School District Analysis

Thursday, February 12, 2015

11:27 PM

The main takeaway of this analysis is that Charter Schools Outperform district schools substantially. The overall percentage of students passing both Math and Reading at 90.4% for Charter schools compared to 53.6% for district schools.

The top 5 schools for passing % are all charter, and the bottom five schools are all district.

|  | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| **School Type** |  |  |  |  |  |
| **Charter** | 83.473852 | 83.896421 | 93.620830 | 96.586489 | 90.432244 |
| **District** | 76.956733 | 80.966636 | 66.548453 | 80.799062 | 53.672208 |

**School Size Analysis**

Small (less than 1000 students) and medium (1000-2000 students) schools have similar Math, Reading and Overall % scores. Large schools (2000 - 5000 students) have much lower Passing percentages. All district schools are classified as large schools. Wilson High is a charter school classified as large but passing percentages from that school lines up with other charter schools.

It is also possible that small and medium size schools are more efficient than large schools, but there are no district schools that are small or medium so we lack the data in this case to decide that.

So while school size might look significant at first glance, the results from the data we have merely reinforce the charter v district finding.

|  | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| **School Size** |  |  |  |  |  |
| **Small (<1000)** | 83.821598 | 83.929843 | 93.550225 | 96.099437 | 89.883853 |
| **Medium (1000-2000)** | 83.374684 | 83.864438 | 93.599695 | 96.790680 | 90.621535 |
| **Large (2000-5000)** | 77.746417 | 81.344493 | 69.963361 | 82.766634 | 58.286003 |

**Cost Per Student Analysis**

The most surprising finding is that as spending per student increases, the passing percentage decreases. Once again, while spending less might look like it leads to significantly higher scores, the real takeaway is that charter schools are more efficient than district schools.

The four spending ranges encompass a relatively small 13% difference in spending with $581 per student being the lowest and $655 being the highest. The lowest per student budget of a charter school is $628, and all charter schools except one are below that spending amount.

|  | **Average Math Score** | **Average Reading Score** | **% Passing Math** | **% Passing Reading** | **% Overall Passing** |
| --- | --- | --- | --- | --- | --- |
| **Spending Ranges (Per Student)** |  |  |  |  |  |
| **<$585** | 83.455399 | 83.933814 | 93.460096 | 96.610877 | 90.369459 |
| **$585-630** | 81.899826 | 83.155286 | 87.133538 | 92.718205 | 81.418596 |
| **$630-645** | 78.518855 | 81.624473 | 73.484209 | 84.391793 | 62.857656 |
| **$645-680** | 76.997210 | 81.027843 | 66.164813 | 81.133951 | 53.526855 |

**By Grade analysis**

There are only very minor differences across the scores per grade at each school, indicating that the grade of the student is nowhere near as impactful of the school the student attends. This is true for math and reading.