**Data Analysis of Pyschool Challenge**

The data set evaluated district and charter schools by a number of criteria, including math and reading scores, type of school (district or charter), and student enrollment size. Attempts were made in the data so show correlation between the dollar amount schools spent per student and size of the student body with reading and math scores. The data included 15 schools in the district with almost 40000 students, managing a budget of about $24.5 million. Across the district, about three quarters of the students were found to have achieved passing math scores, and about 85% passing reading scores. Only 65% of all students were found to have achieved both passing reading and math scores. I have outlined some important takeaways from the data below.

* According to the data, charter schools, in general, have much higher passing rates than district schools. All five of the highest performing school are charter schools, while all five of the bottom performing schools are district schools. When grouped together, charter schools’ students passed reading at about a 16% higher rate, while passing math at an astounding 27% higher rate! This is a very significant difference.
* Per student budget does not seem to have much effect on passing rates for students, either on reading or math. In fact, the 5 worst performers had higher per student spending levels than did the 5 best performing schools. It seems that the charter schools’ methodology, rather than the money being spent per student, is something to consider emulating in district schools.
* Student size between small and medium sized schools did not make much difference in student performance. However, when those two categories are compared with large school student populations, there was a significant difference, with the small and medium sized students doing much better in both reading and math. It is important to note that many charter schools have smaller student populations, and we have already seen that charter schools performed far better than district school in this study. It may be that student enrollment size is one of the reasons for charter schools’ relative excellence. Perhaps the student-to-teacher ratio is lower in these schools, allowing for more attention per student in both math and reading.