

How does school choice affect public schools?

Sound research has demonstrated consistently that school choice policies improve public school performance. More than 20 credible studies indicate school choice programs introduce more competition among all public and private schools, compelling them to work harder to attract and retain students. Not a single empirical study has found that outcomes at public schools worsen as a result of school choice programs, and numerous studies have found that they improve over time.

Three recent research studies support this conclusion:

- A 2011 peer-reviewed study by Jay Greene of the University of Arkansas and Marcus Winters of the University of Colorado - Colorado Springs looked at the impact of Florida's McKay special education voucher program on Florida public schools. Greene and Winters found there was approximately a "12 percent reduction in the probability that a fourth- through sixth-grade student" was diagnosed with a learning disability in a public school with average levels of competition. They also found that "being in a public school surrounded by the average number of McKay-accepting private schools was related to an increase in academic proficiency of about 0.01 standard deviations in both math and reading. The positive but very mild competitive effect is consistent with what has been found in previous research evaluating more conventional school choice policies."
- A 2011 study by David Figlio and Cassandra Hart of Northwestern University examined the competitive effects of the Florida Tax Credit Scholarship Program on public schools. They learned that more access and variety of private schools increased the competitive pressure on public schools in the wake of the policy announcement. They state in their conclusion, "Our results suggest that policies that introduce competition to public schools spur improvements in public school students' test scores. This work therefore helps inform a major policy debate regarding whether harnessing market forces is an effective way to help not only the students who enter the private education market, but also the students who remain behind in the public sector."
- A 2009 study by Jay Greene and Ryan Marsh of the University of Arkansas considered the systemic effects of expanding school choice in Milwaukee. Greene and Marsh found that public school students in Milwaukee fare better academically when they have more free private options through the voucher program. They conclude, "It appears that Milwaukee public schools are more attentive to the academic needs of students when those students have more opportunities to leave those schools. This finding is robust across several different specifications of the model."

MYTH: Vouchers hurt public schools by taking only the best students.

Many people are concerned about the impact school vouchers will have on public schools. One concern is that voucher programs will "drain money" from public schools. Another is that they may result in "creaming," a situation in which the brightest students use vouchers while the students who are hardest to teach stay in public schools.

In addition to fears that vouchers will harm public schools, there is also a related contention that vouchers will not have as much positive impact that has been claimed. Some have argued that vouchers cannot spur public schools to reform because public schools are too weighed down by bureaucracy, unions, or other barriers to change.

FACT: Vouchers improve public schools by providing choice and competition.

Although evidence showing that vouchers improve public schools is counter-intuitive to many people, it is not hard to explain. One reason vouchers improve public schools is that they enable parents to find the right particular school for each child's unique educational needs. Children have different needs and preferences, and everyone's schooling experience can improve if children are allowed greater freedom to find the right niche.

Vouchers also provide positive incentives for responsiveness and improvement that are lacking in the traditional public school system. When public schools know that students have a choice and can leave using vouchers, those schools have a much more powerful incentive to improve their performance and keep those students from walking out the door.

EVIDENCE: Data confirm vouchers serve disadvantaged students well and improve outcomes.

The available evidence suggests that voucher programs do not "cream-skim" the best students. To the contrary, the best analysis of this question found voucher applicants in three cities and a representative sample of the eligible population to be virtually identical on a variety of demographic and educational indicators.¹

The acid test, however, is what actually happens to public school outcomes when vouchers are implemented. A large body of high-quality empirical research has examined this question,

using statistical methods to isolate and measure the impact vouchers have on academic achievement in public schools (see accompanied chart).

In some cases the student improvement gains under vouchers are only moderate. That's not surprising, given that many existing voucher programs are limited in the number and type of students they're allowed to serve and the amount of

choice they're allowed to offer. Narrowly constricted programs produce narrowly constricted results. To produce revolutionary results, we would need broad programs—eligibility for all students.

Overwhelmingly, studies have found that vouchers improve public schools. No empirical study has ever found that vouchers harm public schools.

TABLE 1 Reviewing the research: systemic effects of vouchers and tax-credit scholarships

Study	Location (Program)	Findings
Cecilia E. Rouse, Jane Hannaway, Dan Goldhaber, and David N. Figlio, "Feeling the Florida Heat? How Low-Performing Schools Respond to Voucher and Accountability Pressure," <i>American Economic Journal: Economic Policy</i> 5, no. 2 (May 2013), pp. 251-81, doi:10.1257/pol.5.2.251.	Florida (A+ School Choice)	The study used a regression discontinuity model to compare high-scoring F schools (whose students can receive vouchers) and low-scoring D schools (whose students cannot receive vouchers). It found that receiving an F grade in 2002-03 produced academic improvements in students' test scores in the next year relative to those in non-F schools, and that these improvements were sustained in future years. They presented their results in terms of standard deviations rather than test score points; they found that the gains were equal to about a tenth of a standard deviation.
Rajashri Chakrabarti, "Vouchers, Public School Response, and the Role of Incentives: Evidence from Florida," <i>Economic Inquiry</i> 51, no. 1 (Jan. 2013), pp. 500-26, doi:10.1111/j.1465-7295.2012.00455.x.	Florida (A+ School Choice)	Examined the scores of students in F schools whose test scores fell just short of proficiency. These students' scores improved significantly, suggesting that the schools focused on the failing students whose improvements could most quickly improve the school's overall standing.
David N. Figlio and Cassandra M. D. Hart, "Does Competition Improve Public Schools? New Evidence from the Florida Tax-Credit Scholarship Program," <i>Education Next</i> 11, no. 1 (Winter 2011), pp. 74-80, http://www.educationnext.org/does-competition-improve-public-schools/ .	Florida (Tax-Credit Scholarship)	Greater degrees of competition are associated with greater improvements in students' test scores following the introduction of the program. Authors also found that schools expected to be the most sensitive to competitive pressures see larger improvements in their test scores as a result of increased competition cultivated by the tax-credit scholarship program.
Marcus A. Winters and Jay P. Greene, "Public School Response to Special Education Vouchers: The Impact of Florida's McKay Scholarship Program on Disability Diagnosis and Student Achievement in Public Schools," <i>Educational Evaluation and Policy Analysis</i> 33, no. 2 (June 2011), pp. 138-58, doi:10.3102/0162373711404220.	Florida (McKay Special Needs)	Students in Florida public schools with average levels of McKay competition were 12 percent less likely to be diagnosed with a learning disability, and were likely to see reading and math score improvements of .01 standard deviations.
Matthew Carr, "The Impact of Ohio's EdChoice on Traditional Public School Performance," <i>Cato Journal</i> 31, no. 2 (Spring/Summer 2011), pp. 257-84, www.cato.org/pubs/journal/cj31n2/cj31n2-5.pdf .	Ohio (Educational Choice Scholarships)	Carr's study showed that the voucher threat created by the EdChoice program is associated with a statistically significant increase in the proficiency rates of public schools, for low- and high-performing students, on math and reading scores in both fourth and sixth grades.
Jay P. Greene and Ryan H. Marsh, <i>The Effect of Milwaukee's Parental Choice Program on Student Achievement in Milwaukee Public Schools</i> , SCDP Milwaukee Parental Choice Program Evaluation Reports 11, (Fayetteville: Univ. of Arkansas, Dept. of Education Reform, School Choice Demonstration Project, 2009), http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_11.pdf .	Milwaukee, WI	Looking at student-level data, the study concludes that public school scores improve as more private schools participate in the Milwaukee voucher program. Finds that for every 37 private schools that participate in the program, public school achievement is boosted by two NCE points (similar to percentage points). Speculates that the program has historically improved Milwaukee public school performance by six points.

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TABLE 1 (continued)

Reviewing the research: systemic effects of vouchers and tax-credit scholarships

Study	Location (Program)	Findings
<p>Greg Forster, <i>Promising Start: An Empirical Analysis of How EdChoice Vouchers Affect Ohio Public Schools</i>, School Choice Issues in the State (Indianapolis: Friedman Foundation for Educational Choice, 2008), http://www.edchoice.org/research/reports/promising-start---an-empirical-analysis-of-how-edchoice-vouchers-affect-ohio-public-schools.aspx.</p>	Ohio	<p>Examined year-to-year test score changes in schools where students were eligible for vouchers. Forster found positive effects from the EdChoice program in math scores for fourth- and sixth-grade students and reading scores for sixth-grade students, and no visible effect in other grades. The positive effects ranged from three to five points in one year.</p>
<p>Rajashri Chakrabarti, "Can Increasing Private School Participation and Monetary Loss in a Voucher Program Affect Public School Performance? Evidence from Milwaukee," <i>Journal of Public Economics</i> 92, no. 5-6 (June 2008), pp. 1371-93, doi:10.1016/j.jpubeco.2007.06.009.</p>	Milwaukee, WI	<p>Combined with the analysis published in January 2008, the author found that the Milwaukee voucher program improved public schools. The author conducted multiple analyses using different methods for measuring public schools' exposure to vouchers: Some are similar to Hoxby's method (below) and others to Greene's and Forster's method (also below). In both studies, Chakrabarti found that increased exposure to vouchers improved academic gains in Milwaukee public schools.</p>
<p>Greg Forster, <i>Lost Opportunity: An Empirical Analysis of How Vouchers Affected Florida Public Schools</i>, School Choice Issues in the State (Indianapolis: Friedman Foundation for Educational Choice, 2008), http://www.edchoice.org/Research/Reports/Lost-Opportunity--An-Empirical-Analysis-of-How-Vouchers-Affected-Florida-Public-Schools.aspx.</p>	Florida (A+ School Choice)	<p>Examined the impact of the A+ program in every year from 2001 through 2006. Forster found that in 2001, before vouchers were widely available, "Voucher Threatened" schools made gains relative to all Florida schools equal to 13 points on Florida's new developmental scale." Over the next four years, as the percentage of families using vouchers decreased from the red tape created by the state department of education, the positive voucher effect was not as large but remained substantial ("Voucher Eligible" schools gained from 20 to 27 developmental points each year).</p>
<p>Rajashri Chakrabarti, <i>Impact of Voucher Design on Public School Performance: Evidence from Florida and Milwaukee Voucher Programs</i>, Staff Reports 315 (New York: Federal Reserve Bank of New York, 2008), http://www.newyorkfed.org/research/staff_reports/sr315.html.</p>	Florida (McKay Special Needs)	<p>The author found that implementing a voucher program improves academic gains in Florida public schools. The author conducted multiple analyses using different methods for measuring public schools' exposure to vouchers: Some are similar to Hoxby's method (below) and others to Greene's and Forster's method (also below).</p>
<p>Rajashri Chakrabarti, <i>Impact of Voucher Design on Public School Performance: Evidence from Florida and Milwaukee Voucher Programs</i>, Staff Reports 315 (New York: Federal Reserve Bank of New York, 2008), http://www.newyorkfed.org/research/staff_reports/sr315.html.</p>	Milwaukee, WI	<p>Combined with the analysis published in June 2008, the author found that the Milwaukee voucher program improved public schools. The author conducted multiple analyses using different methods for measuring public schools' exposure to vouchers: Some are similar to Hoxby's method (below) and others to Greene's and Forster's method (also below). In both studies, Chakrabarti found that increased exposure to vouchers improves academic gains in Milwaukee public schools.</p>
<p>Martin Carnoy, Frank Adamson, Amita Chudgar, Thomas F. Luschei, and John F. Witte, <i>Vouchers and Public School Performance: A Case Study of the Milwaukee Parental Choice Program</i> (Washington, D.C.: Economic Policy Institute, 2007), http://www.epi.org/publication/book_vouchers/.</p>	Milwaukee, WI	<p>This study used a modified form of the Hoxby/Chakrabarti method. The authors reported that their analysis "confirms the earlier results showing a large improvement in Milwaukee in the two years following the 1998 expansion of the voucher plan to religious schools." Before 1998, religious schools were excluded from the Milwaukee program, so many fewer students participated. When religious schools were admitted to the program in 1998, participation increased dramatically, and so did public school performance.</p>
<p>Martin R. West and Paul E. Peterson, "The Efficacy of Choice Threats Within School Accountability Systems: Results From Legislatively Induced Experiments," <i>The Economic Journal</i> 116, no. 510 (Mar. 2006), pp. C46-62, doi:10.1111/j.1468-0297.2006.01075.x .</p>	Florida (A+ School Choice)	<p>Among schools that had not received the lowest possible rating under the state's previous school evaluation system (which had no voucher component) receiving an F and thus being required to offer vouchers under the new accountability system produced an improvement in students' test scores equal to about 4 percent of a standard deviation over one year.</p>

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Reviewing the research: systemic effects of vouchers and tax-credit scholarships

Study	Location (Program)	Findings
Jay P. Greene and Marcus A. Winters, <i>An Evaluation of the Effects of D.C.'s Voucher Program on Public School Achievement and Racial Integration After One Year</i> , Education Working Papers 10 (New York: Manhattan Institute, Center for Civic Innovation, 2006), http://www.manhattan-institute.org/html/ewp_10.htm .	Washington, D.C.	The D.C. program enrolls a relatively small percentage of students within the district, and public schools are “held harmless” to the effects of competition because additional money is used to “compensate” schools that lose students. Unsurprisingly, the authors found no visible effects upon the performance of public schools.
David N. Figlio and Cecelia E. Rouse, “Do Accountability and Voucher Threats Improve Low-Performing Schools?” <i>Journal of Public Economics</i> 90, no.1-2 (Jan. 2006), pp. 239-55, doi:10.1016/j.jpubeco.2005.08.005.	Florida (A+ School Choice)	Examined the period over which vouchers were first being introduced in Florida. If a school received an F grade, its students made gains on the state test that were two points larger in reading and five points larger in math than those of other Florida schools over one year. Scores on the nationally-normed Stanford-9 test also improved. The authors would observe larger effects in subsequent studies, after vouchers had expanded further.
Jay P. Greene and Marcus A. Winters, “Competition Passes the Test,” <i>Education Next</i> 4, no. 3 (Summer 2004), pp. 66-71, http://educationnext.org/competition-passes-the-test/ .	Florida (A+ School Choice)	For both math and reading scores, on both the state test and the Stanford-9 test, so-called “Voucher Eligible” schools made improvements 15 points higher than other Florida public schools, while “Voucher Threatened” schools made improvements nine points higher.
Rajashri Chakrabarti, “Closing the Gap,” in “Competition Passes the Test,” <i>Education Next</i> 4, no. 3 (Summer 2004), p. 70, http://educationnext.org/competition-passes-the-test/ .	Florida (A+ School Choice)	Under the previous state accountability system—which did not include a voucher component for low-performing F schools—putting a school in the F category did not improve its performance relative to D schools in the next lowest performance category. However, three years after vouchers were implemented, the gap between F schools and D schools closed from almost 15 points to about five points.
Jay P. Greene and Greg Forster, <i>Rising to the Challenge: The Effect of School Choice on Public Schools in Milwaukee and San Antonio</i> , Civic Bulletins 27 (New York: Manhattan Institute, Center for Civic Innovation, 2002), http://www.manhattan-institute.org/html/cb_27.htm .	Milwaukee, WI	Found that greater exposure to vouchers had a positive effect on year-to-year changes in public school outcomes; the size of the effect was such that a school with all its students eligible for vouchers could be expected to outperform a school with only half its students eligible by 15 percentile points over four years.
Jay P. Greene and Greg Forster, <i>Rising to the Challenge: The Effect of School Choice on Public Schools in Milwaukee and San Antonio</i> , Civic Bulletins 27 (New York: Manhattan Institute, Center for Civic Innovation, 2002), http://www.manhattan-institute.org/html/cb_27.htm .	San Antonio, TX	Examined the impact of a large-scale privately funded voucher program targeted to the Edgewood school district in San Antonio, Texas. Controlling for demographics and local resources, they found that Edgewood’s year-to-year test score gains outperformed those of 85 percent of school districts in Texas. Given that Edgewood is a high-poverty (93 percent eligible for lunch programs) and high-minority (97 percent Hispanic) district, the study concludes that such a high statewide academic rank for Edgewood suggests that vouchers produced public school improvements.
Christopher W. Hammons, <i>The Effects of Town Tuitioning in Vermont and Maine</i> , School Choice Issues in Depth 1 (Indianapolis: Milton and Rose D. Friedman Foundation, 2002), http://www.edchoice.org/Research/Reports/The-Effects-of-Town-Tuitioning-in-Maine-and-Vermont.aspx .	Maine	Maine school districts for decades had the option of “tuitioning” their students—using public funds to pay for their students to attend private schools or nearby public schools—rather than building their own public schools. Hammons measured the relationship between a public school’s academic achievement and its distance from the nearest “tuitioning” town. Using regression analysis, he found a positive relationship. The relationship was strong enough that if a town one mile away from a school began tuitioning its students, the percentage of students at the school passing the state’s achievement test could be expected to go up by three percentage points.

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<p>Christopher W. Hammons, <i>The Effects of Town Tuitioning in Vermont and Maine</i>, School Choice Issues in Depth 1 (Indianapolis: Milton and Rose D. Friedman Foundation, 2002), http://www.edchoice.org/Research/Reports/The-Effects-of-Town-Tuitioning-in-Maine-and-Vermont.aspx.</p>	<p>Vermont</p>	<p>Vermont school districts for decades had the option of “tuitioning” their students—using public funds to pay for their students to attend private schools or nearby public schools —rather than building their own public schools. Hammons measured the relationship between a public school’s academic achievement and its distance from the nearest “tuitioning” town. Using regression analysis, he found a positive relationship. The relationship was strong enough that if a town one mile away from a school began tuitioning its students, the percentage of students at the school passing the state’s achievement test could be expected to go up by three percentage points.</p>
<p>Caroline M. Hoxby, “Rising Tide,” <i>Education Next</i> 1, no. 4 (Winter 2001), pp. 68-74, http://educationnext.org/rising-tide/.</p>	<p>Milwaukee, WI</p>	<p>Compared schools where at least 66 percent of the student population was eligible for vouchers to schools where fewer students were eligible for vouchers. Hoxby found that in a single year, schools in the “more exposed to vouchers” group made gains that were greater than those of other Milwaukee public schools by three percentile points in math, three points in language, five points in science, and three points in social studies.</p>
<p>Jay P. Greene, <i>An Evaluation of the Florida A-Plus Accountability and School Choice Program</i>, Civic Reports (New York: Manhattan Institute, Center for Civic Innovation; Tallahassee: Florida State Univ.; Cambridge, MA: Harvard Univ., Program on Education Policy and Governance, 2001).</p>	<p>Florida (A+ School Choice)</p>	<p>Schools that had received an F grade, whose students would be eligible for vouchers if the school received another F grade, made much larger year-to-year gains than schools that received a D (18 points in reading and 26 points in math for F schools versus 10 points in reading and 16 points in math for D schools).</p>

NOTES

1. William Howell and Paul Peterson, *The Education Gap: Vouchers and Urban Schools* (Washington, D.C.: The Brookings Institution Press, 2002), revised 2006, pp. 61-65.