**Report on school summary**

In this data analysis I have generated the following summaries.

1. *Local Government Area (LGA) Summary* – This gives a broad overview of all the schools included in the data files.

2. *School Summary* – This table gives a summary of the academic performance of each school.

a. *Highest-Performing Schools (by % Overall Passing)* – This gives the top 5 best performing schools from school summary.

b. *Lowest-Performing Schools (by % Overall Passing)* – This gives the bottom 5 performing schools from school summary.

c. *Maths Scores by Year* – This table gives the average Maths scores by year level for each school.

d. *Reading Scores by Year* – This table gives the average Reading scores by year level for each school.

e. *Scores by School Spending* – This table gives the average scores and percentage of students passed by school budget for each student.

f. *Scores by School Size* - This table gives the average scores and percentage of students passed by total number of students in the school.

g. *Scores by School Type* – This table gives the average scores for government schools and independent schools.

Conclusions based on the summary data.

1. The schools which have per student budget in the range $585-630 are the best performing schools. When per student budget is under $585 the average scores have dropped slightly. Similarly, the academic performance of the schools which are spending more than $630 per student is inferior compared to schools with per student budget $585-630.  
   The percentage of students overall passing in schools with budget $585-630 is 79.87%. This drops by approximately 3% for schools with budget under $585. But for the budget greater than $630 it dropped down significantly by 13% and recorded as 66.75%.

From these observations, we can conclude that the extra budget per student does not improve academic performance of the students.

1. Independent schools are performing better in every parameter compared to government schools. The average Maths and Reading scores differ only by 1 point. But the number of students passing the tests is much higher in independent schools. The percentage of the students passing both tests is much higher in independent schools. If we look at the top 5 performing schools 3 out of 5 are independent. Whereas in bottom 5 performing schools 4 out of 5 schools are government schools. We can infer from this data that independent schools are performing better than government schools.