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## COMPETITION DELIVERS IMPROVED STUDENT PERFORMANCE: FINDINGS FROM VOUCHER EXPERIMENTS

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### EXECUTIVE SUMMARY

Competition is widely accepted as a way to improve consumer satisfaction throughout the economy. It is also a large part of our higher education system, since students can take financial aid to any accredited college they choose. Recent reports from Harvard, Princeton, Wisconsin, and Texas professors suggest that competition among K-12 schools also can produce gains in student achievement.

### Three Kinds of Competition all Produce Gains

*Fragmentation of districts drives student gains.* Regions of the country with many districts outperform those with few: 3.8 extra percentile points on 8<sup>th</sup> grade reading, 3.1 points on 10<sup>th</sup> grade math, and 5.8 points on 12<sup>th</sup> grade reading. They also spend less.

*The presence of increased competition from private schools also drives student gains.* Metropolitan areas that have a higher percentage of students in low-cost private schools record superior test scores: 2.7 percentile points higher in 8<sup>th</sup> grade reading and 3.7 points in 12<sup>th</sup> grade math.

*When low-income students can take vouchers or scholarships to private schools, students in both private and public schools improve.* Under the Milwaukee school choice program, the public schools that face the greatest degree of competition from voucher-accepting private schools have seen the greatest academic gains.

### Seven of Eight Randomized Studies Show Gains Through Vouchers

There have been eight studies of private and public scholarship programs that randomly assign interested students to receive or not receive funds. These studies include programs in Charlotte, Dayton, and Milwaukee. Eight of those eight studies have shown that voucher recipients improve their test scores more than those in the control group. Seven of the eight studies show statistically significant results.

### Kansas Must Make Greater Use of Competition

Competition in Kansas schools lies largely in the ability of families to move from one district to another, or to send their children to charter schools. But moving imposes great costs, which many families will not or simply cannot bear. Meanwhile, severe restrictions mean that charter schools are not true competitors of district schools. Indeed, districts have a life-or-death say over charter schools.

Kansans can use one or several ways of promoting competition among K-12 schools, including removing the veto power that school districts have over charter schools, resisting the trend towards district consolidation, and enacting a voucher or tuition tax credit program that will spend money on students, not schools. Whatever methods Kansans use to increase the role of competition in K-12 education, students will benefit.



## INTRODUCTION

Can competition among schools improve education in Kansas? Our economy is built on using competition to match the need for price restraint with quality, and competition for students is the rule in higher education. But what about K-12 education? What can we say about the role of competition there?

The record of competition-enhancing programs across the country suggests that competition is good for K-12 education as well. If this is true, the development of an educated public could well depend on fostering competition among schools through vouchers, tax credits, and other means.

Over the last decade, total school spending in Kansas rose 56 percent. Student enrollment, by contrast, grew 1.4 percent.<sup>1</sup> Even so, rural, suburban, and urban districts alike have called for more funding, offering arguments unique to their situation.

Meanwhile, student performance of Kansas students is above the national average. Still, there are troubling signs. Slightly better than half of African-American and Latino students who enter high school graduate. Only one in three students in the state is proficient in math and reading at the eighth grade.<sup>2</sup>

### Three Kinds of Competition

We can see the benefits of competition in schooling in three ways: by looking at the concentration of districts within a region; by looking at the presence of private, non-voucher schools in a region; and by looking at the performance of public schools when a voucher program is operating within or near a district.

#### *When Many School Districts Compete With Each Other*

Some competition among public schools may already exist if there is more than one public school

system in a given area. Carolyn Hoxby, a Harvard professor who has done much research on education, points out that metropolitan areas vary widely in this regard. Los Angeles has one extremely large district: there is no competition in public school districts there. On the other hand, within a 30 minute drive of downtown Boston, there are 70 districts to choose from.

One way, then, to evaluate the effects of competition on performance is to compare metropolitan areas by the amount of competition that exists among public schools. By using the number of publicly run districts in an area as a measure of competition, Hoxby found that competition does lead to improved student performance. Schools in regions with much inter-district competition scored higher on math and reading tests than schools in areas with little inter-district competition. Further, they achieved their outstanding results at lower costs than regions with less competition.

<b>Academic superiority of all schools in metropolitan areas with higher inter-district competition<sup>3</sup></b>	
<i>Measurement</i>	<i>Result</i>
8 <sup>th</sup> grade reading	3.8 percentile points higher
10 <sup>th</sup> grade math	3.1 percentile points higher
12 <sup>th</sup> grade reading	5.8 percentile points higher
Spending	7.6 percent less

Hoxby drew this conclusion: “Metropolitan areas with maximum interdistrict choice elicit consistently higher test scores than do areas with zero interdistrict choice.”

#### *When School Districts Compete With a Large Number of Private Schools*

The amount of competition that exists can have an effect even when some schools that compete for



students face a severe disadvantage in funding. This is the case of the typical privately run school, which depends on parents willing to pay tuition on top of education taxes.

Hoxby classified metropolitan areas by the extent to which government-run schools had competition from low-cost privately run schools. Private schools tend to be used more frequently in some parts of the country, and in some cities, than in others.

In her review of national data, Hoxby found that metropolitan areas with more competition between private and publicly run schools enjoyed higher test scores for all students.

<b>Academic superiority of all schools in metropolitan areas with higher degrees of competition from low-cost private schools<sup>4</sup></b>	
<i>Measurement</i>	<i>Result</i>
8 <sup>th</sup> grade reading	2.7 percentile points higher
8 <sup>th</sup> grade math	2.5 percentile points higher
12 <sup>th</sup> grade reading	3.4 percentile points higher
12 <sup>th</sup> grade math	3.7 percentile points

***When Districts Compete with Private (Voucher-accepting) Schools***

The most interesting and potentially problematic question is what happens to students who attend districts in which a scholarship or voucher program is operating. Critics of letting the funds follow the child (i.e., vouchers) suggest that when a child leaves the public school for a private school, his classmates will suffer. This argument takes a number of forms, including “skimming the cream.”

The logic of competition, however, suggests that when public districts face increased competition, they will improve, and become better at producing more educated students.

One important test case is the city of Milwaukee, Wisconsin. The Parental Choice Program was started on a small scale in 1990, and expanded in 1995. It gives parents vouchers equal to the amount of state (but not local) support for students in the Milwaukee Public Schools. Under the program, students can take this money (\$5,943 in the 2004-05 school year) to over 100 private schools.

The program is means-tested, meaning that only low-income students can participate. Schools in Milwaukee that have the highest concentrations of low-income students will face the most intense competition from private schools. Some schools in the city have much competition, while others have not so much. If competition brings educational benefits, the academic gains of students ought to be higher in schools facing the greatest competition. Further, schools in the district ought to achieve greater gains than schools that have similar demographic profiles but operate outside the district.

This is exactly what Carolyn Hoxby found in her study of Milwaukee.

By looking at the changes over time in the standardized test scores of fourth grade students, Hoxby found some strong results: the control group schools (those outside the program) saw some improvement over time. Schools in Milwaukee that faced some modest competition through the choice program saw even more improvement. But the schools making the largest gains were those that faced the greatest amount of competition of all.



**Annual gains on standardized tests according to degree of competition facing an elementary school: annual gains in national percentile rank, 1996-2000<sup>5</sup>**

Subject (4 <sup>th</sup> grade level)	Schools with the most competition	Schools with less competition	Schools unaffected by the program
Math	6.3	4.8	3.5
Science	7.0	5.8	2.3
Social studies	4.2	2.4	1.5
Reading	0.8	-0.5	-1.3

**Others Report Gains from Competition**

While Milwaukee is a well-known program of school competition, it is not the only one. By looking at others, we can also see what happens when schools must compete for students who, thanks to vouchers or private scholarships, enjoy an increased range of options in a more competitive environment.

Most programs to enhance choice and competition can serve only a portion of the families who are interested. Their funds are limited, so recipients are chosen by lottery from a larger pool of interested families.

While a lottery by definition disappoints some people, it has one positive result: it gives scholars the gold standard of research, a “randomized selection” for a treatment. They can ask “What happens when some students get a voucher or scholarship and others do not?”

The number of randomized studies is still fairly small, but the evidence we have points towards the benefits of competition. In the book *Education Myths*, Jay Greene summarized the findings of studies that used randomized assignments.<sup>6</sup> After reviewing these eight studies of five different programs, Greene wrote:

“Every one of the eight random-assignment studies finds at least some positive academic effects for students using a voucher to attend a private school. In seven of the eight studies the benefits for voucher recipients are statistically significant, meaning that we can have high confidence that the academic gains observed are not merely the product of chance.”<sup>7</sup>

Scholars who look at the benefits of voucher programs typically examine how much improvement is seen in student test scores on reading and math. The most desirable results are those of programs that have been operating longer, and which have produced gains in more than one subject areas. In Charlotte, Dayton, Milwaukee, New York City, and Washington, D.C., students in public and private scholarship programs have seen statistically significant increases in test scores.

By looking at gains made on math, reading, and other standardized tests, we can see that by strengthening the role of competition through vouchers or scholarships, taxpayers and philanthropists have improved the educational performance of students attending alternative schools.

<b>Statistically Significant Results of Voucher Programs (percentile points gained)<sup>8</sup></b>				
Program	Reading	Math	Combined	After how many years?
Charlotte, NC			6	1
Dayton, OH			6.5	2
Milwaukee	6	11		4
Milwaukee		8		4
New York City			9.2	3
New York City		4.7		1
Washington, D.C.			9.2	2



## Existing Use of Competition is Limited

Americans depend on competition in many areas of life, including higher education. Does competition exist in K-12 education exist today? Yes it does, but only to a limited degree.

The easiest place to see competition, and the one emphasized by school district officials, is in *the real estate market*. People consider the quality and price of a district when making a home purchase, and the term “excellent schools” adorns many real estate listings.

But it would be a mistake to overestimate the extent of competition in K-12 education by focusing on the real estate market. That market consists of home sellers competing against each other, and the local school district is but one component of a property’s qualities.

Second, in a very competitive market for a good or service, buyers can switch from one seller to another with ease and at little cost. Switching from one homeowners insurance company to another is straightforward and inexpensive. Place a few phone calls, answer a few questions, and the property owner has a new insurer.

But switching from one school to another means switching from one district to another. This change usually requires buying a different house or renting a different apartment. Not only does this result in tremendous upheaval in one’s personal and family life, but there are substantial financial costs in moving, such as agent commissions and moving fees.

Another factor that limits the extent of competition in education is the long-term trend of district consolidation. Whenever two large companies in the same industry decide to merge, the Federal Trade Commission and other government agencies often get involved. They want to see how likely it is that the merger will weaken competition in the market.

The “market” for schooling has seen many mergers over the years. The number of school districts in Kansas has declined from over 5,000 in 1945 to 300 today. It is likely that efforts to reduce the number of Kansas districts will continue.<sup>9</sup> As the number of districts gets smaller, the role of competition will decrease.

*Charter schools*, a public school alternative to the district school, offer some competition. But they are in a very weak position in Kansas. They are rather hampered by the rules governing them, so they are few in number. As a result, they do little to contribute to a competitive environment for schooling.

All new charter schools, for example, must be approved by a local district, and if the district rejects the petition, there is no other organization that is able to hear an appeal. Even charters that are established face restrictions that limit their competitive position. State aid for the charter school passes through the district, for example. Any waivers to existing law and policy—a key feature of charter schools in other states—must be approved by the district, and are not built into state law.

As a result of these restrictions, The Center for Education Reform, a clearinghouse (and advocate) of charter schools, gives Kansas a “D” for its charter school laws.<sup>10</sup> Fewer than 30 charter schools (and only 16 charter high schools) in the state serve less than 3,000 students, or roughly 1 student in 200.<sup>11</sup> In law and in fact, the charter schools that do exist in Kansas are creatures of local districts, not competitors of them. As much as charter schools may benefit individual students, they are not a competitive force in Kansas education.

Private schools also provide some competition to traditional district schools, but they face an obvious disadvantage. Parents must first make a “purchase” from (pay taxes to) the public school district.



## Competition Can Be Enhanced Several Ways

There are several ways of enhancing competition in education: give vouchers or tax credits to some or all parents of school-aged children; extend tax credits to people or businesses giving money to scholarship funds; and remove the veto power that school districts currently have over the development of new charter schools.

Even within a government-run approach, there are ways to increase the role of competition among schools: use a liberal policy of public school district choice; implement merit pay for teachers based on gains in student achievement; keep school districts small and many; make vigorous efforts to increase the transparency of district costs and performance. State officials should also look at streamlining or removing regulations that may inhibit the ability of public schools to compete in a marketplace of tax credit or voucher-carrying students.

Whatever methods Kansans use to increase the role of competition in education, schools will excel. More importantly, students will benefit.

Economic theory and the history of the American economy suggest that children in all schools will benefit from increased competition. The record of programs of choice across the country offers confirmation of that idea.

### About the Author



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## Notes

<sup>1</sup> John R. LaPlante, "Facts About Education Spending in Kansas," Flint Hills Center for Public Policy, Policy Brief Vol 2, No 1, March 19, 2005.

<sup>2</sup> John R. LaPlante, "Why Kansas Must Improve Its Above-Average Test Scores," Flint Hills Center for Public Policy, Policy Paper Vol 3, No 1, January 12, 2006; John R. LaPlante, "How Good are Public Schools in Kansas?" Flint Hills Center for Public Policy, Policy Brief Vol 1, No 3, July 8, 2004.

<sup>3</sup> Carolyn Hoxby, "Rising Tide," *Education Next*, <http://www.educationnext.org/20014/68.html>.

<sup>4</sup> Ibid.

<sup>5</sup> Carolyn Hoxby, "How School Choice Affects the Achievements of *Public* School Students," Koret Task Force on K-12 Education paper. [http://post.economics.harvard.edu/faculty/hoxby/papers/choice\\_sep01.pdf](http://post.economics.harvard.edu/faculty/hoxby/papers/choice_sep01.pdf).

<sup>6</sup> Jay P. Greene with Greg Forster and Marcus A. Winters, *Education Myths*, Rowman & Littlefield Publishers, 2005, pp. 147-156.

<sup>7</sup> Greene, p. 151.

<sup>8</sup> Greene, p. 150. Original materials cited by Greene may be found at the following: Jay P. Greene, "The Effects of School Choice: An Evaluation of the Charlotte Children's Scholarship Program," *Education Next*, Summer 2001, <http://www.educationnext.org/unabridged/20012/greene.html>. William G. Howell, Patrick J. Wolf, Paul E. Peterson and David E. Campbell, "Test Score Effects of School Vouchers in Dayton, Ohio, New York City, and Washington, D.C.," paper presented to the American Political Science Association, September 2000, table 2A. Note: due to sample size and other factors, statistically significant results were obtained only for African-American students in each of the three cities studied in this report. See also William G. Howell and Paul E. Peterson, *The Education Gap: Vouchers and Urban Schools*, Brookings Institution press, 2002.

<sup>9</sup> John R. LaPlante, "School Consolidation: An Ineffective Way of Improving Education," Flint Hills Center for Public Policy, Policy Paper Vol 2 No 2, December 7, 2005

<sup>10</sup> "Kansas Charter Law," Center for Education Reform; Available online at <http://www.edreform.com>.

<sup>11</sup> "Charter Schools in Kansas," Kansas Department of Education, Available online at <http://www.ksde.org/outcomes/chartindex.html>. See also "Kansas State Profile," U.S. Charter Schools; Available online at <http://www.uscharterschools.org/cs/sp/view/sp/27>. See also K.S.A. 72-1906.

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