



The Effects of Education Savings Accounts (ESAs) on Teacher Pay in Texas

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This research paper was subjected to a blind peer review by an independent third party.

Key Points

- Given that public school districts employ roughly 90 percent of teachers in Texas, teachers have little negotiating power in today's labor market.
- Budget reallocations at public school districts and private schools from ESAs could increase teacher salaries in the first year, with some increasing by as much as \$28,000.
- More competitive teacher labor markets will gradually contribute to increases in teacher salaries beyond those facilitated by ESAs and improvements in working conditions.
- The freedom to choose in education and teacher labor markets will benefit students, teachers, and all Texans.

Introduction

Our estimates of the effects of education freedom through education savings accounts (ESAs) in its inaugural year in Texas indicate that teacher pay could substantially increase, with some teachers receiving as much as \$28,000 more per year.

Advancing education freedom through ESAs will affect teacher pay primarily by: 1) Influencing budgets of public school districts and private schools,¹ and 2) Increasing competition in teacher labor markets while perhaps reducing bureaucratic inefficiencies ([Ballou and Podgursky](#)).

We start by evaluating the change in student demand for public school and private school slots statewide. To estimate the number of ESA users and fiscal effects at public school districts and private schools, we use the [school choice fiscal notes calculator](#).² To derive our results, we relied on data from the [Texas Education Agency](#) and Texas Private Schools Education Association (2016) to input in the calculator. We included an education savings account amount of \$6,500 per student. Students are considered eligible for an ESA if they are entering kindergarten or first grade or have attended public school for at least the previous school year.

Macro Student and Fiscal Estimates of ESAs

Using the 2017-18 school year as the inaugural year of the ESA law in Texas, the estimated results from the data input in

the calculator show that 196,690 students could use an ESA, with 26,296 current private school students choosing to attend public schools. These changes in student enrollments result in a net exit ratio of 3.2 percent from public schools.

These estimates reflect past private school tuition trends and an expected increase in students desiring private school slots from the \$6,500 tuition discount created by an ESA, resulting in an estimated increase in average private school tuition (weighted by school size) to \$9,515 from \$7,848 in the 2014-15 school year ([Barba et al., 49](#)). Although the past tuition trends and ESAs may lead to a 2017-18 private school tuition that is higher than in 2014-15, some of Texas' accredited private schools will likely have much lower tuition rates. For example, in the 2014-15 school year, the Association of Christian Teachers and Schools' average tuition was \$4,621 with enrollment of 389, and the Texas Catholic Conference Education Department's average tuition was \$4,880 with enrollment of 76,367 ([Barba et al., 49](#)).

The *gross* exit rate of the increase in students choosing private schools over public schools with a tuition discount of \$6,500 is based on [Chiswick and Koutramanes'](#) inflation-adjusted estimate and participation data from the Parental Choice Program and Edgewood (San Antonio, Texas) Voucher Program, which translate into the tuition discount incentivizing approximately 3.7 percent of public school stu-

¹ While understanding that ESA participants are able to choose a number of qualified education services ([Barba et al., 54-55](#)), we have considered only private schools for simplicity.

² This [technical paper](#) describes the rationale underlying the equations and their sequence in the school choice fiscal notes calculator.

dents (196,690 students) to attend private schools. These two voucher programs, although different in mechanism from an ESA program as dollars would follow the student to a host of qualified education services and not to one particular school as with vouchers, were selected as models due to the universality of their student eligibility. Moreover, they are the only measurable school choice programs known to the authors that are open to nearly all students in their geographical area. It should be noted for comparison that the participation rate calculated from these two programs is markedly higher than that of ESA programs in other states, which range between less than 1 percent and 2 percent. For example, Florida's participation rate of eligible students is 2 percent after three years; Arizona's is 1 percent after six years ([EdChoice](#)).

The *net* exit ratio considers an increase in private school tuition that could contribute to some current private school users switching to a public school, and other private school users switching to a public school to become eligible for an ESA. These school switches contribute to a calculated estimate of what is called a private school self-pay loss of 26,296 students. Taking the difference between the average marginal cost savings to the state for the 196,690 ESA users and the 26,296 students entering public schools from self-pay loss results in an estimated \$165 million in fiscal savings that are split between the budgets of the relevant public school district and the state in fiscal year 2018. The result of the difference between 196,690 ESA users and 26,296 self-pay loss students is the net number of students leaving public schools of 170,394, which provides a net exit ratio of 3.2 percent from public schools.

Effects on School Revenues and Teacher Labor Markets of ESAs

Increase in Revenue Available

Given that a district's per-pupil funding loss with each student's departure is less than their total per-pupil funding, we calculate an average increase in per-pupil funding of \$65.97. Taking the total number of students at public school districts and projected enrollment growth based on past trends minus the net 170,394 that choose to attend private schools gives an estimate of 4,930,754 students at public school districts for the 2017-18 school year. The enrollment estimate multiplied by the \$65.97 per-pupil increase equates to \$325.3 million more for public school districts than without ESAs. Likewise, the estimated 170,394 net increase in students attending pri-

private schools multiplied by the calculated tuition payment of \$9,515 yields \$1.62 billion in additional revenue to private schools.

More Teachers Employed

To estimate the change in teacher employment from ESAs, we consider the student-teacher ratios in Texas' public and private schools. We hold the public school districts' average student-teacher ratio constant at its 2014 level of 15.3. Given that we do not have access to Texas' private school student-teacher ratio, we use data from the Texas Private Schools Association (2016) for fall 2015. Their data provide a very low ratio of 5.8 derived from 406,156 private school students with 69,841 teachers. However, the 69,841 teachers are not full-time equivalent (FTE). As a proxy for a range of results that could provide a more accurate ratio with FTE teacher data, we use the [National Center for Education Statistics'](#) 2013 average *national* private school student-teacher ratio of 12.2. Using these student-teacher ratios of 15.3 at public schools and 12.2 at private schools and the combined increase in students at both, we estimate a net increase of 2,830 teachers employed from ESAs; a lower private school student-teacher ratio would result in a bigger increase in teachers employed.

Higher Teacher Pay

With the estimated increase in funding available to private and public schools, and possible competition-improved efficiencies (less overhead spending), teacher salaries could substantially increase as more money is directed to the classroom. These revenue increases at private schools may not all go to teachers, as some will go to private school expansion, administration, and other factors. Competitive pressure from a growing private school sector could induce some public school districts to restructure other operations to create additional funding for teacher salaries. With the student-teacher ratios of 15.3 and 5.8 above and depending on which region teachers are in and the level of competition in those teacher labor markets, we find a range of opportunities for teachers to receive average annual pay increases through ESAs from \$1,009 to \$13,439. However, some teachers could receive even larger salary increases. If we estimate the calculations with the average national private school student-teacher ratio of 12.2, then the \$1.62 billion in additional private school revenue results in annual pay increases of \$28,192 per FTE private school teacher.

To succeed in recruiting new teachers, private schools would likely need to quickly increase the salary they offer new teachers. The rise in teacher pay at public and private schools, along with the substantial drop in the gap between the \$50,715 average public teacher salary ([Texas Education Agency](#)) and \$41,318 weighted average private teacher salary (Texas Private School Association) in the 2015-16 school year could generate competitive pressure. Because private school proprietors will need to quickly finance increased private school infrastructure, existing private school teachers may see a phase-in of the full salary increase. Moreover, Bast et al. (6) note that teachers not only benefit from higher salaries under school choice, but teachers also benefit from working condition adjustments that cause their support services and expectations of teachers to better meet teachers' needs.

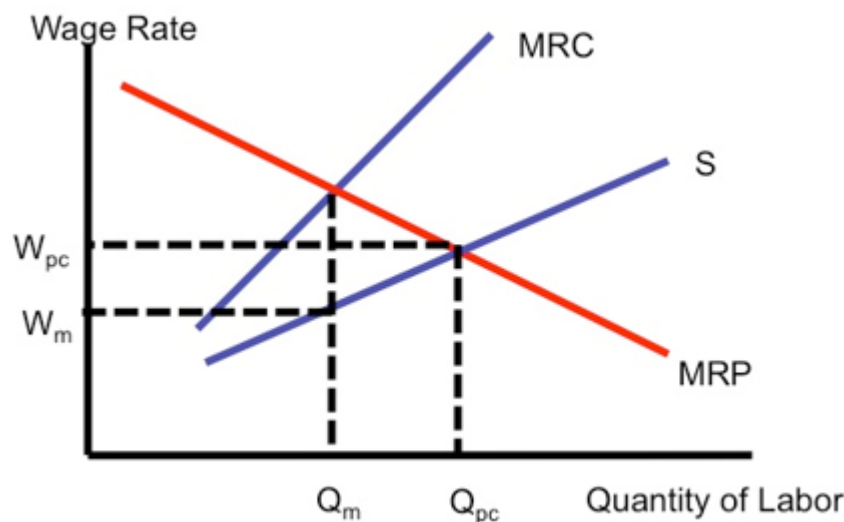
ESAs Gradually Erode Monopsony Effects in Teacher Labor Markets

There is very little competition in teacher labor markets today in some areas of Texas, where one or two public school districts hire most teachers. Statewide, K-12 public schools employ more than 90 percent of all teachers, leaving many individual teachers with little to no negotiating power at the bargaining table with school districts ([Barba](#)

[and Ginn, 1](#)). In economics, this situation is known as a monopsony whereby the buyer (i.e., public schools) has market power to dominate negotiations of wages (i.e., teacher pay). It is the opposite case of the well-known monopoly when there is a dominant supplier in a market that can effectively control prices. **Chart 1** illustrates a monopsony situation that results in lower pay and less employment than in a more competitive market for teachers.

During the recent school finance trial, Dr. Jacob Vigdor, a labor economist and expert witness for school districts, testified that the teacher pay issue is a textbook example of monopsony power. "Introducing greater competition into the market for teachers will raise teacher salaries" ([Barba and Ginn, 2](#)). [Merrifield](#) found that monopsony effects depress teacher salaries, and [Taylor](#) notes that adding competition can increase teacher pay in districts with few public schools. Increasing the number of private school teaching slots, and other options, with a much-reduced public-private salary differential via ESAs, may notably erode districts' monopsony power to depress teacher salaries and over time provide even more opportunities to negotiate higher wages than those estimated below.

Chart 1: Cost of a Monopsony Situation in Texas' Teacher Labor Markets



Notes: The monopsony situation in teacher labor markets leads to lower wages paid (W_m) and quantity hired (Q_m) than in a more competitive situation (W_{pc} and Q_{pc}) for Texas teachers. MRC is the marginal resource cost in a monopsony. S is the supply curve in a competitive market. MRP is the marginal revenue product.

Eroding a monopsony in teacher labor markets over time through competition from ESAs should give teachers more negotiating power and could direct more dollars to the classroom by incentivizing a reduction in bureaucratic inefficiencies. As with other professions, this would positively affect teacher salaries by allowing competition to appropriately price the value of quality teachers instead of today's situation of politically determined salaries.

By advancing education freedom in Texas, schools would compete for the best teachers. This would give teachers the opportunity to negotiate higher pay and improve their job satisfaction. Freedom in such an important market as teaching services, and ultimately education, is why the Texas Legislature should consider passing ESAs. Moreover, research shows structural reform that increases competition in the education system could benefit Texas by improving student academic outcomes ([Hoxby](#)), boosting economic opportunity ([DeVore](#)), increasing economic efficiency ([Peacock](#)), and reducing complexity of school finance ([Grusendorf](#)). Achieving education freedom through ESAs will likely substantially benefit students, teachers, and all Texans.

Conclusion

Advancing education freedom through ESAs will give teachers more opportunities to prosper. This includes increasing their choice of education services to provide, and their ability to negotiate a higher salary. By initially increasing private school demand and eventually reducing monopsony effects in teacher labor markets in many localities statewide through the ESA law, many teachers could see their pay increase by \$13,439 per year, with some teachers gaining the opportunity to negotiate a salary increase of twice that amount.

Given the gains in teacher pay that we find here and from other research through structural reforms accomplished by advancing education choice, ESAs would contribute to quality teachers being rightfully paid more. Moreover, the education system can be reformed to benefit students' learning outcomes while not simply throwing more money at the same subpar school finance system. This is the path to spending taxpayers' hard-earned dollars more wisely than today and creating advancement in human capital that will provide greater prosperity for Texans. ★

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Vance Ginn, Ph.D., is an economist in the Center for Fiscal Policy at the Texas Public Policy Foundation. He is an expert on Texas' state budget, franchise tax, tax and expenditure limit, and other fiscal issues. Before joining the Foundation in September 2013, Ginn was a Koch Fellow, and taught at three universities and one community college in Texas. He has published peer-reviewed articles in academic journals, as well as commentaries in major media outlets across Texas and the nation.



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