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Challenge 4 Written Report

From the school data there seems to be a clear correlation between school type and student score averages, as well as school size and student score averages. Finally, there seems to be a relationship between per capita spending and student score averages.

There is a clear positive relationship between charter schools and student score averages. The likelihood of a student's average math, reading, and ability to score higher in both simultaneously increases dramatically if they are attending a charter school.

Secondly there seems to be an inverse relationship between school size and students average test scores for math, reading, and both per student. However there seems to be a sort of tipping point as the correlation doesn't seem to be 1 for 1 between schools that have less than 1000 students and schools that have between 1000 and 2000 students. However, larger schools with more than 2000 students seem to show a steep drop off in student average scores all around. I'd like to see the data on faculty to student ratio per school and I'd imagine the larger schools have more students being managed per faculty member making it more difficult for one-on-one assistance and governing.

Finally, there seems to be an unusual correlation between spending per student and student average test scores (likely would be different with student data). The pattern shows that the more spent per student the lower the test scores a student is likely to have.