milwaukee graduate at much higher rates [64 percent] than students in its public schools [37 percent]. What’s more, their graduation rates are higher than those at selective public high schools [41 percent] whose students are more likely to be more advantaged in their background than Milwaukee’s choice students, who are disproportionately poor and minority.”


Another study of Milwaukee, conducted by University of Wisconsin professor John Witte, the program’s official evaluator, did not use a random assignment design, relying instead on a limited set of controls for background characteristics. Witte found no benefit or harm in test scores for choice students, but noted that parents using scholarships are much more satisfied and involved with their children’s education:

“There’s one very consistent finding: Parental involvement is very positive, and parental satisfaction is very positive … parents are happier. The people using vouchers are mostly black and Hispanic and very poor … they deserve the same kind of options that middle-class white people have.”


“Choice can be a useful tool to aid families and educators in inner-city and poor communities where education has been a struggle for several generations. … If programs are devised correctly, they can provide meaningful educational choices to families that now do not have such choices. And it is not trivial that most people in America … already have such choices.”


Maine and Vermont

Since the 19th century, the Maine and Vermont choice programs have provided tax-supported school choice to students in communities with few or no public schools. Until 1961 (Vermont) and 1981 (Maine), options available to students included private religious schools. Options now available include non-religious private schools, other public schools and out-of-state private schools.

In a study of the Maine and Vermont programs, Christopher Hammons, Ph.D., identified a range of positive impacts. These included: higher levels of academic achievement in areas where competition for students was greatest; benefits from a competitive environment that were not limited to specific demographic groups; and significant cost savings to Maine and Vermont taxpayers.