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## Highlights

- Major voucher and tuition tax credit programs exist in Wisconsin, Ohio, Florida, Pennsylvania and Arizona.
- It is difficult to tell what fiscal impacts vouchers and tuition tax credits have had on public school finances, although in each of the jurisdictions studied, budgets continued to grow for public schools at healthy rates.
- Growth rates in voucher and tuition tax credit programs have been extremely fast in other states.
- The fiscal impacts of most tax credit programs are more unpredictable than vouchers, because they are available to any who want to claim the credit.
- Studies show gains in African American student performance when they switch to private schools, but other ethnic groups showed no improvement.
- Parental satisfaction increases significantly when students switch to private schools.
- It is not clear whether improved student performance results from any difference in school quality or if it is merely the result of families taking greater interest in, and control of, their students' education.



5242 College Drive, Suite 390
Salt Lake City, Utah 84123
(801) 288-1838
www.utahfoundation.org

# School Choice: Experiences With Vouchers and Tuition Tax Credits in Other States

## Introduction

School choice and competition between public and private schools have become subjects of intense debate in Utah. Senate Bill 34, currently before the State Legislature, would provide a tuition tax credit to parents who pay for private school tuition or for individuals and companies that donate to private school scholarship funds. Advocates for the measure say it will improve education for all Utah children by providing greater opportunities for students to switch to private schools if desired and by forcing public schools to compete to keep their students, thus improving the quality of the public schools through greater attention to quality. Opponents of the measure say it will harm the public schools by enticing the best students to leave the system and taking needed funds away from the public schools to subsidize private schools. Different fiscal estimates show that the measure will either cost millions of dollars a year or save small amounts at first, growing to millions of dollars in later years. Proponents claim that savings would be placed back into the public school system, proving greater resources for those students in public schools. Opponents claim that complicated funding formulas will lead to financial losses for most schools and make it more difficult to cover fixed costs to operate the schools.

Utah Foundation does not attempt in this report to create yet another fiscal estimate of the impacts SB 34. Indeed, most of this report does not focus on the specifics of this measure. Rather, our contribution to the debate is a look at how similar programs have operated in other states. Each of the programs examined is significantly different than the proposal in SB 34. Some are voucher programs limited to specific school districts; some are private scholarship programs that have been heavily evaluated to try to discern the effects of moving students from public schools to private schools; others are tax credit programs, each of which is significantly more limited than the Utah proposal.

The results of this policy review are mixed. On the fiscal side, none of the programs enacted in other states seems to have harmed public school finances. But because of the structure of public finance in those states, it is impossible to make solid conclusions on the fiscal impacts. Unlike Utah, none of the other states tie school funding directly to income tax revenues, so any reduction in income taxes from a tuition tax credit simply reduces overall state revenues, and schools compete with a myriad of other state programs for those funds. Similarly, enactment of a voucher program simply adds one more program to the array of those competing for general state budget appropriations, and when state budgets are growing, all programs can grow. The program most similar to the Utah proposal is Arizona's tuition tax credit, and while the amount of credits claimed (taxes revenues reduced) has grown rapidly, state school funding has also grown rapidly.

There is some evidence that students score better on standardized tests after switching to private schools. However, the improvements are small, not dramatic; and in many cases, initial improvement was not sustained over several

years. An interesting wrinkle in some of the studies was that African American students significantly improved testing performance compared to their public school counterparts, but other students, including Latinos, did not. This research indicates that the usefulness of private school choice will vary, depending on social and cultural attributes. Since Utah has a unique social and cultural makeup, it's anybody's guess how private school competition will affect students' performance in this state.

One result that stands out in these studies is the unambiguous increase in parental satisfaction among families who move their children from public to private schools. The difference in perceived quality is remarkable; parents feel strongly that, compared to public schools, private schools provide greater academic rigor, discipline, safety, student-teacher relationships, and parent-teacher relationships. There seems to be some evidence that simply having a choice improves parents' perception of school quality, even if they choose to keep their children in public schools.

One underlying theme to all of this research is that, when benefits of these programs have been found, no one knows what proportion of those benefits spring from actual differences in education quality and how much is caused by families simply becoming more involved in their children's education. Most educators and researchers will agree that parental involvement in a child's education is the strongest predictor of academic success. It is quite possible that the processes involved in moving a child to a private school or even the sacrifices involved in paying for private school tuition, cause a change in expectations, standards, and behavior of families that lead to increased educational performance, even if the academic quality of the private school is no different than a public school.

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## Context and Definitions of School Choice

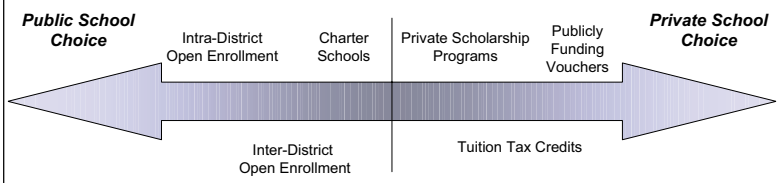
Until last year, the legality of voucher and tuition tax credit programs was uncertain. In 2002, The U.S. Supreme Count ruled on Zelman v. Simmons-Harris, finding that the Cleveland program of issuing publicly funded vouchers for private school education was constitutional, despite the fact that 90 percent of the vouchers issued were used at religiously oriented schools. The decision argued that the state is not sponsoring a religion as long as parents are free to choose religious and non-religious schools. In the aftermath of Zelman, issues regarding school choice have gained momentum nationally, including the current effort in Utah. This type of measure has been introduced in Utah in each of the last five years and is receiving its most serious legislative consideration during the current session.

The term "voucher" is often used in the school choice debate. While voucher programs are part of this debate, they are not the only choice option available to legislators. Unfortunately, vouchers and other school choice policy options are seldom defined; because of this, they are often misunderstood. This was demonstrated by a survey done by Public Agenda, which found that 81 percent of parents feel they need to know more on the issue of vouchers to know whether they support them.[1] Additionally, "voucher" is frequently used interchangeably with the term "tax credit." While they are borne out of similar ideologies, they are distinct policies. Finally, a majority of the people surveyed by Public Agenda suggested that they would be better equipped to form an opinion regarding vouchers or tax credits if they knew the results of similar programs in other states. With this in mind, Utah Foundation offers a review of various voucher and tax credit programs that have been implemented across the country. This report will offer summaries of those programs, highlight the differences

between them, and suggest possible reasons for their successes and failures.

**Figure 1**

**The Spectrum of School Choice Options**




The school choice movement argues that competition for students between schools will improve education. According to this argument, efficiency would be maximized if competition occurred not only between various types of public schools, but included private schools as well. School choice supporters argue that this would maximize innovative teaching practices and ensure that students received the best education available in either a public or a private environment. These arguments utilize neo-classical economic theory, which at its core argues that competition ostracizes inefficient producers and thus promotes efficiency, because all producers must innovate in order to survive. This is vastly different from the environment in which public schools have operated to date. This current environment is characterized mainly by state support for public education aimed at increasing the level of achievement of all schools, with little, if any, state-supported options that create competition or would allow a student to attend a private school. Proponents of preserving the current system of public education argue that competition implies that some schools will fail, which would serve to disadvantage a segment of students. They argue that strategies aimed at improving failing and struggling schools will benefit more students than competition.

These groups share a common goal: maximizing the benefit students derive from the education system. Additionally, they have reached consensus on some areas surrounding school choice, with many school districts nationwide adopting open enrollment policies and some states, including Utah, supporting an increase in charter schools. Figure 1 illustrates the spectrum of school choice options available. Both sides of the aforementioned debate have accepted many of the choices listed on the public school choice side; however, those options are often constrained by factors beyond a parent's control. For example, Utah law allows for open enrollment, both inter- and intra-district, and authorizes a limited number of charter schools; however, not all students are able to utilize the existing programs. For example, a student attending a rural school may not have a charter school in the area, or students in urban areas may attempt to switch to another public school but find that it is already full serving students from its own attendance area.

**These groups share a common goal: maximizing the benefit students derive from the education system.**

While public school choice is undoubtedly part of increasing choice and competition, the debate is usually fiercest when options include private schooling. So far, policies extending school choice to private schools have focused on two mechanisms: vouchers and tax credits.

There are privately funded voucher programs and some of the research regarding academic achievement of voucher students focuses on those that have participated in private voucher programs. However, the term usually denotes a publicly funded program in which the state gives a student's family a document, or voucher, that can be submitted as payment to a private school of their choice. The private school then receives money directly from the state to pay for all or a portion of that student's tuition. Currently, there are three publicly funded voucher programs in the United States. These exist in Milwaukee, Cleveland, and Florida. These programs are usually focused on specific localities where schools have been found to fall below expectations.

Tuition tax credits, by contrast, are credits that reduce income taxes in exchange for payment of private school tuition or contributions made by individuals or businesses to non-profit entities, which then use those donations to distribute scholarships for a child to receive a private education at the school of their parent's choosing. Thus far, each of the tuition tax credit programs in existence is a statewide program, as opposed to the local focus usually seen with vouchers. The states using these programs set guidelines and rules to define the types of non-profits that can distribute scholarships, the income level of recipients, and regulations on participating private schools. Three major tuition tax credit programs currently exist in Arizona, Pennsylvania, and Florida.

## Voucher Programs: Milwaukee, Cleveland, and Florida

**The oldest school choice programs are voucher programs.**

The oldest school choice programs are voucher programs. Currently, voucher programs operate in two metropolitan areas and one state: Milwaukee, Wisconsin; Cleveland, Ohio; and Florida. While tax credit policies (which will be discussed in more detail later) are generally implemented on a statewide level, and are usually targeted at low- to moderate-income children, voucher programs are generally focused on specific school districts and target children who are both impoverished and attending failing schools. Florida's voucher program is no exception, as eligibility, while statewide, is dependent on the student's enrollment in a state-defined failing school. Each of the programs will be described below, and then a discussion of the educational outcomes from voucher programs in general will follow.

### Milwaukee

When reviewing voucher programs, it is critical to examine the Milwaukee program. This is the longest running voucher program in the country. As such, it provides the most reliable data as to the success of voucher programs. Students from families that make less than 175 percent of the federal poverty level and live in the Milwaukee Public School System (MPSS) are eligible for a voucher currently worth $5,059 to attend an eligible private school. At many schools, this amount covers the entire tuition, but if a particular school is more costly, families must find additional funds to complete payment. Eligible private schools must meet at least one of the following four standards:

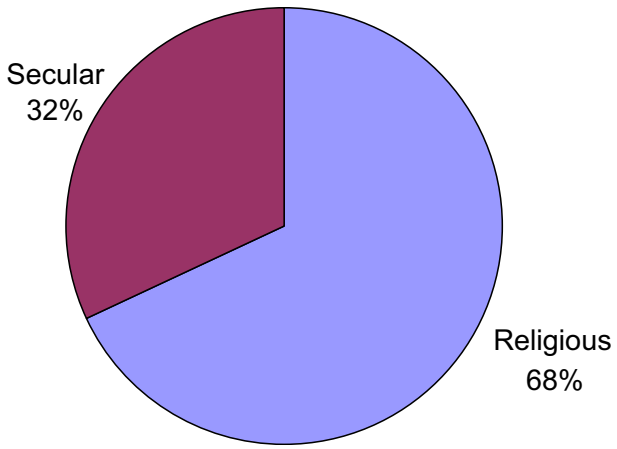
- At least 70 percent of the pupils in the program advance one grade level each year.
- The private school's average attendance rate for pupils in the program is at least 90 percent.
- At least 80 percent of the pupils in the program demonstrate "significant academic progress."
- At least 70 percent of the families of pupils in the program meet parental involvement criteria established by the private school.

Notwithstanding these rules, no auditing procedures have been implemented to ensure that private schools are eligible, making virtually any private school eligible to be a choice school.

When the program was implemented in 1989, two additional restrictions existed that have since been

**Figure 2**

**Milwaukee Voucher Student Enrollment by Control of the Institution: 2002-2003**




Source: Milwaukee Public School System (MPSS).

amended. First, in 1989 the maximum number of students who could receive a voucher was one percent of the total enrollment in MPSS; however that has since been expanded to a cap of fifteen percent. As of the 2001-02 school year, twelve percent of the total population, or 10,882 students, were enrolled in the program. Second, in 1989 voucher students could not attend sectarian schools; this changed in 1998. As of 2002, religious schools dominated the number of schools participating in the program and educated 68 percent of all the students who participated in the choice program. (See Figure 2) The program has grown rapidly in the past ten years; however, that growth has been planned and controlled by the Legislature. Additionally, the budget has grown from an initial $700,000 to an estimated $59.4 million for the 2001-02 school year. However, this is not necessarily money that would have funded the Milwaukee Public School System had the voucher program not existed. Milwaukee's voucher program is funded by state appropriations and treated as a budgetary item separate from traditional school appropriations. In a time of growing budgets for schools and other items in the state budget, it is impossible to know whether the voucher program's funding has impinged on state funding of public schools to any degree. Figure 3 shows that the Milwaukee Public School System's funding from state sources continued to grow at a healthy rate even while the voucher program experienced tremendous growth.

**Figure 3**

## Enrollment and Funding for Public Education and Voucher Systems Compared

***Milwaukee Voucher Program 1990-2002***

| Year | MPSS Expenditures (State Sources) | Enrollment | Per Pupil Spending (State Funds Only) | Voucher State Spending | Number of Participating Schools | Voucher Enrollment |
|---|---|---|---|---|---|---|
| 1990-91 | $604,500,000 | n/a | $6,064 | $700,000 | 7 | 341 |
| 1991-92 | 632,700,000 | 93,381 | 6,302 | 1,400,000 | 6 | 521 |
| 1992-93 | 660,000,000 | 94,258 | 6,575 | 1,600,000 | 11 | 608 |
| 1993-94 | 689,800,000 | 95,258 | 6,831 | 2,100,000 | 12 | 733 |
| 1994-95 | 744,700,000 | 98,009 | 7,382 | 2,500,000 | 12 | 802 |
| 1995-96 | 765,400,000 | 98,378 | 7,556 | 4,600,000 | 17 | 1,454 |
| 1996-97 | 806,000,000 | 101,007 | 7,768 | 7,100,000 | 20 | 1,657 |
| 1997-98 | 854,600,000 | 101,253 | 8,022 | 7,000,000 | 23 | 1,545 |
| 1998-99 | 922,100,000 | 99,814 | 8,718 | 28,400,000 | 86 | 6,194 |
| 1999-00 | 953,100,000 | 99,729 | 9,036 | 38,900,000 | 91 | 7,996 |
| 2000-01 | 981,900,000 | 97,985 | 9,502 | 49,200,000 | 103 | 9,619 |
| 2001-02* | 1,026,500,000 | 97,762 | 9,926 | 59,400,000 | 106 | 10,882 |
| Last Year Change | 4.5% | -0.2% | 4.5% | 20.7% | 2.9% | 13% |
| Annualized Growth Rate | 4.9% | 0.5% | 4.6% | 49.7% | 28.0% | 37.0% |
| 11 Year Change** | 69.8% | 4.7% | 63.7% | 8385.7% | 1414.3% | 3091.2% |

Source: School Choice Info, data available at: http://www.schoolchoiceinfo.org/what/milw_enrollment.jsp

*2001-02 Figures are estimates.

**Enrollment is a 10 year change.

### Cleveland

Cleveland's program gained national attention due to the aforementioned Zelman case. The program began in 1995 and has fewer students enrolled than the Milwaukee program. The maximum number of vouchers available fluctuates, because the allotment depends on appropriations. In 2001 approximately 4,500 students received a voucher to attend private school and the maximum amount of that voucher was $2,250.

**Milwaukee Public School System's funding from state sources continued to grow at a healthy rate even while the voucher program experienced tremendous growth.**

Unlike the Milwaukee program, the Cleveland voucher never covers the entire cost of a private school education. Students whose family income is between 100 percent and 200 percent of the Federal Poverty Level (FPL) are eligible for a maximum of 75 percent of the cost of a child's education, while families whose income is below 100 percent of FPL are eligible to receive 90 percent of the cost of a child's education. Additionally, students who are already in private school are eligible for the voucher, but cannot make up more than 50 percent of the total student population receiving vouchers. In Milwaukee, students who were already attending private school were only eligible for vouchers in the beginning phases of implementation and have since been excluded from eligibility. Finally, in Cleveland, the voucher can be used to facilitate a student's transfer to another public school. This was put in place to maximize the competitive affects of the voucher, although it has seldom been utilized.

For those who have met the eligibility criteria, a lottery is held to

**Figure 4**

## Enrollment and Funding for Public Education and Voucher Systems Compared

***Cleveland Scholarship and Tutoring Program 1996-2002***

| Year | Cleveland Municipal SD Expenditures (State Sources) | Enrollment | Per Pupil Spending (State Funds Only) | Voucher State Spending | Voucher Enrollment |
|---|---|---|---|---|---|
| 1996-97 | $559,694,843 | 74,026 | $7,561 | $4,961,218 | 1,194 |
| 1997-98 | 513,727,054 | 76,500 | 6,715 | 8,461,961 | 2,914 |
| 1998-99 | 564,500,933 | 76,558 | 7,374 | 6,903,244 | 3,674 |
| 1999-00 | 606,441,851 | 76,323 | 7,946 | 6,910,846 | 3,406 |
| 2000-01* | 645,971,192 | 74,193 | 8,707 | 7,657,386 | 3,797 |
| 2001-02* | 662,638,677 | 72,898 | 9,090 | 14,903,943 | 4,457 |
| Last Year Change | 2.6% | -1.7% | 4.4% | 94.6% | 17.4% |
| Annualized Growth Rate | 3.4% | -0.3% | 3.8% | 24.6% | 30.1% |
| 6 Year Change | 18.4% | -1.5% | 20.2% | 200.4% | 273.3% |

Source: School Choice Info, data available at: http://www.schoolschoiceinfo.org/what/cleve_cost.jsp

* Uses budgeted amounts for total state education funding for 2000-01 and 2001-02 and voucher state spending for 2001-02.

determine which students will receive vouchers for that school year. The only preference given to students is family preference, meaning that if a family has more than one child and one receives a voucher, his or her siblings are also eligible for the voucher. The program has doubled in size since its inception, making it the slowest growing voucher program in the country. This is a function of the Legislature exercising restraint when appropriating money to the program, since funding is the factor that limits the number of vouchers available. Figure 4 illustrates the growth of the program from 1996-97, when it was approved, to the present. There appear to be no regulations governing which type of private schools may participate in the Cleveland Scholarship and Tutoring Grant Program, making it slightly different than Milwaukee's voucher program and significantly different from Florida's voucher program.

### Florida

Florida's voucher program, or the Opportunity Scholarship Program (OSP), was passed as a part of the A+ Educational Reform Law of 1999. The OSP is unique in this country because it is the first statewide voucher program to be implemented. However, eligibility for participation is the most restrictive of the three programs outlined in this section. For a student to qualify for a voucher that can be used to attend either a higher-performing public school or an eligible private school, a student must be attending (or about to attend in the case of kindergartners) a school that has received a failing grade on the state rating system for two of the last four years. If this criterion is met, a student is eligible to receive a voucher for approximately $4,000 (the number fluctuates based on budgets).

**The program has doubled in size since its inception, making it the slowest growing voucher program in the country.**

Florida's law is the most restrictive as to which private schools may participate in the voucher program. While both religious and non-religious schools may participate, all of the following criteria must be met:

- Must be in the state of Florida
- Must notify the Department of Education and local school districts of their intent to participate by May 1 of the school year preceding when voucher students will be admitted.
- Must have either been in operation for one school year, or alternatively, demonstrate fiscal soundness.
- Must meet state and local health and safety codes and federal anti-discrimination provisions.
- Must determine which voucher students to accept on a random and religion-neutral basis.
- Must be accredited by an appropriate accrediting body, or be actively pursing accreditation, and must comply with all state statutes relating to private schools.
- Must make available a school profile to parents, including reports of student performance and the certification status of teachers.

- Must employ individuals with bachelor's degrees, or those who have at least three years of teaching experience, special skills, expertise/ knowledge that qualifies them to teach specific subjects.
- Must agree not to compel any voucher student to pray, worship, or profess a specific religious or ideological belief.
- Must adhere to its published disciplinary procedures prior to the expulsion of a voucher student.
- Must accept the voucher as full payment of tuition and fees for the student.

Recently, Florida's voucher population grew by a factor of one hundred due to statutory amendments that created the McKay Scholarship for Disabled Students. This expanded the voucher-eligible population to include the disabled. Prior to this law change, only about 50 students used a voucher to attend a private school; in the aftermath of this change, that number had increased to 5,057 and has overtaken Cleveland as the second largest voucher program in the country (see Figure 5). Preliminary figures for this year suggest that the voucher programs will be expanding rapidly once again. The unadjusted number of Opportunity Scholarships has increased by a factor of ten to 542 and the McKay Scholarships have increased to 8,644.

**Recently, Florida's voucher population grew by a factor of one hundred due to statutory amendments that created the McKay Scholarship for Disabled Students.**

Currently, each of these voucher programs is operational, although Florida's Opportunity Scholarship faces a second legal challenge (the McKay scholarship has not been challenged in court). While the Zelman case removed doubt of voucher's constitutionality on a federal level, Florida's program has been ruled unconstitutional on a state level. It will continue operation until the case is appealed to the U.S. Supreme Court next year.

## Effectiveness of Voucher Programs

Numerous audits of voucher programs have been completed, and while the programs are too young to fully evaluate, some tentative conclusions can be drawn. The Center on Education Policy, in a report titled, "School Vouchers: What We Know and Don't Know... and How We Could Learn More," found that data collection and analysis of voucher programs has been difficult due to the lack of an explicit mandate from states as to what data should be gathered on an ongoing basis. Because of this, the data available has been ad hoc at best, and answers to

**Figure 5**

### Enrollment and Funding for Public Education and Voucher Systems Compared

***Florida Public Education, Opportunity Scholarships, and McKay Scholarships 1996-2002***

| | Public Education System | | | Opportunity Scholarship Program | | | McKay Scholarship Program | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | Total | Enrollment | Per Pupil Spending | Voucher Enrollment | Average Amount of Voucher | Total State Voucher Exp. | Voucher Enrollment | Average Amount of Voucher | Total State Voucher Exp. |
| 1996-97 | $9,921,872,560 | 2,183,059 | $4,545 | | | | | | |
| 1997-98 | 10,496,380,670 | 2,235,977 | 4,694 | | | | | | |
| 1998-99 | 10,539,457,845 | 2,275,382 | 4,632 | | | | | | |
| 1999-2000 | 11,102,932,102 | 2,324,059 | 4,777 | 51 | $3,122 | $177,954 | 2 | $2,210 | $4,420 |
| 2000-01 | 11,780,741,257 | 2,375,201 | 4,960 | 57 | 3,469 | 176,900 | 970 | 6,606 | 5,883,636 |
| 2001-02* | 12,209,943,467 | 2,436,202 | 5,012 | 47 | 3,308 | 155,494 | 5,017 | 5,550 | 27,842,338 |
| Last Year Change | 4% | 2.6% | 1.0% | -18% | -5% | -12% | 417% | -16% | 373% |
| Annualized Growth Rate | 4.2% | 2.2% | 2.0% | -1.6% | 1.2% | -2.7% | 378.5% | 20.2% | 475.3% |
| Time Period Examined Change | 23.1% | 11.6% | 10.3% | -7.8% | 6.0% | -12.6% | 250750% | 151% | 629817% |

Source: Florida Department of Education: Office of Planning, Budget and Management and Financial Reporting.

*Unadjusted. Since 1998, all state education revenues have been adjusted downward to account for contributions to the retirement fund.

**Figure 6**

## Test Scores and Selected Characteristics

***Cleveland Hope Schools***

| | Scholarship Recipients | Public School Parents |
|---|---|---|
| Average Income | $15,769 | $19,948 |
| Mother's Education (Avg. Years) | 13.2 | 12.5 |
| 2 Parent Household | 27% | 52% |
| 1 Parent Household | 69% | 42% |
| *Percentile Scores* | | |
| 1996 Math | 31.9 | n/a |
| 1997 Math | 37.7 | n/a |
| 1998 Math | 42 | n/a |
| 1996 Reading | 29.2 | n/a |
| 1997 Reading | 36.5 | n/a |
| 1998 Reading | 36.6 | n/a |

Source: Summarized from "An Evaluation of the Cleveland Voucher Program After Two Years" Program on Education Policy and Government; Howell, William G. and Greene, Jay P. June 1999

*Scores were taken from Fall of 1996 and 1997, and Spring of 1998--They represent the initial set of voucher students. All data are significant at at least the .05 confidence level.

questions such as how vouchers affect curriculum and instruction have been elusive. Furthermore, the center found that local factors, such as administration of the voucher program, socio-cultural issues, and school availability, have the greatest effect on the way each program functions in that region.[2]

While some studies have found slight achievement gains among students who participate in voucher programs, other studies looking at the same programs have found no achievement gains. In general, studies of Milwaukee and Cleveland (the first evaluation of the Florida program relative to achievement is currently underway) have found that voucher students have improved, but the improvement generally occurs in the first testing cycle and then levels off, with students maintaining, but not continuing to improve, performance. Furthermore, it is unclear whether those gains are the result of external factors due to the self-selecting nature of the community who uses vouchers. For example, an analysis of the Hope Schools in Cleveland found that student scores improved substantially initially and then leveled off (see Figure 6). However, in this same group, while the average income of a family participating was lower, parental educational attainment was, on average, 1.5 years higher than the public school average. Parental educational attainment has been highly correlated with a child's success and may account for the substantial differences observed. Finally, the lack of comprehensive data in regards to achievement makes it difficult for researchers to determine the success of the voucher program itself, rather than the success of a type of school, or a subset of students who are potentially responding to increased parental involvement.

**While some studies have found slight achievement gains among students who participate in voucher programs, other studies looking at the same programs have found no achievement gains.**

The undisputed attribute of vouchers is that their presence increases parental satisfaction for those who use the voucher.[3] Dr. Emily Van Dunk and Anneliese M. Dickman found that this holds true even for parents who are unsure of what they are looking for in a private education. They surveyed parents in districts that did not have school choice and compared those results to Milwaukee. The survey included questions regarding actual knowledge and perceived knowledge and satisfaction. While parents in Milwaukee were no more likely to have increased knowledge of their school system, they were more likely to believe they had adequate knowledge and were thus more satisfied. The results of perceived satisfaction have not been explored, but similar results have been found in Florida and Cleveland making this a worthy topic of exploration.

While publicly funded voucher programs have been unable to provide conclusive evidence regarding changes in student performance, a review of private scholarship funds may offer some answers. Three cities with relatively large private scholarship funds agreed to award those scholarships in such a manner that researchers could perform randomized field trials, similar to medical research, using control and treatment groups. The following section details the scholarship programs in New York City, Washington D.C. and Dayton, Ohio and provides the findings from the research done on scholarship students. The findings reveal a great deal about student performance and parental perceptions of private versus public education.

## Private Scholarship or "Voucher" Programs

While much of the debate about vouchers and tax credits focuses on using tax or public money to fund private school tuition, much of the research regarding the impacts of vouchers on student performance has been done in areas where private scholarship funds provide low-income children the opportunity to obtain a private school education. Despite their differences from publicly funded programs, these are important examples to review, because the studies conducted on these programs provide the best analysis of how student performance and parental satisfaction change when students are provided the choice to attend private schools. These scholarship funds offer the most economically disadvantaged children, usually those with a household income at or below 185 percent of the federal poverty line, a scholarship of approximately $1,500 a year towards the cost of private school tuition. The scholarship funds rely on donations from individuals and organizations. These donations are tax deductible at both the federal and state level, but are not public funds *per se*. The scholarship funds receive applications from eligible families and a lottery system is employed to award the scholarships in the event that more children apply than are eligible. Once a family has been notified that they have won a scholarship, the family is free to use the award at the private school of their choice, provided they gain admission.

This section focuses on research done in New York City, Washington DC, and Dayton, Ohio. These areas have instituted private scholarship programs and rigorous studies have been performed on the results on student performance and parental satisfaction. Much of this work was done as a joint effort between Mathematica Policy Research, Inc. and the Program on Education Policy and Governance at Harvard University. A review of the methodology used and the results from each area are detailed below.

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### Methodology

The researchers chose these three programs because they were of a size that could be studied in a statistically meaningful way. In all three areas, interested parents were asked to complete an initial application. This initial application was identical in all three cities. It included questions regarding family income and public support, educational level of parents, ethnicity and religious affiliation, as well as citizenship status. While parents were completing this application, the students were engaged in taking the Iowa Test of Basic Skills (ITBS) to determine their academic skill level. The only exclusions from this base-line data gathering were children entering into the first grade. After this series of questionnaires and tests was completed, vouchers were awarded by lottery. This allowed students to be randomly assigned to either a "treatment" group or a "control" group.

The treatment group was comprised of those children who were offered a voucher. The control group was those who did not, by lottery, obtain a voucher offer. This random selection of voucher recipients allowed the researchers to control for "skimming", or taking the best and brightest students out of the public school system and placing them in private education. Since assignment was random, no child would be awarded a scholarship based on academic merit. The one exception to this random assignment was in New York City, where program administrators wanted to ensure that the majority of scholarships went to students performing *below* the citywide average on the standardized tests. Therefore, the group receiving a scholarship award over-sampled those in this category. The results of the study are weighted accordingly to compensate for this selection bias.

Another benefit of the random assignment of students to the treatment group or control group is that it eliminates differences between the families of those who choose private school versus those who remain in public schools. Statistics abound showing that private school students achieve higher scores on standardized tests compared to public school students. However, researchers are never certain how much of the performance difference is actually *caused* by private schooling and how much is the result of private school students coming from families with greater advantages, such as higher family incomes, higher levels of parental education, and greater motivation and expectation among family members for educational performance.[4] These studies attempt to eliminate the question of differences in the educational advantages of families by using random selection for the awarding of scholarships and comparing those children who received the scholarships to other children who also attempted to get a scholarship but did not receive one. Because the control group only includes children who attempted to get a scholarship, not the universe of all public school students, it can be assumed that their family motivation levels are similar to those who randomly won a scholarship.

**Figure 7**

## Socio-Economic Status and Educational Performance of Students at the time of the 1997 Lottery

***New York***

| Characteristic | Recipients | Non-recipients | Statistically Significant Difference |
|---|---|---|---|
| **Race/ethnicity of mother/female guardian** | | | |
| White | 5% | 4% | No |
| Black | 48% | 44% | No |
| Puerto Rican | 17% | 20% | No |
| Hispanic other than Puerto Rican | 25% | 28% | No |
| Other | 5% | 4% | No |
| **Job status of mother/female guardian** | | | |
| Full-time job | 23% | 20% | No |
| Part-time job | 15% | 15% | No |
| Seeking work | 46% | 46% | No |
| Not working and not seeking | 14% | 16% | No |
| Don't know | 1% | 2% | No |
| **Government assistance received in household** | | | |
| Food Stamps | 66% | 67% | No |
| Welfare | 56% | 58% | No |
| Social Security | 11% | 11% | No |
| Medicaid | 62% | 67% | Yes (.10 level) |
| SSI | 14% | 14% | No |
| **Average Family Income** | $9,577 | $9,533 | No |
| **Education level of mother or female guardian** | | | |
| Some high school (did not graduate) | 21% | 21% | No |
| High school graduate or GED | 25% | 28% | No |
| Some college | 41% | 40% | No |
| Graduated from four-year college | 8% | 7% | No |
| More than four-year college degree | 2% | 3% | No |
| Don't know | 2% | 1% | No |
| **Student Reading Achievement Scores** *Average score out of 100* | | | |
| Overall | 23.1 | 25.4 | No |
| First-grade cohort | 22.1 | 29.0 | Yes (.05 level) |
| Second-grade cohort | 26.5 | 26.0 | No |
| Third-grade cohort | 19.3 | 22.6 | No |
| Fourth-grade cohort | 24.7 | 24.2 | No |
| **Student Mathematics Achievement Scores** *Average score out of 100* | | | |
| Overall | 17.9 | 17.7 | No |
| First-grade cohort | 9.8 | 11.7 | No |
| Second-grade cohort | 21.1 | 19.4 | No |
| Third-grade cohort | 16.1 | 18.4 | No |
| Fourth-grade cohort | 24.5 | 20.8 | No |

Source: Mayer, et al. "School Choice in New York After Three Years: An evaluation of the School Choice Scholarships Final Report." Mathematica Policy Research Inc. February 2002, MPR Reference No: 8404-045.

The students and their parents, from both the "control" group and the "treatment" group, gathered again at the end of the school year. At this time, students were again tested using the ITBS, and parents completed questionnaires on a variety of topics related to satisfaction with their school. Again, parents in all three cities were given identical questionnaires and asked to rate their satisfaction in a variety of areas. Making this follow-up mandatory for recipiency in the next school year ensured participation by parents of voucher recipients. Parents of non-recipients were given a variety of incentives to participate. Because of this, participation rates were high for both groups in each of the cities listed above. This battery of testing and questionnaires has been repeated in New York and Washington, D.C. for three years. Students in Ohio are in their second year of the study. Findings for each city are discussed below.

### New York

The School Choice Scholarships Foundation (SCSF) began providing scholarships to low-income families in 1997. It had

1,300 scholarships to award, and more than 20,000 students applied between February and April of 1997. These scholarships provided the opportunity for the selected children in grades K-4 to transfer to private schools. These scholarships or "vouchers" ranged in value up to $1,400 annually and could be used for up to four years at the religious or secular school of the family's choice, provided the student could meet the entrance requirements of the school chosen. The scholarship was not meant to cover all the costs of attendance at a private school; it was expected that parents would cover part of their child's tuition and fees.

SCSF officials made a deliberate choice that while a lottery would be held to award the scholarships, the majority of students chosen should have tested below the citywide median on standardized tests. Beyond this, scholarships were chosen by lottery and the children were placed in two groups: those awarded scholarships and those that were not. At this point, a comparison of the socio-economic characteristics and test scores of each group was made. Figure 7 details the breakdown of selected characteristics as reported in Mayer, et al. Except for two areas, Medicaid recipiency and reading scores for the first-grade cohort, there was no statistically significant difference between the two groups at the beginning of the program in 1997.[5]

Students' annual progress was tracked for both recipients of scholarships and non-recipients over the next three years. The data were analyzed comparing subsets of the treatment and control groups to determine the impacts of receiving a scholarship offer and, more specifically, the impacts of actually attending a private school. Figure 8 shows some of the differences that were found between the groups. The study found that overall, there was no significant difference in scores between the entire treatment group and the control group. But when broken down by ethnic background, the data found that African American students made significant gains over their public school counterparts. Hispanic students, on the other hand, did not make gains but generally saw declines that were small enough to be statistically insignificant. Other ethnic groups were too small to measure with any statistical validity. In this table the treatment group is narrowed down to only those students who accepted the scholarship and attended a private school, and the control group is narrowed to only those students who never attended private school (some of those in the control group moved to a private school even without the scholarship). As the results show, African American students received a net positive effect from attending private school, in all three years. Second year increases were not as large as first year increases but students made significant gains the following year.

**The data found that African American students made significant gains over their public school counterparts. Hispanic students, on the other hand, did not make gains.**

The researchers did further analysis to determine why Latinos appeared to not respond as well as African American students to private education. The results of this analysis were that the test scores of African Americans who utilized the scholarships were statistically similar to Latinos who also utilized a scholarship and Latinos from the control group who stayed in public schools. However, the African American students from the control group who attended public school had test scores significantly lower than any of the other three groups. Therefore, it was not necessarily that Latinos responded poorly to private schooling and African Americans

**Figure 8**

## Test Score Changes for African Americans and Latino Students Who Attended Private School for at Least One Year

***Increases of Scores Over Their Public School Cohorts: New York City***

| Impact of Attending a Private School | Year 1 Percentile Increase | Year 2 Percentile Increase | Year 3 Percentile Increase | Total Percentile Increase if Child Attended Private School for 3 Years |
|---|---|---|---|---|
| **African-Americans** | | | | |
| Overall Score | 5.73*** | 4.29* | 7.55*** | 9.23*** |
| Math | 6.98*** | 4.07 | 9.65*** | 11.80*** |
| Reading | 4.49** | 4.51** | 5.45** | 6.66** |
| | | | | |
| **Latinos** | | | | |
| Overall Score | -1.01 | -0.82 | -1.40 | -1.51 |
| Math -1.02 | | -1.87 | -0.07 | -0.08 |
| Reading | -1.01 | 0.23 | -2.73 | -2.94 |

Source: Ibid.

*Significant at the .10 level, 2-tailed test; **.05 level; ***.01 level.

**Figure 9**

## Perceived Effects of Attending a Private School

***New York City***

| Parental Satisfaction with School Child is Attending | Private School Attendance | Public School Attendance | Impact |
|---|---|---|---|
| *Percent Reporting "Very Satisfied"* | | | |
| Student respect for teachers | 50% | 12% | 38% |
| Teaching | 52% | 16% | 36% |
| Observe religious traditions | 41% | 6% | 35% |
| Discipline | 51% | 16% | 35% |
| Location | 55% | 21% | 34% |
| Academic quality | 48% | 14% | 34% |
| School safety | 48% | 15% | 33% |
| What is taught in school | 45% | 14% | 31% |
| Teaching values | 44% | 15% | 29% |
| Teacher-parent communication | 51% | 24% | 27% |
| Clarity of school goals | 38% | 14% | 24% |
| Class size | 30% | 8% | 22% |
| Staff teamwork | 31% | 10% | 21% |
| School facility | 29% | 9% | 20% |
| Parental support | 33% | 14% | 19% |
| Parental involvement | 34% | 16% | 18% |
| Sports program | 20% | 8% | 12% |
| Percent that gave their school an "A" | 42% | 10% | 32% |

Source: Ibid.

responded well, but that African Americans in public schools had test scores that were low and declining.[6]

While test scores are an important part of measuring the quality of an education, either private or public, they are not the only factor to consider. At the end of each school year, researchers asked parents and students (those in the third through sixth grades) in both the control and treatment groups to complete a series of questionnaires regarding their satisfaction with the school they attended. Figure 9 compares parental satisfaction for each group for each of the questions asked. The private schools scored consistently higher than public schools in this assessment, with the widest gaps in parental satisfaction in the areas of school discipline and safety, academic quality and teaching, and student respect for teachers.[7]

These results from the New York program offer the best analysis of student performance over the longest time period. Findings in Washington were different from those in New York.

### Washington, D.C.

**It was not necessarily that Latinos responded poorly to private schooling and African Americans responded well, but that African Americans in public schools had test scores that were low and declining.**

Although Washington, D.C. has had a scholarship program in place since 1993, it was very small and did not provide enough scholarships to test the results in a statistically meaningful way for those children participating in the program. In 1997, an infusion of capital from large donors enabled the program to expand. In order to be eligible for a scholarship, families need to live in the District of Columbia and have an annual household income less than 2.7 times the federal poverty line. For a family of four in 1997, that would have been $43,335. Full or partial scholarships are awarded. Families at or below the poverty line were given scholarships equal to $1,700 or 60 percent of tuition whichever was less. Those above the poverty line but below the cutoff rate were offered smaller amounts. The final qualification was that children had to be in grades 1-7. Over 3,000 families responded to the invitation to participate. The Washington Scholarship Fund (WSF) awarded 1,000 scholarships by lottery; 811 of which were to students that had not previously attended private school.

Scholarships recipients could attend any private school they chose provided they gained admission. WSF staff made a concerted effort to educate recipients about private school options and provided assistance to families with admissions requirements. Of the students offered scholarships the first year, 53 percent or 530 students utilized them. During the second year, 380 students of the original 1,000 awardees were attending private school utilizing their scholarship. The drop off in participation during the second year was caused by a number of the students enrolling in public charter schools. Charter schools are a new phenomenon in Washington, D.C. The researchers speculate that scholarship students who enrolled in charter schools during the 1999-2000 school year did so because they perceived charter schools providing an equivalent education to private schools, but without the cost of a private education. Since the voucher was not meant to cover 100 percent of tuition and fees, many families had difficulty paying the difference and viewed charter schools as an acceptable

and affordable substitute.

When comparing Washington, D.C. families' socio-economic indicators to those of New York City's families, some differences are noted. The main difference is that some of the results for Washington, D.C. compared the demographics of those who were offered the scholarship and used it versus those that were offered but did not use it. The demographic characteristics of those that did not receive a scholarship offer were not reported. However, since the award of a scholarship was made by lottery, it can be assumed those not receiving a scholarship in D.C. are similar, on the average, with those that did. Therefore, some comparisons between New York recipients and Washington, D.C. recipients can be made. For example, D.C. family income is higher, by double, and mothers are more likely to be working full-time in D.C. Conversely, New York families are more likely to be receiving government assistance. Figure 10 shows selected socio-economic characteristics for Washington, D.C. families, both those that utilized a scholarship and those that did not. The figure also highlights students' baseline test scores. These are delineated differently in Washington than in New York.

**Figure 10**

## Socio-Economic Status and Educational Performance of Students at the time of the 1998 Lottery

***Washington, D.C.***

| Characteristic | Takers | Decliners | Statistically Significant Difference |
|---|---|---|---|
| **Race/ethnicity of mother/female guardian** | | | |
| White | 0.4% | 0.0% | No |
| Black | 89.3% | 96.9% | Yes (.01 level) |
| Hispanic | 6.1% | 1.2% | Yes (.01 level) |
| Other | 4.2% | 1.9% | No |
| **Job status of mother/female guardian** | | | |
| Full-time job | 68.1% | 64.4% | No |
| Part-time job | 10.3% | 13.3% | No |
| Seeking work | 16.6% | 18.4% | No |
| Not working and not seeking | 5.0% | 3.8% | No |
| **Government assistance received in household** | | | |
| Food Stamps | 21.7% | 39.5% | Yes (.01 level) |
| Welfare | 15.8% | 27.8% | Yes (.01 level) |
| Social Security | 11.2% | 15.3% | No |
| HUD Housing Vouchers | 8.8% | 18.2% | Yes (.01 level) |
| SSI | 3.9% | 12.3% | Yes (.01 level) |
| **Average Family Income** | $20,466 | $18,072 | Yes (.01 level) |
| **Education level of mother or female guardian** | | | |
| Some high school (did not graduate) | 3.2% | 8.7% | Yes (.05 level) |
| High school graduate or GED | 36.3% | 32.8% | No |
| Some college | 48.9% | 52.8% | No |
| Graduated from four-year college | 10.0% | 3.8% | Yes (.05 level) |
| More than four-year college degree | 1.6% | 1.8% | No |
| **Student Reading Achievement Scores** *Average score out of 100* | | | |
| Grades 1-4 | 30.6 | 30.9 | No |
| Grades 5-8 | 35.5 | 24.8 | Yes (.01level) |
| **Student Mathematics Achievement Scores** *Average score out of 100* | | | |
| Grades 1-4 | 25.1 | 21.1 | No |
| Grades 5-8 | 29.7 | 19.8 | Yes (.01 level) |

Source: Howell, William G. et al. "Test-Score Effects of School Vouchers in Dayton, Ohio, New York City, and Washington, D.C.: Evidence from Randomized Field Trials" August 2002.

Although some of the demographic data in the D.C. study compared scholarship takers to decliners, the testing comparison was done in the same manner as in New York; scholarship takers were compared against members of the control group (those not receiving a scholarship offer) who had not attended a private school. A review of the test scores highlights a concern regarding "skimming" among older children in D.C. That is, those students in 5th to 8th grades who took a scholarship performed at a higher level on their initial ITBS than those in the control group. This higher performance level was statistically significant in its difference from the control group. However, the skimming argument usually implies the students are performing at a level above not only their local peer group but also above that of a national comparison group. While the scholarship takers did outperform their local peers, the scores were well below the national median, implying that these students still had considerable progress to make.

Students' annual progress was tracked for both recipients and non-recipients over the next three years. The impact of private schooling on

**Figure 11**

## Test Score Changes for African Americans and Other Students Who Attended Private School for at Least One Year

***Increases of Scores Over Their Public School Cohorts: Washington, D.C.***

| Impact of Attending a Private School | Year 1 Percentile Increase | Year 2 Percentile Increase | Year 3 Percentile Increase |
|---|---|---|---|
| **African-American Students** | | | |
| Math | 7.3** | 10.4*** | 0.9 |
| Reading | -9.0** | 8.0*** | -4.6 |
| Overall | -0.9 | 9.2*** | -1.9 |
| **All Other Students** | | | |
| Math | 8.5 | 7.3 | -9.5 |
| Reading | 6.3 | -7.6 | 5.9 |
| Overall | 7.4 | -0.1 | -1.8 |

Source: Ibid.

Washington, D.C. students is more mixed than in New York. Figure 11 highlights the percentile difference in test scores of those who attended private school and those who remained in the public system. As the data shows, African American private school students saw a decline in their reading and overall scores, relative to their public school peers, in the first and third years of the program. Private school students made significant progress in the second year, but were unable to maintain those gains. This inability to maintain that progress may be due, in part, to the advent of public charter schools. As will be shown below, the opportunity to receive religious instruction for their children mattered a great deal to many of the parents utilizing these scholarships. These parents would have been less likely to move their children to the new charter schools because they wouldn't offer a religious experience, while parents who were primarily concerned with academic performance may have been more likely to find the charter schools acceptable. If so, the opening of public charter schools during this period may have drawn away a greater proportion of students who were focused on academic achievement, which could have caused the observed drop in private school scores relative to public school students.

Looking again at Figure 11, the scores of other ethnic groups behaved differently than the African American students' scores. However, the statistical importance of those scores is negligible. 89.3 percent of the students who took the scholarship were African American. This means that about 100 students out of 1,000 were of other ethnic groups. This was not considered by the researchers a large enough subset of students to draw any meaningful conclusions about the impacts of private schooling on their test scores.

In addition to test score differences, parental satisfaction with the school attended by their child was compared, in the same manner as the New York study. Questions asked in both New York and D.C. were identical but the results were vastly different. While the greatest difference between private school and public school attendees' satisfaction in New York was over issues such as academic quality and teaching, in Washington, D.C., issues such as religious instruction and the teaching of moral values had the greatest difference in parental satisfaction between public and private schools. The two concerns that ranked high in both cities were "school safety" and "student respect for teachers." (See Figure 12)

**Figure 12**

## Perceived Effects of Attending a Private School

***Washington, D.C.***

| Parental Satisfaction with School Child is Attending | Private School Attendance | Public School Attendance | Impact |
|---|---|---|---|
| *Percent Reporting "Very Satisfied"* | | | |
| Teacher-parent communication | 50% | 19% | 31% |
| Observe religious traditions | 34% | 9% | 25% |
| Class size | 35% | 12% | 22% |
| Safety | 43% | 21% | 22% |
| Student respect for teachers | 41% | 20% | 21% |
| Teaching values | 41% | 21% | 20% |
| What is taught in school | 40% | 21% | 18% |
| Academic quality | 40% | 23% | 17% |
| Teaching | 34% | 18% | 16% |
| Clarity of school goals | 34% | 19% | 15% |
| Staff teamwork | 45% | 35% | 11% |
| Location | 28% | 18% | 10% |
| Parental support | 34% | 24% | 10% |
| Discipline | 29% | 20% | 10% |
| Teacher respect for students | 31% | 23% | 8% |
| Percent that gave their school an "A" or "B" | 81% | 60% | 20% |

Source: Ibid.

The observation that parents in New York and Washington, D.C. are focused on different aspects of their children's school experience raise interesting questions for public schools. In New York, the focus is in areas related

directly to how the well the public schools are fulfilling their charge to provide a quality education. In Washington, D.C., parents turn to the private schools to provide something that will never be a part of the public school curriculum, namely religious instruction. Consequentially, efforts to improve public schools and student test scores might have greater competitive effects in New York than in Washington, D.C.

**Figure 13**

## Socio-Economic Status and Educational Performance of Students at the time of the 1998 Lottery

***Dayton, Ohio***

| Characteristics | Takers | Decliners | Statistically Significant Difference |
|---|---|---|---|
| **Race/ethnicity of mother/female guardian** | | | |
| White | 32.4% | 25.7% | No |
| Black | 66.7% | 72.9% | No |
| Other | 1.0% | 1.4% | No |
| **Job status of mother/female guardian** | | | |
| Full-time job | 46.6% | 55.2% | Yes (0.1 level) |
| Part-time job | 17.7% | 16.3% | No |
| Seeking work | 17.2% | 14.3% | No |
| Not working and not seeking | 18.6% | 14.3% | No |
| **Government assistance received in household** | | | |
| Welfare | 17.2% | 16.7% | No |
| Social Security | 4.1% | 7.0% | No |
| **Average Family Income** | $17,681 | $20,597 | Yes (.05 level) |
| **Education level of mother or female guardian** | | | |
| Some high school (did not graduate) | 6.5% | 13.4% | Yes (.01 level) |
| High school graduate or GED | 19.6% | 17.1% | No |
| Some college | 54.4% | 63.0% | Yes (.01 level) |
| Graduated from four-year college & up | 19.6% | 6.1% | Yes (.01 level) |
| **Student Reading Achievement Scores** *Average score out of 100* | | | |
| Grades 1-8 | 25.1 | 22.1 | No |
| **Student Mathematics Achievement Scores** *Average score out of 100* | | | |
| Grades 1-8 | 24.9 | 29.0 | Yes (0.1 level) |

Source: Ibid.

## Dayton, Ohio

The program started in 1998 in Dayton, Ohio is similar to those in New York and Washington, D.C. A non-profit corporation called Parents Advancing Choice in Education (PACE) offered scholarships to defray the costs of private education for low-income families within the Dayton Metropolitan area. These scholarships provided a maximum award of $1,200 for students in kindergarten through 8th grade and $2,400 for students in grades 9 through 12. Income limits are the same as Washington, D.C. families, with an income up to 2.7 times the federal poverty line eligible for scholarships. Students awarded a scholarship could use it at the private or public (usually, charter) school of their choice. If a student desired to attend a public or charter school, the money could be used for expenses related to transportation, uniforms and other equipment. In 1998, the first year of the program, 3,000 students applied and PACE awarded 775 scholarships by lottery, 515 going to former public school attendees and 260 going to students already attending private school. Of those 775 awardees, 542 students accepted the scholarships, 282 of which were former public school enrollees. In the second year of the program, the number of participants expanded to 853, of which 551 were attending public school at the time of their application.

When comparing the socio-economic statistics on Dayton scholarship students to their counterparts in New York and Washington, D.C., it should be noted that Dayton students are more likely to be white. Also, the mothers of Dayton scholarship takers are more likely to be at least four-year college graduates: 19.6 percent compared to 11.6 percent in Washington, D.C. and 10.0 percent in New York. When comparing the families of students in Dayton who accepted scholarships (the takers) versus those who were offered scholarships but did not use them (the decliners), some interesting trends, not seen in the other two cities, emerge. Families that declined the voucher had a higher average income, and the mothers were more likely to be working full-time.

As with the other two cities, annual testing of student

**Figure 14**

## Test Score Changes for African Americans and Other Students Who Attended Private School for at Least One Year

***Increases of Scores Over Their Public School Cohorts: Dayton, Ohio***

| Impact of Attending a Private School | Year 1 Percentile Increase | Year 2 Percentile Increase |
|---|---|---|
| **African-American Students** | | |
| Math | 0.4 | 5.3 |
| Reading | 6.1 | 7.6* |
| Overall | 3.3 | 6.5* |
| **All Other Students** | | |
| Math | -0.8 | 0.0 |
| Reading | 2.8 | -0.4 |
| Overall | 1.0 | -0.2 |

Source: Ibid.

**Figure 15**

## Perceived Effects of Attending a Private School

***Dayton, Ohio***

| Parental Satisfaction with School Child is Attending | Private School Attendance | Public School Attendance | Impact |
|---|---|---|---|
| *Percent Reporting "Very Satisfied"* | | | |
| What is taught in school | 44% | 16% | 29% |
| Staff teamwork | 37% | 14% | 23% |
| Teacher respect for students | 33% | 12% | 22% |
| Academic quality | 36% | 15% | 21% |
| Teaching | 38% | 17% | 21% |
| Observe religious traditions | 29% | 11% | 19% |
| Safety | 36% | 19% | 17% |
| Teacher-parent communication | 33% | 17% | 16% |
| Teaching values | 27% | 12% | 15% |
| Clarity of school goals | 32% | 17% | 15% |
| Discipline | 30% | 16% | 13% |
| Student respect for teachers | 28% | 16% | 12% |
| Class size | 28% | 16% | 12% |
| Parental support | 26% | 16% | 11% |
| School Facilities | 23% | 13% | 10% |
| Location | 22% | 35% | -14% |
| Percent that gave their school an "A" | 40% | 29% | 11% |

Source: Ibid.

aptitude using the ITBS was performed. Like Washington, D.C. and New York, the impacts of private schooling for African American students were greater than for other ethnic groups. In the first year, black students, on average, increased their test scores 3.3 percentile points over their public school counterparts. In the second year, the increase was 6.5 points and statistically significant. Other students, in this case, largely white students, saw their scores remain relatively on par with their public school counterparts.

A comparison of parental satisfaction in Dayton shows aspects in common with both New York and Washington, D.C. Dayton parents seemed to consider both academic quality and teaching of moral values as equally important. One interesting variation is in regard to respect. In New York and Washington, the category "student respect for teachers" showed a large difference between private and public school attendees. In Dayton, on the other hand, teacher respect of students was more important to parental satisfaction.

### Lessons From These Studies

When all three programs are looked at as a whole and the data combined together, some trends become apparent. The first is that private schooling has had the largest impact on African American students. In their report, "Test-Score Effects of School Vouchers in Dayton, Ohio, New York City and Washington, D.C.: Evidence from Randomized Field Trials," Peterson, et al, reported the estimated effects of switching to private schooling on African Americans. The results are reported in Figure 16.[8] As the chart shows, even one year of private schooling has the potential of boosting an African American child's scores; while after two years, the difference is statistically significant. For other ethnic groups, the results aren't as promising; test scores remain on par with public school counterparts or decline slightly, but the declines are not statistically significant and should be considered no change. The reasons for this are unclear, and the authors stress that the results from these studies cannot be extrapolated to other populations in other cities.

**Figure 16**

## Average Percentile Score Impact

***For Students Attending Private Schools in New York City, Washington, D.C. & Dayton, Ohio***

| Three-City Average Impact | Year 1 | Year 2 |
|---|---|---|
| **African-American Students** | | |
| Overall | 3.3 | 6.3** |
| Math | 5.5* | 6.2* |
| Reading | 1.3 | 6.3** |
| **All Other Ethnic Groups** | | |
| Overall | 0.2 | -1.0 |
| Math | -0.2 | -1.2 |
| Reading | 0.4 | -0.8 |

Source: Ibid.

In terms of other factors, private schools seem to provide greater academic quality and religious freedom than public school, at least in the perceptions of parents. This cannot be made into a sweeping generalization, however. Parents that deliberately seek private schooling for their children, subsidized by vouchers or not, are usually unsatisfied with the education provided in public schools. They are, even in the most carefully controlled circumstances, a self-selecting group and will, therefore, be biased towards favoring the choice they have made.

Utah does have a private scholarship fund for low-income students. Children First Utah provided approximately 300 scholarships to students during the 2002-2003 program year.

Because of the size of the program it would be difficult to draw statistically significant conclusions regarding performance.

The value of the above analysis is in the context of tuition tax credits. Public perception seems to view vouchers and tax credit programs as interchangeable. In the broadest sense that public monies are being used to fund attendance at private schools, there is little difference between the two. However, at the functional level, vouchers and tax credits operate in fundamentally different ways and, in order to analyze the proposed program before the Utah Legislature, it is important to understand those functional differences. The tuition tax credit programs are examined in more detail below and some analysis of Utah's proposed program is provided.

**In the broadest sense that public monies are being used to fund attendance at private schools, there is little difference between the two. However, at the functional level, vouchers and tax credits operate in fundamentally different ways.**

## Tuition Tax Credits

In addition to vouchers and private scholarship funds, there is another way in which school choice is being funded. Six states have enacted tuition tax credit programs to offset the cost of private school attendance. These programs fall into two categories. In Arizona, Florida, and Pennsylvania, individuals or corporations (depending on the state; see Figure 17) receive a state income tax credit for donations to a private scholarship fund. In Illinois, Iowa, and Minnesota the tax credit is offered to parents for expenses related to their own children's education. However, in these states, the credit taken by parents can only be for expenses related to the cost of education, such as uniforms or textbooks. It cannot be used as an offset for actual tuition payments. This was a deliberate effort by the legislatures in those states to allow the tax credit to be used for public, as well as private, school expenses. If a parent wanted to send his or her child to a school outside of the district in which they reside, the tax credit could be used to

**Figure 17**

### Comparison of Tuition Tax Credit Programs with Utah's SB 34

| Donations to the Scholarship Fund | Arizona | Florida | Pennsylvania | Utah (Proposed) |
|---|---|---|---|---|
| Who is eligible to donate to the scholarship fund? | Individuals | Corporations | Corporations | Individuals/Corporations |
| What is the ratio of donation to tax liability reduction? | $1 to $1 | $1 to $1 | $1 to $0.75 | $1 to $1 |
| Limit on the amount that can be donated? | $500 | $5 million or 75% of tax liability whichever is less | $100,000 | 50% of tax liability. For direct payment of tuition, limit = $2132 or future WPU |
| Donations can be in the form of: | Cash | Cash | Cash, Equipment or "in-kind" | Cash |
| **The Scholarship Fund** | | | | |
| How many scholarship funds are eligible? | 30+ | No data | 129 | Undetermined |
| Percentage of funds to be distributed as scholarships? | 90% or more | 100% | 80% or more | 98% or more |
| Cap on the size of total statewide fund? | None | $50 million | $30 Million | None |
| Can Scholarship Funds choose the schools? | Yes | Yes | Yes | Yes |
| **Scholarship Recipients** | | | | |
| What income limits to qualification? | None | Income <= 185%FPL | Income<=$50,000 | Public school student: None. Private school students: <=185% FPL |
| Statutory limits to the amount of the scholarship? | No | Yes | No | Yes |
| If so, what is the limit? | | $3,500 private or full tuition/$500 other public | | Up to the equivalent of the weighted pupil unit (lower amount for Kindergarten) |
| **Public Schools** | | | | |
| Can donations be made to public education? | Yes | Yes | Yes | Not directly |
| If so, in what capacity? | Student Fees | Costs associated w/ transfer | Through Educational Improvement Organizations | Any funds not used by schools or the scholarship fund at the end of the year will be returned to the public school system |
| Maximum tax credit for public school donations? | $250 | N/A | N/A | N/A |

Compiled by Utah Foundation.

offset transportation expenses if school buses were not used. Or if parents wanted to enroll their child in a summer learning camp, the credit could be used for that purpose. The credit is small. In Minnesota, for example, parents can receive a credit for 25 percent of their expenses, up to $1,000. This makes the credit worth a maximum of $250 per student. Because these smaller programs are available to everyone statewide, regardless of income, and they provide only a limited credit, this report will concentrate on the larger programs in Arizona, Florida and Pennsylvania. Figure 17 delineates the similarities and differences between the approaches in each state as well as the proposed legislation in Utah.

### Arizona

Arizona is the oldest of the three tax credit proposals and the one that has caused the most controversy. The program was started in 1998 and 19,290 tuition grants were awarded during the time period of 1998-2000. The controversy over the program stems from the lack of income limits on eligibility. Critics expressed concerns that without income limits and providing a fairly small subsidy for tuition, these credits would be mostly used by wealthy families to offset the costs of students already attending private school. A study by the Education Policy Studies Laboratory at Arizona State University seems to support that assertion.[9]

**Tax credits have the ability to shrink anticipated state revenues at a faster rate than do deductible donations. In Arizona, the impact was $74.3 million over the three-year period.**

The program provides advantages to two specific groups: individual taxpayers that donate to the scholarship fund and the students that apply for the scholarships. Because it is a dollar-for-dollar credit against taxes owed, this kind of mechanism is a strong incentive to generate donations. This is different from the kind of private scholarship fund described in New York and Washington, D.C. In those areas, contributions are treated like other charitable donations—they reduce taxable income and then taxes are calculated on that reduced income level. So if a taxpayer was in the five percent state tax bracket, a donation of $1,000 would save the taxpayer $50 on his or her return.

In states like Arizona, with a tuition tax credit, a taxpayer can donate $500 (the limit in Arizona) to a private scholarship organization and actually reduce his or her tax bill by $500. Since the state is fully reimbursing taxpayers who choose to donate to those scholarship funds, this type of policy is more like direct state support for private schools. Only individuals may claim the credit in Arizona—corporations are not allowed to utilize it.

**Figure 18**

**Enrollment and Funding for Public Education and Tuition Tax Credits Compared**

***Arizona Education Tax Credit Program 1998-2000***

| Year | Total State Public Education Expenditures | Enrollment | Per Pupil Spending (State Funds Only) | Total Tuition Grant Spending | Number of Tuition Grants Awarded |
|---|---|---|---|---|---|
| 1998* | $2,444,104,300 | 848,262 | $2,881 | $147,470 | 326 |
| 1999 | 2,520,907,900 | 852,612 | 2,957 | 2,377,319 | 3,726 |
| 2000 | 2,960,526,900 | 856,984 | 3,455 | 13,040,812 | 15,239 |
| Last Year Change | 17.4% | 0.5% | 16.8% | 448.6% | 309.0% |
| Annualized Growth Rate | 10.1% | 0.5% | 9.5% | 840.4% | 583.7% |
| 3 Year Change | 21.1% | 1.0% | 19.9% | 8743.0% | 4574.5% |

Public School Data from NCES and Tuition Tax Credit Data from ASU Education Policy Research Unit.

*One STO did not provide the number of students served, so their data was eliminated from the analysis.

While the difference between a tax-deductible donation and a tax credit may seem subtle, in the aggregate it has far reaching consequences. Tax credits have the ability to shrink anticipated state revenues at a faster rate than do deductible donations. In Arizona, the impact was $74.3 million over the three-year period according to the state's Department of Revenue.

The utilization of the scholarships in Arizona has also raised concerns. The enabling legislation was written without an income limit. This means that any student, regardless of the

family's ability to pay for private school, can apply for a scholarship. The non-profit scholarship funding organizations can award scholarships using any criteria they desire. According to the ASU study, when these organizations were surveyed about their criteria, most cited "financial need" as the most important criteria for awarding scholarships. However, the data gathered by the ASU researchers does not bear that out. During the first year of the program, approximately 81 percent of the credits went to families with a federally adjusted gross income above $50,000. Additionally, the average scholarship award during the three-year period was $806.93, which would cover between 15 and 30 percent of the tuition costs at the average private school. The ASU study points out that while the number of tuition scholarships has grown significantly since 1998, the number of students attending private schools has remained fairly stable. The number of private school students during the time of the study (1998-2000) was not significantly different from the number of students prior to 1998. Consequentially, the researchers at ASU conclude the tuition tax credit scholarships have not caused a significant migration of students from public to private schools, thus the scholarships are being awarded primarily to students already attending private school. Figure 18 highlights the growth in tuition scholarships and tax credits taken.

**Figure 19**

**Arizona Tax Credits Taken: 1998-2000**

| | Public School | Private School | Total |
|---|---|---|---|
| 1998 | $8,990,042 | $1,816,299 | $10,806,341 |
| 1999 | $14,775,353 | $13,706,611 | $28,481,964 |
| 2000 | $17,517,774 | $17,542,662 | $35,060,436 |
| Three Year Total | $41,283,169 | $33,065,572 | $74,348,741 |

Source: Arizona Department of Revenue.

### Pennsylvania and Florida

The programs in Pennsylvania and Florida are slightly different than Arizona's or the proposed legislation in Utah. While Utah would allow corporations and individuals to contribute to the scholarship funds, the programs in Pennsylvania and Florida limit participation to corporations only. Individual taxpayers cannot receive a tax credit for donating to a scholarship fund or for their own children's expenses. Both states also cap the size of the scholarship fund to $30 million and $50 million, respectively, and corporations receive credit on a first come, first served basis. This ensures that state coffers will still receive corporate income tax revenue. Pennsylvania added one more innovation as an incentive. They allow businesses to donate not just cash, but equipment and "in-kind" contributions. Equipment may be computers or other needed supplies and "in-kind" donations are recognized as time volunteered by employees to the private schools. Both of these options were instituted to encourage donations by small businesses that may not have adequate cash to make contributions.

**The researchers at ASU conclude the tuition tax credit scholarships have not caused a significant migration of students from public to private schools, thus the scholarships are being awarded primarily to students already attending private school.**

The programs in Pennsylvania and Florida are too new for rigorous analysis regarding the impacts on tax revenue or the public school system, although a preliminary report released by the Collins Center for Public Policy in Florida estimated a slight net gain for the public school system. However, the measurement was very broad and the methodology relied on assumptions that may or may not bear out in practice.[10]

Each of the existing tuition tax credit programs listed in this section includes some sort of benefit to the public education system. In Arizona, taxpayers can contribute to a public education scholarship fund. Students can then use these scholarships to pay for things like student fees, uniforms and athletic equipment at public schools. In Florida, a student may apply for a scholarship to pay for the costs of transferring to another public school, either intra- or inter-district. The scholarship would pay for things such as transportation costs, or in the case of a charter school, uniforms. Pennsylvania corporations can donate to Educational Improvement

Organizations that in turn provide "value added curriculum enhancements." These enhancements come mainly through supplementary programs, such as arts education by the local arts council, and vary from district to district.

## Utah

Of the existing tax credit programs, Arizona's is the most similar to the proposal currently under consideration in Utah. However, the legislation before the Utah Legislature differs from Arizona in significant ways. First, the credit in Utah would be substantially higher: $2,132 (and rising in subsequent years) versus $500 in Arizona. Second, there are differences between the income levels that qualify a student for a scholarship. In Arizona, a student currently enrolled in either public or private school can apply for a scholarship regardless of income level. The legislation proposed in Utah would allow currently enrolled public school students, regardless of income, to apply for a scholarship to attend private school or his or her parents can take the tax credit directly for paying tuition. For currently enrolled private school students, there is a restriction on their income level of 185 percent of the Federal Poverty Level. This is the cutoff for qualification for the federal reduced price lunch program.

**In Utah, income tax revenue is earmarked for the Uniform School Fund and reductions in income tax revenue would affect that fund, having a direct impact on funds available for public education.**

These broad eligibility standards, coupled with generous limits on the amount of individual or corporate taxpayer credits for donations to a scholarship organization, raise concerns regarding the fiscal impact of Utah's proposed tuition tax credit law. As was stated above, Arizona saw an estimated $74.3 million reduction in state income tax revenue over the first three years of the tuition tax credit program. In Arizona, income tax revenue is placed in the general fund and most state agencies and programs feel the reduction in revenues. In Utah, income tax revenue is earmarked for the Uniform School Fund and reductions in income tax revenue would affect that fund, having a direct impact on funds available for public education. However, the Legislature is not restricted to using only the Uniform School Fund to provide for public education. It can, and has in the past, dipped into the General Fund to make up any shortfalls in anticipated revenues. Since most other state agencies and programs are funded by the General Fund, (transportation being a major exception) this legislation could potentially have a greater impact on other state services than education, should the Legislature decide to continue to fund public education at its historic level.

Since all of the revenue from both corporate and individual income tax in Utah is earmarked for public education, and since this bill could significantly impact the amount of revenue collected by the state, thus affecting public education funding, there is a "safety valve" built into he legislation. The bill states that whatever monies are left unspent in scholarship funds at the end of the year will be returned, with interest, to the public education fund. Therefore, if demand for private schools does not increase, public education would still receive its funding but it would be delayed. This mechanism anticipates that perhaps scholarship funds would receive more in donations than they would be able to provide in scholarships. The disparity between the amount of the scholarship available to an individual child and the cost of a private education in Utah might cause this to happen. The $2,132 tax credit would only pay 27.1 percent of the weighted average tuition at private schools in Utah. According to information gathered in Utah Foundation's private school report, there were 5 of 16 private schools with annual tuition less than $5,000 for their secondary level students during the 2001-02 school year. Further, there is the issue of capacity. Because of Utah's historically low private school

enrollment rates, there will initially be a limited number of seats available in private schools. Even assuming that capacity will increase to meet demand, there is a lag time for building new facilities. This limits the number of students, after the initial influx, which can take advantage of the scholarship, regardless of demand.

## Vouchers Versus Tax Credits

Vouchers and tax credits differ in scope. Tax credits are a statewide phenomenon. Any student, if they meet income or other requirements, can utilize a tax credit scholarship, regardless of the performance of the public school they currently attend. A poor student who is attending a high-achieving suburban public school can apply for a tax credit scholarship. However, under existing voucher systems, solutions are more localized or targeted towards failing schools. Although either a tax credit or voucher program could conceivably be fashioned to accomplish the same objectives, vouchers seem to offer greater control to policymakers when a program is designed to target specific, local problems.

Vouchers and tax credits also differ in their funding mechanisms. At the appropriations level, voucher programs are treated as another budgetary item. This means that when the Wisconsin Legislature, for example, appropriates funds for Milwaukee's voucher program, it is looked at as just another school district in need of funding. The Legislature determines what level of funding the voucher program will receive. Administrators of the voucher program then determine how many students will be served based on the amount of funding. Tax credit programs are a more individualized, sometimes unpredictable, approach. Tax revenue from state income tax is either brought into state coffers, a portion to then be distributed to public education, or it is redirected to scholarship funds for use by students.

**Tax credits are driven by demand. While some limits as to eligibility exist, the entire eligible population could feasibly claim a tax credit—whereas with vouchers an eligible person could be denied a voucher because of government limitations, such as funding.**

Because of the differences in funding mechanisms, voucher programs offer a greater ability of the government to manage the growth of the program. This is highlighted when looking at the growth trends from the Cleveland Scholarship and Tutoring Program, or the Opportunity Scholarship in Florida and the Arizona Tax Credit program. While some voucher programs have grown exceptionally fast (the McKay Scholarship, for instance) this growth can always be explained by a statutory change instituted by the government. In effect, the government has control of the supply of vouchers in a given area and can choose to expand that supply, if the demand exists, based on available resources, political concerns, etc. Tax credits on the other hand are driven by demand. While some limits as to eligibility exist, the entire eligible population could feasibly claim a tax credit—whereas with vouchers an eligible person could be denied a voucher because of government limitations, such as funding.

Despite the differences in operation, administration, and program control, voucher and tax credit programs probably have the same effects on educational performance and parental satisfaction. The extent of these effects is debatable, and thus far, the studies can lead to alternative conclusions used by both sides in the debate. The programs that have yielded the best data on educational outcomes are the private scholarship programs analyzed above, and these are most similar to voucher programs. But there is no reason to believe that tax credits would produce any difference in outcome.

## Endnotes

[1] Public Agenda survey released in "On Thin Ice: How Advocates and Opponents Could Misread the Public's Views on Vouchers and Charter Schools," 1999. Abridged version of the findings is available online at http://www.publicagenda.org/specials/vouchers/voucherhome.htm.

[2] "School Vouchers: What we Know and Don't Know… and How We Could Learn More," The Center on Education Policy, May 2000.

[3] This has been documented in numerous studies, including: "An Evaluation of the Cleveland Voucher Program After Two Years," Howell, William G. and Greene, Jay P.; "Educational Consumers: A Comparative Look at the competitive Effects of Public School Choice Policy," Van Dunk, Emily and Dickman, Anneliese M.; and the aforementioned Center for Education Policy Study.

[4] See Peterson, et al "School Choice in New York City After Three Years: An Evaluation of the School Choice Scholarships Program: Final Report," (Mathematica Policy Research, Inc. reference no. 8404-045) Feb. 2002, pp 1-2.

[5] Non-recipients were more likely to be enrolled in Medicaid, statistically significant at the .10 level and non-recipients in the first grade had higher reading scores, significant at the .05 level.

[6] The researchers then performed a series of statistical analyses to try to determine if the public schools attended by Latinos in the control group differed in some fundamental way from those attended by the African American control group. Within six of the 10 variables tested there was no statistically significant difference between the schools. The other four had some variation but further causal testing proved those variables alone could not account for the differences in test scores. Therefore, the researchers posited that some type of peer effects could be the cause of the difference. Since peer effects were not included as part of the study, the researchers suggest that should be the topic of further research.

[7] The researchers used the third year survey results as the minimum standard and when possible used multiple years of results, in order to mitigate a possible "Hawthorne" effect, which occurs when subjects of a study improve performance simply because they know they are being studied.

[8] See Peterson, et al "Test-Score Effects of School Vouchers in Dayton, Ohio, New York City and Washington, D.C.: Evidence from Randomized Field Trials."

[9] Wilson, Glen, "The Equity Impact of Arizona's Education Tax Credit Program: A Review of the First Three Years, (1998-2000)," March 2002. Available at http://www.asu.edu/educ/epsl/EPRU/documents/EPRU%202002-110/epru-0203-110.htm.

[10] See "The Florida Corporate Income Tax Credit Scholarship Program: A Preliminary Analysis," available at http://www.collinscenter.org.

This Research Report was written by Sara Sanchez and Janice Houston. Each is available for comments at (801) 288-1838. They may also be contacted by email at: sara@utahfoundation.org or janice@utahfoundation.org. For more information about Utah Foundation, please visit our website: www.utahfoundation.org.

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