

EdChoice Study Guide

A review of the research on private
school choice

2024 EDITION



WHY READ THIS

Each year, states consider creating or expanding school choice programs—such as vouchers, tax-credit scholarships, and education savings accounts (ESAs)—which empower families to choose beyond their ZIP Code-assigned schools. And families weigh whether they are the right fit for their children.

Anyone can promise what school choice programs could, would or should do. But we prefer to rely on what the data say these programs are already doing—whether that’s positive, negative or unknown.

Researchers from across the country have published at least 188 empirical studies on the effectiveness of private school choice programs. For most, that’s an overwhelming amount of literature to tackle.

That’s why we are excited to bring you the *EdChoice Study Guide*, a resource updated annually exploring available research on private school choice programs in America. In this guide, you’ll learn what the body of rigorous research says about school choice’s effect on:

- **Participant Test Scores**
- **Participant Educational Attainment**
- **Parent Satisfaction**
- **Public School Students’ Test Scores**
- **Students’ Civic Values and Practices**
- **Racial and Ethnic Integration in Schools**
- **Taxpayers, State Budgets, and Public School Districts (Fiscal Effects)**
- **School Safety**

SCHOOL CHOICE PROGRAM STUDIES TO DATE

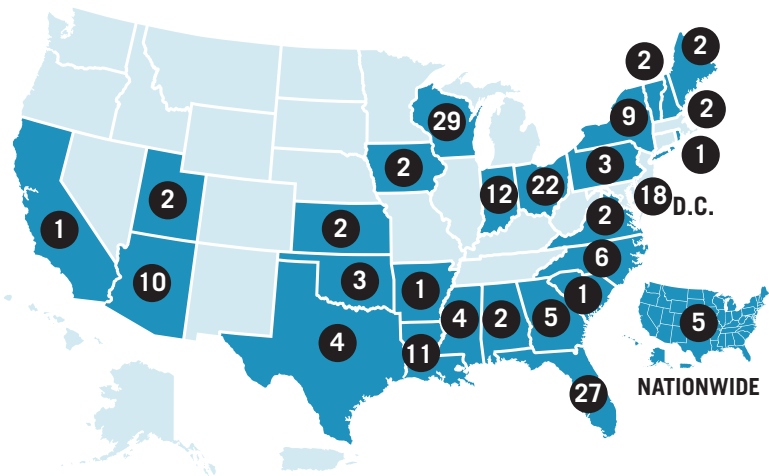
Outcome	Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
Program Participant Test Scores	17	11	4	2
Educational Attainment	7	5	2	0
Parent Satisfaction	33	31	1	2
Public School Students' Test Scores	29	26	1	2
Civic Values and Practices	11	6	5	0
Integration*	8	7	1	0
Fiscal Effects	75	69	5	5
School Safety	8	8	0	0
Total	188	163	19	11

*One study employed multiple measures of racial integration and concluded that the effects of the program was overall neutral. We included this study in the "No Visible Effect" column.

Notes: If a study's analysis produced any positive or negative results or both, we classify those studies as positive, negative or both. Studies that did not produce any statistically significant results for any subgroup are classified as "no visible effect." The number of effects detected may differ from the number of studies included in the table because we classify one study as having detected both positive and negative effects. For Lamarche (2008) we removed the negative indicator because it was brought to our attention that the negative estimation in the paper was not a program effect. Rather, it was making a comparison between high-income and low-income groups of students.

For Lamarche (2008) we removed the negative indicator because it was brought to our attention that the negative estimation in the paper was not a program effect. Rather, it was making a comparison between high-income and low-income groups of students.

NUMBER OF STUDIES OF PRIVATE SCHOOL CHOICE PROGRAMS BY LOCATION



84% of reviewed empirical studies from across the country find school choice programs have positive effects on students, schools or state budgets

TYPES OF RESEARCH YOU CAN TRUST

GOLD STANDARD

A **random-assignment study** is the strongest type of analysis in social science. For this reason, we focus only on random assignment studies—also known as randomized control trials (RCTs)—whenever possible.

Random assignment studies make it possible for researchers to make apples-to-apples comparisons between groups that are, on average, the same. The only difference between the two groups is whether they received the treatment—treatment in this case being the use of an ESA, voucher or scholarship. So, researchers can confidently say that the private school choice program caused the results we see in student outcomes. In simple terms, random assignment studies are best at controlling for bias.

In fact, the What Works Clearinghouse in the U.S. Department of Education designates random assignment as the only research method that can receive the highest rating: “Meets Group Design Standards **Without Reservations**” [emphasis added].

SILVER STANDARD

Where certain characteristics of how a choice program is structured don’t allow researchers to use random assignment study methods, they often employ a **“matched” study method** instead. With this method, researchers, for instance, would manually match up the demographics of a control sample of students to the demographics of a sample of students that receive the school choice treatment.

BRONZE STANDARD

These studies are weaker than gold or silver studies, but still make an attempt at least to control for the differences between the two groups being studied.

WHAT WE INCLUDE

Each section of this review will have a table that looks like this:

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
X	X	X	X

What they show is the total number of available studies on that particular topic as well as a breakdown of how many of those studies showed positive or negative results. “No visible effect” means the results were neither positive nor negative, meaning the study showed no change.

For us to exclude any silver or bronze studies from the counts you will see in each of those tables, we require at least 10 gold-standard studies of a certain outcome to exist.

In instances where fewer than 10 gold-standard studies exist on a given research topic, we also include silver and bronze studies.

Replication is an important part of the scientific process for discovering truth. If one researcher can repeat another researcher’s work and get the same results, that means those results are that much more reliable. For that reason, it is important to consider reports by different researchers who study the same programs and different students, so we do.

If a report includes multiple distinct analyses of different private school choice programs, then we counted each of those analyses as distinct studies. We include replication studies by different research teams and studies that use different methods. In cases where the same researcher or team of researchers conduct multiple studies to evaluate a given program’s outcome, we include the most recent analysis and year(s) of data from the evaluation.

PARTICIPANT TEST SCORES

Do students get better test scores after using private school choice? Studies in this section reveal whether students who used scholarships to attend a private school of their choice achieved higher test scores than students who applied for but did not receive or use scholarships.

All of the studies included in this section use random assignment methods.

These studies include scores from some state standardized tests, depending on the state and program, but most come from nationally norm-referenced tests, such as the Iowa Assessments. In each study, the students using choice programs and the control group had taken the same test.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
17	11	4	2

KEY POINTS

A meta-analysis is a statistical analysis that combines the results of multiple scientific studies to determine overall trends. A meta-analysis is an authoritative method in science, more so even than our literature review here. The most recent meta-analysis on this topic was conducted by researchers Danish Shakeel, Kaitlin Anderson, and Patrick Wolf at the University of Arkansas.

- A meta-analysis found students who won voucher lotteries and used their vouchers saw large positive gains on test scores that equate roughly to **30 more days** of learning in reading and math.

WHAT ABOUT THOSE NEGATIVE EFFECTS STUDIES?

Results from the meta-analysis also suggest that English, reading, and math scores increase the longer a student uses a voucher. Here's what you need to know:

- Voucher students tend to experience a small, negative, and statistically insignificant effect on reading and math test scores **in their first year** in a program.
- Researchers who study students over longer periods of time find that, **after four years** in the voucher program, this effect is reversed. Their test scores actually surpass their public school peers.
- This pattern is similar for math, except that fourth-year estimates are positive but remain statistically insignificant.

PARTICIPANT ATTAINMENT

Though test scores can be useful, they ignore other important student outcomes. For instance, differences in test scores among students in public and private schools may simply reflect differences in curricula rather than quality.

This section reviews studies that examined whether school choice students are more likely to graduate, enroll in college, and/or persist in college than students who did not use vouchers or tax-credit scholarships.

So far no study to date has examined the effect of a private school choice program on outcomes related to earned income or employment.

Given that only four studies on educational attainment use random assignment, we also include studies that use non-experimental methods with some strategy for controlling for self-selection. We exclude observational methods with only control variables as they do not control for self-selection bias.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
7	5	2	0

KEY POINTS

As you'll find in the next section on parent satisfaction, families care about more than test scores. They care about the factors that give their children the grit it takes to attain more. Here's what we know for sure.

- Most studies have found voucher and tax-credit scholarship students are **more likely** to graduate, enroll in college, and persist in college than their public school peers.
- The most recent study of students in Florida's low-income tax-credit scholarship program found student enrollment in two- and four-year colleges increased **12%** for elementary and middle school students and **19%** for high schoolers compared to their peers who did not use the program.
- Notably, research not covered in this guide suggests there's a relationship between students with better educational attainment and later life outcomes, such as employment, income, health, and likelihood to commit crime.

PARENT SATISFACTION

Private school choice programs improve student test scores and long-term educational attainment, but are families getting what they want from their experiences using ESAs, vouchers, and tax-credit scholarships? Studies in this section use surveys of parents to learn whether they are more satisfied with their children’s schools after using such programs.

Given that eight studies on parent satisfaction use random assignment, we also include studies that use other research methods.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
33	31	1	2

These studies compare:

- Differences in families’ satisfaction with their current private school compared to their satisfaction with their previous school;
- differences in choice program families’ satisfaction with their current school compared to non-program families’ satisfaction with their current public schools; and
- differences in choice program families’ satisfaction with their current school compared to non-program families’ satisfaction with their current private schools.

Families of nearly every demographic are represented in these surveys, though most choice programs today are built specifically for low- and middle-income families and families of students with special needs. Students of color tend to be represented in these programs at higher rates as well.

KEY POINTS

- Overall, parents who use private school choice programs are **more satisfied** with their children’s experiences in schools of choice.
- Nearly every study of parent satisfaction ever conducted finds ESA, voucher, and scholarship programs have a positive effect on families’ schooling experiences.
- Parents also report **engaging more** in their children’s education after receiving a voucher or scholarship.
- Parents using Indiana’s voucher—the largest single voucher program in the nation—said the top reasons they chose their children’s private schools were: academics, safety, and morals/character/values instruction.
- About **95%** of parents using Florida’s low-income program—the largest tax-credit scholarship program in the nation—said their kids now try their best, stay out of trouble, pay attention in class, and are safe in the hallways of their schools of choice.

PUBLIC SCHOOL STUDENT TEST SCORES

When some students leave with voucher funds or scholarships, what happens to the students who stay behind in public schools?

These studies help answer that question by examining the competitive effects of private school choice programs on public school students' academic performance.

We include studies that use non-experimental methods given no studies on competitive effects use random assignment.

Public schools that face greater competitive pressure—more expansive private school choice programs—may be systematically different than public schools that face lesser competitive pressures—more limited private school choice programs. Researchers who conducted these studies use statistical techniques to address that concern.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
29	26	1	2

KEY POINTS

- **90%** of reviewed studies find private school choice programs tend to induce public schools to improve. Moreover, the research suggests that these positive effects are stronger when there is a greater degree of choice for families and, thus, competition among schools.
- The more private schools in an area and students a school choice program makes eligible, the more local public schools tend to improve their reading, English, and math proficiency scores.
- A 2023 study by David Figlio, Cassandra Hart, and Krzysztof Karbownik examines the effect of student eligibility expansion of the Florida Tax Credit (FTC) Scholarship Program on students who remained in public schools. The program, one of the oldest and largest in the United States, improved math and reading test scores and also reduced rates of absenteeism and school suspensions for students remaining in public schools.

CIVIC VALUES AND PRACTICES

What effect will switching to private school using a voucher or scholarship have on a student’s understanding of the rights and duties of citizens in their community?

Studies in this section researched students’ tolerance for others before and after using private school choice programs, largely via survey questionnaires that gauge whether students recognize the views, rights, and legal protections of people with whom they disagree. These studies also measured civic engagement, such as political participation, voting, giving to charity, and volunteering. Finally, one study included here examined private school choice’s effect on a student’s likelihood to commit a crime.

For the purposes of reporting civic outcomes, we consider only the voucher and private scholarship participants’ effects. This review includes random assignment and non-experimental studies.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
11	6	5	0

KEY POINTS

A 2017 paper by Corey DeAngelis of the University of Arkansas remains the only systematic review exclusively of research on the effects of private school choice programs on students' civic values and practices. That paper found:

- The body of evidence finds students who use private school choice programs have higher or the same level of tolerance and civic engagement as their peers who don't use choice programs.
- Students who participated in Milwaukee's voucher program were compared with students in the Milwaukee Public School district and examined for their likelihood to engage in criminal activity. The analysis found "exposure to private schooling through a voucher is associated with lower rates of criminal activity," such as committing misdemeanors, felonies, and theft.
- **No study** has ever found private school choice programs lead students to become less tolerant, more apathetic citizens.

RACIAL AND ETHNIC INTEGRATION

Do private school choice programs lead to more segregation in schools?

These studies examine the effect of school voucher programs on racial and ethnic diversity in public and private schools.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
8	7	1	0

This section considers studies that employ a variety of methods. Their conventional measures of integration compare:

- The racial and ethnic composition of public and private schools and the racial/ethnic composition of the choice program's metropolitan area;
- the racial and ethnic composition of public and private schools before and after the introduction or expansion of a choice program;
- the racial and ethnic composition of public and private schools, assuming choice students had enrolled in their district schools instead;
- the racial and ethnic composition of classrooms in public and private schools compared with the racial composition of the nation's general population; and
- the shares of public and private schools that are racially homogenous (usually defined as a school with at least 90% of student enrollment that is white or minority).

The table below depicts the four possible outcomes for studies that make causal claims using student-level data over time.

	Receiving school became MORE integrated	Receiving school became LESS integrated
Originating school became MORE integrated	Positive	Mixed
Originating school became LESS integrated	Mixed	Negative

KEY POINTS

Housing patterns play a huge role in the racial makeup of neighborhoods and, therefore, schools. So who should decide what the right amount of racial or ethnic diversity is in a neighborhood or in a school? Most would say it should be their personal value judgment to make.

For instance, an important question arising from the charter school world: Is it good or bad if a school is led by educators of color and overwhelmingly attended by students of color—not by a ZIP Code-based education system, but rather by parents’ choices? Conventional measures of integration like the ones described in this section might say that is a bad thing. Families of color might disagree.

Because opinions differ so widely, science cannot study the concept of integration perfectly. That said, here’s what we know:

- By conventional measures of integration, **seven out of eight** studies show vouchers **improve integration** in private and public schools. One found vouchers cause no change. Zero studies have found vouchers lead to more segregation in schools.

FISCAL EFFECTS

How do private school choice programs affect the bottom line for taxpayers, state budgets, and public school districts? This section examines just that.

Any fiscal analysis worth its salt should account for:

- Costs and savings, which include the costs of providing vouchers as well as the costs public schools are freed of when students leave and those schools are no longer required to educate them; and
- switchers, or students who would likely enroll in a public school if they did not receive any financial assistance from the choice program. (It is not accurate to assume that all students using school choice programs would attend private schools even without access to the program.)

The studies counted in our analysis account for both. We exclude any analyses that report estimates only for the cost of scholarships. We do not consider fiscal analyses of school choice bills, such as legislative fiscal notes.

Some studies estimated the fiscal effects of private school choice programs from their inception, while others estimated fiscal effects for a particular year or time period. The time periods of these studies range anywhere from one year to more than 30 years after a program launched.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
75	69	5	5

KEY POINTS

- The vast majority of studies find ESA, voucher, and tax-credit scholarship programs **save money**.
- Short-run estimates from four studies show net costs while long-run estimates indicate that these programs generate net fiscal benefits.
- Because most voucher programs are funded only by a portion of state funds, most if not all local and federal funds remain in public district schools, meaning they have **fewer students** to educate **and more money** per pupil to do it.

Of course, school officials face a challenge in cutting costs when enrollment declines, but school district enrollment fluctuates for numerous reasons all of the time.

Too often, education costs are treated as fixed, and school administrators argue that they cannot immediately cut costs when a student leaves their school. Fair enough, but it should be noted that they don't make the same argument when a student joins their school. They tend to ask for more money. If their costs are fixed, it shouldn't matter either way. Yet, that's not how it works.

Enrollment fluctuation is a part of the life of schools, not to mention other endeavors like higher education, service, manufacturing, family households, and health care. Claims to the contrary should be treated with skepticism.

SCHOOL SAFETY

As numerous surveys of parents of school-age children have told us, parents are concerned about school safety. It is usually at the top of the list when parents are asked to rank the factors they care about when it comes to their children’s schooling. This section reviews studies that examine the effect of educational choice on school climate and safety-related issues such as student bullying, physical conflict, gang activities, drug-related problems, discipline issues, and safety practices.

Studies considered in this section use random assignment, matching methods, and multivariate regression analysis that controls for student and school factors. Outcomes are measured as incidents or perceptions of school climate and safety-related issues reported by students, parents, and school leaders.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
8	8	0	0

KEY POINTS

- Studies tend to find no effects to positive effects of choice programs on numerous safety outcomes, and every study has measured positive effects on at least some safety outcomes. One study found that the D.C. Opportunity Scholarship Program had a positive effect on students' perceptions of school safety three years after they applied for the program.
- A study of Indiana's voucher program found that relative to traditional public schools, private schools were less likely to have restrictive safety practices such as random metal detector checks, random dog sniffs for drugs, and security cameras. Compared to public school leaders, private school leaders were more likely to report never having safety-related issues such as physical conflicts among students, various illegal activities, students abusing teachers, student racial tensions, widespread disorder in the classroom, and gang activities.
- A study of the Children's Scholarship Fund program reported that significantly fewer private school parents rated fighting, cheating, stealing, gangs, racial conflict, guns, and drugs as serious problems in their schools, relative to ratings by public school parents.
- Studies of privately funded voucher programs in New York City, Dayton, and Washington, D.C., reported that significantly fewer parents with children in private schools reported fighting and destruction of property as "very serious," compared to parents with children in public school.

CITING OUR SOURCES

Listed in chronological order, starting with most recent

PARTICIPANT TEST SCORES

Heidi H. Erickson, Jonathan N. Mills and Patrick J. Wolf (2021): The Effects of the Louisiana Scholarship Program on Student Achievement and College Entrance, *Journal of Research on Educational Effectiveness*. Retrieved from: <https://doi.org/10.1080/19345747.2021.1938311>

Ann Webber, Ning Rui, Roberta Garrison-Mogren, Robert B. Olsen, and Babette Gutmann (2019), *Evaluation of the DC Opportunity Scholarship Program: Impacts Three Years After Students Applied* (NCEE 2019-4006), retrieved from Institute of Education Sciences website: <https://ies.ed.gov/ncee/pubs/20194006/pdf/20194006.pdf>

Atila Abdulkadiroglu, Parag A. Pathak, and Christopher R. Walters (2018). Free to Choose: Can School Choice Reduce Student Achievement? *American Economic Journal: Applied Economics*, 10(1), pp. 175–206. <https://dx.doi.org/10.1257/app.20160634>

Marianne Bitler, Thurston Domina, Emily Penner, and Hilary Hoynes (2015). Distributional Analysis in Educational Evaluation: A Case Study from the New York City Voucher Program. *Journal of Research on Educational Effectiveness*, 8(3), pp. 419–450. <https://dx.doi.org/10.1080/19345747.2014.921259>

Patrick J. Wolf, Brian Kisida, Babette Gutmann, Michael Puma, Nada Eissa, and Lou Rizo (2013). School Vouchers and Student Outcomes: Experimental Evidence from Washington, D.C. *Journal of Policy Analysis and Management*, 32(2), pp. 246–270. <https://dx.doi.org/10.1002/pam.21691>

Hui Jin, John Barnard, and Donald Rubin (2010). A Modified General Location Model for Noncompliance with Missing Data: Revisiting the New York City School Choice Scholarship Program using Principal Stratification. *Journal of Educational and Behavioral Statistics*, 35(2), pp. 154–173. <https://dx.doi.org/10.3102/1076998609346968>

Joshua Cowen (2008). School Choice as a Latent Variable: Estimating the “Complier Average Causal Effect” of Vouchers in Charlotte. *Policy Studies Journal*, 36(2), pp. 301–315. <https://dx.doi.org/10.1111/j.1541-0072.2008.00268.x>

Carlos Lamarche (2008). Private school vouchers and student achievement: A fixed effects quantile regression evaluation, *Labour Economics*, 15(4), pp. 575-590, <https://doi.org/10.1016/j.labeco.2008.04.007>

Eric Bettinger and Robert Slonim (2006). Using Experimental Economics to Measure the Effects of a Natural Educational Experiment on Altruism. *Journal of Public Economics*, 90(8-9), pp. 1625-1648. <https://dx.doi.org/10.1016/j.jpubeco.2005.10.006>

Alan Krueger and Pei Zhu (2004). Another Look at the New York City School Voucher Experiment. *American Behavioral Scientist*, 47(5), pp. 658-698. <https://dx.doi.org/10.1177/0002764203260152>

John Barnard, 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), pp. 310-326. <https://dx.doi.org/10.1198/016214503000071>

William G. Howell, Patrick J. Wolf, David E. Campbell, and Paul E. Peterson (2002). School Vouchers and Academic Performance: Results from Three Randomized Field Trials. *Journal of Policy Analysis and Management*, 21(2), pp. 191-217. <https://dx.doi.org/10.1002/pam.10023>

Jay P. Greene (2001). Vouchers in Charlotte. *Education Matters*, 1(2), pp. 55-60. Retrieved from Education Next website: http://educationnext.org/files/ednext20012_46b.pdf

Jay P. Greene, Paul Peterson, and Jiangtao Du (1999). Effectiveness of School Choice: The Milwaukee Experiment. *Education and Urban Society*, 31(2), pp. 190-213. <https://dx.doi.org/10.1177/0013124599031002005>

Cecilia E. Rouse (1998). Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program. *Quarterly Journal of Economics*, 113(2), pp. 553-602. <https://dx.doi.org/10.1162/003355398555685>

PARTICIPANT ATTAINMENT

Matthew M. Chingos and Brian Kisida (2023), *School Vouchers and College Enrollment: Experimental Evidence From Washington, DC, Educational Evaluation and Policy Analysis*, 45(3), pp. 422-436, retrieved from <https://doi.org/10.3102/01623737221131549>

Megan J. Austin and Max Pardo (2021). *Do college and career readiness and early college success in Indiana vary depending on whether students attend public, charter, or private voucher high schools?* (REL 2021-071). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from: <http://ies.ed.gov/ncee/edlabs>

Heidi H. Erickson, Jonathan N. Mills and Patrick J. Wolf (2021): The Effects of the Louisiana Scholarship Program on Student Achievement and College Entrance, *Journal of Research on Educational Effectiveness*. Retrieved from: <https://doi.org/10.1080/19345747.2021.1938311>

Albert Cheng and Paul E. Peterson (2020), *Experimentally Estimated Impacts of School Vouchers on Educational Attainments of Moderately and Severely Disadvantaged Students* (PEPG 20-02). Retrieved from Harvard University website: https://www.hks.harvard.edu/sites/default/files/Taubman/PEPG/research/PEPG20_02.pdf

*** This paper is an update to the analysis from: Matthew M. Chingos and Paul E. Peterson (2015). Experimentally Estimated Impacts of School Vouchers on College Enrollment and Degree Attainment. Journal of Public Economics, 122, pp. 1–12. <https://dx.doi.org/10.1016/j.jpubeco.2014.11.013>*

Matthew M. Chingos, Daniel Kuehn, Tomas Monarrez, Patrick J. Wolf, John F. Witte, and Brian Kisida (2019). *The Effects of Means-Tested Private School Choice Programs on College Enrollment and Graduation*, retrieved from Urban Institute website: https://www.urban.org/sites/default/files/publication/100665/the_effects_of_means-tested_private_school_choice_programs_on_college_enrollment_and_graduation_2.pdf

Patrick J. Wolf, Brian Kisida, Babette Gutmann, Michael Puma, Nada Eissa, and Lou Rizo (2013). School Vouchers and Student Outcomes: Experimental Evidence from Washington, DC. *Journal of Policy Analysis and Management*, 32(2), pp. 246–270. <http://dx.doi.org/10.1002/pam.21691>

PARENT SATISFACTION

Andrew D. Catt and John M. Kristof (2022), Families' Schooling Experiences in Kansas, EdChoice and Kansas Policy Institute, retrieved from: <https://www.edchoice.org/wp-content/uploads/2022/11/Families-Schooling-Experiences-in-Kansas.pdf>

Shannon Varga et al. (2021), *Choices and Challenges: Florida Parents' Experiences with the State's McKay and Gardiner Scholarship Programs for Students with Disabilities*, Boston University, CERES Institute for Children & Youth, retrieved from: https://ceresinstitute.org/wp-content/uploads/2021/04/ChoicesChallenges_REPORT.pdf

Andrew D. Catt and Albert Cheng (2019), *Families' Experiences on the New Frontier of Educational Choice: Findings from a Survey of K–12 Parents in Arizona*, retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2019/05/2019-4-Arizona-Parent-Survey-by-Andrew-Catt-and-Albert-Chang.pdf>

New Hampshire Department of Revenue Administration (2018), *Scholarship Organization Report: Giving and Going Alliance*, retrieved from <https://www.revenue.nh.gov/assistance/documents/giving-and-going-alliance.pdf> ; New Hampshire Department of Revenue Administration (2018), *Scholarship Organization Report: Children's Scholarship Fund*, retrieved from <https://www.revenue.nh.gov/quick-links/documents/childrens-scholarship-fund-ed-5.pdf>

Legislative Audit Bureau (2018), *Special Needs Scholarship Program* (Report 18-6), retrieved from <https://legis.wisconsin.gov/lab/media/2753/18-6full.pdf>

Andrew D. Catt and Evan Rhinesmith (2017), *Why Indiana Parents Choose: A Cross-Sector Survey of Parents' Views in a Robust School Choice Environment*, retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2017/09/Why-Indiana-Parents-Choose-1.pdf>

Anna J. Egalite, Ashley Gray, and Trip Stallings (2017), *Parent Perspectives: Applicants to North Carolina's Opportunity Scholarship Program Share Their Experiences* (OS Evaluation Report 2), retrieved from North Carolina State University website: <https://ced.ncsu.edu/elphd/wp-content/uploads/sites/2/2017/07/Parent-Perspectives.pdf>

Andrew D. Catt and Evan Rhinesmith (2016), *Why Parents Choose: A Survey of Private School and School Choice Parents in Indiana*, retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2017/03/Why-Parents-Choose-A-Survey-of-Private-School-and-School-Choice-Parents-in-Indiana-by-Andrew-D.-Catt-and-Evan-Rhinesmith.pdf>

Brett Kittredge (2016), *The Special Needs ESA: What Families Enrolled in the Program Are Saying After Year One*, retrieved from Empower Mississippi website: <http://empowerms.org/wp-content/uploads/2016/12/ESA-Report-final.pdf>

David B. Black (2015), *School Choice and Florida's McKay Scholarship Program for Students with Disabilities: An Analysis of Parental Satisfaction* [dissertation], Florida Atlantic University, retrieved from http://fau.digital.flvc.org/islandora/object/fau%3A31570/datastream/OBJ/view/School_choice_and_Florida___s_McKay_scholarship_program_for_students_with_disabilities__an_analysis_of_parental_satisfaction.pdf

Paul DiPerna (2015), *Why Indiana Voucher Parents Choose Private Schools*, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/07/Indiana-Survey.pdf>

Brian Kisida and Patrick Wolf (2015), *Customer Satisfaction and Educational Outcomes: Experimental Impacts of the Market-Based Delivery of Public Education*. *International Public Management Journal*, 18(2), pp. 265–285, <https://dx.doi.org/10.1080/10967494.2014.996629>

Jonathan Butcher and Jason Bedrick (2013), *Schooling Satisfaction: Arizona Parents' Opinions on Using Education Savings Accounts*, retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2013/10/SCHOOLING-SATISFACTION-Arizona-Parents-Opinions-on-Using-Education-Savings-Accounts-NEW.pdf>

James P. Kelly, III, and Benjamin Scafidi (2013), *More Than Scores: An Analysis of Why and How Parents Choose Private Schools*, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/07/More-Than-Scores.pdf>

John F. Witte, Patrick J. Wolf, Joshua M. Cowen, David J. Fleming, and Juanita Lucas-McLean (2008), *MPCP Longitudinal Educational Growth Study: Baseline Report* (SCDP Milwaukee Evaluation Report 5), retrieved from University of Arkansas Department of Education Reform website: <https://scholarworks.uark.edu/scdp/42/>

Virginia R. Weidner and Carolyn D. Herrington (2006), Are Parents Informed Consumers: Evidence from the Florida McKay Scholarship Program, *Peabody Journal of Education*, 81(1), pp. 27–56, https://doi.org/10.1207/S15327930pje8101_3

Jay P. Greene and Greg Forster (2003), *Vouchers for Special Education Students: An Evaluation of Florida's McKay Scholarship Program* (Civic Report 38), retrieved from Manhattan Institute website: https://media4.manhattan-institute.org/pdf/cr_38.pdf

William G. Howell and Paul E. Peterson (2002), *The Education Gap: Vouchers and Urban Schools*, retrieved from JSTOR website: <https://www.jstor.org/stable/10.7864/j.ctt128086>

Jay P. Greene (2001), Vouchers in Charlotte. *Education Next*, 1(2), pp. 55–60, retrieved from Education Next website: <https://www.educationnext.org/vouchersincharlotte/>

Paul E. Peterson and David E. Campbell (2001), *An Evaluation of the Children's Scholarship Fund* (PEPG 01-01), retrieved from <https://eric.ed.gov/?id=ED453308>

Paul E. Peterson, David E. Campbell, and Martin R. West (2001), *An Evaluation of the BASIC Fund Scholarship Program in the San Francisco Bay Area, California* (PEPG 01-01), retrieved from Paul E. Peterson website: <http://paulepeterson.org/publications/evaluation-basic-fund-scholarship-program-san-francisco-bay-area-california>

John F. Witte (2000), *The Market Approach to Education: An Analysis of America's First Voucher Program*, retrieved from JSTOR website: <https://www.jstor.org/stable/j.ctt7rqnw>

Kim K. Metcalf (1999), *Evaluation of the Cleveland Scholarship and Tutoring Grant Program: 1996-1999*, retrieved from <https://cdm16007.contentdm.oclc.org/digital/collection/p267401ccp2/id/1948>

Paul E. Peterson, William G. Howell, and Jay P. Greene (1999), *An Evaluation of the Cleveland Voucher Program After Two Years*, retrieved from <https://eric.ed.gov/?id=ED451260>

Paul E. Peterson, David Myers, and William G. Howell (1999), *An Evaluation of the Horizon Scholarship Program in the Edgewood Independent School district, San Antonio, Texas: The First Year*, retrieved from <https://eric.ed.gov/?id=ED441274>

Jay P. Greene, William G. Howell, and Paul E. Peterson (1998), Lessons from the Cleveland Scholarship Program. In Paul E. Peterson and Bryan C. Hassel (Eds.), *Learning from School Choice* (pp. 357–392), retrieved from University of Arkansas Department of Education Reform website: <https://jaypgreene.uark.edu/files/2018/04/Cleveland-Lessons-Book-20e6tpp.pdf>

David J. Weinschrott and Sally B. Kilgore (1998), Evidence from the Indianapolis Voucher Program. In Paul E. Peterson and Bryan C. Hassel (Eds.), *Learning from School Choice* (pp. 307–334), <https://journals.sagepub.com/doi/10.1177/08904802016003004?cid=int.sj-abstract.citing-articles.39>

PUBLIC SCHOOL STUDENT TEST SCORES

David N. Figlio, Cassandra M. D. Hart, and Krzysztof Karbownik (2023), *Effects of Maturing Private School Choice Programs on Public School Students*, *American Economic Journal: Economic Policy*, 15(4), pp. 255-294, <https://doi.org/10.1257/pol.20210710>

Stéphane Lavertu and John J. Gregg (2022), *The Ohio EdChoice Program's Impact on School District Enrollments, Finances, and Academics*, Thomas B. Fordham Institute, retrieved from Thomas B. Fordham website: <https://fordhaminstitute.org/sites/default/files/publication/pdfs/edchoice-impact-report-12-14-22-web-final.pdf>

Anna J. Egalite and Jonathan N. Mills (2021), Competitive Impacts of Means-Tested Vouchers on Public School Performance: Evidence from Louisiana, *Education Finance and Policy*, 16(1), pp. 66-91, https://doi.org/10.1162/edfp_a_00286 https://www.mitpressjournals.org/doi/abs/10.1162/edfp_a_00286

Yusuf Canbolat (2021), The long-term effect of competition on public school achievement: Evidence from the Indiana Choice Scholarship Program, *Education Policy Analysis Archives*, 29(97), <https://doi.org/10.14507/epaa.29.6311>

Anna J. Egalite and Andrew D. Catt (2020), Competitive Effects of the Indiana Choice Scholarship Program on Traditional Public School Achievement and Graduation Rates (EdChoice working paper 2020-3), retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2020/08/EdChoice-Working-Paper-2020-3-Competitive-Effects-of-the-Indiana-Choice-Scholarship-Program.pdf>

David Figlio and Krzysztof Karbownik (2016), *Evaluation of Ohio's EdChoice Scholarship Program: Selection, Competition, and Performance Effects*, retrieved from Thomas B. Fordham Institute website: <https://fordhaminstitute.org/sites/default/files/publication/pdfs/FORDHAM-Ed-Choice-Evaluation-Report-online-edition.pdf>

Nathan L. Gray, John D. Merrifield, and Kerry A. Adzima (2016), A Private Universal Voucher Program's Effects on Traditional Public Schools. *Journal of Economics and Finance*, 40(2), pp. 319–344, <https://dx.doi.org/10.1007/s12197-014-9309-z>

Daniel H. Bowen and Julie R. Trivitt (2014), Stigma Without Sanctions: The (Lack of) Impact of Private School Vouchers on Student Achievement, *education policy analysis archives*, 22(87), <https://dx.doi.org/10.14507/epaa.v22n87.2014>

David Figlio and Cassandra M.D. Hart (2014), Competitive Effects of Means-Tested School Vouchers. *American Economic Journal: Applied Economics*, 6(1), pp. 133–156, <https://www.aeaweb.org/articles?id=10.1257/app.6.1.133>

Rajashri Chakrabarti (2013), Vouchers, Public School Response, and the Role of Incentives: Evidence from Florida. *Economic Inquiry*, 51(1), pp. 500–526, <https://dx.doi.org/10.1111/j.1465-7295.2012.00455.x>

Cecilia E. Rouse, Jane Hannaway, Dan Goldhaber, and David Figlio (2013), Feeling the Florida Heat? How Low-Performing Schools Respond to Voucher and Accountability Pressure. *American Economic Journal: Economic Policy*, 5(2), pp. 251–281, <https://dx.doi.org/10.1257/pol.5.2.251>

Matthew Carr (2011), The Impact of Ohio's EdChoice on Traditional Public School Performance. *Cato Journal*, 31(2), pp. 257–284, retrieved from Cato Institute website: <http://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2011/5/cj31n2-5.pdf>

Marcus A. Winters and Jay P. Greene (2011), Public School Response to Special Education Vouchers: The Impact of Florida's McKay Scholarship Program on Disability Diagnosis and Student Achievement in Public Schools. *Educational Evaluation and Policy Analysis*, 33(2), pp. 138–158, <https://dx.doi.org/10.3102/0162373711404220>

Nicholas S. Mader (2010), *School Choice, Competition and Academic Quality: Essays on the Milwaukee Parental Choice Program* (Doctoral dissertation), retrieved from ProQuest (3424049), retrieved from <https://eric.ed.gov/?id=ED520755>

Jay P. Greene and Ryan H. Marsh (2009), *The Effect of Milwaukee's Parental Choice Program on Student Achievement in Milwaukee Public Schools* (SCDP Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program Report 11), retrieved from University of Arkansas Department of Education Reform website: <https://scdp.uark.edu/the-effect-of-milwaukees-parental-choice-program-on-student-achievement-in-milwaukee-public-schools/>

Rajashri Chakrabarti (2008), Can Increasing Private School Participation and Monetary Loss in a Voucher Program Affect Public School Performance? Evidence from Milwaukee, *Journal of Public Economics*, 92(5–6), pp. 1371–1393, <https://dx.doi.org/10.1016/j.jpubeco.2007.06.009>

Greg Forster (2008), *Lost Opportunity: An Empirical Analysis of How Vouchers Affected Florida Public Schools*. School Choice Issues in the State, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/09/Lost-Opportunity-How-Vouchers-Affected-Florida-Public-Schools.pdf>

Greg Forster (2008), *Promising Start: An Empirical Analysis of How EdChoice Vouchers Affect Ohio Public Schools*, School Choice Issues in the State, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/09/Promising-Start-How-EdChoice-Vouchers-Affect-Ohio-Public-Schools.pdf>

Martin Carnoy, Frank Adamson, Amita Chudgar, Thomas F. Luschei, and John F. Witte (2007), *Vouchers and Public School Performance: A Case Study of the Milwaukee Parental Choice Program*, retrieved from Economic Policy Institute website: https://www.epi.org/publication/book_vouchers

Jay P. Greene and Marcus A. Winters (2007), An Evaluation of the Effect of DC's Voucher Program on Public School Achievement and Racial Integration After One Year, *Journal of Catholic Education*, 11(1), pp. 83–101, <http://dx.doi.org/10.15365/joce.1101072013>

David N. Figlio and Cecilia E. Rouse (2006), Do Accountability and Voucher Threats Improve Low-Performing Schools? *Journal of Public Economics*, 90(1–2), pp. 239–255, <https://dx.doi.org/10.1016/j.jpubeco.2005.08.005>

Martin R. West and Paul E. Peterson (2006), The Efficacy of Choice Threats within School Accountability Systems: Results from Legislatively Induced Experiments, *Economic Journal*, 116(510), pp. C46–C62, <http://dx.doi.org/10.1111/j.1468-0297.2006.01075.x>

Jay P. Greene and Marcus A. Winters (2004), Competition Passes the Test, *Education Next*, 4(3), pp. 66–71, retrieved from Education Next website: <https://www.educationnext.org/competition-passes-the-test/>

Jay P. Greene and Greg Forster (2002), *Rising to the Challenge: The Effect of School Choice on Public Schools in Milwaukee and San Antonio* (Civic Bulletin 27), retrieved from Manhattan Institute website: http://www.manhattan-institute.org/pdf/cb_27.pdf

Christopher Hammons (2002), *The Effects of Town Tuitioning in Vermont and Maine*. School Choice Issues in Depth, retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2019/03/The-Effects-of-Town-Tuitioning-in-Vermont-and-Maine.pdf>

Caroline M. Hoxby (2002), How School Choice Affects the Achievement of Public School Students. In Paul T. Hill (Ed.), *Choice with Equity* (pp. 141–78), retrieved from <https://books.google.com/books?id=IeUk3myQu-oC&lpq=PP1&pg=PA141>

Jay P. Greene (2001), *An Evaluation of the Florida A-Plus Accountability and School Choice Program*, retrieved from Manhattan Institute website: http://www.manhattan-institute.org/pdf/cr_aplus.pdf

CIVIC VALUES AND PRACTICES

Corey A. DeAngelis and Patrick J. Wolf (2020). Private School Choice and Character: Evidence from Milwaukee, *The Journal of Private Enterprise*, 35(3), pp. 13-48, retrieved from: http://journal.apee.org/index.php/Parte3_2020_Journal_of_Private_Enterprise_Vol_35_No_3_Fall

Corey A. DeAngelis and Patrick J. Wolf (2018). *Will Democracy Endure Private School Choice? The Effect of the Milwaukee Parental Choice Program on Adult Voting Behavior*. <https://dx.doi.org/10.2139/ssrn.3177517>

Deven Carlson, Matthew M. Chingos, and David E. Campbell (2017). The Effect of Private School Vouchers on Political Participation. *Journal of Research on Educational Effectiveness*, 10(1), pp. 545–569. <https://dx.doi.org/10.1080/19345747.2016.1256458>

Jonathan N. Mills, Albert Cheng, Collin E. Hitt, Patrick J. Wolf, and Jay P. Greene (2016). *Measures of Student Non-Cognitive Skills and Political Tolerance After Two Years of the Louisiana Scholarship Program* (Louisiana Scholarship Program Evaluation Report 2). <https://dx.doi.org/10.2139/ssrn.2738782>

David J. Fleming (2014). Learning from Schools: School Choice, Political Learning, and Policy Feedback. *Policy Studies Journal*, 42(1), pp.55–78. <https://dx.doi.org/10.1111/psj.12042>

David J. Fleming, William Mitchell, and Michal McNally (2014). Can Markets Make Citizens? School Vouchers, Political Tolerance, and Civic Engagement. *Journal of School Choice*, 8(2), pp. 213–236. <https://dx.doi.org/10.1080/15582159.2014.905397>

David E. Campbell (2008). The Civic Side of School Choice: An Empirical Analysis of Civic Education in Public and Private Schools. *Brigham Young University Law Review*, 2008(2), pp. 487–523. Retrieved from <https://digitalcommons.law.byu.edu/lawreview/vol2008/iss2/11>

Eric Bettinger and Robert Slonim (2006). Using Experimental Economics to Measure the Effects of a Natural Educational Experiment on Altruism. *Journal of Public Economics*, 90(8–9), pp. 1625–1648. <https://dx.doi.org/10.1016/j.jpubeco.2005.10.006>

William G. Howell and Paul E. Peterson (2006). *The Education Gap: Vouchers and Urban Schools*, revised edition. Retrieved from <https://books.google.com/books?id=lAzMJs8i-rUC>

Paul E. Peterson and David E. Campbell (2001). *An Evaluation of the Children's Scholarship Fund* (PEPG 01-03). Retrieved from Harvard University website: <https://sites.hks.harvard.edu/pepg/PDF/Papers/CSF%20Report%202001.pdf>

Patrick J. Wolf, Paul E. Peterson, and Martin R. West (2001). *Results of a School Voucher Experiment: The Case of Washington, D.C. after Two Years* (PEPG 01-05). Retrieved from <https://files.eric.ed.gov/fulltext/ED457272.pdf>

RACIAL AND ETHNIC INTEGRATION

Stéphane Lavertu and John J. Gregg (2022), *The Ohio EdChoice Program's Impact on School District Enrollments, Finances, and Academics*, Thomas B. Fordham Institute, retrieved from Thomas B. Fordham Institute website: <https://fordhaminstitute.org/sites/default/files/publication/pdfs/edchoice-impact-report-12-14-22-web-final.pdf>

Anna J. Egalite, Jonathan N. Mills, and Patrick J. Wolf (2017), *The Impact of Targeted School Vouchers on Racial Stratification in Louisiana Schools*. *Education and Urban Society*, 49(3), pp. 271–296, <https://dx.doi.org/10.1177/0013124516643760>

Jay P. Greene, Jonathan N. Mills, and Stuart Buck (2010), *The Milwaukee Parental Choice Program's Effect on School Integration* (School Choice Demonstration Project Report 20), retrieved from University of Arkansas Department of Education Reform website: <https://scholarworks.uark.edu/scdp/55/>

Jay P. Greene and Marcus A. Winters (2007), *An Evaluation of the Effect of DC's Voucher Program on Public School Achievement and Racial Integration After One Year*. *Journal of Catholic Education*, 11(1), pp. 83–101, <http://dx.doi.org/10.15365/joce.1101072013>

Greg Forster (2006), *Segregation Levels in Cleveland Public Schools and the Cleveland Voucher Program*. School Choice Issues in the State, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/09/Segregation-Levels-in-Cleveland-Public-Schools-and-the-Cleveland-Voucher-Program.pdf>

Greg Forster (2006), *Segregation Levels in Milwaukee Public Schools and the Milwaukee Voucher Program*. School Choice Issues in the State, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/09/Segregation-Levels-in-Milwaukee-Public-Schools-and-the-Milwaukee-Voucher-Program.pdf>

Howard L. Fuller and George A. Mitchell (2000), *The Impact of School Choice on Integration in Milwaukee Private Schools*. Current Education Issues 2000-02, retrieved from <https://files.eric.ed.gov/fulltext/ED443939.pdf>

Jay P. Greene (1999), *Choice and Community: The Racial, Economic and Religious Context of Parental Choice in Cleveland*, retrieved from <https://files.eric.ed.gov/fulltext/ED441928.pdf>

FISCAL EFFECTS

Greg S. Griffin and Lisa Kieffer (2023), *Qualified Education Expense Tax Credit: Economic Analysis*, Georgia Department of Audits & Accounts, Special Report, Report Number 22-10, June, retrieved from <https://www.audits2.ga.gov/reports/summaries/22-10qeec/>

Estelle Montgomery (2022), *Iowa's School Tuition Organization Tax Credits Program Evaluation Study*, retrieved from Iowa Department of Revenue website: <https://tax.iowa.gov/sites/default/files/2022-12/2022SchoolTuitionOrganizationTaxCreditStudy.pdf>

Stéphane Lavertu and John J. Gregg (2022), *The Ohio EdChoice Program's Impact on School District Enrollments, Finances, and Academics*, Thomas B. Fordham Institute, retrieved from Thomas B. Fordham Institute website: <https://fordhaminstitute.org/sites/default/files/publication/pdfs/edchoice-impact-report-12-14-22-web-final.pdf>

Dagney Faulk and Michael J. Hicks (2021), *School Choice and State Spending on Education in Indiana*, Ball State University, Center for Business and Economic Research, retrieved from Center for Business and Economic Research Ball State University website: <http://projects.cberdata.org/reports/SchoolSpendingChoice-20210611web.pdf>

Martin F. Lueken (2021), *The Fiscal Effects of Private K-12 Education Choice: Analyzing the costs and savings of private school choice programs in America*, EdChoice, retrieved from EdChoice website: <https://www.edchoice.org/wp-content/uploads/2021/11/The-Fiscal-Effects-of-School-Choice-WEB-reduced.pdf>

*** This paper includes an update to the analysis from: Martin F. Lueken (2018), The Fiscal Effects of Tax-Credit Scholarship Programs in the United States, Journal of School Choice, 12(2), pp. 181-215, https://dx.doi.org/10.1080/15582159.2018.1447725*

Alexander Nikolov and A. Fletcher Mangum (2021), *Scholarship Tax Credits in Virginia: Net Fiscal Impact of Virginia's Education Improvement Scholarships Tax Credits Program*, Mangum Economics, retrieved from Thomas Jefferson Institute of Public Policy website: <http://www.thomasjeffersoninst.org/files/3/EISTC%20Study%20FINAL.pdf>

Corey A. DeAngelis (2020), The Cost-effectiveness of Public and Private Schools of Choice in Wisconsin, *Journal of School Choice*, 15(2), pp. 225-247, <https://doi.org/10.1080/15582159.2020.1726164>

Julie R. Trivitt and Corey A. DeAngelis (2020), Dollars and Sense: Calculating the Fiscal Effects of the Louisiana Scholarship Program, *Journal of School Choice*, <https://doi.org/10.1080/15582159.2020.1726704>

Heidi Holmes Erickson and Benjamin Scafidi (2020), *An Analysis of the Fiscal and Economic Impact of Georgia's Qualified Education Expense (QEE) Tax Credit Scholarship Program*, Education Economics Center, Kennesaw State University, retrieved from Education Economics Center of Kennesaw State University website: <https://coles.kennesaw.edu/education-economics-center/docs/QEE-full-report.pdf>

Deborah Sheasby (2020), *How the Arizona School Tuition Organization Tax Credits Save the State Money*, retrieved from Center for Arizona Policy website: <https://www.azpolicy.org/wp-content/uploads/2020/01/How-the-AZ-STO-Tax-Credits-Save-the-State-Money-2.pdf>

Joint Legislative Committee on Performance Evaluation and Expenditure Review (2020), *2020 Statutory Review of Mississippi's Education Scholarship Account Program (Report 649)*, retrieved from <https://www.peer.ms.gov/Reports/reports/rpt649.pdf>

Jacob Dearmon and Russell Evans (2018), *Fiscal Impact Analysis of the Oklahoma Equal Opportunity Scholarship Tax Credit*, retrieved from Oklahoma City University website: <https://www.okcu.edu/uploads/business/docs/Scholarship-Tuition-Tax-Credit-FY-2017-Fiscal-Impact-Report.pdf>

Julie R. Trivitt and Corey A. DeAngelis (2018), *State-Level Fiscal Impact of the Succeed Scholarship Program 2017-2018*, *Arkansas Education Reports*, 15(1), pp. 1–21, retrieved from <http://scholarworks.uark.edu/oepreport/1>

Wisconsin Legislative Audit Bureau (2018), *Special Needs Scholarship Program: Department of Public Instruction (Report 18-6)*, retrieved from <https://legis.wisconsin.gov/lab/media/2753/18-6full.pdf>

SummaSource (2017), *Final Report: Analysis of the Financial Impact of the Alabama Accountability Act*, SummaSource at Auburn University at Montgomery, retrieved from American Federation for Children website: <https://www.federationforchildren.org/wp-content/uploads/2017/02/AUM-Fiscal-Impact-Report.pdf>

Corey A. DeAngelis and Julie R. Trivitt (2016), *Squeezing the Public School Districts: The Fiscal Effects of Eliminating the Louisiana Scholarship Program* (EDRE Working Paper 2016-10), retrieved from University of Arkansas Department of Education Reform website: <https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=1019&context=scdp>

Jeff Spalding (2014), *The School Voucher Audit: Do Publicly Funded Private School Choice Programs Save Money?* Retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/07/The-School-Voucher-Audit-Do-Publicly-Funded-Private-School-Choice-Programs-Save-Money.pdf>

Patrick J. Wolf and Michael 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), pp. 74–99, https://dx.doi.org/10.1162/EDFP_a_00083

Legislative Office of Economic and Demographic Research (2012), *Revenue Estimating Conference*, retrieved from <http://www.edr.state.fl.us/Content/conferences/revenueimpact/archives/2012/pdf/page540-546.pdf>

Robert M. Costrell (2010), *The Fiscal Impact of the Milwaukee Parental Choice Program: 2010-2011 Update and Policy Options* (SCDP Milwaukee Evaluation Report 22), retrieved from University of Arkansas Department of Education Reform website: <https://scdp.uark.edu/files/2018/10/report-22-the-fiscal-impact-of-the-milwaukee-parental-choice-program-2010-2011-update-and-policy-options-24dyjxq.pdf>

John Merrifield and Nathan L. Gray (2009), An Evaluation of the CEO Horizon, 1998–2008, Edgewood Tuition Voucher Program. *Journal of School Choice*, 3(4), pp. 414–415, <https://dx.doi.org/10.1080/15582150903430764>

OPPAGA (2008), *The Corporate Tax Credit Scholarship Program Saves State Dollars* (Report 08-68), retrieved from <http://www.oppaga.state.fl.us/reports/pdf/0868rpt.pdf>

Collins Center for Public Policy (2007), *The Florida Corporate Income Tax Credit Scholarship Program: Updated Fiscal Analysis*, retrieved from <https://www.stepupforstudents.org/wp-content/uploads/2022/09/2007-collins-center-fiscal-analysis.pdf>

Susan L. Aud (2007), *Education by the Numbers: The Fiscal Effect of School Choice Programs, 1990-2006*. School Choice Issues in Depth, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/09/Education-by-the-Numbers-Fiscal-Effect-of-School-Choice-Programs.pdf>

Susan L. Aud and Leon Michos (2006), *Spreading Freedom and Saving Money: The Fiscal Impact of the DC Voucher Program*, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2015/09/Spreading-Freedom-and-Saving-Money-The-Fiscal-Impact-of-the-DC-Voucher-Program.pdf>

SCHOOL SAFETY

Ann Webber, Ning Rui, Roberta Garrison-Mogren, Robert B. Olsen, and Babette Gutmann (2019), *Evaluation of the DC Opportunity Scholarship Program: Impacts Three Years After Students Applied* (NCEE 2019-4006), Institute for Education Sciences, U.S. Department of Education, retrieved from <https://files.eric.ed.gov/fulltext/ED594875.pdf>

Corey A. DeAngelis and Martin F. Lueken (2019), School Sector and Climate: An Analysis of K–12 Safety Policies and School Climates in Indiana, *Social Science Quarterly*, 101(1), pp. 376-405, <https://doi.org/10.1111/ssqu.12737>

Patrick Wolf et al. (2010), *Evaluation of the DC Opportunity Scholarship Program: Final Report* (NCEE 2010-4018), Institute for Education Sciences, U.S. Department of Education, retrieved from <https://files.eric.ed.gov/fulltext/ED510451.pdf>

OTHER REVIEWS OF RESEARCH

Most studies of educational choice evaluate a single program. This creates a challenge for understanding the effects of choice writ large, because programs vary greatly: Who is eligible? How much money is available and how is it distributed? What regulations apply to participating schools and families? These are just a few differences that make it hard to report on educational choice as a concept rather than a specific program.

Nonetheless, policymakers considering whether to introduce or expand choice programs in their states want to gain a general understanding about the effectiveness and potential of these programs in their states. To answer their questions, researchers appraise and synthesize the broad body of research evidence by conducting systematic reviews which integrate research findings in an attempt to come to a more general understanding of the impact of educational choice programs.

Total Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
32	24	8	0

KEY POINTS

- We identified 22 papers that integrate findings from studies on all eight outcomes we examine in this edition of 123s of School Choice, which amount to 32 distinct analyses. One of the 22 papers synthesizes research that evaluated the Milwaukee Parental Choice Program. The remainder of these reviews synthesized studies of multiple programs across the country.
- Of the 32 distinct analyses, 24 indicate that outcomes overall lean positive. The 24 include analyses which categorize findings as “null to positive.” Eight analyses indicate that overall findings were neutral, mixed, or inconclusive. No research review indicated an overall negative effect of private educational choice for any of the eight outcomes.

CITATIONS OF OTHER REVIEWS OF RESEARCH

Listed in chronological order, starting with most recent

M. Danish Shakeel, Patrick J. Wolf, Alison Heape Johnson, Mattie A. Harris and Sarah R. Morris (2024), The Public Purposes of Private Education: a Civic Outcomes Meta-Analysis, *Educational Psychology Review*, 36(40), <https://doi.org/10.1007/s10648-024-09874-1>

Danish Shakeel, Kaitlin P. Anderson, and Patrick J. Wolf (2021), The participant effects of private school vouchers around the globe: a meta-analytic and systematic review, *School Effectiveness and School Improvement*, 32(4), pp. 509-542, <https://doi.org/10.1080/09243453.2021.1906283>.

Jude Schwalbach and Corey A. DeAngelis (2020), School sector and school safety: a review of the evidence, *Educational Review*, 74(4), pp. 882-898, <https://doi.org/10.1080/00131911.2020.1822789>

Corey A. DeAngelis and Patrick J. Wolf (2019), “Improving Civil Society Through Private School Choice: A Review of the US Evidence.” In Pauline Dixon and Steve Humble (Eds.) *School Choice Around the World ...and the lessons we can learn*, edited (pp. 71-93). London: The Institute of Economic Affairs.

Huriya Jabbar, Carlton J. Fong, Emily Germain, Dongmei Li, Joanna Sanchez, Wei-Ling Sun, and Michelle Devall (2019), The competitive effects of school choice on student achievement: A systematic review. *Educational Policy*, 36(2), pp.1-35, <https://doi.org/10.1177/0895904819874756>

Corey A. DeAngelis (2017), Do Self-Interested Schooling Selections Improve Society? A Review of the Evidence, *Journal of School Choice*, 11(4), pp. 546–558. <https://dx.doi.org/10.1080/15582159.2017.1395615>

Dennis Epple, Richard E. Romano, and Miguel Urquiola (2017), School Vouchers: A Survey of the Economics Literature, *Journal of Economic Literature*, 55(2), 441–92. <http://dx.doi.org/10.1257/jel.20150679>

Michael R. Ford and Fredrik O. Andersson (2017), Taking Stock and Moving Forward: Lessons from Two Plus Decades on the Milwaukee Parental Choice Program, *Journal of School Choice*. <http://dx.doi.org/10.1080/15582159.2017.1350085>

Leesa M. Foreman (2017), Educational Attainment Effects of Public and Private School Choice. *Journal of School Choice*, 11(4), pp. 642–654, <https://dx.doi.org/10.1080/15582159.2017.1395619>

Fryer Jr, R. G. (2017), The Production of Human Capital in Developed Countries: Evidence from 196 Randomized Field Experiments, In E. Duflo & A. Banerjee (Eds.) *Handbook of Field Experiments*, Vol. 2, (pp. 95-322). Amsterdam: North-Holland

Evan Rhinesmith (2017), A Review of the Research on Parent Satisfaction in Private School Choice Programs, *Journal of School Choice*, 11(4), pp. 585–603, <https://dx.doi.org/10.1080/15582159.2017.1395639>

Elise Swanson (2017), Can We Have It All? A Review of the Impacts of School Choice on Racial Integration, *Journal of School Choice*, 11(4), p. 507–526. <https://dx.doi.org/10.1080/15582159.2017.1395644>

Julianne Bozzo (2016), School Vouchers: A Vehicle to Induce Greater Competition Among Public Schools. *Hatfield Graduate Journal of Public Affairs*, 2(1-4), <http://dx.doi.org/10.15760/hgja.2017-2.4>

Anna J. Egalite and Patrick J. Wolf (2016), A Review of the Empirical Research on Private School Choice, *Peabody Journal of Education*, 91(4), 441–454. <http://dx.doi.org/10.1080/0161956X.2016.1207436>

Greg Forster (2016), *A Win-Win Solution: The Empirical Evidence on School Choice (4th ed.)*, Friedman Foundation for Educational Choice, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2016/05/A-Win-Win-Solution-The-Empirical-Evidence-on-School-Choice.pdf>

Christopher Lubienski and T. Jameson Brewer (2016), An Analysis of Voucher Advocacy: Taking a Closer Look at the Uses and Limitations of “Gold Standard” Research, *Peabody Journal of Education*, 91(4), 455–472, <https://doi.org/10.1080/0161956X.2016.1207438>

Patrick J. Wolf and Anna J. Egalite (2016), *Pursuing Innovation: How Can Educational Choice Transform K-12 Education in the U.S.?*, retrieved from EdChoice website: <http://www.edchoice.org/wp-content/uploads/2016/05/2016-4-Pursuing-Innovation-WEB-1.pdf>

Mary R. Anderson, Tatyana Guzman and Evan J. Ringquist (2013), “Evaluating the Effectiveness of Educational Vouchers,” In *Meta-Analysis for Public Management and Policy*, edited by Evan J Ringquist and Mary Anderson, 202–237. San Francisco: John Wiley & Sons

Anna J. Egalite (2013), Measuring Competitive Effects from School Voucher Programs: A Systematic Review, *Journal of School Choice*, 7(4), 443–464. <http://dx.doi.org/10.1080/15582159.2013.837759>

Alexandra Usher and Nancy Kober (2011), *Keeping Informed about School Vouchers: A Review of Major Developments and Research*, Center on Education Policy, retrieved from: <https://files.eric.ed.gov/fulltext/ED522161.pdf>

Cecilia Elena Rouse and Lisa Barrow (2009), School Vouchers and Student Achievement: Recent Evidence and Remaining Questions, *Annual Review of Economics*, 1: 17–42, <https://doi.org/10.1146/annurev.economics.050708.143354>

Christopher Lubienski and Peter Weitzel (2008), The Effects of Vouchers and Private Schools in Improving Academic Achievement: A Critique of Advocacy Research, *Brigham Young University Law Review*, 2(10), 447–485, <https://digitalcommons.law.byu.edu/lawreview/vol2008/iss2/10>

Gary Miron, Stephanie Evergreen, and Jessica Urschel (2008), *The impact of school choice reforms on student achievement*, Education Policy Research Unit and the Education and the Public Interest Center, Arizona State University, <https://nepc.colorado.edu/sites/default/files/CHOICE-10-Miron-FINAL-withapp22.pdf>

Patrick J. Wolf (2008), School Voucher Programs: What the Research Says About Parental School Choice, *Brigham Young University Law Review*, 2(9), 415–446, <https://digitalcommons.law.byu.edu/lawreview/vol2008/iss2/9/>

2024 EDITION



111 MONUMENT CIRCLE
SUITE 2650
INDIANAPOLIS, IN 46204
317 681 0745

EDCHOICE.ORG

Leading the Way for **UNIVERSAL CHOICE** Since 1996