

Py City Schools Analysis

Analysis: Based on the data, students that attend charter schools in the district perform better than those that attend traditional school. There is a significant difference in the overall passing rates. All of the top performing schools are Charter schools, whereas all the bottom performing schools all district-level schools. (See Figure 1 and Figure 2)

In addition, there is a significant difference in pass rates between students that attend larger schools (population) versus those that attend the medium or smaller schools. (See Figure 3)

Figure 1

	Average Reading Score	Average Math Score	%Passing Math	% Passing Reading	% Overall Passing
School Type					
Charter	83.90	83.47	93.62	96.59	90.43
District	80.97	76.96	66.55	80.80	53.67

```
#sort and display the Top Five Performing Schools by %overall passing
top_schools_summary = school_summary_df.sort_values('% Overall Passing', ascending = False)
top_schools_summary.head()
```

School Name	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	%Passing Math	% Passing Reading	% Overall Passing
Cabrera High School	Charter	1858	\$1,081,356.00	\$582.00	83.06	83.98	94.13	97.04	91.33
Thomas High School	Charter	1635	\$1,043,130.00	\$638.00	83.42	83.85	93.27	97.31	90.95
Griffin High School	Charter	1468	\$917,500.00	\$625.00	83.35	83.82	93.39	97.14	90.60
Wilson High School	Charter	2283	\$1,319,574.00	\$578.00	83.27	83.99	93.87	96.54	90.58
Pena High School	Charter	962	\$585,858.00	\$609.00	83.84	84.04	94.59	95.95	90.54

```
#sort and display the Bottom Performing Schools by %overall passing
bottom_performing_schools = school_summary_df.sort_values('% Overall Passing')
bottom_performing_schools.head()
```

School Name	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	%Passing Math	% Passing Reading	% Overall Passing
Rodriguez High School	District	3999	\$2,547,363.00	\$637.00	76.84	80.74	66.37	80.22	52.99
Figueroa High School	District	2949	\$1,884,411.00	\$639.00	76.71	81.16	65.99	80.74	53.20
Huang High School	District	2917	\$1,910,635.00	\$655.00	76.63	81.18	65.68	81.32	53.51
Hernandez High School	District	4635	\$3,022,020.00	\$652.00	77.29	80.93	66.75	80.86	53.53
Johnson High School	District	4761	\$3,094,650.00	\$650.00	77.07	80.97	66.06	81.22	53.54

Figure 2

Figure 3

	Average Reading Score	Average Math Score	%Passing Math	% Passing Reading	% Overall Passing
School Size					
Small(< 1000)	83.93	83.82	93.55	96.10	89.88
Medium(1000-2000)	83.86	83.37	93.60	96.79	90.62
Large(2000 -5000)	81.34	77.75	69.96	82.77	58.29