KICKSTARTING K-12 EDUCATION IN TENNESSEE: AVENUES FOR SYSTEMIC TRANSFORMATION

Corey A. DeAngelis, Ph.D.

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A POLICY STUDY OF

Political Economy Research Institute
MIDDLE TENNESSEE STATE UNIVERSITY
Kickstarting K-12 Education in Tennessee: Avenues for Systemic Transformation*

A Policy Study by the Political Economy Research Institute at MTSU

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Executive Summary

Tennessee’s K-12 education system could use a kickstart. Although the state has recently taken some steps in the right direction when it comes to education policy, Tennessee’s math and reading assessments indicated that only 36 percent of students performed at or above grade level in the 2018-19 school year. Pouring more money into an education system is unlikely to fix it without proper incentives to spend that money wisely. Data from the Tennessee Department of Education indicate that higher levels of expenditures per student are not positively associated with math or English Language Arts (ELA) performance on the state assessment.

The state could provide schools with stronger incentives to spend K-12 education dollars wisely by expanding access to public charter schools and private school choice programs. This report reviews the literature on the topic and finds that expanding access to these types of educational options could improve student outcomes while empowering families. The state could increase access to public charter schools by revising its school funding formula to allow education dollars to follow children to the schools that work best for them. Tennessee could expand access to private schools by relaxing the eligibility requirements for the state’s two educational choice programs. Making school funding based on students, rather than systems, would lead to more equity and stronger incentives for schools to meet the needs of children by providing meaningful education services.

This report finds that Tennessee’s K-12 education spending is not associated with higher student academic achievement even after controlling for several differences in demographic characteristics across districts in the 2017-18 school year. In addition, the scientific evidence suggests that increasing access to public charter schools and private school choice programs could provide substantial economic benefits associated with improvements in and educational achievement and attainment. For example, doubling the number of students in public charter schools in the state is expected to produce an additional $1.2 billion in economic benefits associated with higher lifetime earnings. Furthermore, expanding access to the state’s Education Savings Account Pilot Program is expected to produce an additional $102 million in economic benefits associated with increasing high school graduation rates.

Keywords: education policy; school choice; charter schools; economics of education; school finance; education reform

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Introduction

Tennessee’s K-12 education system could use a kickstart. Although the state has recently taken some steps in the right direction when it comes to education policy, Tennessee’s math and reading assessments indicated that only 36 percent of students performed at or above grade level in the 2018-19 school year. The Nation’s Report Card similarly indicates that less than 32 percent of eighth-grade students in Tennessee were proficient in math and reading in 2018-19 school year. Although the state scored around the national average on the eighth-grade math and reading exams, Tennessee performed worse than states such as Louisiana and Mississippi after controlling for differences in student background characteristics such as age, race/ethnicity, special needs status, English language learner status, and free and reduced-price lunch eligibility.

The latest data from the National Center for Education Statistics indicate that public schools in Tennessee spent around $10,548 per student in the 2016-17 school year. In general, Tennessee’s K-12 education spending per student has increased faster than the national average over the last few decades. Although currently spends 23 percent less than the national average, the state increased inflation-adjusted spending per student by 178 percent since 1970, whereas the U.S. increased inflation-adjusted spending per student by 150 percent since 1970. Tennessee increased inflation-adjusted spending per student by 44 percent since 1990 and by 21 percent since 2000. The U.S. increased inflation-adjusted spending per student by 38 percent since 1990 and by 24 percent since 2000. Despite the Great Recession, Tennessee has increased inflation-adjusted spending per student by around 2.5 percent since 2010, which is roughly the same as the overall increase of 2.4 percent in the U.S. In the most recent school year, Tennessee schools spent over 4 percent more per student than schools in states like Florida, Arizona, North Carolina, and Mississippi, and about the same amount as schools in Alabama. However, after controlling for differences in student populations, North Carolina ranked third in eighth grade math scores, and Florida ranked third in eighth-grade reading scores in the most recent school year. Tennessee ranked 26th in eighth-grade math and 23rd in eighth grade reading in the same year.²

The next section will examine the latest data on K-12 education spending and student outcomes in Tennessee and review the evidence linking increases in schooling expenditures to student outcomes throughout the United States. The report will then review the educational options available to families in Tennessee such as open-enrollment, public charter schools, and private school choice programs. The report will review the evidence on these policies and make recommendations for transforming the K-12 education system in the state to improve students’ outcomes while empowering their families. Next, the report will discuss how the state could improve its school funding formula to increase competitive pressures and equity at the same time. The report will then conclude with a discussion and policy recommendations.

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K-12 Education Funding and Outcomes

Pouring more money into an education system is unlikely to fix it without proper incentives to spend that money wisely. Data from the Tennessee Department of Education indicate that higher levels of expenditures per student are not positively associated with math (Figure 1) or English Language Arts (ELA) (Figure 2) performance on the TNReady assessment at the district-level. However, these figures are limited in that they do not account for differences in the relative disadvantage of students across districts. For example, although Figure 1 indicates that Williamson County performs the highest on math and ELA while spending around $1,000 less per child than the state average, the school district also serves more advantaged students than most other districts in the state. In Williamson County Schools, only 2.3 percent of the students are classified as economically disadvantaged, 9.4 percent are classified as having disabilities, and 1.4 percent are classified as having limited English proficiency. In comparison, 36.1 percent of students in the state are classified as economically disadvantaged, 13.6 percent are classified as having disabilities, and 4.6 percent are classified as having limited English proficiency.

A similar result occurs when performing ordinary least squares regression analyses that control for several differences in students across districts using data from the Tennessee Department of Education. Higher levels of funding are not associated with better math or ELA outcomes at the district-level. The main ordinary least squares regression model takes on the form:

$\text{Achievement}_i = \beta_0 + \beta_1 \text{Spending}_i + \mathbf{X}_i + \epsilon_i$

Where the dependent variable of interest, Achievement, is the percent of students in district, $i$, that scored at least “on-track” on the TNReady assessment for math or ELA in the 2017-18 school year. The independent variable of interest, Spending, is the total spending per student for each district in thousands of U.S. dollars in the same school year. Vector $\mathbf{X}$ includes controls for average daily membership, number of schools in the district, percent of students identified as African American, percent of students identified as Asian, percent of female students, percent of students identified as Hawaiian or Pacific Islander, percent of students identified as Hispanic, percent of students identified as Native American, percent of students identified as having limited English proficiency, percent of students identified as economically disadvantaged, and percent of students with disabilities. The error term is denoted by $\epsilon$. Each district-level observation is weighted by average daily membership. A statistically significant positive coefficient for $\beta_1$ would signify a positive relationship between spending and academic achievement.

As shown in Table 1, the statistically insignificant relationship between district-level education expenditures and academic achievement remains after controlling for observed differences in students between districts.

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9 The results from these analyses should be considered with caution. Lawmakers have reported concerns about the TNReady state assessment including online connectivity problems on test day. These issues could introduce measurement error which could bias estimates towards zero. For an example of criticism of the TNReady test, see https://wdef.com/2018/04/17/tennessee-lawmakers-fuming-new-assessment-test-problems/
10 This means that we cannot confidently conclude that the observed relationship is caused by something other than random chance. In other words, these data do not allow us to sufficiently conclude that there is a relationship between district-level education expenditures and academic achievement.
The relationship between spending and outcomes remains statistically insignificant when the dependent variable is replaced with its natural log; however, the fully specified model indicates that there is a marginally negative relationship between per student expenditures and the natural log of math test scores at the district-level.\footnote{This negative relationship passes a 10 percent test of marginal statistical significance; however, this 90 percent level of confidence is much lower than the conventional economics standard of a 95 percent level of confidence.} Although these correlational regression analyses should be considered with caution, this descriptive evidence from Tennessee suggests that higher spending levels are not associated with improvements in academic outcomes as measured by the state’s math or ELA assessments.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{District-Level Spending and Math Proficiency in Tennessee (2017-18)}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{District-Level Spending and ELA Proficiency in Tennessee (2017-18)}
\end{figure}
### Table 1: District-Level Spending and Academic Outcomes in Tennessee (2017-18)

<table>
<thead>
<tr>
<th></th>
<th>Math On-Track (%)</th>
<th>Math On-Track (%)</th>
<th>Ln Math On-Track (%)</th>
<th>ELA On-Track (%)</th>
<th>ELA On-Track (%)</th>
<th>Ln ELA On-Track (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Pupil Spending ($1,000’s)</td>
<td>-0.809</td>
<td>-0.764</td>
<td>-0.044+</td>
<td>0.465</td>
<td>0.160</td>
<td>-0.022</td>
</tr>
<tr>
<td></td>
<td>(0.571)</td>
<td>(0.427)</td>
<td>(0.083)</td>
<td>(0.701)</td>
<td>(0.786)</td>
<td>(0.274)</td>
</tr>
<tr>
<td>Average Daily Membership</td>
<td>0.001*</td>
<td>-0.000*</td>
<td>-0.000*</td>
<td>0.001*</td>
<td>-0.000</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.014)</td>
<td>(0.021)</td>
<td>(0.010)</td>
<td>(0.260)</td>
<td>(0.192)</td>
</tr>
<tr>
<td>Number of Schools</td>
<td>-0.524*</td>
<td>0.203**</td>
<td>0.005**</td>
<td>-0.537**</td>
<td>0.111</td>
<td>0.003+</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.009)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.148)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Economic Dis. (%)</td>
<td>-0.460***</td>
<td>-0.012***</td>
<td>-0.309***</td>
<td>-0.010***</td>
<td>-0.010***</td>
<td>-0.010***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>LEP (%)</td>
<td>-1.140*</td>
<td>-0.025</td>
<td>-0.897**</td>
<td>-0.015</td>
<td>-0.015</td>
<td>-0.015</td>
</tr>
<tr>
<td></td>
<td>(0.038)</td>
<td>(0.118)</td>
<td>(0.004)</td>
<td>(0.122)</td>
<td>(0.122)</td>
<td>(0.122)</td>
</tr>
<tr>
<td>SWD (%)</td>
<td>-0.843+</td>
<td>-0.013</td>
<td>-0.655*</td>
<td>-0.007</td>
<td>-0.007</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.056)</td>
<td>(0.318)</td>
<td>(0.016)</td>
<td>(0.424)</td>
<td>(0.424)</td>
<td>(0.424)</td>
</tr>
<tr>
<td>Female (%)</td>
<td>0.017</td>
<td>0.019</td>
<td>0.325</td>
<td>0.034+</td>
<td>0.034+</td>
<td>0.034+</td>
</tr>
<tr>
<td></td>
<td>(0.983)</td>
<td>(0.433)</td>
<td>(0.521)</td>
<td>(0.084)</td>
<td>(0.084)</td>
<td>(0.084)</td>
</tr>
<tr>
<td>African American (%)</td>
<td>-0.125*</td>
<td>-0.006**</td>
<td>-0.152***</td>
<td>-0.006***</td>
<td>-0.006***</td>
<td>-0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.002)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Hispanic (%)</td>
<td>0.177</td>
<td>0.007</td>
<td>0.073</td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.564)</td>
<td>(0.469)</td>
<td>(0.656)</td>
<td>(0.687)</td>
<td>(0.687)</td>
<td>(0.687)</td>
</tr>
<tr>
<td>Asian (%)</td>
<td>1.904*</td>
<td>0.037*</td>
<td>2.139***</td>
<td>0.042***</td>
<td>0.042***</td>
<td>0.042***</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.026)</td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Hawaiian / Pacific (%)</td>
<td>5.549+</td>
<td>0.149</td>
<td>6.612**</td>
<td>0.192**</td>
<td>0.192**</td>
<td>0.192**</td>
</tr>
<tr>
<td></td>
<td>(0.072)</td>
<td>(0.103)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Native American (%)</td>
<td>0.455</td>
<td>0.077</td>
<td>-0.082</td>
<td>0.040</td>
<td>0.040</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.848)</td>
<td>(0.192)</td>
<td>(0.958)</td>
<td>(0.350)</td>
<td>(0.350)</td>
<td>(0.350)</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.4236</td>
<td>0.8063</td>
<td>0.7849</td>
<td>0.4500</td>
<td>0.8859</td>
<td>0.8602</td>
</tr>
<tr>
<td>N</td>
<td>141</td>
<td>141</td>
<td>141</td>
<td>141</td>
<td>141</td>
<td>141</td>
</tr>
</tbody>
</table>

Notes: P-values in parentheses. + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. Average marginal effects are reported. Each observation is weighted by average daily membership. “SWD” is “Students with Disabilities.” “LEP” is “Limited English Proficiency.” “ELA” is “English Language Arts.” Each variable is at the district-level. The natural log of the dependent variable is used in columns 3 and 6. Four school districts representing 77 students were dropped because of missing data.
The general lack of an observed relationship between K-12 schooling expenditures and academic outcomes is not unique to Tennessee. Hanushek (1997) performed a review of nearly 400 studies on the subject and concluded that “there is not a strong or consistent relationship between student performance and school resources.” In particular, Hanushek (1997) found that about 66 percent of the reviewed studies failed to detect statistically significant relationships between education spending and outcomes, whereas 27 percent of the studies detected positive relationships and seven percent detected negative relationships.

Although a more recent review claims to find that education spending improves outcomes and that “the question of whether money matters is essentially settled,” the analysis is limited to 33 studies, a quarter of which find statistically insignificant results (Jackson, 2018). Additionally, although Jackson (2018) claims that these more recent studies use methods that “allow for much more credible causal claims” than the evidence cited by Hanushek (1997), the more recent analyses could actually introduce more bias than they eliminate (Eden & DeAngelis, 2020; Greene, 2020).

As Hanushek (2015) said, “it is always important to recognize that none of this discussion suggests that money never matters. Or that money cannot matter. It just says that the outcomes observed over the past half century—no matter how massaged—do not suggest that just throwing money at schools is likely to be a policy that solves the significant U.S. schooling problems seen in the levels and distribution of outcomes. We really cannot get around the necessity of focusing on how money is spent on schools.” Education researchers who contend that more spending improves student outcomes also concede that “we are very careful to highlight that how money is spent matters” (Jackson, Johnson, & Persico, 2015), and that “money must be spent wisely to yield benefits” (Baker, 2017). These claims are reasonable. Spending more money on K-12 schooling should lead to improvements as long as there are incentives to spend money efficiently. The problem is that district-run public schools in Tennessee currently have weak incentives to spend money wisely because of residential assignments alongside compulsory property taxes.

**Monopoly Power in Tennessee’s K-12 Education System**

If families are dissatisfied with the education services provided by their children’s residentially assigned schools, they generally only have a few highly costly or ineffective options. They could move to a residence that is assigned to a higher-quality district-run public school, pay for a private school out of pocket while still paying for the residentially assigned school through property taxes, incur the costs of homeschooling while still paying for the residentially assigned school through property taxes, advocate on behalf of their child to their school’s teachers and principals, or vote for school board members that implement policies that work for their individual children. Because the transaction costs associated with opting out of ineffective residentially assigned schools are high, district-run schools hold substantial monopoly power and therefore do not have particularly strong incentives to cater to the needs of students and their families (Hanushek et al., 2007).

The lack of competitive pressures might partially explain why Tennessee’s inflation-adjusted average teacher salaries dropped by 2 percent between

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**Without strong incentives to spend money on satisfying the needs of students in the classroom, increases in K-12 education spending might go towards administrative bloat, surges in non-teaching staff, and non-classroom expenses.**
1992 and 2014 at the same time inflation-adjusted education expenditures per student increased by 41 percent (Scafidi, 2017). Over the same period, the number of non-teaching staff increased by 49 percent, whereas the number of students increased by only 19 percent (Scafidi, 2017). Without strong incentives to spend money on satisfying the needs of students in the classroom, increases in K-12 education spending might go towards administrative bloat, surges in non-teaching staff, and non-classroom expenses. Competitive pressures in the education system could incentivize district-run public schools to allocate resources towards students in the classroom and raise teacher salaries (DeAngelis & Shuls, 2018; Hensvik, 2012; Hoxby, 1994; Jackson, 2012; Vedder & Hall, 2000).

Private school choice programs and public charter schools introduce competitive pressures into the K-12 education system by giving families alternatives to their residentially assigned public schools (Chubb & Moe, 1988; Chubb & Moe, 1990; DeAngelis, 2018; Friedman, 1955; Hoxby, 2007). Schools must cater to the needs of students if their families have the option to take their children—and their education funding—elsewhere. Access to public charter schools and private schools could also lead to better outcomes by improving the match between educators and students (DeAngelis & Holmes Erickson, 2018). Public charter schools and private schools might also have a competitive advantage over district-run public schools because of additional autonomy and fewer government regulations (Shakeel & DeAngelis, 2017). However, only around 3 percent of the school-aged population is enrolled in a public charter school in Tennessee, whereas around double that proportion of students are enrolled in public charter schools nationwide (Catt, 2019). Less than one-tenth of 1 percent of the school-aged population is enrolled in a private school choice program in Tennessee (Catt, 2019). Expanding access to public charter schools and private school choice programs could introduce the competitive pressures necessary to kickstart Tennessee's K-12 education system and provide substantial economic benefits in the short and long run.

**Public School Choice**

According to the U.S. Department of Education and the Tennessee Department of Education, charter schools are public schools of choice, meaning that students are not residentially assigned to them. In Tennessee and most other states, charter schools are public schools that are operated by independent not-for-profit governing bodies. Tennessee's public charter schools are prohibited from charging tuition, having religious affiliations, and using selective admissions processes. Public charter schools additionally must comply with federal safety, special education, and civil rights laws. However, Tennessee generally allows charter schools to have more flexibility in their operations than district-run schools. Tennessee enacted a charter school law in 2002, and there are currently 112 public charter schools in the state serving about 42,900 students, or around 3 percent of the school-aged population.

The evidence generally suggests that expanding access to public charter schools would benefit students in Tennessee. The latest and most comprehensive systematic review and meta-analysis of 38 rigorous studies...
on the subject finds that access to public charter schools in the United States increases math achievement by 3.3 percent of a standard deviation and increases reading achievement by 2 percent of a standard deviation (Betts & Tang, 2019). According to Stanford University’s Center for Research on Education Outcomes (2015), these positive effects translate to about 24 additional days of learning in math and about 14 additional days of learning in reading. In their review, Betts and Tang (2019) found nine random assignment studies linking public charter schools to student achievement. Those nine studies generally suggest that access to public charter schools increases student academic achievement (Abdulkadiroğlu et al., 2011; Angrist et al., 2012; Angrist et al., 2016; Dobbie & Fryer, 2011; Gleason et al., 2010; Hoxby, Murarka, & Kang, 2009; Hoxby & Rockoff, 2004; McClure et al., 2005; Tuttle et al., 2013). For example, Tuttle et al. (2013) found that winning a lottery to attend a Knowledge is Power Program (KIPP) charter school increased math achievement by 36 percent of a standard deviation after two years of attendance. Two other recent random assignment studies that were not included in the Betts and Tang (2019) meta-analysis also found that winning a lottery to attend public charter schools increased academic achievement in Michigan (Dynarski et al., 2018) and Massachusetts (Cohodes, Setren, & Walters, 2019). Zimmer et al. (2019) also recently summarized the evidence on public charter schools in the United States and similarly concluded that “lottery-based analyses have generally shown strong positive effects on student achievement of charter school admission and enrollment.”

These types of academic benefits could translate to economic benefits as well. For example, Hanushek (2011) observed that a one standard deviation increase in student achievement is associated with a 13 percent increase in lifetime earnings. Following the methodology from previous evaluations (e.g. DeAngelis, 2018; DeAngelis et al., 2019; DeAngelis & DeGrow, 2018; DeAngelis & Flanders, 2018; Flanders & DeAngelis, 2018; Wolf et al., 2014), because 70 percent of learning is retained from one year to the next, it is possible to forecast the potential effects of expanding access to public charter schools in Tennessee on lifetime earnings. Using the more cautious estimate of public charter schools’ effects on student achievement reported by Betts and Tang (2019) (a 2 percent of a standard deviation positive effect on reading scores), the following two equations could be used to forecast the possible effects of expanding access to public charter schools on lifetime earnings in Tennessee:

\[
\text{Avg Lifetime Earnings} \times [1 + (0.02) \times (0.13/\text{SD}) \times (0.70)]^{13} = \text{Expected Lifetime Earnings} \quad (1)
\]

\[
\text{Expected Lifetime Earnings} - \text{Avg Lifetime Earnings} = \text{Gain in Lifetime Earnings} \quad (2)
\]

To calculate the net present value of lifetime earnings, each student is assumed to work for 46 years, or from the age of 25 to the age of 70. Using a discount rate of 3 percent, and the average wage in Tennessee in 2019 ($45,650) from the U.S. Department of Labor Bureau of Labor Statistics, the net present value of the average lifetime earnings in Tennessee is $1,135,921. Because the vast majority of students in Tennessee attend district-run public schools today, this number is the best approximation available for the expected lifetime earnings.

16 Chetty, Friedman, and Rockoff (2014) found a similar positive relationship between effects on student achievement and effects on earnings.

of individuals educated in district-run public schools in the state. Plugging this information into equation (1) produces expected lifetime earnings of $1,163,093 for students attending public charter schools for their entire K-12 education. Plugging this information into equation (2) produces an expected gain in lifetime earnings of $27,171 for each child attending public charter schools in the state.

\[
1,135,921 \times [1 + (0.02) \times (0.13/\text{SD}) \times (0.70)]^{13} = 1,163,093 \quad (1)
\]

\[
1,163,093 - 1,135,921 = 27,171 \quad (2)
\]

Based on these calculations, expanding access to public charter schools could provide substantial benefits to students and the economy. If Tennessee increased access to public charter schools so that participation rates mirrored the nation overall, the state would essentially double the number of students in public charter schools from 42,900 to 85,800. That expansion of access to public charter schools for 42,900 students would result in an expected benefit of an additional $1.2 billion in lifetime earnings statewide (42,900 students times $27,171 per student). Using the less cautious result from Betts and Tang (2019)—a 3.3 percent of a standard deviation increase in academic achievement—provides an estimated economic benefit associated with charter school expansion of around $1.9 billion in increased lifetime earnings statewide (42,900 students times $45,153 per student). This larger estimate is calculated by plugging 3.3 percent into equation (1) to find the expected lifetime earnings for each student attending a public charter school from kindergarten through 12th grade ($1,181,074), which is about $45,153 higher than the expected lifetime earnings for students educated in district-run public schools in the state.

These estimates should be weighed with considerable caution, however, because effects on standardized test scores might not be valid proxies for effects on lifetime earnings. Although studies such as Hanushek (2011) and Chetty, Friedman, Rockoff (2014) suggest that higher standardized test scores tend to be associated with higher earnings, two recent reviews of the school choice literature suggest that schools’ effects on standardized test scores often do not successfully predict their effects on long-term outcomes (DeAngelis, 2019; Wolf, Hitt, & McShane, 2018).

Although effects on standardized test scores are not always strong predictors of effects on long-term outcomes, the preponderance of the evidence suggests that access to public charter schools also improves other outcomes such as educational attainment. Foreman (2017) reviewed the evidence and found six rigorous evaluations on the effects of public charter schools on educational attainment (Angrist et al., 2016; Davis & Heller, 2019; Dobbie & Fryer, 2015; Dobbie & Fryer, 2016; Furgeson et al., 2012; Sass et al., 2016). Each of the six studies found that access to public charter schools improved at least one educational attainment outcome, such as the likelihood of high school graduation, college enrollment, or college graduation. Three of the six studies used random assignment methodology, and each of these evaluations found statistically significant positive effects of public charter schools on educational attainment outcomes (Angrist et al., 2016; Davis & Heller, 2019; Dobbie & Fryer, 2015). For example, Davis and Heller (2019) found that winning a lottery to attend a public charter school in Chicago increased the likelihood of attending college by 10 percentage points.

Betts and Tang (2014) also reviewed the literature on public charter schools and outcomes such as educational attainment and similarly concluded that “overall the studies appear to find positive effects of charter schools on non-achievement outcomes.” Only three other rigorous studies on this subject have been published since the Betts and Tang (2014) and Foreman (2017) reviews. Two of these three studies found statistically significant
positive effects on college enrollment (Coen, Nichols-Barrer, & Gleason, 2019; Gwynne & Moore, 2017), and one study found no effects overall (Place & Gleason, 2019). For example, Coen, Nichols-Barrer, and Gleason (2019) found that winning a KIPP charter school lottery increased enrollment in four-year colleges by 6.9 percentage points. Improvements in educational attainment could produce economic benefits in the form of increases in tax revenues and decreases in social costs associated with crime, healthcare, and welfare (Levin, 2009).


The studies linking access to public charter schools to nonacademic outcomes such as reductions in discipline, crime, and school climate problems also tend to lean positive. Families value safety when choosing schools for their children, so public charter schools are incentivized to promote school safety and culture (Bedrick & Burke, 2018; Holmes Erickson, 2017; Kelly & Scafidi, 2013). Schwalbach and DeAngelis (2020) reviewed the evidence on the topic and found nine studies linking access to public charter schools to safety as reported by students, parents, and principals. Eight of the nine studies indicated school safety advantages overall for public charter schools relative to nearby district-run public schools (Barrett, 2003; DeAngelis, 2020a; DeAngelis, 2020c; DeAngelis & Lueken, 2020; Hamlin, 2017; Shakeel & DeAngelis, 2018; Tuttle et al., 2015). One study did not find evidence of differences in school safety between sectors (Gleason et al., 2010). None of the eight studies indicated school safety advantages for district-run public schools overall.

Public school choice has been shown to lead to reductions in crime (Deming, 2011; Dills & Hernández-Julián, 2011; Dobbie & Fryer, 2015; McEachin et al., 2020). Deming (2011) found that winning a lottery to attend a preferred public school reduced crime by about 50 percent for a high-risk group of male students in North Carolina. McEachin et al. (2020) found that access to public charter schools in North Carolina was associated with a 36 percent reduction in the likelihood of committing a felony and a 38 percent reduction in the likelihood of committing a misdemeanor. Dobbie and Fryer (2015) similarly found that winning a lottery to attend a public charter school in New York City completely eliminated the likelihood of incarceration for male students (a 100 percent reduction) and reduced the likelihood of teen pregnancy by 59 percent for female students.

Wong et al. (2014) found that winning a lottery to attend a public charter school in Los Angeles reduced risky behaviors such as binge drinking, substance use at school, and gang participation for low-income minority students. Similarly, Dudovitz et al. (2018) found that winning a lottery to attend a public charter school in Los Angeles reduced marijuana misuse, truancy, and disorder. Imberman (2011) also found that public charter schools improved student discipline and attendance.

**Expanding Access to Public School Choice in Tennessee**

Only around three percent of the school-aged population is enrolled in a public charter school in Tennessee. However, there are specific reforms the state can implement to expand access to this type of educational option. Although state law requires a local board of education to allocate per student state and local funds to charter schools in Tennessee, recent analyses have revealed substantial funding inequities between sectors. A 2014 national study of funding inequities between school sectors found that public charter schools in Tennessee received around $1,496 less, or about 16.5 percent less, than district-run schools in the state on a per student basis (Batdorff et al., 2014). More recently, the latest study of funding inequities between school sectors found that public charter schools in Shelby County, Tennessee received about $2,273 less, or about 20 percent less, than
district-run schools in the same location (DeAngelis et al., 2018). Allowing 100 percent of the funding to follow the child to whatever school works best for them would equalize funding between sectors, promote equity, and give individual schools stronger financial incentives to cater to the needs of students. Equalizing funding between sectors by providing equitable access to capital funding and facilities would also provide educational entrepreneurs with stronger incentives to open and expand public charter schools in the state, increasing the supply of educational options available to families. Tennessee could provide additional incentives to increase educational options by allowing for-profit entities to operate public charter schools and by allowing non-profit charter governing bodies to contract with for-profit entities to operate or manage schools.¹⁸

Inequitable funding is not the only policy restricting the supply of public charter schools available to families in the state. Tennessee requires public charter schools to be authorized by local school boards, the Achievement School District, or the state board of education.¹⁹ Requiring that public charter schools are authorized by their competition—public school districts—is a clear conflict of interest that could limit high-quality educational opportunities for students. In 2019, Tennessee amended its charter school law to allow public charter schools to appeal to the Tennessee Public Charter Schools Commission—appointed by the governor and approved by lawmakers—when they are denied authorization by a local school board.²⁰ Although this amendment was a step towards giving public charter schools more avenues for authorization, it’s still possible for members of the commission to protect local school districts from competition. The state could increase access to public charter schools by allowing additional authorizing entities such as colleges, universities, and mayors.

Tennessee also passed legislation in 2013 that allows students to request transfers to district-run public schools to which they are not residentially assigned.²² The transfers between district-run public schools must be approved by the receiving board of education.²³ However, because only 5 percent of K-12 education funding is dispersed to schools on the basis of students in Tennessee, receiving districts currently have weak financial incentives to accept students transferring from other school districts.²⁴ Increasing the proportion of education funding dispersed on the basis of students would give receiving districts stronger incentives to approve transfer requests, which would also increase incentives for schools to retain students by providing meaningful educational services.

All brick-and-mortar public schools closed in Tennessee in an attempt to mitigate the spread of COVID-19.²⁵ In a matter of weeks, nearly all public school students in the state transitioned to some form of homeschooling.

¹⁸ The only random assignment study linking for-profit charter schools to student outcomes found positive effects on math achievement (Dynarski et al., 2018).
or virtual schooling. Families in the state would have been able to better adapt to these closures if Tennessee’s public charter school law allowed virtual charter schools to exist. Tennessee’s charter school law prohibits families from choosing virtual charter schools, whereas 21 other states—including Georgia, Florida, Louisiana, Kansas, and Arizona—explicitly allow families to have these educational options.26

**Private School Choice**

Private school choice programs allow education dollars to follow eligible children to private schools of their families’ choosing. The preponderance of the rigorous evidence on the topic suggests these programs improve test scores, educational attainment, reports of safety, and other nonacademic outcomes. Ten of the 17 random assignment studies on the topic find that winning a lottery to use a private school choice program has statistically significant positive effects on math or reading test scores overall or for student subgroups (Barnard et al., 2003; Cowen, 2008; Greene, 2000; Greene et al., 1999; Howell et al., 2002 (three locations); Jin et al., 2010; Rouse, 1998; Wolf et al., 2013).27 Only two of the evaluations—both of the highly regulated Louisiana Scholarship Program—find negative effects on test scores overall or for subgroups of students (Abdulkadiroğlu, Pathak, & Walters, 2018; Mills & Wolf, 2019). One evaluation finds mixed results depending on the subgroup of students (Lamarche, 2008), and four of the studies do not detect statistically significant effects on test scores (Bittle et al., 2013; Bettinger & Slonim, 2006; Krueger & Zhu, 2004; Webber et al., 2019). It’s worth noting, however, that studies finding no statistically significant differences in test scores suggest a positive return on taxpayer investment because vouchers are generally funded at substantially lower amounts per student than district-run schools. For example, the latest evaluation of the D.C. Opportunity Scholarship Program found that students using vouchers to attend private schools achieved the same math and reading test score results as their peers in public schools for less than a third of the cost (Webber et al., 2019). The latest data indicate that D.C. public schools spend $31,280 per child,28 on average, whereas the average private school voucher amount was only $9,531 in the 2018-19 school year.29

The research on the competitive effects of private school choice programs on outcomes in public schools is generally positive. Egalite (2013) found that 20 of 21 studies on this topic showed that private school choice competition improved outcomes in nearby public schools. EdChoice (2020) more recently found that 25 of the 27 existing studies on the subject indicated that competition from private school choice improved outcomes for students who remained in nearby public schools (e.g. Chakrabarti, 2008; Chakrabarti, 2013; Egalite & Mills, 2019; Figlio & Hart, 2014; Figlio & Rouse, 2006; Rouse et al., 2013). Jabbar et al. (2019) performed a systematic review and meta-analysis on this body of research and similarly “found small positive effects of competition on student achievement.” Their results also indicated private schools had larger positive

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27 These types of evaluations are the “gold standard” of research because, given a large enough sample size and effective random assignment, we can be fairly confident that the only difference between the group of students attending private schools and the group of students attending public schools is random chance. Put differently, we can be fairly confident that the difference in observed average outcomes between the two groups is caused by access to the private school choice program rather than student and family background characteristics such as household income and parental engagement.


competitive effects on district-run public schools than public charter schools had on district-run public schools. More recently, Figlio, Hart, and Karbownik (2020) found that expansion of private school choice in Florida was associated with improvements in academic and behavioral outcomes for children who remained in nearby public schools.

The evidence also leans positive for outcomes other than test scores such as educational attainment. Foreman (2017) reviewed the rigorous evidence on the subject and found five studies indicating that access to private school choice programs improves at least one educational attainment outcomes overall or for student subgroups. More recently, DeAngelis and Wolf (2019b) reviewed this literature and found eight rigorous studies on the topic. Six of the eight evaluations found that access to private school choice programs improved educational attainment overall or for student subgroups (Cheng, Chingos, & Peterson, 2019; Chingos, Monarrez, & Kuehn, 2019; Chingos & Peterson, 2015; Cowen et al., 2013; Wolf et al., 2013; Wolf, Witte, & Kisida, 2019). Two of the evaluations did not detect statistically significant effects of private school choice on educational attainment (Chingos, 2018; Holmes Erickson, Mills, & Wolf, 2019). None of the studies on the topic found negative effects. EdChoice (2020) reviewed the evidence on the subject and similarly found that four out of six studies that met their inclusion criteria indicated that access to private school choice programs improved educational attainment. None of the six studies found negative effects. For example, Wolf et al. (2013) found that winning a lottery to use a private school choice program in D.C. increased the likelihood of graduating from high school by 21 percentage points. Cowen et al. (2013) similarly found that students using the Milwaukee Parental Choice Program were about 4 percentage points more likely to graduate high school than their matched peers in nearby public schools.

Such improvements in educational attainment could produce substantial economic benefits for the state by through increases in productivity and taxpayer revenues and decreases in social costs associated with taxpayer-funded healthcare, welfare, and crime. Levin (2009) estimated that the present value of economic benefits associated with an additional high school graduate was around $209,100 in 2009 dollars, which is about $254,700 in inflation-adjusted 2020 dollars. The cautious estimates from Cowen et al. (2013) and Levin (2009) can be combined with the number of students accessing private school choice programs in the state to forecast economic benefits. Equations three and four show the forecasted economic benefits resulting from 5,000 students (the current cap set for the state’s Education Savings Account Pilot Program) using an education savings account program in Tennessee.

\[
5,000 \text{ students} \times 0.04 = 200 \text{ additional graduates} \quad (3)
\]

\[
200 \text{ additional graduates} \times $254,700 = $51 \text{ million in economic benefits} \quad (4)
\]

Equation three shows that a four-percentage point increase in high school graduation rates would be expected to produce 200 additional high school graduates. Equation four shows that 200 additional high school graduates would be expected to produce about $51 million in additional economic benefits over their lifetimes in terms of higher productivity and tax revenues and lower social costs associated with taxpayer-funded healthcare, welfare, and crime. Doubling the cap to 10,000 students would double the expected number of additional graduates to 400 and the expected increase in economic benefits to around $102 million.
Access to private school choice programs is also generally associated with improved civic outcomes such as political participation, political knowledge, voluntarism, and tolerance of others (DeAngelis, 2017; DeAngelis & Wolf, 2019b; EdChoice, 2020; Wolf, 2007). Wolf (2007) reviewed 59 findings from 21 empirical studies linking public and private school choice to civic outcomes in the United States. Wolf (2007) found that 56 of 59 estimates showed that school choice either improved civic outcomes (33 results) or had no statistically significant effects (23 results). Only 3 of the 59 results suggested that access to school choice harmed reports of voluntarism, patriotism, and political tolerance. DeAngelis (2017) limited the review to more rigorous studies and found 11 evaluations linking private school choice programs to civic outcomes in the United States (DeAngelis, 2017). The majority of the studies found statistically significant positive effects of access to private school choice on civic outcomes. None of the 11 studies found statistically significant negative effects overall. More recently, DeAngelis and Wolf (2019b) found 12 studies on the topic similarly suggesting that private school choice generally had positive effects, or no effects, on civic outcomes.

Schwalbach and DeAngelis (2020) summarized the evidence linking access to private schools to safety as reported by students, parents, and principals from eleven studies. Six of the studies included results for private schools participating in school choice programs and five included results for private schooling in general. Each of the 11 studies indicated that access to private schools was associated with higher levels of safety as reported by students, parents, or principals. None of the 11 studies found school safety advantages for district-run public schools relative to private schools overall. For example, Webber et al. (2019) found that winning a lottery to use a voucher to attend a private school in D.C. increased the likelihood of students reporting being in a “very safe” school by 34 percent.

Access to private school choice programs generally leads to other social benefits as well. Because residentially assigned schools are already segregated by neighborhood, allowing low-income families to access private school choice programs generally leads to more integration (EdChoice, 2020; Swanson, 2017). Data from Memphis, Tennessee, for example, show that district-run public schools have been highly segregated by race over the last five decades. Six of the seven studies on the topic indicate that private school choice programs in the U.S. lead to more racially integrated schools (e.g. Egalite, Mills & Wolf, 2017; Greene & Winters, 2006; Greene, Mills, & Buck, 2010). A limited body of evidence also suggests that access to private school choice could improve mental health (DeAngelis & Dills, 2018) and reduce adult criminal activity and paternity suits (DeAngelis & Wolf, 2019a; DeAngelis & Wolf, 2020). EdChoice (2020) also found that 49 of 55 studies on the topic indicate that private school choice programs save taxpayer money (e.g. Lueken, 2018; Spalding, 2014; Trivitt & DeAngelis, 2020; Wolf & McShane, 2013), whereas only two studies have found the opposite. This is because private school choice programs are generally funded at lower amounts per student than district-run public schools, and because the vast majority of students using private school choice programs would have likely attended public schools without access to the programs, as summarized by Lueken (2020).

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Expanding Access to Private School Choice in Tennessee

Tennessee currently has two private school choice programs available to families. The first school choice program in the state—the Individualized Education Account Program (IEA)—launched in 2016. The funding can be used for government-approved educational expenses such as private school tuition, private tutoring, textbooks, and learning therapies. The program limits eligibility to students with Individualized Education Plans (IEPs) and those that have been diagnosed with one of the following: autism, deaf-blindness, a hearing impairment, an intellectual disability, an orthopedic impairment, a traumatic brain injury, developmental delay, visual impairment, or multiple disabilities. Students must additionally have either (1) been enrolled in the public school in the state during the previous school year, (2) be attending a public school in the state for the first time, or (3) received an Individualized Education Account in the previous year. Because of these restrictions, only about 2 percent of students in Tennessee are eligible for the program, and only 137 students used the program in the 2018-19 school year. The average saving account amount was $5,830 in the 2018-19 school year, or about 55 percent of the spending in public schools.

Tennessee also enacted the Education Savings Account Pilot Program in 2019, which was expected to launch by the 2021-22 school year for students in Davidson and Shelby Counties. However, a Davidson County judge recently ruled that the program was unconstitutional because it only applied to two counties in the state—Davidson and Shelby. If the program overcomes the state’s constitutional challenge, it would be available to students from families earning less than 200 percent of the income eligibility level for free lunch in the National School Lunch Program, which is about $66,950 for a family of four in 2019-20. Students would also be required to have been enrolled in a public school in the prior school year or be newly eligible to attend a public school in the state to be eligible for the program. About 60 percent of families in Davidson and Shelby Counties are eligible based on the income criterion. However, the pilot program is capped at 5,000 students in Shelby County or Metro Nashville, or about one-half of one percent of the number of public school students in the state. The maximum voucher value was set at $7,300, or about 69 percent of the amount spent per student in the state’s public schools.

The state could provide more educational opportunities to more students by lifting the pilot program’s cap of 5,000 students. The program currently allows the cap to grow by 2,500 students the following year—until it reaches 15,000 students—if applications exceed 75 percent of the current year’s cap. The maximum number of students allowed—15,000—is only about 1.5 percent of the number of students in public schools in the state. This maximum should be increased substantially or entirely eliminated so that every eligible child will have the opportunity to attend a private school that works for them. The state should consider further expanding the program past its current geographic limitations so that families outside of Memphis and Nashville can also have access to more educational options. Expanding the program statewide would also eliminate the constitutional

concern regarding the “home rule,” since the program would no longer be targeted to specific geographic locations within the state.

Instead of having an income cutoff at 200 percent of the income eligibility level for free lunch in the National School Lunch Program, Tennessee could make the program available to all families in the state and use a sliding scale funding mechanism where lower-income families receive more education dollars for their children. The state could also eliminate the requirement for students to switch from public to private schools. The requirement increases the likelihood of the program creating taxpayer savings; however, it is arguably unfair for a low-income family to be denied a voucher the next school year just because they figured out a way to afford private school tuition for their child out-of-pocket in the current school year.

One way to alleviate the concern about taxpayer costs while simultaneously eliminating the switching requirement is to weight the voucher lottery to guarantee that a certain proportion of students who are awarded a voucher switch from the public school system.

Tennessee could also improve the pilot program by reducing regulatory burdens. The program currently requires private schools accepting students using the program to administer the state’s standardized test. The evidence on the topic suggests that the state standardized testing requirement reduces the quantity and quality of the private schools that choose to participate in choice programs (DeAngelis, 2020b; DeAngelis, Burke, & Wolf, 2019; DeAngelis, Burke, & Wolf, 2020; Sude, DeAngelis, & Wolf, 2018), which means fewer and less-meaningful educational options for families.35 Some evidence also suggests that onerous program regulations can homogenize the education sector by making private schools operate like the district-run schools that students are leaving (DeAngelis & Burke, 2017; DeAngelis & Burke, 2019). Tennessee should consider eliminating the top-down state testing requirement and instead allow families to hold schools accountable from the bottom-up. Tennessee could also allow private schools to administer a nationally norm-referenced standardized test of their choosing instead of requiring all schools to administer the state test.

Although it is called the “Education Savings Account Pilot Program,” the program currently only allows families to use the funding for supplemental services if they enroll their children in private schools. Tennessee could allow for more customization if the state amends the program to allow families to choose various educational services including private schooling. Because the COVID-19 pandemic allowed families to get a taste of homeschooling in 2020, some parents may wish to continue educating their children at home after brick-and-mortar schools reopen.36 The state should consider making continued homeschooling economically feasible for low-income families by allowing them to use program funds to cover homeschooling expenses. Although the evidence on the subject is limited, homeschool students generally fare better academically and socially than their peers in district-run public schools (Burke, 2017; Hamlin, 2019; Medlin, 2013; Ray, 2017).

School Funding Formula

Tennessee should overhaul its resource-based K-12 education funding formula. The state determines the cost of providing educational services in each district based on the costs of resources such as salaries, capital, and curriculums. Tennessee is one of the few states that use this antiquated approach, and the funding formula is very complex and has little transparency. Additionally, although school districts have some flexibility, this approach tends to be more restrictive and implies that resources should be structured in a certain way. In fact, according to Georgetown University’s Edunomics Lab, because Tennessee uses a top-down resource-based allocation system, only about 5 percent of state and local education funding is disbursed on the basis of individual students. In contrast, over 50 percent of K-12 education funding is based on student enrollment in states like Florida, Texas, California, and Missouri.

Tennessee’s 5 percent of education funding disbursement being based on individual students means that district-run public schools arguably benefit financially when they lose students to private or charter schools. District-run public schools are able to keep a large portion of a student’s funding whenever the child goes to another school. In other words, district-run schools end up with more funding per student when they lose students to their competitors. Imagine if Whole Foods were able to keep a large portion of a family’s food stamp funding after they decided to start shopping at Trader Joe’s. That would be a fantastic deal for Whole Foods, but not so much for the taxpayer if that meant subsidizing two grocery stores when only one actually provided goods and services to the family. Similarly, it would be nonsensical to purport that private school choice competition is “draining funding” from district-run public schools in Tennessee; on the contrary, many of the public school districts are currently getting a fantastic deal financially whenever they lose students to competition. Of course, the public school districts that lose students would financially benefit to a lesser degree if Tennessee’s school funding formula were to be based more on student enrollments.

Because losing students to competition is arguably financially beneficial on a per pupil basis for some public school districts, the current school funding formula greatly reduces the incentives to convince families to keep their children in district-run public schools. The state could increase these competitive pressures by increasing the proportion of dollars that are allocated on the basis of students. Increasing this proportion would increase competitive pressures for schools to improve and would increase the likelihood that the state’s school choice programs would save taxpayer money. This would also give public school districts stronger incentives to accept students transferring from other public schools.

Tennessee should move away from its outdated resource-based funding formula by allocating dollars based on students using a Weighted Student Funding formula (Barnard, 2019). District-run schools could receive

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education funding the same way school districts receive funding – on a per-student basis. The per-student funding amount could be weighted by the individual characteristics of each student, such as economic disadvantage, special education status, and English language learner status. The state could also equalize per-student funding between sectors by reforming how the formula employs local dollars—which would increase funding equity and competitive pressures at the same time (Smith, 2019). The largest school district in the state—Metro Nashville Public School District—implemented a more student-centered funding approach in the 2015-16 school year. The rest of the state should follow its lead for more equity, transparency, and stronger incentives to serve students well.

**Federal Education Funding**

Similar to other states, Tennessee’s K-12 education funding comes from federal, state, and local sources. The latest data from the 2017-18 school year indicate that 11.0 percent of Tennessee’s total K-12 education funding comes from federal sources, 46.4 percent comes from state sources, and 42.5 percent comes from local sources. Because Tennessee spends about $10,548 per child per year, around $1,160 per child per year comes from federal sources. Tennessee relies more on federal revenue sources than the nation as a whole, where 7.7 percent of total K-12 education revenues come from federal sources in the U.S. Eight states rely more on federal revenues than Tennessee, including Mississippi (13.8 percent), New Mexico (13.4 percent), and Louisiana (12.0 percent).

Rejecting this federal education funding would come with various costs and benefits for the Tennessee education system. The primary cost of rejecting federal education funding is the funding itself. As noted above, federal education funding is about $1,160 per child per year, or around $1.1 billion in the most recent school year in Tennessee. The main benefit of rejecting federal education funding would be a reduction in certain onerous regulations, which could give public schools more autonomy. The additional autonomy could put public schools in better positions to adapt to the needs of individual families if they have the incentives necessary to cater to their needs.

The best way to ensure that the right incentives are in place would be to reduce top-down government regulations in public schools alongside bottom-up regulation via school choice. For example, rejecting federal education funding would eliminate the annual standardized testing requirements for students in grades 3 through 8 as outlined in the Every Students Succeeds Act (ESSA), which would give public schools more flexibility and weaker incentives to teach to the test (given that the state government relaxes standardized testing requirements as well). Notably, none of the 50 states nor the District of Columbia have rejected the money by determining that the costs of federal regulations outweigh the benefits of federal education funding. The calculus behind this decision, however, would differ if rejecting federal education funding led to a reduction of federal tax burden for individual states.

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Discussion and Conclusion

The preponderance of the evidence suggests that increasing access to public charter schools and private school choice programs could improve student outcomes in Tennessee. The success of public charter schools and private school choice programs in Tennessee would depend on factors such as the quality of district-run schools in the area, the quality of public charter schools and private schools, geography, and implementation fidelity.

The state could increase access to public charter schools by equalizing funding between sectors and by revising its school funding formula so that education dollars follow children to the school of their families’ choosing. Making education funding based more on student enrollment would be more equitable and would provide stronger incentives for schools to meet the needs of children. The state could further increase access to public charter schools by allowing for additional authorizing entities such as colleges, universities, and mayors. In light of the COVID-19 pandemic, the state should also consider following the 21 other states that allow children to attend virtual charter schools, especially if families are uncomfortable with sending their children back to brick-and-mortar schools after the lockdown.

The state could increase access to private education by expanding access to its two private school choice programs. The IEA program is currently only available to around 2 percent of the student population, and the ESA pilot program is capped at only 5,000 students in the first year. Policymakers should consider getting rid of the 5,000-student cap, which is only about one half of one percent of the public school population in Tennessee. The state should also consider removing the current geographic restrictions on the ESA pilot program, which only allow students in Shelby County and Metro Nashville to access to the program. Allowing students throughout the state to access the program would expand educational opportunities and would also eliminate the current constitutional concern regarding Tennessee’s “home rule.”

Each of these proposals would increase equity in the state’s K-12 education system and provide students with more educational opportunities. Instead of funding schools directly, regardless of how well they are serving children’s needs, Tennessee could fund students and allow their families to choose the schools that work best for them. The state has the opportunity to restructure education funding to prioritize the needs of students as opposed to institutions.
References


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**About the Author**

**Corey A. DeAngelis, Ph.D.** is director of school choice at the Reason Foundation and adjunct scholar at the Cato Institute. His research primarily focuses on the effects of school choice programs on non-academic outcomes such as criminal activity, character skills, mental health, political participation, and schooling supply. He has authored or co-authored over 40 journal articles, book chapters, and reports on education policy. His research has been published in peer-reviewed academic journals such as *Social Science Quarterly, School Effectiveness and School Improvement, Educational Review, Educational Research and Evaluation, Journal of School Choice,* and the *Cato Journal.* His work has also been featured at outlets such as USA Today, New York Post, The Hill, Washington Examiner, Foundation for Economic Education, *EdChoice,* and *Education Next.* DeAngelis received his Ph.D. in Education Policy from the University of Arkansas.

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