

EdChoice Study Guide

A review of the research on private
school choice

2023 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 187 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 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**

We’ve also added a new section synthesizing the findings of other reviews of educational choice research.

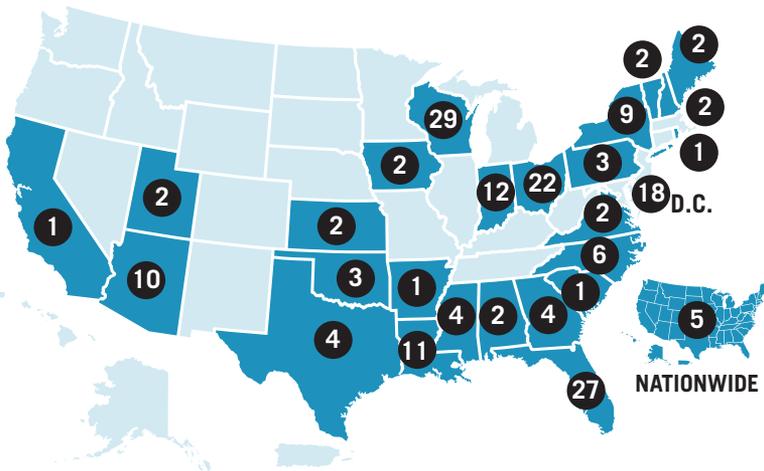
SCHOOL CHOICE PROGRAM STUDIES TO DATE

Outcome	Number of Studies	Any Positive Effect	No Visible Effect	Any Negative Effect
Program Participant Test Scores	17	11	4	3
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	74	68	5	5
School Safety	8	8	0	0
Total	187	162	19	12

*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.

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	3

Note: The number of effects detected differs from the total number of studies included because we classify one study as having detected both positive and negative effects.

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 **49 more days** of learning in math and **28 more days** of learning in reading and English.

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 percent** for elementary and middle school students and **19 percent** 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 percent** 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

- **89 percent** 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 2022 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 percent 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, **six out of seven** 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
74	68	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

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Note: A study is a unique set of one or more data analyses, published together, of a single school choice program. "Unique" means using data and analytic specifications not identical to those in previously reported studies. "Published" means reported to the public in any type of publication, paper, article or report. By this definition, all data analyses on a single school choice program that are reported in a single publication are taken together as one "study," but analyses studying multiple programs are taken as multiple studies even if they are published together.

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
31	24	7	0

KEY POINTS

- We identified 21 papers that integrate findings from studies on all eight outcomes we examine in this edition of 123s of School Choice, which amount to 31 distinct analyses. One of the 21 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 31 distinct analyses, 24 indicate that outcomes overall lean positive. The 24 include analyses which categorize findings as “null to positive.” Seven 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

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