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School Vouchers and Student Achievement: What We Know So Far

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Although small, carefully managed voucher programs might provide a helpful safety valve for some disadvantaged children, policy makers should be under no illusion that such programs will address the fundamental challenge of providing an adequate education to the large numbers of such students in many of our urban centers.

Contrary to the claims of many voucher advocates, widespread use of school vouchers is not likely to generate substantial gains in student achievement or in the productivity of the U.S. K-12 education system. Any gains in overall student achievement due to vouchers are likely to be small at best. Moreover, given the tendency of parents to judge schools in part by the characteristics of the students in them, a universal voucher system would undoubtedly harm large numbers of disadvantaged students, who would wind up grouped together in schools that more motivated and/or talented students had left. Claims that performance at these schools would eventually rise because of competition within a voucher system, or that these schools would be replaced by better ones, is not borne out by research.

At the same time, there are good arguments for giving families, especially those who are economically disadvantaged, more power to choose the schools their children attend. The challenge for policy makers is to find ways to expand parental choices without excessively privileging the interests of individual families over the social interests that justify the public funding of K-12 education.

Understanding How Large-Scale Voucher Programs Could Affect Student Achievement

A large-scale voucher program could potentially affect student achievement through three interrelated mechanisms. First, it would shift students from the public sector to the private sector. If the private sector was more productive than the public sector in generating student achievement, this shift would increase the productivity of the education system.

Second, such a program is likely to generate greater socioeconomic and racial polarization of students among schools as some students and families seek to improve the quality of their peers. This greater polarization could increase overall achievement, decrease it, or have no effect, depending on how peers affect the achievement of different groups of students.

Third, the introduction of a voucher system would increase competition among schools for students. Proponents argue that such competition would increase achievement by forcing the public schools to become more effective.

The evidence for examining these mechanisms and the effects of vouchers is limited. Voucher programs currently exist only on a small scale in the United States. The main publicly funded voucher programs are in Milwaukee, Cleveland, and Florida. In addition, small privately funded programs provide vouchers for low- and moderate-income students in cities such as New York, Dayton, Ohio, and Washington, D.C. Another privately funded program, the Children's Scholarship Fund, operates at the national level. Large-scale voucher or voucher-like programs that have been studied in Chile and New Zealand offer useful lessons. None of these programs provide evidence of significant improvements in student achievement or in the productivity of the education system.

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1. The Shift from the Public to the Private Sector

The educational productivity of urban private versus public schools has been well studied. In the early 1980s, researchers J. S. Coleman, T. Hoffer, and S. Kilgore concluded that students in the private high schools they studied, most of which were Catholic, outperformed their public school counterparts. However, the study did not fully account for self-selection—that students who chose to attend these schools may have been more motivated or otherwise primed to perform better.

Other studies of urban Catholic schools tend to show that they appear to have at most small effects on student achievement as measured by test scores but somewhat larger positive effects on the probability that students will graduate from high school and attend college.² The benefits seem to be greatest for urban minorities. Studies of private schools not restricted to Catholic schools have reported somewhat smaller positive overall effects on educational attainment, but they do find higher test scores in math from attending religious schools for the subgroup of African Americans in big cities.³

Most of the knowledge about the effects of private schools at the elementary level emerges from evaluations of the publicly funded Milwaukee Parental Choice program and of the privately funded programs in Dayton, Washington, D.C., and New York City. All of these voucher programs serve only a small fraction of the eligible students. Results from the publicly funded Milwaukee program have been the most controversial, in large part because that program was not set up as a true randomized experiment. The best study of the Milwaukee program found that it generated small gains for students in math but none in reading.⁴

Recent studies of the privately funded voucher programs in Dayton, Washington, D.C., and New York City provide additional information on how voucher programs—and hence private schools—affect the achievement of elementary and middle school students. In contrast to the Milwaukee program, each of these programs was set up as an experiment with random assignment of children.

Based on three years of the voucher programs in New York City and Washington, D.C., and two years in Dayton, researchers William Howell and Paul Peterson found no evidence of a general achievement difference between the public and the private schools.⁵

When the analysis was broken down by race, no differences emerged for either white or Hispanic students. Only the subgroup of African American students appeared to show achievement gains from the shift to private schools. This positive finding, however, has recently been contested by Alan Krueger and Pei Zhu.⁶ Moreover, at best it applies to a particular group of African Americans. Having a mother on welfare, for example, reduced the probability that a student would accept a voucher in the first place and remain in the private school once admitted. Working in the other direction, religiously observant students were more likely to accept vouchers and remain in the school. So even though the gains are good news for the students involved, it is not at all clear that this positive effect—provided it is indeed real—can be extrapolated to an expanded voucher program that would undoubtedly include a different mix of private schools than the mix that was relevant for the small voucher experiments.

More explicit evidence about the sector effect for a large-scale voucher program emerges from Chile, where the universal voucher program generated a large number of new for-profit secular private schools that operated alongside the more established and somewhat better resourced Catholic schools. Careful analysis of fourth grade achievement data in Chile indicates that, compared to the traditional public schools, Catholic schools generated higher achievement in Spanish and math while the new secular schools produced marginally lower achievement in Santiago and even lower achievement outside the capital city.⁷



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2. The Peer Effect and Socioeconomic and Racial Polarization

Because many parents use the social and ethnic composition of a school's students to judge a school's quality, a large-scale voucher program—or any unrestricted educational choice program—is likely to increase the racial and socioeconomic stratification of schools. In addition, low-income families would have disproportionately fewer choices if the government did not pay for transportation to the chosen schools, if voucher schools were allowed to charge fees and tuition above the amount of the voucher, if schools were allowed to select their students, and so forth. While a voucher program could be designed to mitigate these effects, the more basic pressure for stratification would remain.

If peer effects are positive and symmetric across groups—if a student raises his or her achievement level by being with motivated and/or talented peers—the gains in achievement for the students who move out of the public schools in search of higher quality peers would be exactly offset by the losses to students who remained at the original schools. However, if the magnitude of the peer effects were greater for students with low socioeconomic status (SES), then the movement of low SES students into schools with more affluent peers could potentially increase overall achievement. Alternatively, if the students who left the public schools were the more able and more motivated students, their gains in achievement could be more than offset by the loss in achievement of the students in the schools left behind.

Unfortunately, we still don't know enough about peer effects to predict whether a voucher program would be likely to increase or decrease the overall productivity of the education system through the mechanism of peer effects. Claims by both proponents and opponents are unsubstantiated opinion at this point, based on political, social, or cultural leanings rather than on evidence.

3. The Competition Effect on School Productivity

Voucher proponents believe that voucher-induced competition from private schools would pressure traditional public schools to become more productive. There are reasons to question these beliefs.

The strongest claims that voucher programs have succeeded in making public schools more productive are based on two empirical studies: Jay Greene's study of the Florida voucher program and Caroline Hoxby's analysis of fourth-grade achievement in the Milwaukee voucher experiment. However, in both cases there are good reasons to question whether the point has been proven.

Greene studied schools in Florida that had been placed in the state's lowest performing category and faced the possibility that their students would be eligible for vouchers if the schools did not improve significantly within a year.⁸ Those schools, in general, improved more significantly in the ensuing year than schools in any other category, and Greene attributed this to the threat of vouchers. However, a similar study in North Carolina, where the school accountability system does not include vouchers, found the same kind of one-year improvement in the lowest performing schools.⁹ The improvement in Florida thus could not be attributed solely to the competition effect of vouchers.

Hoxby carried out an analysis of fourth-grade achievement in Milwaukee public schools before and after the expansion of that city's voucher program in 1998.¹⁰ She reports that the annual increase in student achievement was higher in the Milwaukee public schools most subject to competition from private schools.

However, Hoxby's interpretation overstates the potential gains from a voucher program, because she was unable to control for the changing mix of students in her treatment and control groups. Earlier studies in Milwaukee had found that the average test scores of voucher applicants were well below those of other students



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in the Milwaukee system.¹¹ If these low-performing students left the public schools via their vouchers, the average achievement scores at those schools would naturally rise.

Conclusions

The evidence suggests that the overall effect of vouchers on student achievement is likely to be small. Studies from the United States and other countries provide no compelling evidence to support the view that the private sector generates higher achievement than the public sector, except possibly for a subset of low-income African Americans, or that there are significant gains to be had from competition. Nor is there clear evidence that peer effects could affect overall productivity.

These conclusions do not rule out other types of benefits, such as those that would accrue to families who used school vouchers to achieve a better match between their values, including their religious values, and the values of the schools their children attend. The results do imply, however, that the debate about voucher programs should revolve around the desirability of benefits of that type rather than around their alleged contribution to student achievement.

- 1. J. S. Coleman, T. Hoffer, and S. Kilgore, *High School Achievement: Public, Catholic, and Private Schools Compared* (New York: Basic Books, 1982).
- 2. William Evans and Robert Schwab, "Finishing High School and Starting College: Do Catholic Schools Make a Difference?" *Quarterly Journal of Economics* 110, no. 4 (1995): 941–74; Derek Neal, "The Effect of Catholic Secondary Schooling on Educational Attainment," *Journal of Labor Economics* 15 (January 1997, part 1): 98–123; Jeffrey Grogger and Derek Neal, "Further Evidence on the Effects of Catholic Secondary Schooling," Brookings-Wharton papers on Urban Affairs (2000).
- 3. David N. Figlio and Joe A. Stone, "Are Private Schools Really Better?" Research in Labor Economics 18 (1999): 115-40.
- 4. C. E. Rouse, "Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program." *Quarterly Journal of Economics* 113, no. 2 (1998).
- 5. William G. Howell and Paul E. Peterson, *The Education Gap: Vouchers and Urban Schools* (Washington D.C.: Brookings Institution Press, 2002).
- 6. Alan Krueger and Pei Zhu, "Another Look at the New York City School Voucher Experiment," Department of Economics, Princeton University, 2003, unpublished paper.
- 7. Patrick J. McEwan and Martin Carnoy, "The Effectiveness and Efficiency of Private Schools in Chile's Voucher System," *Educational Evaluation and Policy Analysis* 22, no. 3 (2000): 227.
- 8. Jay Greene, "An Evaluation of the Florida A-Plus Accountability and School Choice Program," New York, N.Y. Manhattan Institute for Policy Research, Center for Civic Innovation, 2001.
- 9. Helen F. Ladd and Elizabeth J. Glennie. 2001, "A Replication of Jay Greene's Voucher Effect Study Using North Carolina Data," in Martin Carnoy, *Do School Vouchers Improve Student Performance?* (Washington, D.C. Economic Policy Institute, 2001), app. C.
- 10. Caroline M. Hoxby, 2001 "Rising Tide: New Evidence on Competition and the Public Schools," *Education Next* (winter, 2001): 68–74.
- 11. John Witte, *The Market Approach to Education: An Analysis of America's First Voucher Program* (Princeton, N.J.: Princeton University Press. 2001).