Module 4 Challenge:

PyCitySchools Analysis

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# Introduction:

The high-level analysis aims to present insights into school performance within the Randle Council Shire. The findings of this report will serve as valuable information for the school board and mayor, aiding them in making strategic decisions regarding future school budgets and priorities. The analysis is based on data collection from the 15 high schools in the Randle Council Shire, comprising of 7 Government schools and 8 Independent schools. Key metrics examined include student enrolment, school budgets and performance in mathematics and reading tests.

According to the Australian Government Department of Education website: “Schools are funded through a combination of Australian Government (Commonwealth) funding, state and territory government funding, and funding from fees, charges and other parental or private contributions”.[[1]](#footnote-1) While all schools receive Government funding, Government schools generally receive more assistance than Independent Schools. “For government schools in most states and territories, the payment of fees by parents and guardians is voluntary and the fee levels are low.”[[2]](#footnote-2)

# Analysis & Conclusions:

1. Randle Council Summary:



The above summary shows that mathematics slightly outperformed reading in terms of average test scores overall and proportion of students passing each subject.

1. Top Performing Schools based on % Overall Passing:

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The top 5 performing schools based on overall proportion of students passing, consisted of 3 Independent schools and 2 Government schools. Independent schools took the top 2 positions. All schools showed a slightly higher average performance in mathematics than reading. Furthermore, the proportion of students passing mathematics was slightly higher than the proportion of students passing reading. The school budget per student ranged from $582 to $637, with the Government schools receiving the higher budget per student in comparison to the Independent schools. Although, Independent school, Griffin High School’s budget per student was only $3 less than Government School, Cabrera High School. Furthermore, both Government schools had significantly more students and funding allocated than the Independent schools.

1. Bottom Performing Schools based on % Overall Passing:

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The bottom 5 performing schools based on overall proportion of students passing, consisted of 4 Government schools and 1 Independent school. The average reading score was slightly higher than the mathematics score for 3 of the schools, whilst the proportion of students passing mathematics was slightly higher for 4 of the schools. The school budget per student ranged from $578 to $655, with the Government schools receiving the higher budget per student in comparison to the one Independent school.

1. Maths and Reading Scores By School Year:

|  |  |
| --- | --- |
| Maths: | Reading: |
|  |  |

When breaking down the average mathematics and reading scores by year level, an Independent school always had the highest average score for each of the year levels, except for the highest average reading score for Year 12 being at a Government School (Bailey High School). Furthermore, a Government school always had the lowest average score for each of the year levels, except for the lowest average score for mathematics at an Independent School (Wilson High School).

1. Scores by Spending Ranges:

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The lower the Government funding per student, the average mathematics and reading scores tend to increase. Furthermore, the proportion of students who pass increases as well. The $585-$630 spending per student range showed the highest performance of all ranges, across all metrics in the above table.

1. Scores by School Size:

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The larger the number of students at a school the lower the scores and the lower the proportion of students passing mathematics, reading and overall. The best performing school size range was “Small” less than 1000 students per school.

1. Scores by School Type:

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Independent schools outperform Government schools in mathematics, reading and overall testing.

# Recommendations:

As mentioned earlier, this analysis is high-level therefore it is recommended to further investigate the following:

* school performance based on gender,
* private & parental contributions vs government funding allocations to all schools,
* class sizes, and
* number of teaching staff to student ratios.

1. Sourced from [How schools are funded - Department of Education, Australian Government](https://www.education.gov.au/schooling/how-schools-are-funded#:~:text=Most%20schools%20receive%20some%20private,the%20fee%20levels%20are%20low.) under “How Schools are funded”. [↑](#footnote-ref-1)
2. Sourced from [How schools are funded - Department of Education, Australian Government](https://www.education.gov.au/schooling/how-schools-are-funded#:~:text=Most%20schools%20receive%20some%20private,the%20fee%20levels%20are%20low.), under “Private Funding”. [↑](#footnote-ref-2)