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Rutgers Data Analytics and Visualization Bootcamp

Pandas Challenge Analysis

In the Pandas Challenge, the data that I observed showed me a simple trend that Charter schools do better academically than District schools. If you look at the data, students in Charter schools perform 6.5 points better on average in Mathematics than students in District schools, as well as nearly three points better in reading, a whopping twenty-seven percent more students pass Math classes in Charter schools than in public, a nearly sixteen percent more favorable rate in passing reading classes, and to top that point all off, 90% of students in Charter schools pass both classes, compared to just 53% in District schools.

Other takeaways from the data have shown me that schools with under 1,000 students are close to equal if not academically better than schools with 1,000-2,000 students. Other takeaways that I got from the data are that schools who spend the least in budget per student turn out to have a more successful academically. It’s also proven that while District institutions are putting more money into their programs, they don’t pan out to well in the classroom, at least not for the students. I also noticed that between students who are in grades 9-12, Senior students perform the best academically across all 15 schools charter or district, and the freshman by a very miniscule margin perform the worst, while the most consistent pattern was seen amongst the junior students across the all the schools with a consistent 82 average.

The art of coding the data was a bit rigorous given that you had to code so many things to get all the information you need. There were times where you coded the data and you would wind up with an error, and there were other moments where the code was given to you in chunks and had to finish off the sequence. Overall, the interesting part of the coding aspect for this challenge was a lot slower compared to coding regular python given that the instructions were right in front of you, to go along with the fact that you had help from the checkpoint version to see if you were making progress and what your codes should look like.