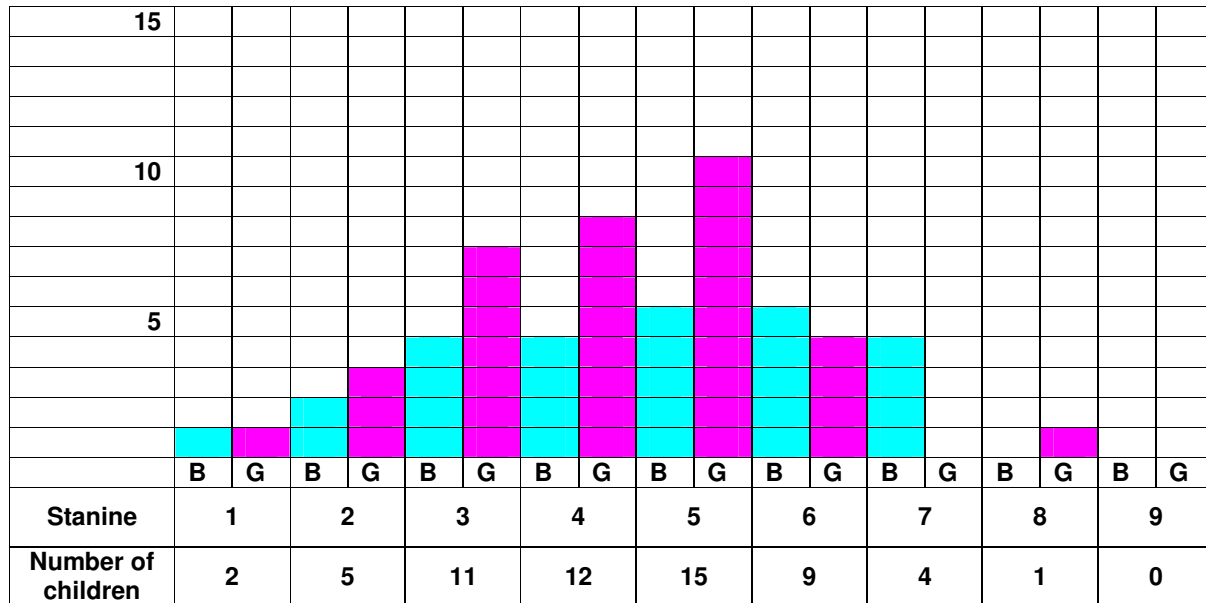


PAT Mathematics Data: Results for students classified as being Maori



The numbers of Maori students at a particular class level are too few to produce a meaningful graph, as the placement of a single child is enough to considerably alter the picture and give a misleading impression. The graphs therefore aggregate the results for all students under this classification from Year 4 to Year 8.

The online database –comparing our children’s results with national norms- has the same problem, in that there are too few children at any level to provide a meaningful comparison.

Analysis of the above figures as a whole show an approximate bell curve –the largest numbers of children are around the Stanine 4-5 level (Stanine 5 is considered average). This is marginally below the results for all ethnicities in the school –the Stanine average for the school is 5.2, that for Maori children is 4.7.

As with almost all test data, the results show increasing success as children move up through the classes –after a start in Year 4 at Stanine 4.3 (approx), Year 8 students average out at 5.1.

In general, Maori children advance at a fairly similar rate to all other children; but the results indicate that they start at a lower level and maintain this margin throughout their time at RBS.

A word of caution: As noted above, numbers are too few for too much to be read into a single dataset. Until two years ago, a single family of two boys who had very high results, was enough to move our aggregated results to well above national norms for all children irrespective of ethnicity. The arrival or departure of a family at either end of the range would similarly alter the results.

Overall achievement on the Vocabulary test shows a very similar pattern. The mean Stanine is 4.9.

There is no discernable weakness in vocabulary as an indicator of difficulty with reading comprehension. The overall numbers of students is such that the margin of error for the test results is greater than the difference between this group and either national norms or those of RBS students as a whole.

Of greatest concern is the small number (12-15) of children whose results are consistently in the Stanine 1-3 area, from year to year. Considerable effort and extra resources have been –and are being- allocated to these children, with limited success. In some cases these children have clearly defined learning difficulties, such as visual perception, dyslexia etc; others have factors such as inconsistent attendance or ongoing involvement with outside agencies such as CYFS that affect the continuity of their learning or their ability to prioritise learning in their lives. It may be that support for their families as a whole, would provide the stability that enabled them to place learning higher in their lives.

Analysis of STAR (Supplementary Test of Reading Achievement) presents an encouraging picture. This test examines a number of reading skills –Word recognition, sentence comprehension, paragraph comprehension and vocabulary- with the addition of advertising language and writing style at Year 7/8 level.

Student performance is again measured in Stanines, although teachers are able to break down the data for each child to help determine teaching priorities.

Stanine	1	2	3	4	5	6	7	8	9
March	3	1	11	10	14	8	13	9	5
October	3	0	4	13	10	12	15	12	7

Most pleasing is that the number of children “at risk” (green) has dropped from 22 to 17, and the number of children at “advanced” –i.e. a level of achievement well above the national average (yellow) has climbed from 27 to 34, approaching half the children who are classified as being Maori.

Of the three boys classified as “Critical” (red), two have made significant progress within this level.

The improvement in result shows that of the 74 children who are classified as being Maori, 10 have “regressed”. This does not necessarily mean failure –most of these have in fact increased their score, but not enough to show “expected improvement”. Some of these are continuing to achieve at Stanine 8 or 9.

FEB	OCT		
Stanine	Stanine	10	Regressed
Average	Average	28	Expected Progress
5.5	6.0	36	Accelerated Progress

Comparison of data indicates that children who are classified as being Maori have made slightly greater overall progress as a group than RBS students as a whole, although the Stanine average is 0.2 lower (this is small enough to be within the margin of error).

Summary

Overall progress and achievement of children who are classified as being Maori is very close to that of RBS children as a whole. As noted earlier, the sample group is too small at any one level for that data to be statistically significant –the performance of just one or two children is enough to greatly alter the picture. Looking at the whole group, it is noted that there is a small negative difference across all tests. In each, there is a very small number of children (almost all boys) whose achievement is well below expectation, and which causes concern. In all these cases, considerable resourcing and support have been given to these children, but the results have not been encouraging (Note that this is not restricted to children who are classified as being Maori).

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