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Module 4: Pandas Challenge

Oct. 26, 2023

PyCitySchools Report

Intro:

P1:

Using the information provided, the district summary gives the following points. Among the 15 schools in the district, the budget of over $24 million is divided. The total number of students in the district is almost 40,000, although the students are not divided equally among the schools. The average reading scores and percent passing reading and within the of the letter grade B range. However, the analysis shows that the average math score, percent passing math and percent overall passing is below the range in which most school officials would like to see. The average math scores and percent passing math is in the letter grade C range. And the most severe outcome from this analysis in the percent overall passing is in the letter grade of D.

The analysis shows that the trends in the different schools have different outcomes that vary tremendously. There are two types of schools: Charter and District. The scores for Percent overall pass rate range from A to F letter grades. The school summary gives better insight into which schools are thriving to provide students with the opportunity to excellent in testing. Among the notable schools that have achieved this so far is Cabrara High School and Thomas High School. However, some are failing their students, of the lowest score is Rodriguez High School, with a percent overall passing in the F range.



Figure 1. District Summary.

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Figure 2. School Summary.

P2:

A more in-depth analysis into the percent overall passing is shown in Figures 3 and 4, shown below. As highlighted above, the highest-performing schools are listed. All the top overall passing rates are Charter schools. The total number of students in these schools is within the range of 900 to 2300. The data shows that they consistently have scores of B letter grade for both average math and reading scores and perform in the A range for percent passing math and reading. However, in Figure 4., the lowest performing schools are highlighted. All these schools are District schools. The total number of students in these schools is much higher than the highest-performing schools, ranging from 2900 to 4800. It also shows that the budget per student is consistently higher dollar amount than the highest performing schools. The overall passing rate for these schools fall into the F range, with is failing all students.

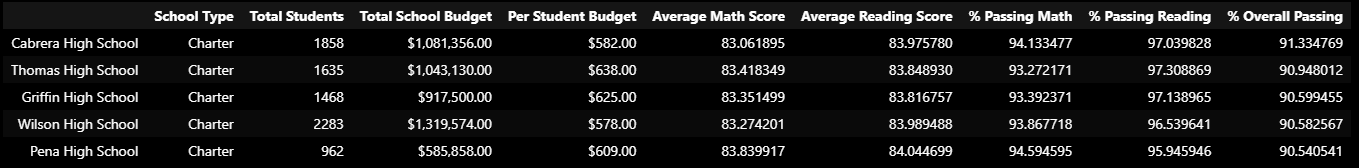


Figure 3. Highest-Performing Schools by Percentage of Overall Passing.

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Figure 4. Lowest-Performing Schools by Percentage of Overall Passing.

P3:

A black and white table with numbers

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Figure 5. Math Scores by Grade. Figure 6. Reading Scores by Grade.

P4:

A screenshot of a score

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Figure 7. Scores by School Spending.

A screenshot of a score

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Figure 8. Scores by School Size.

A screenshot of a calculator

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Figure 9. Scores by School Type.

Conclusion:

Summarizes the analysis (5 points)

Draws two correct conclusions or comparisons from the calculations (10 points)