



The Reality of Switchers

Are most education savings accounts (ESAs) given to students already in private schools? An analysis of switchers in the Iowa and New Hampshire ESA programs.

Martin F. Lueken, Ph.D.

Summary

This policy brief discusses “switchers” and “non-switchers” in the context of choice programs with broad eligibility (universal and near-universal choice programs). **Switchers** are students who would have enrolled in a public school without any financial assistance from a choice program. **Non-switchers** are students who would have enrolled in a nonpublic school even without any financial assistance from a choice program. Switchers generate fiscal benefits for taxpayers when they leave public schools. These savings can partially or fully offset the cost of the choice program. Non-switchers do not generate any savings and represent a pure cost.

Opponents claim that around 70 to 90 percent of ESAs awarded in universal and similar ESA programs are given to “students already enrolled in private schools.” This is much different than students who originated in private schools. The data used to bolster opponents’ claims are incomplete and lack context. To better inform the switcher question, we obtained participation data on ESA programs in Iowa and New Hampshire to try and estimate the true switcher rate. This brief discusses the analysis and findings.

- Opponents claim an 89% non-switcher rate during the first year of New Hampshire’s ESA program, implying a switcher rate of just 11%. With a closer look at more complete data and program experience, the true switcher rate is likely much higher, by 34 percentage points, for an actual switcher rate of 45% instead of 11%.
- Contrary to what has been reported recently in media reports and a 66% non-switcher rate touted by choice opponents for Iowa’s ESA program, the actual non-switcher rate for the program is likely significantly lower (around 30%) when considering more complete data and program experience. Thus, the actual switcher rate may be around 70%.
- The break-even switcher rates for the Iowa and New Hampshire ESA programs are 47% and 26%, respectively. Data indicate that the actual switcher rates for these programs are likely higher than their programs’ break-even switcher rates and therefore show that these programs generate long-run net fiscal benefits for state and local taxpayers combined.

While stakeholders should expect switcher rates to decrease as choice programs increasingly open to students outside the public school system, it is too early to know for sure how things will play out for programs with broader eligibility. Universal programs are new, and there is still much to learn about them. As data become available, it will take time for researchers to sort through them. In the meantime, wisdom and patience should guide policy decisions, not rash rushes to judgment that will prevent students and families having educational options.

Introduction

Choice opponents *argue* that “ESAs cannibalize public schools and are a way to divert public dollars into private pockets.”¹ Some even argue that they will *bankrupt* their states. No surprise here.²

More recently, however, opponents of education choice have been quick to weaponize data reported by state education officials to signal that ESAs in states with universal choice programs are being used by students already in private schools. One state teacher’s union official *claimed* that “between 80 percent and 90 percent of [universal choice programs] around the country pay for students who are already enrolled in private schools.”³

How did they get to these numbers?

The Iowa Department of Education *reports* that only 12.7% of ESA students previously attended a public school and 21% of the students were entering kindergarten students.⁴ *Opponents* use these data to claim that at least 67% of ESAs go to students already enrolled in private schools.⁵

The Arizona Department of Education *reports* that 21% of ESA students attended public school immediately before enrolling in the ESA program during the first year of the universal expansion.⁶ In the second year (FY 2024), 47% of new ESA students attended public school immediately before enrolling in the ESA program. *Opponents* use these data to claim that 80-90% of ESAs go to students already enrolled in private school.⁷

The rates touted by opponents, however, paint an inaccurate and incomplete picture. This policy brief aims to provide a more informed picture of switcher rates for choice programs without public school prior enrollment requirements.

Many choice programs, until the recent spate of universal expansion, have public school prior enrollment requirements or are limited to disadvantaged populations, thus lending to high switcher rates. Initial reporting suggests that these new programs do have switcher rates that are lower than the 90% average switcher rate that researchers have *documented* for choice programs prior to the “universal era.”⁸ But not nearly to the degree that opponents contend.

While stakeholders should expect switcher rates to decrease as choice programs are open to students outside the public school system, it is too early to know for sure how these programs will play out for programs with broader eligibility.

Why should anyone care if students are switchers or not?

Because ESAs are generally funded at a rate that is less than the cost to educate a child in public school, each student switching from public school to the ESA program represents savings for the state. When ESAs are awarded to non-switchers, costs for the program increase because non-switchers do not generate any savings. They represent a pure cost. If a large enough group of ESA students are non-switchers, then a program can generate net fiscal costs for a state, even in the long run.

As discussed below, we find some evidence that the data used to bolster opponents’ claims are incomplete and lack context, thus suggesting that these rash proclamations may be nothing more than fearmongering and instances of jumping the gun.

To just give one example of how using students “already in private school” to make claims or assertions that most ESAs are distributed to non-switchers is misleading, we can look to the state of Arizona. An important fact that opponents neglect is that Arizona operates multiple educational choice programs. As it turns out, some ESA students who were identified as “non-switchers” also participated in other choice programs before enrolling in the ESA program. That means that they did not, in fact, represent a new cost to the state, it was already paying for their attendance via another choice program. It’s quite possible that some of these students switched into those choice programs from public schools before they joined an ESA program. But that doesn’t show up in the data being reported, meaning that switchers show up in new data as non-switchers when they were not.

To better inform the switcher question, we obtained participation data on ESA programs in Iowa and New Hampshire to try and estimate the true switcher rate. Below is a discussion of my analysis and findings.

New Hampshire Education Freedom Account Program

Switcher rate

The Children’s Scholarship Fund (CSF) provided EdChoice with three years of anonymous (de-identified) student-level data on students participating in the EFA program from 2021-22 to 2023-24. These data identify the type of school that EFA students enrolled right before entering the EFA program.

CSF also identified ESA students who participated in the New Hampshire Education Tax Credit (ETC) Program before they joined the ESA program. CSF records the type of school that ESA students enrolled right before entering the ETC program.

There are multiple ways to identify switchers in the data set. The analysis identifies the following students as switchers:

- those identified as “ETC Switcher” by CSF (per the criteria listed below),
- those enrolled in a public school immediately before entering the ETC or EFA program (whichever came first), and
- those enrolled in a public school during the application year of the EFA program.

CSF includes a variable called “ETC Switcher.” “ETC switchers” are students who meet one of the following criteria:

- 1)** were enrolled in a district school or public charter school prior to applying for the ETC,
- 2)** entered grades K or 1, or came from out-of-state prior to entering the ETC, or
- 3)** were enrolled in a private school upon applying for the ETC (e.g., a student completed a school year in public school and subsequently entered the EFA program during a summer month, and the parent listed the intended private school as the current school instead of listing the public school) and CSF confirmed with the NH DOE that a student was actually enrolled in a public school during the prior year.

As an added layer of caution, a final adjustment is made for the likelihood that some ESA students entering kindergarten or coming from out-of-state are non-switchers. The analysis applies a 10% non-switcher rate to students in this category and subtracts them from the switcher group. Table 1 summarizes the results for New Hampshire.

Let’s walk through the first column, the results for the first year of the program.

The overall take-up rate for the program for the 2021-22 school year is 3.3%. That is, 3.3% of students who were eligible for the ESA program participated in it. Breaking this down, 1.7% of public school students eligible for the program participated while 19.1% of eligible non-public school students participated.

The program switcher rate was 44.6%. That is, 44.6% of EFA students were switchers and would have enrolled in public schools without financial assistance from the program. This rate is based on all students identified in the data set as switchers and is significantly higher than the 11% switcher rate implied by opponents.

Table 1: Participation in New Hampshire Education Freedom Account program, by year 2021-22 to 2023-24

	Year 1 (2021-22)	Year 2 (2022-23)	Year 3 (2023-24)
Program take-up rate (TUR)	3.3%	5.8%	5.4%
Public TUR	1.7%	3.0%	2.8%
Nonpublic TUR	19.1%	32.3%	29.6%
Program switcher rate	44.6%	45.5%	44.8%
Program non-switcher rate	55.4%	54.5%	55.2%
Switcher rate based on reporting method used by AZ (switcher rate = prior public immediately before entering EFA / total ESAs)	11.9%	15.9%	21.3%
Non-switcher rate based on reporting method used by AZ (switcher rate = prior public immediately before entering EFA / total ESAs)	88.1%	84.1%	78.7%
% of EFA students who were in ETC before entering EFA	12.4%	11.2%	8.1%

Notes: The analysis identifies switchers based on 3 criteria: 1) any student who attended a district school or charter school immediately before entering ETC or EFA, whichever program they enrolled in first; 2) any student who attended a district school or charter school during the application year of the EFA program; 3) any student that CSF identified as an “ETC switcher.” “ETC switchers” are students who met one of the following criteria: 1) was enrolled in a district school or public charter school prior to applying for the ETC; 2) entered in grades K or 1, or came from out-of-state prior to entering the ETC; or 3) was enrolled in a private school upon applying for the ETC (e.g., during summer month and the parent listed the intended private school as the current school) and CSF confirmed with the NH DOE that the student was actually enrolled in a public school during the prior year.

Break-even switcher rate

The break-even switcher rate (BESR) is the average cost of a choice program divided by the average cost to educate ESA students in the public school system. Comparing the BESR with a choice program’s switcher rate can provide a general idea about whether a program will generate net costs or net fiscal benefits in the long run. If the actual switcher rate exceeds the BESR, then a program will generate net fiscal benefits. The larger the gap between the per-pupil funding for a choice program and the per-pupil funding for public schools, the lower the BESR, and the greater the likelihood the program will generate net fiscal benefits.

Table 2 compares the average per-pupil cost for the EFA program and New Hampshire public school systems. In 2021-22, the average cost for the EFA program was \$4,367 while the average cost per student for public school systems was \$19,400. This implies a break-even switcher rate of 22.5% for the ESA program, meaning that the program that year will generate long-run net fiscal benefits for state and local taxpayers combined if more than 22.5% of ESA students are switchers.

Note that the switcher rates based on only prior public enrollment immediately before students entered the ESA program (12% to 21%) are below the break-even switcher rate. This implies that the program would generate net fiscal costs in the long run if these switcher rates were true. Switcher rates based on more complete data, however, suggest that the program generates long-run net fiscal benefits for state and local taxpayers combined.

Table 2: Per-pupil costs for ESA program and NH public schools, and break-even switcher rate for ESA program, by year

	Year 1 (2021-22)	Year 2 (2022-23)	Year 3 (2023-24)
Total PPE	\$19,400	\$20,323	\$20,323
Average ESA amount	\$4,367	\$4,684	\$5,255
Break-even switcher rate	22.5%	23.1%	25.9%

Sources: Children’s Scholarship Fund; New Hampshire Department of Education

Note: The break-even switcher rate represents the minimum percentage of EFA students who must be switchers for the EFA program to generate net fiscal benefits in the long run. School finance data were not available for 2023-24 school year. For total per-pupil funding for 2023-24, we use the amount from 2022-23 school year.

Iowa Education Savings Account (ESA) Program

Switcher rates

The Iowa DOE [reports](#) that just 12.7% of the 16,757 ESA students were enrolled in public school before joining the ESA program, and 21.0% of ESA students were entering kindergarten.¹⁰ [Opponents](#) use these data to claim the program has a 67% non-switcher rate.¹¹ This implies 11,109 ESA students who are non-switchers.

Using these data to proxy non-switcher rates in the way described above likely overstate the number of ESA students who are non-switchers for two reasons. First, the 12.7% figure reflects ESA students who were in public school during the prior year only instead of students who were enrolled in public school at any time before entering the program. It may be the case that some students not counted in this figure were enrolled in public school at other points in their K-12 career before joining the ESA program. This would understate the switcher rate and overstate the non-switcher rate.

Second, some non-switchers came from Iowa’s School Tuition Organization (STO) Tax Credit program. That is, of the 67% non-switchers implied by the data, an unknown number participated in the STO program. This would also understate the switcher rate and overstate the non-switcher rate.

We obtained data from four school tuition organizations (STOs) on the number of ESA students who participated in the STO program prior to joining the ESA program.¹² Data cover 7,062 ESA students served by these STOs, or 42% of the total number of ESA students. Of these ESA students, 3,957 participated in the STO program during the prior year (SY 2022-23). This number represents 56% of ESA students served by the four STOs.

Assuming that 56% of the 16,757 ESA students participated in the STO program prior to joining the ESA program, 9,389 non-switchers were prior-STO ESA students.

The present analysis estimates switcher rates by adjusting for the likelihood that some portion of prior-STO ESA students are switchers. The analysis also assumes that 90% of ESA students entering kindergarten are also switchers.¹³ Table 3 shows adjusted switcher rate estimates under assumptions that 90%, 70%, 50%, 30%, and 0% of prior-STO ESA students are switchers.

Table 3: Adjusted estimates for switcher rates for Iowa ESA program

Switcher rate among prior-STO ESA students	Number of switchers among prior-STO ESA students	Number of switchers among kindergarten students	Adjusted switcher rate
90%	8,450	3,162	82%
70%	6,572	3,162	71%
50%	4,695	3,162	60%
30%	2,817	3,162	48%
0%	0	3,162	32%

Notes: Estimates for switcher rates are adjusted by different rates of switching among students who were participating in the School Tuition Organization Tax Credit program prior to entering the ESA program; analysis assumes that 90% of students entering kindergarten would have enrolled in public school without financial assistance from the ESA program

We use data from New Hampshire’s ESA program to help inform our preferred estimate from the range of estimates in Table 3. Data indicate that 70% of ESA students who were in the ETC program prior to entering the ESA program are switchers. Thus, we use this information as basis for assuming that 70% of prior-STO students are switchers and generating an estimate for the ESA program’s switcher rate.

Assuming that 70% of prior-STO ESA students are switchers implies an additional 6,572 switchers. Assuming that 90% of ESA students entering kindergarten are switchers implies 3,162 switchers among this group. Adding these students to the 2,135 ESA students who were already identified as previously attending a public school implies a switcher rate of 71%.

$\frac{\text{Number of switchers}}{\text{Total ESA students}}$	<p>= (2,135 + 6,572 + 3,162 switchers) / 16,757 total ESAs</p> <p>= 11,869 switchers / 16,757 total ESAs</p> <p>= 71% switcher rate</p> <p>= 29% non-switcher rate</p>
--	--

Table 4 summarizes overall participation in Iowa’s ESA program based on this 29% non-switcher rate. The overall take-up rate in the program’s first year is 3.3%. The take-up rate among eligible public school students is 2.5% while the take-up rate among eligible private school students is 22.7%. This experience is in line with New Hampshire’s ESA program.

Table 4: Participation in the first year of the Iowa Education Savings Account Program

	Number of students eligible for ESA program	Number of ESAs	Take-up rate
Public	481,250	11,869	2.5%
Private	21,538	4,888	22.7%
Overall	502,788	16,757	3.3%

Notes: The analysis assumes that 70% of prior-STO ESA students are switchers and 90% of ESA students entering kindergarten are switchers.

Break-even switcher rate

The maximum ESA amount possible for Iowa's ESA program is \$7,413. This amount represents 47% of the average total funding amount per pupil for Iowa public schools and implies a 47% break-even switcher rate. Thus, if more than 47% of ESA students in the program are switchers, then the program will generate long-run net fiscal benefits for state and local taxpayers combined.

Contrary to what has been reported recently in media reports and a 66% non-switcher rate touted by choice opponents for Iowa's ESA program, the actual non-switcher rate for the program is likely significantly lower (around 30%) when considering more complete data and program experience. This implies a switcher rate of 70%, a rate that exceeds the program's break-even switcher rate and therefore indicates that the program is generating fiscal benefits in the long run.

Discussion

Before the recent nationwide spate of universal choice programs were enacted, programs had limited eligibility. The best data on switchers for these programs come from random assignment studies—the gold standard of social science research—of oversubscribed programs. When programs are oversubscribed, a lottery is conducted to determine who can access the choice program. Researchers studied students who lost the lottery and observed the type of school they enrolled in after the lottery. Overall, *about 90% of students who lost a lottery ended up enrolling in public schools*¹⁴. This implies that 10% of students in these programs are non-switchers – they would have enrolled in a nonpublic school setting even without the assistance of a choice program. These students represent a cost for the program but do not generate savings to offset the cost, as with switchers.

Earlier choice programs tended to have high switcher rates because they were usually targeted to students enrolled in the public school system and/or high-need students, such as students with disabilities or low-income. With universal programs, however, the switcher rate will likely be lower as students enrolled outside the public school system choose to participate.

Some *media* and *government* agencies have reported data that touch on program switcher rates.¹⁵ Opponents, however, are seizing on these data and citing them as definitive and exceptionally high program switcher rates. The present analysis, however, suggests that these claims are incomplete and lack context. The true switcher rates are likely much lower than currently portrayed by opponents.

Arizona *reports* that 21% of ESA students were “in public school immediately before ESA enrollment” during the first year of universal expansion (FY 2023) and 47% in the second year (FY 2024).¹⁶ This implies switcher rates of 21% in the first year and 47% in the second year. Using these particular data or methods to extrapolate the rate of switching likely understates the true switcher rate and overstates the true non-switcher rate.

Based on this method of counting switchers as students who were enrolled in public school in the year prior to joining the ESA program, the implied switcher rate for the NH ESA program is 12% for the first year, 16% for the second year, and 21% for the third year. Choice *opponents* tout that 89% of ESA students in New Hampshire originated in private schools during the first year, implying that just 11% are switchers.¹⁷ This 11% switcher rate, however, is 34 percentage points lower than the switcher rate estimate based on more complete data for the program's first year.

Of course, creating programs with low switcher rates is not beyond the realm of possibility. But even if programs have low switcher rates, meaning funding is going to students not previously enrolled in a public school, there are positive reasons for this arrangement.

First, many families with children enrolled in private schools or homeschools, including many low-income/disadvantaged families, make sacrifices to access a better education for their children. And families with children enrolled in educational settings outside the public system also pay for public schools with their property taxes, even though their children don't attend the public schools they help fund.

Second, education is a *public good*, which is not so for public schooling.¹⁸ When families provide a sound education for their children, whether private, public, homeschool, or other, that produces societal benefits. Research on choice shows that more educational opportunity for families boosts *learning, educational attainment, tolerance and other civic outcomes*, while also *lowering crime*.¹⁹

Third, *pluralism in education* and universal access, not monopoly, is the desirable norm.²⁰ Outside the United States, most other democracies fund students who attend all types of schools—private, parochial, and public—without controversy. Public schooling in the United States has deeply entrenched monopolistic characteristics, and will continue *to lag behind its international competitors* until a system of freedom and choice gains wide adoption.²¹

The bottom line is these universal programs are new, and there is still much to learn about them. As data become available, it will take time for researchers to sort through them. In the meantime, wisdom and patience should guide policy decisions, not rash rushes to judgment that will prevent students and families having educational options.

Summary

Estimating non-switcher rates (i.e., the percent of ESA students who would enroll in private school settings without financial assistance from a choice program) based on more complete data and program experiences suggests that the high non-switcher rates implied by recent government reports and touted by choice opponents may significantly overstate actual non-switcher rates for at least two reasons. First, data cited by opponents reflect new program participants only rather than all students in a program. Second, estimates based on less complete data do not account for the reality that some portion of ESA students were also participating in other choice programs prior to joining the ESA program and switched into those other programs from public schools.

Opponents claim an 89% non-switcher rate during the first year of New Hampshire's ESA program, implying a switcher rate of just 11%. With a closer look at more complete data and program experience, the true switcher rate is likely much higher, by 34 percentage points, for an actual switcher rate of 45% instead of 11%.

Contrary to what has been reported recently in media reports and a 66% non-switcher rate touted by choice opponents for Iowa's ESA program, the actual non-switcher rate for the program is likely significantly lower (around 30%) when considering more complete data and program experience. Thus, the actual switcher rate may be around 70%.

The break-even switcher rate (BESR) is simply the average cost of a choice program divided by the average cost to educate ESA students in the public school system. Comparing the BESR with a choice program's switcher rate can help guide people to get a general idea about whether a program will generate net costs or fiscal benefits in the long run. If the actual switcher rate is greater than the BESR, then a program will generate net fiscal benefits. The larger the gap between funding for a choice program and public schools, the lower the BESR, and the greater the likelihood the program will generate net fiscal benefits.

The BESR for the Iowa and New Hampshire ESA programs are 47% and 26%, respectively. The actual switcher rates for these programs are likely higher than their programs' BESR and therefore indicate that these programs generate long-run net fiscal benefits for state and local taxpayers combined.

It's also likely that the high non-switcher rates implied by government data reported on Arizona's ESA program, and *promoted* by choice opponents, significantly overstates the true number of ESAs distributed to students who were already enrolled in private schools.

While stakeholders should expect switcher rates to decrease as choice programs increasingly open to students outside the public school system, it is too early to know for sure how these programs will play out for programs with broader eligibility. Universal programs are new, and there is still much to learn about them. As data become available, it will take time for researchers to sort through them. In the meantime, wisdom and patience should guide policy decisions, not rash rushes to judgment that will prevent students and families having educational options.



*Fiscal Research
& Education Center*
By EdChoice

NOTES

1. Indiana Coalition for Public Education (Not Dated). “Talking Points: Why Indiana should not create Education Scholarship Accounts (ESAs),” <https://www.indianacoalitionforpubliced.org/wp-content/uploads/2021/03/ICPE-ESA-Talking-Points.pdf>
2. Tim Walker (2024). “No Accountability’: Vouchers Wreak Havoc on States,” NEA Today, February 2, <https://www.nea.org/nea-today/all-news-articles/no-accountability-vouchers-wreak-havoc-states>
3. Kayle Hamrick (2024). “Class Conflict: Lawmakers, teachers split on merits of new school choice program,” Lagniappe, March 13, https://www.lagniappemobile.com/news/coverstory/lawmakers-teachers-split-on-merits-of-new-school-choice-program/article_45cb8d20-e0a7-11ee-9a02-d7cada514971.html
4. Iowa Department of Education (2024). “Certified enrollment for 2023-24 holds steady; 16,757 ESA participants enrolled at Iowa accredited nonpublic schools,” Press Release, January 26, <https://educate.iowa.gov/press-release/2024-01-26/certified-enrollment-2023-24-holds-steady-16757-esa-participants-enrolled-iowa-accredited-nonpublic>
5. Josh Cowen [@joshcowenMSU]. (January 26, 2024). *Oh look, the new Iowa numbers are in. ~67% of voucher users were already in private school. Only 13% were ever in a public school.* [Thumbnail with link attached] [Post]. X. <https://twitter.com/joshcowenMSU/status/1750973951092945257>
6. Arizona Department of Education (2024). “Arizona Empowerment Scholarship Account (ESA) Program: Fiscal Year 2024 Quarter 2 Report Pursuant to Arizona Revised Statutes §15-2406,” February 27, https://www.azed.gov/sites/default/files/2024/02/FINAL_ESA%20Draft_Governors%20Report%201.11.24%20copy%20secured%202.pdf
7. Center for Evaluation and Education Policy (2023). “Summary of Research on School Vouchers,” Indiana University School of Education, Policy Brief #23-2, February, <https://ceep.indiana.edu/education-policy/policy-briefs/2023/research-on-school-vouchers.pdf>
8. Martin F. Lueken (2021). The Fiscal Impact of K-12 Educational Choice: Using Random Assignment Studies of Private School Choice Programs to Infer Student Switcher Rates, *Journal of School Choice*, 15(2), pp. 170-193, <https://doi.org/10.1080/15582159.2020.1735863>
9. Row 6 in Table 1 reports switcher rate estimates based on the number of students enrolled in public school immediately before entering the ESA program (switcher rate = prior public immediately before entering ESA program / total ESAs).
10. Iowa Department of Education (2024). “Certified enrollment for 2023-24 holds steady; 16,757 ESA participants enrolled at Iowa accredited nonpublic schools,” Press Release, January 26, <https://educate.iowa.gov/press-release/2024-01-26/certified-enrollment-2023-24-holds-steady-16757-esa-participants-enrolled-iowa-accredited-nonpublic>
11. Josh Cowen [@joshcowenMSU]. (January 26, 2024). *Oh look, the new Iowa numbers are in. ~67% of voucher users were already in private school. Only 13% were ever in a public school.* [Thumbnail with link attached] [Post]. X. <https://twitter.com/joshcowenMSU/status/1750973951092945257>
12. Other STOs either do not track this information or did not respond to our request for information.
13. This assumption follows prior work by others attempting to estimate switcher rates. For instance, Ben Scafidi (2024) assumed that 90% of ESA students in Mississippi entering kindergarten would be switchers in his fiscal analysis of the program. Lueken (2020) shows that, on average, 90% of voucher students in oversubscribed programs who lost a random lottery enrolled in a public school after they lost the lottery.
14. Martin F. Lueken (2021). The Fiscal Impact of K-12 Educational Choice: Using Random Assignment Studies of Private School Choice Programs to Infer Student Switcher Rates, *Journal of School Choice*, 15(2), pp. 170-193, <https://doi.org/10.1080/15582159.2020.1735863>
15. Matt Barnum (2023). “Vouchers Helping Families Already in Private School, Early Data Show: Critics say program amounts to subsidy for better-off families, while supporters call it parent choice in action,” *Wall Street Journal*, December 3, <https://www.wsj.com/us-news/education/vouchers-helping-families-already-in-private-school-early-data-show-47ced812>; Iowa Department of Education (2024). “Certified enrollment for 2023-24 holds steady; 16,757 ESA participants enrolled at Iowa accredited nonpublic schools,” Press Release, January 26, <https://educate.iowa.gov/press-release/2024-01-26/certified-enrollment-2023-24-holds-steady-16757-esa-participants-enrolled-iowa-accredited-nonpublic>
16. Arizona Department of Education (2024). “Arizona Empowerment Scholarship Account (ESA) Program: Fiscal Year 2024 Quarter 2 Report Pursuant to Arizona Revised Statutes §15-2406,” February 27, https://www.azed.gov/sites/default/files/2024/02/FINAL_ESA%20Draft_Governors%20Report%201.11.24%20copy%20secured%202.pdf
17. Center for Evaluation and Education Policy (2023). “Summary of Research on School Vouchers,” Indiana University School of Education, Policy Brief #23-2, February, <https://ceep.indiana.edu/education-policy/policy-briefs/2023/research-on-school-vouchers.pdf>

- 18.** Corey A. DeAngelis (2018). “Is Public Schooling a Public Good? An Analysis of Schooling Externalities,” Cato Institute, <https://www.cato.org/policy-analysis/public-schooling-public-good-analysis-schooling-externalities>
- 19.** M. Danish Shakeel (2019). 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>; Leesa Foreman (2017). Educational attainment effects of public and private school choice, *Journal of School Choice*, 11(4), pp. 642-654, <https://doi.org/10.1080/15582159.2017.1395619> ; 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://doi.org/10.1080/15582159.2017.1395615>; Corey A. DeAngelis and Patrick J. Wolf (2020). Private School Choice and Character: More Evidence from Milwaukee, *The Journal of Private Enterprise*, 35(3), pp. 13-48, http://journal.apee.org/index.php/Parte3_2020_Journal_of_Private_Enterprise_Vol_35_No_3_Fall
- 20.** John Hopkins School of Education (2022). “Ashley Berner: Not all schools are the same. Think pluralism.” News, April 8, <https://education.jhu.edu/news/ashley-berner-not-all-schools-are-the-same-think-pluralism/>
- 21.** Organisation for Economic Co-operation and Development (No Date). “PISA 2022 Results,” https://www.oecd.org/pisa/OECD_2022_PISA_Results_Comparing%20countries%E2%80%99%20and%20economies%E2%80%99%20performance%20in%20mathematics.pdf