Azriel Manuel Tamayo Written Report – Module 4

To analyze and summarize this challenge, we were tasked to figure out and help the school board with future strategic decisions regarding future school budgets and priorities. Our first task was to summarize the district and then to summarize the schools. Most of the calculations included the total amount of students, average scores in math and reading as well as its percentage. Meanwhile, specifically for the district summary, we were asked to take a look at the count of unique school. For schools, we looked at the school’s budget and the type. Once that was performed, we figured out what the highest performing and the lowest performing schools would be and the scores of both math and reading by grades. Then, we figured out spending costs as well as the school size and scores by school type. To conclude, this was a well thought out challenge in order to be in the shoes of a Data Scientist figuring things out for the school board. For specifics, we were able to find out that there were 39,170 students in total across each school, a total budget of $24,649,428 and found out at least 80% of all students were passing. There are more specifics and calculations!

The first conclusion I can draw is that when calculating the averages of a math score and reading score is how tightknit the averages are between the 15 schools listed. While that would make sense by seeing the overall passing for all students from before, it definitely is interesting to see that the majority of students in this district have success. If you compare the average scores of Cabrera, Holden, Pena, Shelton, Thomas, Wilson, Wright, you can see they all averaged 83% and even 84% for Pena High School specifically. This tells me that the students have a lot of success in these high schools specifically. This would make my job a bit easier since I will then know that those schools have more success than a few others, however, all schools do have success with the fact that many are having success in the first place.

The second and other conclusion I can draw was when you compare the highest performing schools and the bottom performing schools, by percentage of overall passing. A quick glance will show that there are multiple factors. The highest performing schools will have less students, a less budget, a slightly less student budget and all scores and percentages of passing is higher. Meanwhile, the bottom performing schools will have more students, a bigger budget and student budget and less overall passing by percentage. Adding on from the first conclusion, it definitely seems like the lesser the students, the better the chance at success and you can draw the rest of the conclusions there. Also, a very key point, that every highest performing school is a Charter type school, while the lowest are all District types. To me, this is very interesting information, because this would tell me where the priority lies. It may tell me to put more budget for the highest performing schools, but it may damage the bottom performers even more, only off of an assumption. However, you may also conclude that the more the budget, the more the students, which needs more budget anyway so every student can be accommodated.