# PyCity Schools Conclusions

**Observable Trends**

•The dataset encompasses a total of 15 schools, 39,170 students. The total students average reading score is 81.88 which is higher than the average math score 78.99. When we see the passing rate reading (85.81%) has a higher rate than math (74.98 %), the overall passing rate is 65.17%. These findings indicate that student's score more in reading than math.

•The school summary finding showed that from 15 schools 7 of them are found at the district level, and the other 8 of them found at the charter level. The number of students in schools ranged between 427 students (Holden High School) to 4976 students (Bailey High School). The analysis also showed that district schools have more students than charter schools. Hence it can be concluded that district schools have more students than charter schools because of their geographical coverage.

•The total budget field of the school summery showed the amount of money each school consumed. The maximum budget is for Bailey High School an amount of $3,124,928.00, and the lowest budget is for Holden High School an amount of $248,087.00. Even though Bailey High School has the highest budget is not one of the top performing schools, hence the budget allocation for this school must be analyzed or budgeted, or the school needs to pick up on the quality of education it provides. Regarding budget per student, Huang High School ($655.0) has the highest budget per student, and Wilson High School ($578.0) allocates a lower budget per student. Huang High School is one of the bottoms performing school the same as Bailey High School it one area for future improvement to see education quality as it budgeted.

•The findings from the data showed that in all metrics (average, percent, and overall) of reading and math scores Charter schools have a greater score than District schools. Pena High School has the maximum (83.84) average math score, with the percentage of students passing math is 94.59% and average reading score (84.04). This implies that Pena High School has a good quality, and reputation in teaching math, and reading. On the other side, Huang High School has a lower average math score (76.63), and percent of students passing math (65.68%). Regarding the percent of passing reading class Thomas High School has a highest percentage of all schools at (97.30%). On the flip side, Rodriguez High School has a lower Average Reading Score (80.74%), and Ford High School has a lower passing reading at 79.30%. In the overall passing category Cabrera High School has the maximum passing percentage rate (91.33 %), and Rodriguez High School has the lowest percentage of (52.99) students who are passing.

•Grade 11 students at Holden High School holds a highest average Math score (85) comparing all schools and grades of 9th ,10th ,11th and 12th while Holden High School grade 12 students possess the highest average reading score (84.70).

•The other irregular finding of this analysis is that when the budget per student increases student's average math score, the average reading score, percent of passing math, percent of passing reading, and the overall passing decreases.

•The data revealed that when the number of students sizes is higher in schools, the average math scores, average reading scores, passing math, passing reading, and overall passing decrease. So, we can infer that, when student size rises, it negatively influences student academic results. Therefore, schools, cities, districts, and charters should work on finding the right student size per school to achieve good academic results.

PyCity Schools Conclusions

After performing analysis on the data, the following conclusions can be drawn:

The schools with higher budgets, did not yield better test results. By contrast, schools with higher spending per student actually (>\\$630) underperformed compared to schools with smaller budgets (<\\$600 per student). Thomas high School being the only exception.

The smaller and medium sized schools out-performed the large sized schools on passing math performances (89-91% passing vs 59% on average).

Charter schools out perform district schools 90.43% to 53.67%. However, more data is required to draw appropriate conculusions on which type of school is better.