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Analysis of Education Trust "2018 School Funding Gaps" Report

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March 2018

In February 2018 the Education Trust released the latest version of its "Funding Gaps" report, the subtitle of which is "An analysis of school funding equity across the U.S. and within each state." The report ranks Ohio 2nd nationally in terms of equitable funding for students in poverty (with #1 being the most equitable), however, the following analysis indicates that the findings in the report regarding Ohio's funding equity, while well intentioned, are flawed. According to calculations here, Ohio actually ranks 32nd among the 50 states in funding for districts with high concentrations of students in poverty.

The report can be downloaded at: https://edtrust.org/resource/funding-gaps-2018/.

As the report's subtitle suggests, the primary objective of the Funding Gaps report is to provide "an overview of funding equity by race and poverty concentration across states..." (page three). This is done by analyzing state and local revenue data in a manner which compares funding in each state in school districts with the highest concentrations of low income (or minority) students with funding in each state in the school districts with the highest concentrations of low income (or minority) students. Federal resources are excluded from the analysis because these funds are typically restricted in use (for example of students with disabilities) and thus are not available for general education purposes. This is consistent with the report's objective which is to better understand how states allocate the resources they oversee.

States where the highest poverty (or highest minority) school districts spend more per pupil than do school districts with the lowest concentrations of students in poverty (or minorities) are considered to be the most equitable. This is because it is well understood in education circles that high poverty students — who are often disproportionately black or Hispanic — often require additional resources to meet their educational needs. States where students in these school districts receive fewer resources on average than their

wealthier counterparts (the "funding gap" of the report's title) are thus considered to be exacerbating the already existing inequities through their regressive funding practices.

Figure 1 on page six of the Funding Gaps report provides an overview of the findings of the analysis as it relates to students in poverty. The funding gap in each state is shown in percentage terms, with the percentage reflecting the ratio between state and local revenue per pupil in the school districts with the poorest one fourth of students as compared to the per pupil revenue in the districts with the wealthiest one fourth of students. The Ed Trust analysis identifies 20 states where high poverty districts receive 5% more in state and local revenue per pupil than the lowest poverty districts and six states that are especially progressive where high poverty districts receive at least 15% more funding.

The Education Trust analysis ranks Ohio second nationally (behind only Utah) in school funding progressivity with the highest poverty districts in Ohio averaging 20% more in state and local revenue per pupil than do the lowest poverty districts. At the other end of the spectrum is Illinois, which ranks last among the 50 states as its highest poverty districts average 22% less state and local revenue per pupil than is the case in the lowest poverty districts.

In addition, the Education Trust also ranks states in terms of how equitably they fund school districts with high and low percentages of minority students (aka "students of color"). In this regard the Education Trust ranks Ohio first nationally, with their analysis showing that Ohio's highest minority school districts receive 28% more in state and local funding per pupil than do the Ohio's lowest minority school districts.

A summary of the Education Trust funding gap findings relating to poverty and minority students in Ohio can be found at: https://edtrust.org/graphs/?sname=Ohio.

Examining Ohio's Ranking

While Ohio's ranking near the top of the Education Trust's funding gaps analysis would certainly be welcome news on the equity front if it were accurate. It would also come as a bit of a surprise to many who study school funding closely in Ohio. In Fiscal Year (FY) 17 the base core opportunity aid per pupil amount in the school funding formula was only $6,000 per pupil whereas the state average expenditure was over $11,600 per pupil. More than 5% of the state's 610 school districts spent more than $14,600 per pupil; $3,000 per pupil over the average. Wealthy suburban school districts often have higher than average tax rates to go along with their higher than average property wealth. Over the past 15 years funding for economically disadvantaged students has increased at less than 1/3 the rate of the increase in low income students. Only the presence of Targeted Assistance and Capacity Aid — which together combine for over $1 billion in additional state aid to lower wealth school districts — suggests that Ohio might be doing comparatively more than other states in terms of school funding equity.

In light of this, the Ohio Education Policy Institute (OEPI) has examined the methodology and data used by the Education Trust in their Funding Gaps analysis.

Methodology

The methodology used by the Education Trust in their report appears to be logical and generally sound. Taking the school districts in each state and breaking them into quartiles based on their level of poverty (with the quartiles representing equal number of students rather than equal numbers of districts) and then comparing the top and bottom quartiles is a sound way to examine resource allocation among high and low poverty students. Data is averaged over three years and adjusted for inflation. A regional cost adjustment is used to make comparisons across states.

Data Used

The Education Trust analysis relies upon the U.S. Census Bureau's Public Elementary Secondary Education Finance Data files, a respected source of state and local education funding data. The most current data available from this source is the FY15 school year. This data can be found at: https://www.census.gov/programs-surveys/school-finances.html. Poverty data is also from the Census Bureau, relying on the 2015 Small Area Income and Poverty Estimates which compute the percentage of students in poverty at the school district level. FY15 enrollment data by race and ethnicity comes from the National Center for Education Statistics (NCES) Common Core of Data.

Upon closer examination, however, two issues relating to the data used by the Education Trust did become apparent. First the state and local revenue data that is reported in the Census Bureau dataset includes capital expenditures. In fact, the presence of revenues relating to construction and permanent improvements is the reason cited by the Education Trust for using a three-year average. By using a three-year average they hope to smooth out year to year fluctuations in revenue deriving from non-operating needs. Rather than trying to smooth out these fluctuations, the preferred approach when examining funding equity would be limit the analysis to operating expenditures or revenues. In order to illustrate the difference Table 1 compares the Ohio Census Bureau data and state and local operating revenue commonly used in Ohio by the Legislative Service Commission (LSC), the Ohio Department of Education (ODE), and the Ohio Education Policy Institute (OEPI).

Table 1: Comparison of Census Bureau and Ohio Education Policy Institute FY15 Ohio State and Local Revenue Data

	FY15 Ohio State Revenue	FY15 Ohio Local Revenue	FY15 Ohio Total S & L Revenue
Census Bureau / Education Trust	$10,169,760,000	$11,643,701,000	$21,813,461,000
Ohio Education Policy Institute	$7,450,233,931	$9,617,294,265	$17,067,528,196

Table 1 shows that the Census Bureau data used by the Education Trust in their analysis reports $2.7 billion more in state revenue and $2.0 billion more in local revenue than that used by OEPI in our on-going analysis of Ohio school funding. Note that the state revenue used by OEPI includes state foundation funding and Tangible Personal Property

Tax Operating levy replacement payments. These are the two main general purpose state revenue sources (note that the state formula aid amount includes state General Revenue Fund revenue allocated to schools as well as the profits from the Ohio Lottery). Similarly, Local revenue used by OEPI includes property tax and school district income tax operating levy revenue and does not include bond levy or permanent improvement levy revenue.

The second data issue regarding the Education Trust funding gap analysis is even more significant than the revenue figure discrepancy. The Education Trust methodology explains that in order to compute the pre pupil expenditure figures that they "divided each district's three-year average state and local revenues by the ***total number of students enrolled*** (emphasis added) in the district in 2015" (page five). In the vast majority of other states, the use of students enrolled as the denominator in the revenue per pupil calculation would be both straightforward and non-controversial.

However, on this issue, ***Ohio is not like other states***. Because of the way Ohio funds its community schools (which are typically called "charter schools" in other states), there is a significant difference between the number of students counted on an "ADM" (Average Daily Membership) basis and on an "enrollment" basis. In most states the question is whether to base state formula funding on average daily "membership" or average daily "attendance." In these states "membership" typically refers to students who are enrolled to attend school in the district and attendance refers to those who actually show up to school. As such, the difference between the two measures is whether or not student absences are counted or not when state funding is determined.

However, in Ohio, ADM — whether it is Total ADM or Formula ADM — refers to the number of students who live in a given school district and are eligible to attend a traditional public school (either in their own district or in another district through open enrollment), a community (aka charter) school, or a private school through the state's voucher program. In contrast "enrollment" refers to the number of students who actually are enrolled to attend one of the district's own schools.

The practical impact of Ohio's definition of ADM is that Ohio's public school districts receive state funding for their students as well as for those students who attend community schools (and for students in the state voucher program) and then pass this funding through to the community school (or private school) that the student actually attends. The problem is that Ohio school districts receive only the state share of funding as computed by the State Share Index formula, however they are responsible for passing through 100% of the funding formula amount that the community school is to receive. For example, the base aid state aid amount is currently $6,010 per pupil. A district with a state share of 50% will receive $3,005 for each student. However, districts are obligated to pass along $6,010 for every pupil that attends a community school. As a result, Ohio's school districts "lose money" on each child that chooses to attend a community school.

While most other states have community schools and many have some sort of voucher program, discussions with other states have shown that Ohio's method of funding

community/charter schools is an outlier nationally. Michigan, a neighboring state of similar size and demographics to Ohio, funds charter schools directly, with those students not counted in the enrollment or ADM of traditional school districts and the state paying them directly. Minnesota which ranks third in the Education Trust poverty equity rankings also funds charter schools directly from the state, as does Utah, which ranks first in the Education Trust poverty rankings.

Most importantly, the distinction of whether community/charter schools are funded directly (as is the case in most states) or through a pass through mechanism (as is the case in Ohio) has important implications regarding the findings from the Education Trust Funding Gap analysis. This issue is discussed below.

The Problem with the Education Trust Analysis as it Relates to Ohio

In Ohio in 2015 nearly 122,000 community school students received a total $941.4 million in funding. The issue as it relates to the Education Trust funding gap analysis is that ***the Census Revenue data includes the $941 million as state and local school district revenue, however the enrollment data used to compute the per pupil revenue figures does not include the community school students*** (because they do not attend traditional public schools).

Columbus City school district can be used as a simple example to make this point.

FY15 Formula Funding = $275.5 million for roughly 70,350 students included in Formula ADM

FY15 Community School Deduction = $138.2 million for 17,700 Columbus resident students attending community schools

FY15 Net State Formula Funding = $137.3 million for the 52,650 students actually attending district schools (this is their "enrollment" figure).

So, under this circumstance what is Columbus's state revenue per pupil? There are two logical ways to answer this question.

The first method is to take their total state funding ($275.4 million) and divide it by the 70,350 total students who attend either a district school or a community school. This amounts to $3,914 per pupil and it represents the state funding for all students who live in the Columbus city school district.

The second method is compute the state funding only for those students who attend Columbus public schools. This is done by excluding both the 17,700 community school students and the $138.2 million in state funding that they take with them to their community schools. So, dividing the $137.3 million in state funding that is left for the 52,650 students attending Columbus school results in a state revenue per pupil figure of $2,607. This figure would be comparable to how the Education Trust has computed funding in all other states that fund community schools completely separate from funding for traditional public school districts.

Finally, there is a third — completely illogical — method of computing state aid per pupil. That would be to take the total state funding that Columbus gets for both its own students and those attending community schools, and then divide it by its enrollment figure of 52,650 after excluding the community school students. In this manner, $275.4 million divided by 52,650 = $5,230 per pupil.

The above figure is more than twice the $2,607 per pupil figure computed in the second example when both community school students and their funding is excluded from the calculation. However, this is exactly the method that the Education Trust employs in the funding gap analysis when they divide the census state revenue figure by the district enrollment count. In this manner, ***the Education Trust has artificially and incorrectly (albeit unintentionally) overstated the funding per pupil in Ohio's high poverty urban school districts where the vast majority of students attending community schools reside.***

Because the districts that the lose largest share of their students to community schools are in Ohio's major urban areas, the Education Trust's overstating of per pupil revenue makes it appear that state and local funding in high poverty school districts is higher than that in Ohio's low poverty school districts. And because Ohio's urban districts are both high poverty and high minority, the Education Trust analysis also overstates the funding received by high minority districts in Ohio relative to low minority districts.

Replication and Recalculation of the Education Trust Funding Gap Analysis

In order to verify that the revenue per pupil discussed above does in fact actually impact the Education Trust analysis to a significant degree, OEPI replicated the methodology and recomputed the Education Trust computations for Ohio.

Using the state and local revenue data shown in Table 1 and the exact same poverty data, OEPI recalculated the average state and local revenue per pupil in the highest and lowest poverty quartiles. Under one scenario funding is divided by the total of district and community school students (Formula ADM) and the other scenario the state and local funding is divided by district enrollment only (the Education Trust method). The findings are summarized below:

1) Average S+L Revenues Per Pupil Using Formula ADM (OEPI Method)
High poverty quartile = $9,941
Low poverty quartile = $10,194
Ratio of high poverty to low poverty = 97.5%

2) Average S+L Revenues Per Pupil Using Year-end Enrollment (ED Trust Approach)
High poverty quartile = $12,202
Low poverty quartile = $10,827
Ratio of high poverty to low poverty = 112.7%

Comparison of the two scenarios clearly shows that the high poverty districts have less

revenue than the low poverty districts under the Formula ADM approach, but they are shown to have more revenue per pupil than the low poverty districts under the Education Trust enrollment approach.

Clearly the reason for this discrepancy is that the high poverty districts (which include Cleveland, Columbus, Cincinnati, Akron, Dayton, Toledo and Youngstown) lose a lot more students to community schools than do the low poverty districts. However, the Education Trust state and local revenue data erroneously attributes the $941.1 million in state funding going to Ohio community schools as money that the traditional public school districts have to spend on their own students. ***As a result, the Education Trust analysis overstates the amount of resources that high poverty (and high minority) districts actually have to spend on the students who attend their local schools.***

According to the computations above, the finding that Ohio's high poverty school districts spend 2.5% less than do the low poverty districts would rank Ohio 32nd (rather than 2nd) in terms of equity.

Conclusion

The analysis summarized here shows that the Education Trust Funding Gap findings relating to Ohio are (unintentionally) suspect. It is important to note that this is the case not because the Education Trust methodology is flawed or the researchers misused the data available, but rather because Ohio's school funding system works differently with regard to charter schools than is in the case in other states. This in turn makes the Census revenue data for Ohio misleading when combined with enrollment data.