The following analysis was done on a school district containing 15 schools and 39170 Students. The data included type, size, and budget for each school, as well as average reading score, average math score, gender, and grade for each student. This district has set 70% as the minimum threshold for a passing grade.

**In analyzing this data, a few assumptions were made:**

* Grading was consistent across all schools. In other words, all teachers were grading all students on the same criteria, and there were no schools where 70% was easier to achieve.
* School budget was entirely allocated to students – or at least the same percentage of budget was allocated toward students. If, for example, a school spent a large portion of their budget toward renovation, repair, or maintenance, that would not be reflected in the data.
* We operate under the assumption that a) children are required to be in school through 12th grade, that b) students attending public school do **not** have a choice on where to attend school – and public schools do **not** have a choice on whether to accept a student, and c) charter schools operate as a school of choice.

**Data Overview**

* School size ranges from 427 (Holden HS) – 4761 Students (Johnson HS)
* Total School funding ranges from 248,087 (Holden HS) – to 3.1 million (Bailey HS)
* Reading scores range from 63% to 99%, while math scores range from 55% to 99%
* Overall Passing % by school ranges from 53.2% (Figueroa HS) to 91.3% (Cabrera HS)
* The connection between students and budget is linear – the more students, the higher budget, generally
* The smallest (and least funded) schools are charter Schools, whereas the largest (and therefore most funded schools) are all public.
* Spending per student is also higher in public schools. The two schools spending between $645 and $680 per student are both public. And the four schools spending below $585 are all charter schools.

**Key Takeaways**

**Charter Schools Beat District Schools**

Charter Schools vastly outperform their district counterparts. They have higher average math scores, higher reading scores, a higher percentage of students passing math and reading, and a higher overall passing rate.

**Funding Does Not Equal Success**

Charter schools enjoy greater success despite less funding. You might expect per student spending to correlate to school success, but there is no correlation there. In fact, there is an inverse correlation, where the schools spending the most per student enjoy the least success. And the schools with the highest overall passing rate are the least funded.

**Size Matters**

There appears to be a correlation between large schools and poor school performance. Schools up to 2000 students enjoy overall passing rates above 89%. Above 2000 students, however, schools enjoy passing rates in the 50s.