# Analysis of district wide standardized test results:

In this assignment, we looked at the different schools and districts as well as the students that were part of various schools within their assigned districts. Students were measured in a high school range in various districts and their math and reading scores were tabulated to discover trends and gain insights. A total of 15 schools were part of the analysis from 39,170 total students. The district had a total budget of $24.6 million.

## District summary:

The district had the average math score of 78.9 and Average reading score of 81.8. The percent that passed reading was 85.8% and the percent that passed Math was 74.9 percent. The percent of students that passed math were 4 percentage points lower than what the math average score was. However the percentage of students that passed reading did better (4 percentage points) than what the average reading score was. The percentage of students that passed both reading and math was 65%. Students from Huang High School had the five highest combined reading and math scores. Students from the “district” designated school type did the best as they were the top performers. One can gather from the data that the students in the district did better overall in reading than they did in math as both the percentage passing rate (85.8%) and the average reading score (81.8%) were both higher than what the math scores were.

## School summary:

There were two types of school in the district. One of them being a Charter and another having a District designation. Bailey High School and Johnson High School had the highest number of students (4976 and 4761 respectively). Bailey High School being the largest school in the district by student count also had the highest budget at ~$3.1 million. However, this did not translate to Bailey High School getting the best results in math and reading. The school that had the highest reading and math score was Pena High School. Pena High School beat out the other schools in Math with the average score coming in at 83.8 percent. This was followed closely by Holden High School which also came in with the average math school score of 83.8 percent. Students at Pena High School did better than other schools coming in at 84 percent. Looking at the average reading scores vs. Math scores, all 15 schools performed at above 80 percent when it came to reading vs. only 8 schools got an above 80 precent Math score average. Looking further, the number of students that performed better in reading than math were by ~4300.

## Highest performing schools:

Bailey High School had the highest number of students (2719) that passed both Math and Reading. Since Bailey High School also had the highest number of students, it can be drawn from the data that just from the sheer number of students will lead to increased scores in test results. One should take into consideration that other variables are staying constant across measurements, like budget and per capita spending. Another conclusion is that higher budget and per capita spending per school will lead to increased scores for students in that school district. We saw that Bailey High School did not have the highest reading and math scores despite of having a high spending budget. Infact, Bailey High School at one of the lowest percentage of students passing Math at 66.6 percent. The school that had the highest percentage of students passing Math was Pena High School at 94.59 percent and the school that had the highest percentage of students passing reading was Thomas High School. The school with the highest percentage of students passing both Math and Reading was Cabrera High School at 91.3%. While Cabrera High School and Pena High School were on the lower end of the school size, (1858 and 962 respectively), their students did the best in reading and math. Cabrera high school also had a modest budget compared to Bailey High School.

## Lowest performing schools:

Rodriguez High School had the lowest performing score in Math at 76.8 percent and in Reading it also had the lowest score at 80.7 percent. The overall passing rate for Rodriguez High School was also on the lowest end at 52.9 percent. Rodriguez High School had the highest number of Total Students at 3999 and also their per student budget was on the higher end at $637.00. One can draw from the conclusions that despite having a large student body and a large school budget, the school was still unable to invest in the resources to get their students to pass Math and Reading and performed at the lower end of the spectrum.

## Math and reading scores:

Further analysis from the Math and Reading scores give us insight that majority of students regardless of the school district did well in both areas. Looking at the student size ranges, in the small bin (<1000), 89 percent of the students passed both subjects. In the medium bin between (1000 -2000), 90.6 percent of the students from all school passed. With Charter schools having the highest passing rates at 90 percent, we can probably conclude that they have a robust and more engaging reading and math curriculum than District school type does.