PyCitySchools Analysis

Summary

Acting as Chief Data Scientist for our city’s school district, we have done some detailed data analysis that compiles and summarizes the following information:

* High level look at all 15 schools including the total number of students, total budget, average math score, average reading score, and the % of students passing math, reading, and overall pass
* This information was broken down further to look at each individual school’s performance in reading and math and identified the school type (District or Charter) as well as school budget and per student budget.
* Using the above summary tables, we were able to look at the highest and lowest performing schools (based on the % overall passing), how the different size of the schools impacted the average reading and math scores, whether the school type (charter or district) impacted the math and reading scores, and whether the per student budget impacted math and reading scores.

Conclusions/ Comparisons

* Increased school spending per student does not seem to positively influence a students ability to learn math, in fact the two lowest spending ranges have the highest average math scores, and the percentage passing math significantly decreases as the spending range increases. There is less of a discrepancy in the percentage passing reading as compared to math, but the lowest spending still yields the most successful students.
* The size of the school does seem to impact the students math and reading scores. Small and medium sized schools (between 0 – 2000 students) have comparable math and reading scores, with the overall passing rate being approximately 90%, where as large schools (between 2000 – 5000 students) have an overall passing rate of only 58%
* The type of school also seems to impact the success of the schools – charter schools have an overall passing rate of approximately 90%, vs. district schools, of only 53%.