PyCity Schools Analysis

This assignment analyzes district and charter schools in a city's school district to identify patterns and trends in school performance. It evaluates standardized test results in reading and math and measures them against the number of students and the school's budget. The following two conclusions were derived from the data.

Charter schools are higher performing than district schools.

Charter schools significantly outperformed district schools in all measured academic areas. The Percent Overall Passing rate in the charts below show charter schools performed in the 90th percentile, while district schools performed much lower in the 50th percentile. Of all areas measured, School Type is the only metric that shows a positive correlation to the Percent Overall Passing rate.

Top Schools by Percent Overall Passing

	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	Percent Passing Math	Percent Passing Reading	Percent Overall Passing
school_name									
Cabrera High School	Charter	1858	\$1,081,356.00	582.0	83.061895	83.975780	94.133477	97.039828	91.334769
Thomas High School	Charter	1635	\$1,043,130.00	638.0	83.418349	83.848930	93.272171	97.308869	90.948012
Griffin High School	Charter	1468	\$917,500.00	625.0	83.351499	83.816757	93.392371	97.138965	90.599455
Wilson High School	Charter	2283	\$1,319,574.00	578.0	83.274201	83.989488	93.867718	96.539641	90.582567
Pena High School	Charter	962	\$585,858.00	609.0	83.839917	84.044699	94.594595	95.945946	90.540541
	Cabrera High School Thomas High School Griffin High School Wilson High School	school_name Cabrera High School Thomas High School Griffin High School Wilson High School Pena High Charter	Type Students school_name	Cabrera High School Charter 1858 \$1,081,356.00 Thomas High School Charter 1635 \$1,043,130.00 Griffin High School Charter 1468 \$917,500.00 Wilson High School Charter 2283 \$1,319,574.00 Pena High Charter 962 \$555,858.00	Type Students Budget Budget school_name Cabrera High School Charter 1858 \$1,081,356.00 582.0 Thomas High School Charter 1635 \$1,043,130.00 638.0 Griffin High School Charter 1468 \$917,500.00 625.0 Wilson High School Charter 2283 \$1,319,574.00 578.0 Pena High Charter 962 \$585,589.00 609.0	Cabrera High School Charter 1858 \$1,081,356.00 582.0 83.061895 Thomas High School Charter 1635 \$1,043,130.00 638.0 83.418349 Griffin High School Charter 1468 \$917,500.00 625.0 83.351499 Wilson High School Charter 2283 \$1,319,574.00 578.0 83.274201 Pena High Charter 962 \$585,589.00 609.0 93.839917	Cabrera High School Charter 1635 \$1,081,356.00 582.0 83.061895 83.975780 Thomas High School Charter 1635 \$1,043,130.00 638.0 83.418349 83.848930 Griffin High School Charter 1468 \$917,500.00 625.0 83.351499 83.816757 Wilson High School Charter 2283 \$1,319,574.00 578.0 83.274201 83.989488 Pena High Charter 962 \$555,559.00 609.0 83.830017 84.044699	Type Students Budget Budget Math Score Reading Score Passing Math school_name Cabrera High School Charter 1858 \$1,081,356.00 582.0 83.061895 83.975780 94.133477 Thomas High School Charter 1635 \$1,043,130.00 638.0 83.418349 83.848930 93.272171 Griffin High School Charter 1468 \$917,500.00 625.0 83.351499 83.816757 93.392371 Wilson High School Charter 2283 \$1,319,574.00 578.0 83.274201 83.989488 93.867718 Pena High Charter 962 \$585 858 00 609.0 83.83917 84.044699 94.504595	Type Students Budget Budget Math Score Reading Score Passing Math Passing Reading

Bottom Schools by Percent Overall Passing

	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	Percent Passing Math	Percent Passing Reading	Percent Overall Passing
school_name									
Rodriguez High School	District	3999	\$2,547,363.00	637.0	76.842711	80.744686	66.366592	80.220055	52.988247
Figueroa High School	District	2949	\$1,884,411.00	639.0	76.711767	81.158020	65.988471	80.739234	53.204476
Huang High School	District	2917	\$1,910,635.00	655.0	76.629414	81.182722	65.683922	81.316421	53.513884
Hernandez High School	District	4635	\$3,022,020.00	652.0	77.289752	80.934412	66.752967	80.862999	53.527508
Johnson High School	District	4761	\$3,094,650.00	650.0	77.072464	80.966394	66.057551	81.222432	53.539172
	Rodriguez High School Figueroa High School Huang High School Hernandez High School	school_name Rodriguez High School Figueroa High School Huang High School Hernandez High School Johnson High District	school_name Rodriguez High School Figueroa High School Huang High School Hernandez High School Johnson High District Johnson High Johnson Hig	Type Students Budget school_name	Type Students Budget Budget school_name Rodriguez High School District 3999 \$2,547,363.00 637.0 Figueroa High School District 2949 \$1,884,411.00 639.0 Huang High School District 2917 \$1,910,635.00 655.0 Hernandez High School District 4635 \$3,022,020.00 652.0 Johnson High District 4761 \$3,094,650.00 650.00	Type Students Budget Budget Math Score school_name Rodriguez High School District 3999 \$2,547,363.00 637.0 76.842711 Figueroa High School District 2949 \$1,884,411.00 639.0 76.711767 Huang High School District 2917 \$1,910,635.00 655.0 76.629414 Hernandez High School District 4635 \$3,022,020.00 652.0 77.289752 Johnson High District 4761 \$3,094,650.00 650.0 77.072464	School Type Students Iotal School Budget Budget Budget Math Score Reading Score	School Total Total School Budget Budget Budget Reading Score Math	School Total Total School Budget Budget Budget Reading Reading Passing Reading Score Math Reading Passing Reading

Budget does not correlate to overall pass rate.

Surprisingly, a school's budget, Total Budget and Per Student Budget, does not correlate with a school's Percent Overall Passing rate. Where one might expect that the higher the budget, the higher the academic performance, the data clearly show that charter schools, despite having a lower budget than district schools, score higher in both reading and math when compared to their district school counterparts.



