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PUBLIC DOLLARS, PRIVATE SCHOOLS:

Examining The Options In Missouri

By James V. Shuls

INTRODUCTION

“Isn’t that just a voucher?” I often hear that question when I discuss enabling students to use public dollars to attend private schools. This question is an attempt to do two things: (1) lump all forms of state-supported private school choice programs into one group and (2) dismiss these programs with a word that to some has a negative connotation. Labeling all programs that give students the ability to attend a private school with state money a “voucher” may be an effective rhetorical device, but it obfuscates the important distinctions that exist between different types of programs. Even worse, it ignores the potential benefits private

school choice programs can bring to students and the state.

In this essay, I address the two premises of the “Isn’t that just a voucher?” question. First, I describe the three distinct types of programs which other states are currently using to enable students to attend private schools: vouchers, tax credit scholarships, and education savings accounts (ESA). These programs are quite unique from one another and provide different benefits to students and taxpayers. Therefore, it is important to know how each system works. Second, I review the literature on private school choice programs. In short, I demonstrate why we should not dismiss all private school choice programs as “just a voucher.”

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PRIVATE SCHOOL CHOICE PROGRAMS

As I noted, there are three distinct types of programs that provide private school options at state expense. It is fairly easy for opponents of private school choice programs to lump these programs together, because at the most basic level, they all have an impact on the state budget constraint. That is, each type of program requires the state to cover the cost of the program in one of two ways. The state can generate additional revenue to cover the costs of the program or it can shift money from an existing program. Opponents can easily latch onto this fact and claim that the state does not have the money for a private school choice program. As you will see, however, each of the three programs can be designed to save the state money. Moreover, shifts in expenditures are simply that, shifts. As I describe in this paper, these programs transfer education funding from the school to the individual.

Voucher

The most widely known concept of all private school choice programs is the voucher. Essentially, a voucher system works as follows (*see* Figure 1). Citizens pay their taxes to the state.

The state then provides the individual with a voucher of a specified dollar amount that the individual can use to pay for tuition at private schools. The money never enters the student’s or parent’s hands; rather, it flows directly from the taxpayer to the state to the private school. In some cases, the voucher covers the entire cost of tuition at a private school. This occurs when the voucher amount is sufficient to cover the cost of tuition or when the state prohibits private schools from collecting additional tuition from voucher recipients. If the voucher amount is less than a school’s tuition, the school potentially can collect all or a portion of the remaining tuition from the student’s family. Of course, the level of the voucher amount and whether a school can collect additional money depends entirely on how the program is designed.

While the idea of allowing students to use public dollars at private schools has gained steam in recent years, the idea is not new. In fact, the two longest-running voucher programs in the United States have been in place for 140 years or more.¹ Students in Maine and Vermont who live in an area without a public elementary or secondary school are allowed to use a

Figure 1: Transition of Dollars in a State Voucher System



“town tuitioning” program to attend non-sectarian private schools or other public schools. These programs were developed for pragmatic reasons to serve students in rural areas of the state.

Milton Friedman is credited with developing the modern concept of school vouchers in his 1955 paper “The Role of Government in Education.” Friedman argued that the public desire to provide students with a basic education did not necessitate that schools be publicly operated.

Rather, he argued:

[T]he two steps could readily be separated. Governments could require a minimum level of education which they could finance by giving parents vouchers redeemable for a specified maximum sum per child per year if spent on “approved” educational services. Parents would then be free to spend this sum and any additional sum on purchasing educational services from an “approved” institution of their own choice.

[T]he two longest-running voucher programs in the United States have been in place for 140 years or more.

Table 1: List of Voucher Programs

State	Name	Date Started	Students Served in 2011-12
Wisconsin	Milwaukee Parental Choice Program	1990	23,198
Ohio	Cleveland Scholarship and Tutoring Program	1995	5,603
Florida	John M. McKay Scholarship for Students with Disabilities Program	1999	22,861
Ohio	Autism Scholarship Program	2003	2,236
Washington, D.C.	D.C. Opportunity Scholarship Program	2004	1,615
Utah	Carson Smith Special Needs Scholarship	2005	635
Georgia	Special Needs Scholarship Program	2007	2,965
Louisiana	Student Scholarships for Educational Excellence Program	2008	1,848
Louisiana	School Choice Pilot Program for Certain Students with Exceptionalities	2010	188
Oklahoma	Lindsey Nicole Henry Scholarship for Students with Disabilities Program	2010	160
Indiana	Choice Scholarship Program	2011	3,919
Ohio	Jon Peterson Special Needs Scholarship Program	2011	Set to begin in 2012-13 ²
Wisconsin	Racine Parental Choice Program	2011	228
Mississippi	Mississippi Dyslexia Therapy Scholarship for Students with Dyslexia Program	2012	Set to begin in 2012-13 ³

[A] tax credit of less than 100 percent could potentially generate more money for educational purposes.

The first modern-day voucher program, the Milwaukee Parental Choice Program, began in 1990. There are now 14 voucher programs nationwide (*see* Table 1).

Tax Credit Scholarships

Tax credit scholarships are similar to vouchers in that they provide students access to private schools, but the mechanism for doing so is quite different. In a tax credit scholarship program, the taxpayer – an individual or a corporation – provides a gift to a scholarship granting organization for a tax credit (*see* Figure 2). The scholarship granting organization then provides scholarships to students to attend private schools. The tax credits can be worth varying amounts, up to 100 percent of the gift. That means if an individual gives a gift of \$100 to a scholarship program with a 100 percent tax credit, he or she could deduct \$100 from the individual tax liability. If the tax credit is 40 percent, the individual would deduct \$40 from the tax liability. In this scenario, the taxpayer would give \$100 to the scholarship program and \$60 to the

state. Thus, a tax credit of less than 100 percent could potentially generate more money for educational purposes.

Caps can be placed on the tax credit program to ensure that there is not too much money diverted from the state's general revenue. Often, individuals and corporations are only allowed to claim a set percentage of their overall tax liability in the form of a credit. Caps can also be established to limit the total amount of dollars contributed to scholarship granting organizations. If limits are implemented, it is important to include a mechanism within the program to allow it to grow at least at the rate of inflation. One such mechanism is called an escalator, which automatically increases the cap in the year after the cap has been reached.

Some prefer tax credit scholarships over vouchers for a variety of reasons. First, the possibility of bringing in additional dollars through the tax credit program is appealing. Others prefer tax credit scholarships because they worry about state entanglement in private schools. The money flows

Figure 2: Transition of Dollars in a Scholarship Tax Credit System



Table 2: List of Scholarship Tax Credit Programs

State	Name	Date Started	Students Served in 2011-12
Arizona	Individual School Tuition Organization Tax Credit	1997	25,343
Florida	Florida Tax Credit Scholarship Program	2001	37,998
Pennsylvania	Educational Improvement Tax Credit Program	2001	40,876
Iowa	School Tuition Organization Tax Credit Program	2006	590
Rhode Island	Corporate Scholarship Tax Credit	2006	341
Arizona	Corporate School Tuition Organization Tax Credit	2006	4,578
Georgia	Georgia Private School Tax Credit	2008	8,131
Indiana	Indiana School Scholarship Tax Credit Program	2009	10,820
Arizona	Lexie's Law Scholarship	2009	115

directly from the state to the private school in a voucher system and some fear there may be too many strings attached with that aid. A tax credit scholarship program, on the other hand, may limit the influence of the state over private schools because the money flows to the private school through a scholarship granting organization rather than the state. Others prefer tax credit scholarships over vouchers for more practical reasons, believing they will be upheld if challenged constitutionally.⁴

Education Savings Accounts

Education savings accounts (ESA) are the newest program designed to give students the ability to use public dollars to attend private schools. Arizona passed the country's first education savings account program in 2011. However, this new concept of the ESA is often confused with the

more established 529 college savings accounts. Missouri's 529 college savings plan, MOST, allows parents to deposit money into a college savings account for their children. These deposits are tax-deductible and the interest on the accounts accrues tax-free. This is quite different from an ESA program.

Matthew Ladner says ESAs "bring Milton Friedman's original school voucher idea into the 21st century."⁵ Like vouchers, the funding for an ESA comes from the taxpayer to the state, but education funds are not distributed directly to private schools like they are in a traditional voucher program. Rather, the funds are placed in an individual's education savings account. In Arizona, when a student leaves the public school and opens an ESA, he or she receives 90 percent of the funds that the state would have

Parents can use the funds in the [ESA] account to purchase goods and services for their student from a host of providers.

. . . technology is making it possible to customize educational services for each individual student.

given to that student's public school based on the state's funding formula. Note the difference between this type of plan and a 529 plan. In the 529 plan, the money comes from the individual and is not taxed. In an ESA system, the individual still pays his or her taxes. The money in the account comes from the normal allotment of public funds for that particular student.

In Arizona, the department of education and the treasurer coordinate quarterly deposits into the accounts. Bank of America issues debit cards to parents, but the bank itself does not have oversight of the accounts. Once the account has been established, parents can use the funds in the account to purchase goods and services for their student from a host of providers. These goods and services can include textbooks, standardized tests, tutoring, or even private school tuition. Anything not spent from the account is retained for future purchases.

The development of ESAs is really the result of improved technology. Schools are beginning to change from the traditional models of the past few decades. Technology now makes it possible to take an online course from Massachusetts Institute of Technology (MIT) while living on a farm in rural Missouri. In essence, technology is making it possible to customize educational services for each individual student. Technology also makes it possible to distribute educational dollars in a different

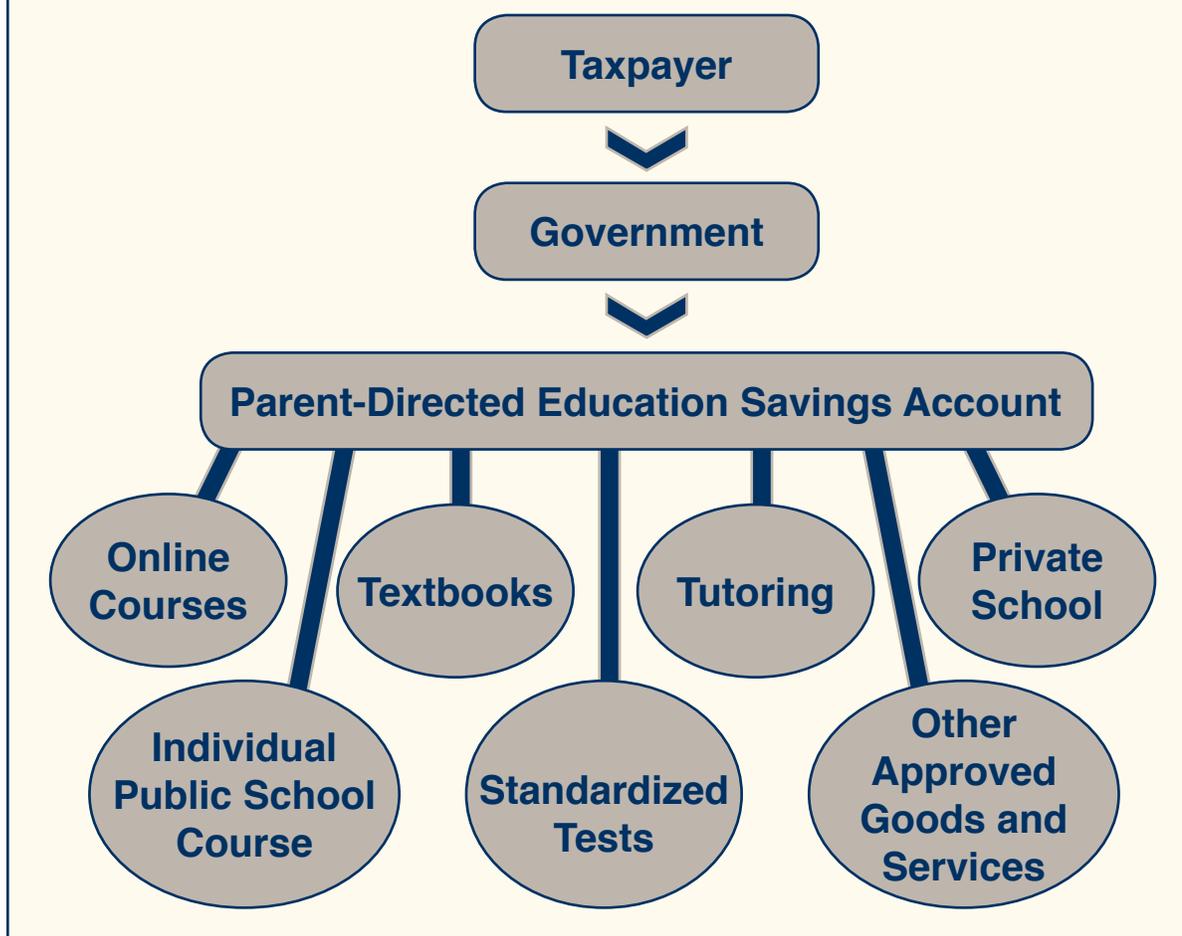
manner. Both vouchers and tax credit scholarships distribute a set dollar amount directly to private schools. In an ESA, state dollars flow into a savings account which can be accessed to purchase a host of education goods and services. This distinction is important because it allows for more flexibility and helps to place a downward pressure on private school prices.

In a voucher or a tax credit scholarship system, each private school has an incentive to set its tuition at or above the scholarship amount. If the school does not do this, it will lose out on *free* dollars that it could have received from students receiving state support. Moreover, families have no incentive to shop for a lower price if their voucher or scholarship will cover the tuition at the private school of their choice. That means it is possible for vouchers or tax credit scholarships to lead to inflation in private school tuition. Because money can be saved in an ESA, families have more incentive to select cheaper schools. Then they can use the remaining dollars to purchase textbooks or tutoring services, or they could save those dollars to pay for high school or college. This encourages private schools to keep their prices low to attract students.

Summary

Though vouchers, tax credit scholarships, and education savings accounts are often lumped together conceptually, they have very distinct

Figure 3: Transition of Dollars in an Education Savings Account



features and benefits. The thing that these three programs all have in common is that they provide families with options.

BENEFITS FROM PRIVATE SCHOOL CHOICE

Next, we examine the literature on private school choice. Legislation in Jefferson City or a vote of the people through a ballot initiative would be needed to implement a school choice program. There are at least four reasons Missourians might consider enacting a private school choice program through one of these routes:

1. If private school choice improves educational outcomes for students.
2. If private school choice generates cost savings.
3. If private school choice programs benefit low-income families by giving them equal educational opportunities as their more affluent peers.
4. If private school choice programs increase individual liberty.

I think the evidence is clear that private school choice programs meet each of these goals.

So far, there have been 12 random assignment studies of private school voucher programs. Eleven of the 12 studies found positive impacts in at least one area for some or all of the students involved.

[T]he evidence indicates that private school choice leads to increased parental satisfaction, improved academic performance, and increased graduation rates.

Do private school choice programs improve educational outcomes?

A number of studies have sought to determine if private school choice improves student outcomes. One problem that exists in this type of study is non-random sorting. That means the types of students in private schools are not random and in fact may be quite different from students in traditional public schools. For instance, students in private schools may have more involved parents, which could boost student achievement. Thus, a comparison of academic performance of the two groups may inaccurately attribute positive effects of parental involvement to the private schools. The most rigorous evaluations account for this by using a random assignment lottery to award a voucher to some students. A lottery avoids the non-random sorting problem because all individuals in the lottery have expressed similar levels of interest or commitment to education. The only difference between the two groups is whether or not the student won the lottery.

So far, there have been 12 random assignment studies of private school voucher programs. Eleven of the 12 studies found positive academic impacts for all students or for a specific subgroup. Not one study has found negative effects for students using a voucher to attend a private school. The positive effects are myriad. Parents of voucher recipients report higher levels of parental satisfaction.⁶ Students often demonstrate significantly larger

gains in student achievement.⁷ In some instances, the gains have been particularly pronounced for a specific subset of students, such as African-Americans⁸ or students from low-performing schools.⁹ Vouchers have also led to increased graduation rates.¹⁰ In Washington D.C., the offer of a voucher to a student increased graduation rates by 12 percentage points.¹¹ For students who actually used the voucher, graduation rates increased from 70 percent to 91 percent, a difference of 21 percentage points.¹² A study conducted in New York found black students who received vouchers were significantly more likely to attend college.¹³ The evidence indicates that private school choice leads to increased parental satisfaction, improved academic performance, and increased college-going rates for some students. A summary of the studies is presented in Table 3.

Do private school choice programs result in cost savings?

An objection often raised against private school choice programs is funding. It is argued that we simply do not have enough money for these programs, especially when our state's education formula is not fully funded. This objection carries a lot of weight, but may not actually have merit. It all depends on how the scholarship program is structured. In each of the three types of programs, there is the potential to structure them in a way that costs the state money or in a way that saves the state money.

If a program is designed well, taxpayers

can benefit directly from a private school choice program through cost savings. These savings occur in a voucher or an ESA program when the amount of money provided to the scholarship program follows the student and is less than would have been spent on that pupil had they attended a public school. For instance, if a traditional public school spends \$10,000 per pupil and a student is able to direct \$5,000 of that to the private school of his choice through a voucher or an ESA, then the district or the state is able to retain the other \$5,000 at a cost savings. Of course,

these savings are minimized when the program entices students to participate in the program who would have otherwise paid for private school tuition on their own. Nevertheless, there is the potential to generate real cost savings. In Milwaukee, for instance, the voucher program is estimated to have saved taxpayers more than \$50 million in 2009.¹⁵

A program that is not designed to allow funding dollars to follow the student will not provide cost savings. In Washington D.C., for instance, the program was created in addition to the regular funding of schools and when

A cost-benefit analysis of the [DC Opportunity Scholarship] program . . . indicated that taxpayers received a \$2.62 return for every \$1 invested in the voucher program.

**Table 3: Effects of Vouchers on Participants
(All Studies Using Random-Assignment Methods)¹⁴**

Location	Author	Published	Results			
			Positive Effect		No Visible Effect	Negative Effect
			All Students	Student Subgroup		
New York	Chingos & Peterson	2012		X		
New York	Jin et. al.	2010		X		
D.C.	Wolf et al.	2010	X			
Charlotte	Cowen	2008	X			
New York	Krueger & Zhu	2004			X	
New York	Barnard et al.	2003		X		
New York	Howell & Peterson	2002		X		
D.C.	Howell & Peterson	2002	X			
Dayton	Howell & Peterson	2002		X		
Charlotte	Greene	2001	X			
Milwaukee	Greene et al.	1998	X			
Milwaukee	Rouse	1998	X			

From 1990 to 2006, Susan Aud estimates the total savings from private school choice programs is approximately \$444 million.

a student left, the public schools were held harmless. That means they did not lose any of the money that would have been used to educate the voucher students. In that type of situation, vouchers or ESAs cost taxpayers more. That is why it is important to structure these systems so the money follows the child.

Missouri already has a funding formula that determines how much money each school will receive based on the number of students in attendance.¹⁶ If vouchers or ESAs are paid for through the funding formula, then the state's budget will not be adversely impacted. The budgets of schools may be slightly reduced. That is, if a student leaves the school, the school then loses some of the funds that were directed to the school based on that child. Thus, schools can rightly say that school choice programs hurt their bottom line. This, however, is a red herring. Students regularly move from one district to another. In each of these cases, the district's budget decreases. Yet that is not objectionable because the parents are expressing their right and the school has one fewer student to serve. In the same way, the funding could simply follow the child to the school of their choice, but in this case it could be a private school. Essentially, these programs are simply transferring school funding from the public school to the individual student.

Like vouchers or ESAs, tax credit scholarships can also generate cost

savings for the state. If a student were to attend a public school, the state would be obligated to provide some funds for the student. When the student uses a tax credit scholarship, the state no longer has to fund that student through the funding formula. Moreover, the local school district will have one fewer student, but will keep all of the local dollars. Though the student leaving the school will lower overall revenue for the district, per-pupil expenditures will rise because the local dollars would not be reduced.

Of the three programs, only tax credit scholarships will have an impact on the state's general revenue. As individuals and corporations receive credits for donating to scholarship granting organizations, their total tax liability decreases, resulting in fewer dollars flowing into the state coffers. However, as I have mentioned, the decrease in revenue can potentially be made up by the decrease in state expenditures. In their piece on tax-credit scholarships in Missouri, Podgursky, Brodsky, and Hauke write, "A partial credit offers the greatest opportunity for savings, but in all cases, the cost to the state will be far lower than the tax revenue loss."¹⁷

Though Podgursky, Brodsky, and Hauke were only estimating the potential savings of a tax credit scholarship program in Missouri, other states have realized cost savings from enacting such legislation. In Pennsylvania, the state's tax credit

scholarship program has been estimated to generate approximately \$20 million in savings annually.¹⁸ From 1990 to 2006, Susan Aud estimates the total savings from private school choice programs is approximately \$444 million.

As we have seen, private school choice programs have the potential to save taxpayers money directly. These programs also have the ability to provide fiscal benefits indirectly through increased efficiency. Indirect savings occur when the choice programs lead to improved outcomes for students. For example, the Washington, D.C., Opportunity Scholarship Program significantly increased high school graduation rates. Given that high school graduates are more likely to go to college, obtain higher paying jobs, live healthier lifestyles, and spend less time in jail or on government handouts than high school dropouts, this is a large gain for taxpayers. A cost-benefit analysis of the program, which took into account these factors, indicated that taxpayers received a \$2.62 return for every \$1 invested in the voucher program.¹⁹

A well-designed school choice program can offer the state significant financial savings while providing students with options they may not have had. With that said, even when savings occur from private school choice programs they are not always felt uniformly. It is quite possible for some school districts to incur a financial strain when they lose some

students through school choice. However, this is mostly a problem in the short run. If a school loses 5 percent of students, administrators may have fixed costs that do not allow them to cut a full 5 percent of their spending. In the long run, however, fixed costs become variable costs and districts should be able to make appropriate adjustments to increased competition.

Do private school choice programs improve opportunities for disadvantaged students?

Nearly all of the existing private school choice programs are designed to provide additional opportunities to disadvantaged students. Many of these programs are “means-tested.” That means that participants in the program must have a family income below a certain level. Assistance is provided based on whether a family has the *means* to afford private school tuition. Even in states where scholarship participants may be middle-class families, such as Pennsylvania, the participants tend to be low-income families. That state’s Legislative Budget and Finance Committee reported that the average income for a family receiving a scholarship was only \$29,000.²⁰

Other programs, such as the Ohio voucher program, are targeted to students in failing schools. Failing schools, including in Missouri, tend to serve more disadvantaged students in terms of socio-economic status and race. Thus, by providing access

Of all the benefits that may occur as a result of a private school choice program, the impact on liberty is the most obvious. Vouchers, tax credit scholarships, and ESAs provide options to families who may not otherwise have such opportunities.

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to private school choice programs to students in failing schools, the state can target a disadvantaged segment of the population that currently lacks quality educational options.

The evidence from the experimental analysis of voucher programs is also quite clear that these programs benefit disadvantaged students.²¹ In New York, researchers found that African-American students using the private school voucher led to a 24 percent increase in college enrollment. This was a statistically significant increase. Attending college opens the door to the middle class and is a tremendous benefit to disadvantaged students.

Do private school choice programs expand liberty?

Of all the benefits that may occur as a result of a private school choice program, the impact on liberty is the most obvious. Vouchers, tax credit scholarships, and ESAs provide options to families who may not otherwise have such opportunities. This means families can have the ability to send their child to a school that best meets their needs rather than be forced to send them to a local public school simply because they live within that school's attendance zone.

Too often, discussions about school choice focus solely on school quality. While it is important to give families in low-performing schools options, it is also worthwhile to give all families options. In many places throughout the state, traditional public schools are doing a good job of educating

students. No school, however, can effectively meet the needs and desires of every family; therefore, having the option to send your child to another school is crucial even if you do not utilize that option. In instances where a school is not meeting a child's needs, school choice gives the school the incentive to make needed changes or potentially lose that student. If the school is unable to make the necessary changes, parents have options.

Though school quality is an important consideration, there are many reasons parents may wish to send their children to a private school. I withdrew my children from a traditional public school because I did not like the "discovery learning" method the school was using to teach math.²² Other parents may wish to have a more or less structured environment. Whatever the reason for wanting an alternative to the traditional public school, private school choice programs provide families with more opportunities to choose a school for their child.

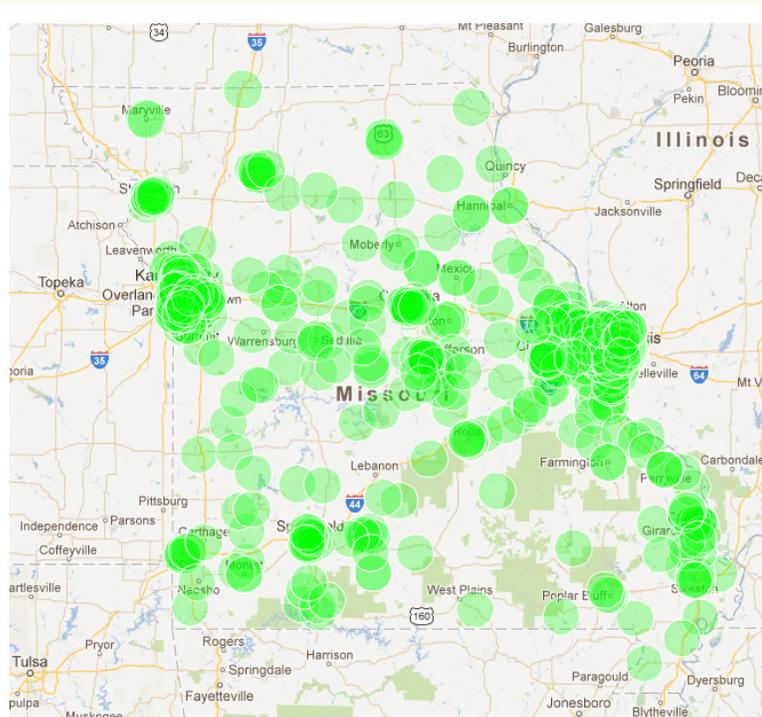
What about rural Missouri?

Some attempt to dismiss the efficacy of private school choice programs in Missouri because of the state's rural center. This argument suggests that school choice may be beneficial in Saint Louis and Kansas City but it would not really provide options to students in other parts of the state. In reality, there are many private schools throughout the state that families might be able to access with the help

of a state program. According to the Private School Universe Survey, conducted by the National Center for Education Statistics, there are more than 580 private schools in Missouri. In Figure 4, I have plotted these schools with a 10-mile radius around each school. It is readily apparent that private schools exist in almost every part of the state. The only places without private schools tend to be very rural places where very few people live. Thus, a private school choice program could provide most families in Missouri expanded educational options.

The rural state argument also ignores the impact that a private school choice program might have on the private school market. If more students are able to access private schools, demand will increase. It makes sense that this might induce private schools to open in more places, including smaller towns that previously could not have supported a private school and a public school. Additionally, these programs may encourage schools to expand online course offerings or find other unique ways to reach individuals in remote parts of the state.

Figure 4: Every Missouri Private School With A 10-Mile Radius²³



Whatever the reason for wanting an alternative to the traditional public school, private school choice programs provide families with more opportunities to choose a school for their child.

CONCLUSION

The evidence is mounting that private school choice programs improve outcomes for students, especially disadvantaged students. Additionally, these advances in student achievement, high school graduation, and college enrollment often provide a cost savings for taxpayers. Most importantly, private school choice programs enable parents to have more authority in the education of their child. It is time for Missouri to implement a program that will allow parents to use public dollars for private school tuition.

James V. Shuls, PhD, is the education policy analyst at the Show-Me Institute, which promotes market solutions for Missouri public policy.

According to the Private School Universe Survey, conducted by the National Center for Education Statistics, there are more than 580 private schools in Missouri.

NOTES

¹ Hammons, Christopher W. (2001). "School Choice in Depth: The effects of town tuitioning in Vermont and Maine." Milton and Rose D. Friedman Foundation. View online here: http://www.edchoice.org/CMSModules/EdChoice/FileLibrary/61/The_Effects_of_Town_Tuitioning_in_Maine_and_Vermont.pdf.

² As of March 25, 2013, only one school had met the criteria for accepting voucher students and approximately 25 students were using the voucher, according to personal correspondence with the Mississippi Department of Education.

³ As of March 25, 2013, 1,808 students were using a Jon Peterson Special Needs Scholarship, according to personal correspondence with School Choice Ohio.

⁴ Missouri has a Blaine Amendment, a constitutional provision that restricts state dollars from supporting religious institutions. Because the money flowing to private schools in a tax-credit scholarship program never enters the government's hand, these programs may avoid violating this provision of the constitution.

⁵ Ladner, Matthew. (2012). "The way of the future: Education savings accounts for every American family." The Friedman Foundation. View online here: <http://www.edchoice.org/CMSModules/EdChoice/FileLibrary/925/The-Way-of-the-Future--Education-Savings-Accounts-for-Every-American-Family.pdf>.

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⁷ Cowen, Joshua M. (2008). "School choice as a latent variable: Estimating the 'complier average causal effect' of vouchers in Charlotte." *Policy Studies Journal*, 36(2), 301-315. Greene, Jay P., Paul Peterson, and Jiangtao Du. School Choice in Milwaukee. "Learning from school choice," 335-356. Greene, Jay P. (2001). "Vouchers in Charlotte." Rouse, Cecilia. (1998). "Private school vouchers and student achievement." *Quarterly Journal of Economics*, 113(2), 553-602.

⁸ Howell and Peterson. (2002). "The education gap."

⁹ Barnard, John, Constantine Frangakis, Jennifer Hill, and Donald Rubin. (2003). "Principal stratification approach to broken randomized experiments: A case study of school choice

vouchers in New York City." *Journal of the American Statistical Association*. 98(462), 299-310.

¹⁰ Wolf et al. 2010.

¹¹ Ibid.

¹² The 12 percentage point increase in graduation rates pertains to all students who were offered a voucher. This group is known as the "Intent To Treat" (ITT) group. The comparison examines the differences between all students who were awarded the voucher and those who were not. This is a standard program evaluation method used to account for those individuals who never use the voucher or who attrite from the program. The 21 percentage point difference pertains to the individuals who actually used the voucher. This is the impact on the treated or the impact of actually using the voucher.

¹³ Chingos, Matthew, and Paul Peterson. (2012). "The effects of school vouchers on college enrollment: Experimental evidence from New York City." Brookings Institution and Harvard University.

¹⁴ Table reproduced from Forster, Greg. (2013). "A win-win solution: The empirical evidence on school vouchers, third edition." The Friedman Foundation for Educational Choice. View online here: <http://www.edchoice.org/Research/Reports/A-Win-Win-Solution--The-Empirical-Evidence-on-School-Choice.aspx>.

¹⁵ Costrell, Robert M. (2010). "The fiscal impact of the Milwaukee parental choice program: 2010-2011 update and policy options." SCDP Milwaukee Evaluation Report No. 22, University of Arkansas. View online here: http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_22.pdf.

¹⁶ For more on the funding formula see: Shuls, James V. (2012). "A Primer On Missouri's Foundation Formula For K-12 Public Education." Show-Me Institute Policy Study No. 35. View online here: <http://www.showmeinstitute.org/publications/policy-study/education/878-school-funding-primer.html>.

¹⁷ Podgursky, Michael, Sarah Brodsky, and Justin Hauke. (2008). "The Fiscal Effects Of A Tuition Tax Credit Program In Missouri." The Show Me Institute, Policy Study No. 12. View online here: <http://showmeinstitute.org/publications/policy-study/education/357-the-fiscal-effects-of-a-tuition.html>.

¹⁸ Aud, Susan, L. (2007). "School choice by the numbers: The fiscal effects of school choice programs, 1990-2006." The Friedman Foundation for Educational Choice. View online here: <http://www.edchoice.org/Research/Reports/Education-by-the-Numbers--The-Fiscal-Effect-of-School-Choice-Programs--1990-2006.aspx>.

¹⁹ Wolf, Patrick, and Michael Q. McShane. (2013). "Is the juice worth the squeeze? A benefit/cost

analysis of the District of Columbia Opportunity Scholarship Program." *Education Finance and Policy*, 8(1), 74-99.

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²¹ Howell and Peterson. (2001). "The education gap." Barnard et al. (2003).

²² Shuls, James. (2013). "Why We Need School Choice." Show-Me Institute Essay. View online here: <http://www.showmeinstitute.org/publications/essay/taxes/905-why-we-need-school-choice.html>.

²³ Private school locations obtained from the National Center for Education Statistics, Private School Universe Survey of 2010. View online here: <http://nces.ed.gov/surveys/pss/privateschoolsearch/>.

. . . a private school choice program could provide most families in Missouri expanded educational options.



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