City Schools Report

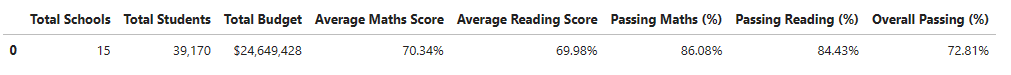
This is a report of the following findings regarding the Local Government Area which includes 15 schools in a certain Local Government Area. The analysis gives us two data sets that contain information regarding schools and individual students and merge these two CSV datasets. This merged dataframe was then used to calculate and summarise information regarding the schools budget, student count, maths scores and reading scores.

Furthermore, these summaries were completed below.

* Local Government Area (LGA) Summary
* School Summary
* Highest-Performing Schools (Top 5)
* Lowest-Performing Schools (Bottom 5)
* Maths Scores by Year
* Reading Scores by Year
* Scores by School Spending
* Scores by School Size
* Scores by School Type

# Local Government Area (LGA) Summary

This section of the summary gives us an overview of the area and the total for all schools. In this way, the summary can be seen as a standard or average of all thing scores for maths and reading and the total students in the area with the total budget for schools in the LGA.



# School Summary

Using the merged school data and separate school data set, several variables were calculated to form the following summary table that including the School Type, Total Students, Total School Budget, Per Student Budget, Average Maths Score, Average Reading Score, Percentage of students passing maths, reading and both per school. This summary focuses on individual school statistics rather than LGA statistics.

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# Highest-Performing Schools (by % Overall Passing)

Next we were able to determine the highest and lower performing schools by focusing on the percentage of students passing both maths and reading. This was done by sorting the values of the percentage of students passing and collecting the head of ascending and descending. This could have also been calculated by using .head() and .tail(). This shows that Griffing High School was the highest performing school by percentage overall passing and Hernandez High School as the lowest-performing school in this LGA.

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# Lowest-Performing Schools (by % Overall Passing)

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|  |  |
| --- | --- |
|  | |
| Maths Score by Year | Reading Score by Year |
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The above summary gives information regarding the mean/average of maths and reading for each year level per school to summarise more individual school performance per subject.

# Scores by Spending

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# Scores by School Size

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# Scores by School Type

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This last set of data frames used bins, groupings and calculations to give a good overview of the correlation(s) (if any) of school spending, size and type with maths and reading scores, as well as the percentage of passing students.

# Summary

With the help of the tables and calculations completed for the LGA provided, two conclusions can be made.

Firstly, the top performing school data frame shows that the percentage of overall passing students for maths and reading is not correlated to the total school budget or per student budget. As noted on the Lowest-Performing School data frame, there were schools such as Hernandez High School and Johnson High School that had both a higher Total Budget and Per Student budget than schools such as Griffin High School and Cabrera High School who were the Top-Performing Schools (by percentage overall passing). Therefore, in this LGA it may be implied that the Total Budget or the Per Student Budget does not correlate or effect the average overall passing scores for maths and reading.

Secondly, in this LGA, Independent attending students had a higher average score and overall percentage passing rate than Government Type attending students. This may imply from the dataset we have, that students in Independent schools generally perform better in maths and reading than those in Government schools in this LGA.