**Module 4 Written Response/Analysis:**

For this assignment we analyzed district student score results by looking at the data at a district level and then breaking it out into relevant group combinations. We first started by grouping student results by the schools attended, and then we looked at how we could break out the schools into relevant groups to try and see some trends in student test results. The main way we looked at school level results is by the following groups. By grade level, by spending per student, by class size and lastly by the school type (in this case charter vs district).

Results and conclusions:

* One of the starker contrasts we could find was the difference in scores between charter schools and district schools. On average, students would score around 7 points lower at district schools vs charter schools and 3 points lower in reading. The lower math score may be driving the substantially lower average overall pass % of district schools, which sits at 53.675% vs 90.43% at charter schools.
* What might be a surprise is the contrast in school performance in specific spending buckets. It appears that the higher the buckets go, the lower the test scores and pass rate goes. In the $645-800 per student bracket, schools had an average overall pass rate of only 53% vs a 90% overall average pass rate. This might be a surprise as we might expect the more funding a school get, the better the test results get. However, if funding is a response to student test results then this could make sense (I.E a school gets poor testing results and as a response the district attempts to fund them to support students, while forgoing funding for schools that are overperforming).