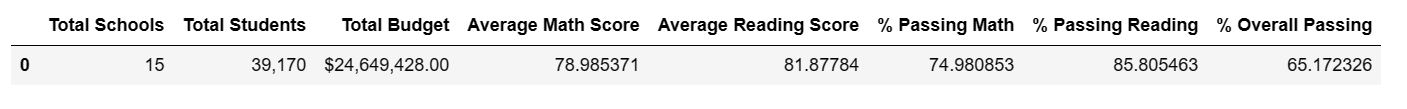
**PYCITYSCHOOLS ANALYSIS REPORT**

**SUMMARY**

* The PyCitySchools analysis report is based on the 2 CSV files provided (student and schools).
* Analysis conducted on 15 schools having a total of 39170 students. The school types considered for this analysis include District and Charter schools.
* Analysis based on school type conducted involves comparing both the school types. Charter school type have the highest percentage score in both Math and Reading. Thereby, Charter schools outperforms the District type schools by scoring the overall highest passing percentage.
* Depending on the school's strength, the school is classified as small if the strength is less than 1000, medium if the strength is between 1000 and 2000, and large if the strength is greater than 2000.
* On an average, small and medium-sized schools have the highest passing percentage in both Math and Reading. Small sized school scored 89.88% and medium sized school scored 90.62%. Whereas large sized school scored 58.28%.
* Cabrera High School defied the usual norm, despite receiving the lowest budget allocation per school, it excelled over other schools in overall passing rate. It is a large charter school type and has an overall pass percentage of 91%.
* We could see that as the budget per student increases the overall passing percentage decreases. Math and Reading pass percentage decreases with the increase in budget. This proves that the money spent cannot be correlated with the pass percentage of students or there is an additional unknown attribute such as spending on other dimensions of students’ development. This unknown attribute can be impacting the students’ studies and hence the pass percentage. With the given data, we cannot infer a direct dependency between Students’ performance and the budget spent per student.
* Grade-wise score for math is less in comparison to the reading score. Analysis is performed over the average Math and Reading scores of 9th grade, 10th grade, 11th grade, and 12th grade of all 15 schools. In each school, the average score across grades is not significantly different. However, a stark difference is observed in Math when the grade scores across different schools are compared. Overall, the Reading scores among grades are better compared to Math scores.
* Bottom performing schools: All the 5 bottom performing schools are district type large schools with students greater than 2000. Overall pass percentage is low. However, these schools have better average reading scores compared to average math scores.
* Top performing schools: All the top performing 5 schools are charter type schools with student count less than 2000 except for one school that has student count of 2283.
* % Passing rate in Reading is higher than % Passing rate in Math. This pulls down the overall pass percentage.
* Overall, all the students in all schools are performing well in reading hence the average score in reading is high compared to the average score in math.

**DISTRICT SUMMARY**

* There are 15 schools with 39170 students in total.
* A total of $24,649,428.00 is allocated to the school district.
* 78.985 is the average Math score and 81.877 is the average Reading score.
* Overall, 74.98% of students in the district passed Math and 85.80% of students passed Reading.
* 65.172% of students passed in the district.



**SCHOOL SUMMARY**

* Out of 15 schools, 7 schools are District type, and 8 schools are Charter type schools.
* Students count range from 427 to 4976.
* Score of 70 and above is considered pass in Math and Reading.
* % Passing Reading - ranges from 79.29% to 97.30%
* % Passing Math - ranges from 65.68% to 94.59%
* Average Math score ranges from 76.62 to 83.83
* Average Reading score ranges from 80.74 to 84.04
* Thomas High School excels in Reading with 97.30%. Out of 1635students, 1591 students scored above 70.
* Pena High School excels in Math with 94.59%. Out of 962 students, 910 students scored above 70.

**Per School Summary**

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**Top 2 schools in Reading with highest pass percentage**

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**Top 2 schools in Math with highest pass percentage**

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**HIGHEST PERFORMING SCHOOLS**

* The top 5 highly performing schools are all Charter type schools.
* Cabrera High School takes the first place with 91.33% passing rate. Math pass percentage is 94.13 and Reading pass percentage is 97.03%. The school has 1858 students.
* The top 5 schools have 90% students passing both Math and Reading scoring 70 and above in both Math and Reading.
* Total budget spent for these schools ranged from $585,858 to $1,319,574.

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**LOWEST PERFORMING SCHOOLS**

* The bottom performing 5 schools are all District type schools.
* Rodriguez High School have 52.988% pass percentage with 66.36% pass rate in Math and 80.22% pass rate in Reading. The school has 3999 students.
* The bottom 5 performing schools have 53% students passing both Math and Reading scoring 70 and above in both Math and Reading.
* Total budget spent for these schools ranged from $1,884,411 to $3,094,650.

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**MATH SCORES BY GRADE**

* Overall, we could see that the Math scores range the same among the 9th, 10th,11th, and 12th graders.
* 9th Grade Math score range between – 76.40 to 83.78
* 10th Grade Math score range between – 75.90 to 84.22
* 11th Grade Math score range between – 76.39 to 85.0
* 12th Grade Math score range between – 76.17 to 84.12

**READING SCORES BY GRADE**

* Overall, we could see that the Reading scores range the same among the 9th, 10th,11th, and 12th graders.
* 9th Grade Reading score range between – 80.63 to 84.12
* 10th Grade Reading score range between – 80.62 to 84.25
* 11th Grade Reading score range between – 80.40 to 84.37
* 12th Grade Reading score range between – 80.30 to 84.69

**SCORES BY SCHOOL SPENDING**

* Performance of the students is not related to the budget spent by the schools.
* Schools with Lowest budget allocated have 90% pass rate whereas, highest budget allocated schools have scored 53.52% pass rate. Budget spent and performance have zero correlation.

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**SCORES BY SCHOOL SIZE**

* From the table below, it is very clear that small sized (less than 1000) and medium sized schools (1000 to 2000) have higher overall pass rate compared to the large sized schools with students between 2000 and 5000. However, given the amount of data it is difficult to draw direct relationship between the school size and the students’ performance.

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**SCORES BY SCHOOL TYPE**

* Charter school students excelled in both Math and Reading. Charter school secured 93.62% pass percentage in Math and 96.58% pass rate in Reading. 90% students scored above 70 in both Math and Reading.
* District school students have better performance in Reading a pass rate of 80.79%. In Math the pass rate is 66.54%. Overall, 53% students scored 70 and above marks in both Math and Reading.

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