**Pandas Challenge - Written Report**

**Written Report**

To receive all points, the written report presents a cohesive written analysis that:

* Summarises the analysis (5 points)
* Draws two correct conclusions or comparisons from the calculations (10 points)

**Summary of analysis**

The analysis provides a comprehensive overview of the educational landscape within the Local Government Area, involving various performance metrics across schools.

It is outlining the summary statistics for the entire region, including total schools, students, budget allocation, and average academic scores.

As well as detailed insights into individual schools, school types (Government or Independent), budget allocations, student numbers, and academic performances.

**Conclusions**

The dataset has a total of 15 schools with 39,170 students. The total students average maths score is 70.34% which is higher than the average reading score 69.98%. When we see the passing rate, maths (86.08%) has a higher rate than reading (84.43%), the overall passing rate is 72.81%.

**Influence of Spending Ranges on Student Achievement**

Schools in lower spending ranges (<$585 and $585-$630) shows higher average scores and passing rates, while higher spending ranges ($630-$645 and $645-$680) show lower academic performance.

This implies that while adequate funding is crucial, academic achievement might not be solely determined by higher budgets. Effective utilisation of available resources and strategic allocation could significantly impact student success irrespective of the overall spending range.

**Academic Performance with School Size**

Smaller-sized schools have higher average scores in both math and reading.

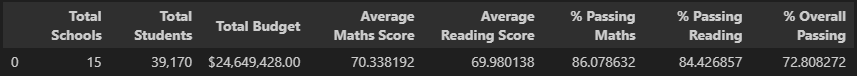
This could be possibly due to personalised attention given the teachers to student ratio and perhaps a more focused learning approaches.

**Impact of School Type on Academic Performance**

This data highlights academic performance between Government and Independent schools.

Independent schools demonstrates higher average scores across both maths and reading.

**Annex**

**Local Government Area Summary**

**A screenshot of a graph

Description automatically generatedSchool Summary**

**A screenshot of a computer screen

Description automatically generatedTop Performing Schools (By % Overall passing)**

**A screenshot of a computer screen

Description automatically generatedBottom Performing Schools (By % Overall passing)**

**Maths Score by Year**

**A screenshot of a school board

Description automatically generated**

**A table with numbers and letters

Description automatically generatedReading Score by Year**

**A screenshot of a graph

Description automatically generated  
Scores by School Spending Ranges per Student**

**A screenshot of a computer screen

Description automatically generatedScore by School Size**

**Scores by School Type**

**A screenshot of a computer

Description automatically generated**