

Module 4 Challenge

School District Standardized Testing and Budget Analysis

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Budget and Standardized Test Summary by School

	school_types	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	Percentage of Student Body Passing Math	Percentage of Student Body Passing Reading	Percentage of Student Body Passing Both Math and Reading
Cabrera High School	Charter	1858	\$1,081,356.00	\$582.00	83.061895	83.975780	94.133477	97.039828	91.334769
Griffin High School	Charter	1468	\$917,500.00	\$625.00	83.351499	83.816757	93.392371	97.138965	90.599455
Holden High School	Charter	427	\$248,087.00	\$581.00	83.803279	83.814988	92.505855	96.252927	89.227166
Pena High School	Charter	962	\$585,858.00	\$609.00	83.839917	84.044699	94.594595	95.945946	90.540541
Shelton High School	Charter	1761	\$1,056,600.00	\$600.00	83.359455	83.725724	93.867121	95.854628	89.892107
Thomas High School	Charter	1635	\$1,043,130.00	\$638.00	83.418349	83.848930	93.272171	97.308869	90.948012
Wilson High School	Charter	2283	\$1,319,574.00	\$578.00	83.274201	83.989488	93.867718	96.539641	90.582567
Wright High School	Charter	1800	\$1,049,400.00	\$583.00	83.682222	83.955000	93.333333	96.611111	90.333333
Bailey High School	District	4976	\$3,124,928.00	\$628.00	77.048432	81.033963	66.680064	81.933280	54.642283
Figueroa High School	District	2949	\$1,884,411.00	\$639.00	76.711767	81.158020	65.988471	80.739234	53.204476
Ford High School	District	2739	\$1,763,916.00	\$644.00	77.102592	80.746258	68.309602	79.299014	54.289887
Hernandez High School	District	4635	\$3,022,020.00	\$652.00	77.289752	80.934412	66.752967	80.862999	53.527508
Huang High School	District	2917	\$1,910,635.00	\$655.00	76.629414	81.182722	65.683922	81.316421	53.513884
Johnson High School	District	4761	\$3,094,650.00	\$650.00	77.072464	80.966394	66.057551	81.222432	53.539172
Rodriguez High School	District	3999	\$2,547,363.00	\$637.00	76.842711	80.744686	66.366592	80.220055	52.988247

Data Summary

BUDGET SPEND

During the period of study, the district spent \$24,649,428.00 across 39,170 students, who collectively attended 15 schools in the district.

Total Number of Unique Schools:	Total Students:	Total Budget:
15	39,170	\$24,649,428.00

School Type

26,976 of these individuals were students of 8 different District schools and the remaining 12,194 attended one of 7 Charter schools.

District schools received \$17,347,923 across their student body, while Charter schools in the district spent a total of \$6,362,688. This gives a per capita spend of \$643.57 and \$599.50 per student for District and Charter schools, respectively.

STANDARDIZED TESTING RESULTS

The Standardized Testing consisted of two portions: Math and Reading, each of which required the student to achieve a minimum score of 70% in order to pass. The average District-wide scores for Math and Reading were 79% and 82%, respectively; with 74.98% of the student body passing the Math portion of the test and 85.81% of the students passing

the Reading portion. Only 65.17% of students passed both the Math and Reading components.

School Type

Summary of Standardized Test Scores by School Type: Charter or District

school_types	Average Math Score	Average Reading Score	Percentage of Student Body Passing Math	Percentage of Student Body Passing Reading	Percentage of Student Body Passing Both Math and Reading
Charter	83.473852	83.896421	93.620830	96.586489	90.432244
District	76.956733	80.966636	66.548453	80.799062	53.672208

There were some notable disparities between Charter and District schools:

- For the Math portion of the test:
 - 93.7% of Charter school students passed versus 66.5% of District school students
- For the Reading portion of the test:
 - 96.6% of Charter school students passed versus 80.9% of District school students
- For proportion of the student body who passed both Math and Reading:
 - 90.6% of Charter students versus 53.7% of District school students
 - The Top 5 Highest-Performing Schools were all Charter schools
 - The Bottom 5 Schools were all District schools

These data consistently show higher performance levels for Charter schools.

Top 5: Highest Overall Passing % (Students passing both Math and Reading)

	school_types	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	Percentage of Student Body Passing Math	Percentage of Student Body Passing Reading	Percentage of Student Body Passing Both Math and Reading	
	Cabrera High School	Charter	1858	\$1,081,356.00	\$582.00	83.061895	83.975780	94.133477	97.039828	91.334769
	Thomas High School	Charter	1635	\$1,043,130.00	\$638.00	83.418349	83.848930	93.272171	97.308869	90.948012
	Griffin High School	Charter	1468	\$917,500.00	\$625.00	83.351499	83.816757	93.392371	97.138965	90.599455
	Wilson High School	Charter	2283	\$1,319,574.00	\$578.00	83.274201	83.989488	93.867718	96.539641	90.582567
	Pena High School	Charter	962	\$585,858.00	\$609.00	83.839917	84.044699	94.594595	95.945946	90.540541

Bottom 5: Lowest Overall Passing % (Students passing both Math and Reading)

	school_types	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	Percentage of Student Body Passing Math	Percentage of Student Body Passing Reading	Percentage of Student Body Passing Both Math and Reading
Rodriguez High School	District	3999	\$2,547,363.00	\$637.00	76.842711	80.744686	66.366592	80.220055	52.988247
Figueroa High School	District	2949	\$1,884,411.00	\$639.00	76.711767	81.158020	65.988471	80.739234	53.204476
Huang High School	District	2917	\$1,910,635.00	\$655.00	76.629414	81.182722	65.683922	81.316421	53.513884
Hernandez High School	District	4635	\$3,022,020.00	\$652.00	77.289752	80.934412	66.752967	80.862999	53.527508
Johnson High School	District	4761	\$3,094,650.00	\$650.00	77.072464	80.966394	66.057551	81.222432	53.539172

By Grade

On a school-by-school basis, student performance on the Standardized Testing was consistent (within 2.2%) across all four grade levels (9th, 10th, 11th, 12th).

Math Scores by Grade:

	9th	10th	11th	12th
Bailey High School	77.1	77.0	77.5	76.5
Cabrera High School	83.1	83.2	82.8	83.3
Figueroa High School	76.4	76.5	76.9	77.2
Ford High School	77.4	77.7	76.9	76.2
Griffin High School	82.0	84.2	83.8	83.4
Hernandez High School	77.4	77.3	77.1	77.2
Holden High School	83.8	83.4	85.0	82.9
Huang High School	77.0	75.9	76.4	77.2
Johnson High School	77.2	76.7	77.5	76.9
Pena High School	83.6	83.4	84.3	84.1
Rodriguez High School	76.9	76.6	76.4	77.7
Shelton High School	83.4	82.9	83.4	83.8
Thomas High School	83.6	83.1	83.5	83.5
Wilson High School	83.1	83.7	83.2	83.0
Wright High School	83.3	84.0	83.8	83.6

Reading Scores by Grade:

	9th	10th	11th	12th
Bailey High School	81.3	80.9	80.9	80.9
Cabrera High School	83.7	84.3	83.8	84.3
Figueroa High School	81.2	81.4	80.6	81.4
Ford High School	80.6	81.3	80.4	80.7
Griffin High School	83.4	83.7	84.3	84.0
Hernandez High School	80.9	80.7	81.4	80.9
Holden High School	83.7	83.3	83.8	84.7
Huang High School	81.3	81.5	81.4	80.3
Johnson High School	81.3	80.8	80.6	81.2
Pena High School	83.8	83.6	84.3	84.6
Rodriguez High School	81.0	80.6	80.9	80.4
Shelton High School	84.1	83.4	84.4	82.8
Thomas High School	83.7	84.3	83.6	83.8
Wilson High School	83.9	84.0	83.8	84.3
Wright High School	83.8	83.8	84.2	84.1

By Per Capita Spend

Per Capita Spend by School suggests a correlation between higher per-student spending and lower success on both the Math and Reading tests:

Spending Ranges (Per Student)	Average Math Score	Average Reading Score	Percentage of Student Body Passing Math	Percentage of Student Body Passing Reading	Percentage of Student Body Passing Both Math and Reading
<\$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 School Size

Standardized Test Scoring by School Size was analyzed using the following bins:

- Small (<1000 students)
- Medium (1000-2000 students)
- Large (2000-5000 students)

The table below shows a suggested correlation in the data in that Large schools have the lowest scores.

School Size	Average Math Score	Average Reading Score	Percentage of Student Body Passing Math	Percentage of Student Body Passing Reading	Percentage of Student Body Passing Both Math and Reading
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

It is also noteworthy that the scores between the Small and Medium size schools are very similar. Further analysis should include additional school size bins as well as analysis of the student-to-teacher ratio for each school in order to better understand the suggested correlations relating to school size.

FURTHER ANALYSIS

The data summarized above suggests a correlation between higher Standardized Test performance and School Type. School Type also appears to correlate with per capita spending and school size in that Charter Schools have lower per capita spending and lower student counts by school. Further analysis of the Charter versus District school models should be carried out in order to better address the lower Standardized Test performance of District School students versus Charter School students. This analysis should include student-teacher ratios as well as curriculum and teaching method comparisons.