

Methodologies – Uncharted Territory

Page 10 – “Demographics Differ from Districts and Performance is Underwhelming”

Weighted average calculation for comparisons of brick and mortar charter schools and the districts they draw from

To compare brick and mortar charter school performance and demographics to the districts they draw from, a weighted average was calculated for each brick and mortar charter school of data points for the school districts they draw from. The data for each school district was multiplied by the district’s percentage of students at the charter school. The products were then summed to arrive at the weighted average.

Page 11 – “Demographics Differ from Districts and Performance is Underwhelming”

Page 12 – “Cyber Charter Schools Perform Far Worse Than Southeast School Districts”

Comparisons of charter schools to school districts with similar shares of disadvantaged students

In the report, “disadvantaged students” refers to low income, special education, and English language learning students. The Pennsylvania Department of Education publishes disaggregated test score data for all students that fall into at least one of those groups, in a category they label ‘historically underperforming.’

PCCY compared each charter school to each suburban school district that was within five percentage points in terms of the share of historically underperforming students taking the PSSA. One school, Chester Community, had 100% of its students in the historically underperforming category, so it was compared to the closest school district, Chester-Upland, which is 7.6 percentage points lower in terms of the share of historically underperforming students.

All Performance Comparisons

Grade-level matching

Some charter schools serve different grade spans than others, and thus had different sets of grades taking the PSSA. For comparisons made between charter schools and school districts on the PSSA, school district data for grades not served by the charter was excluded.

Page 16 – “Charter Schools are Overpaid for Special Education”

Special education revenue and expenditures

Special education revenue was calculated in two steps. First, because special education tuition for each school district is made up of the base tuition rate plus the special education supplement, the base cost had to be removed from the special education tuition figure. To do so, each district’s non-special education student tuition was subtracted from the special education student tuition. The remaining amount was then multiplied by the number of special education students from each school district at each charter school.

Special education expenditures for each charter school were retrieved from State reports of financial data. The difference between each charter's special education tuition revenue and special education expenditures was then calculated.

Since some charter schools enroll from districts outside of the southeast suburbs, especially cyber charter schools, PCCY estimated how much special education tuition from just the southeast suburban districts was underspent at each school. Each charter school's total special education expenditures was multiplied by the percentage of special education students at the school from suburban districts to get an estimated amount spent on suburban students. Then the total special education tuition received from suburban districts was calculated for each charter school and was then subtracted by the estimated amount spent on suburban students. The difference is the estimated overpayment from suburban districts at each charter school.

Page 17 – “Charter Schools are Overpaid for Special Education”

Estimate of special education tuition cost reduction due to application of special education funding formula

To estimate the amount that special education payments to charter schools would be reduced by if the special education funding formula was applied to charter schools, first the special education tuition amount for each cost category of the funding formula was calculated for each school district. The weights for each cost category (1.51, 3.77, and 7.46) were multiplied by the non-special education tuition for each district.

To estimate which categories special education students fall into at a typical charter school, two hypothetical scenarios were then created, based on the following findings from previous research:

- 90% of special education students in Pennsylvania are in the lowest cost category (special education costs below \$25,000).
- 98% of charter school special education students statewide have special education costs that are under \$30,000.

Scenario one, the least expensive scenario, assumed 98% of students to be in the lowest category and 2% of students in the middle category (costs between \$25,000 and \$50,000). Scenario two, the most expensive scenario, assumed 2% of students to be in the highest cost category (costs above \$50,000), 8% in the middle cost category and 90% in the lowest cost category.

For each scenario, the total number of special education students per district was multiplied by the percentage of students a given cost category, which was then multiplied by the tuition per student in that category. This calculation was done for each cost category, and the products were summed to reach a total estimated tuition cost for each school district under the funding formula.

This estimated total special education tuition cost by district was then subtracted from the actual special education tuition paid by the district. The difference is the estimated reduction in special education tuition costs if the special education funding formula was applied to charter schools.