

PAT (Progress and Achievement Test) – Term 1, 2012

PATs are multiple-choice tests designed to help teachers determine achievement levels of Year 4-10 students in Mathematics, Reading Comprehension, Reading Vocabulary, and Listening Comprehension. The test results help teachers decide what kinds of teaching materials are needed and which methods or programmes are most suitable for their students. PATs are also important because they identify the progress a student is making from year to year. School wide the results can be used to identify trends and achievement patterns and to make school wide comparisons to national norms.

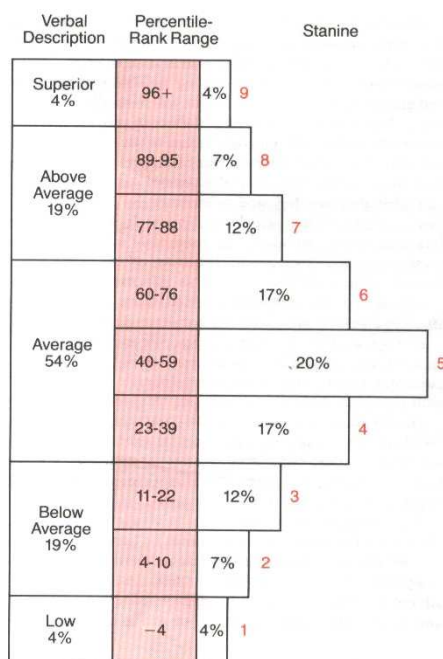


FIGURE 2: Interrelationship Among Percentile Ranks and Stanines

PAT:Reading Comprehension assesses how well students understand the text they are reading. Each test is organised around several extended pieces of writing which include stories, poems and other kinds such as reports or explanations.

PAT:Reading Vocabulary assesses students' ability to understand the words they read. Each question is based around a key word that is embedded in a short sentence. Students are asked to choose a synonym that best represents the meaning of this word from a list of five possible alternatives.

PAT:Listening Comprehension measures a child's ability to understand spoken material. Students listen to a passage and then answer questions. It helps teachers detect children with poor listening skills and is also useful in identifying those children whose listening comprehension performance is significantly different from their ability to comprehend written material.

PAT:Mathematics covers number knowledge, number strategies, algebra, geometry and measurement, and statistics.

PAT enables a student's achievement to be compared against National Norms.

PAT Stanines and their associated test scores are scaled and normed to fit the Bell Curve of Normal Distribution.

Scaled Scores

Students receive a raw test score which is converted onto a scale. There are three separate PAT scales: the PAT: Mathematics scale, the PAT: Reading Comprehension scale and the PAT:Reading Vocabulary scale.

Each scale covers Years 4-10 so an individual student's progress can be tracked over time. As students learn more and move through the year levels, they should move up the scale.

Stanines

Scale scores at each year level nationally are divided into nine levels of achievement, called stanines, with the lowest performance level being stanine one and the highest stanine nine.

Reporting on Maori and Pacific Groups – NZCER makes the following point - *Schools with small numbers of students at a particular year level (20 or less) should take care when comparing their students' achievement with that of a national reference group. Statistics for small-sized cohorts are more likely to be affected by factors such as measurement error and extreme values, meaning the distribution of achievement could look different if the assessment were to be repeated.*

Results for Pacific students (9) are on the whole not reported separately for the above reason and doing so may breach confidentiality. Results for Maori students (24) are included but any group data is to be treated with care and is not conclusive evidence. Individual information is however useful and used by classroom teachers.

Kapanui PAT 2012 Reading Comprehension

Overall performance

% Average, Above Average or Superior – table 1

NZ Norm students at or above Stanine 4 =77% (average, above average, superior)

2012 Kapanui at or above Stanine 4 Whole School = 86% (+9%), Boys 83% (+6%) and girls 89%, (+12.1%)

2011 Kapanui at or above Stanine 4 Whole School = 84.8% (+7.8%), Boys 80.3% (+3.3%) and girls 89%, (+12.1%)

Kapanui School has a satisfactory level of performance in PAT Reading Comprehension with 86% of students in the average, above average or superior range compared with the NZ norm of 77%. This high level is maintained from Y4 through to Y8 (graph 3) indicating that the students continue to make satisfactory progress each year as they progress through the school.

% Above Average or Superior – table 1

Kapanui exceeded the NZ norms (23%) for % of students at stanines 7, 8 and 9 by +9.6 % (32.6%), Boys by +5.3% (28.3%) and girls by +13.8 % (36.8%)

% Low, Below Average – table 1

Kapanui below or low - Stanines 1, 2, 3 – Whole School = 14% (-9%)

Kapanui School has a satisfactory level of performance in PAT Reading Comprehension with only 14% of students in the below average, or low range compared with the NZ norm of 23%.

Kapanui School has a wide range of interventions directed at reducing this group by early identification, early intervention and accelerating their progress.

Mean Stanines / Mean Scaled Scores

| PAT | Rdg comp | NZ Norm | School | Female | Male |
|--------------|----------|---------|--------|--------|------|
| Mean Stanine | | 5.0 | 5.5 | 5.7 | 5.3 |

2012 PAT Reading Comprehension – Kapanui School Mean stanine 5.52 (NZ 5)

Kapanui School mean stanines and mean scaled scores (table 2, graphs 12 and 13) are positive against NZ norms in all year groups and positive or equal to Kapiti Cluster data for 4/5 year groups.

In particular it is encouraging to note that the mean stanine and mean scaled score at Y4 has increased each year from 2010 – 12. The mean scaled score for the 2012 Y4 is 36.5, +7.7 (NZ mean scaled score 28.8). The Kapanui Y4 2012 mean is greater than the NZ mean for Y5 (35.8). This trend is not apparent in the Kapiti cluster data. This is a strong indication that the programmes and early interventions put in place since 2009 are having a positive effect on student achievement at Kapanui School.

Gender Comparisons (graphs 6-11, table 1)

2012 PAT Reading Comprehension - Mean stanine Boys 5.3, (total boys 159) Girls 5.74 (total girls 163) - *2011 Mean stanine Boys 5.44, Girls 5.68*
Overall girls' performance is better than boys. Girls' mean scores are more positive than boys with all year groups having 86 to 96% of stanines 4-9. Boys are less positive compared to NZ norms with the 2012 Y6 and Y7 slightly below the NZ norm. It is again pleasing to note the positive result for Y4 boys 97% +20 (NZ norm 77%).

Of note are the Y4 and Y7 girls with 47% and 46% in stanines 7-9 and the Y4 and Y5 boys with 34% and 33% in stanines 7-9 (NZ norm 23%) – (table 1)

Maori and Pacific Comparisons – (tables 1, 3, graphs 1, 4 and 5)

The number of Maori students in Y4-8 is small, (24), so any conclusions are to be treated with caution. Maori students make up 11% of the school.

Maori students Y4-8 have a mean stanine of 5.2 compared to Kapanui All 5.5 and NZ All 5. The mean stanine for Maori students at Kapanui School is positive as it is higher than the NZ mean but is lower than the Kapanui mean stanine 5.5. Of note are the mean stanines for Maori in Y7, 4.7 and Y8, 4.5, which fall below the NZ norm of 5.

Average, above average and superior - 20/24 (83.3%) Maori students achieved in the Stanine 4-9 levels (NZ 77%).

Above average and superior - 4/24 (16.6%) Maori students achieved in the Stanine 7-9 levels (NZ 23%).

Low or below average - 4/24(16.6%) Maori students achieved in the Stanine 1-3 levels - (NZ 23%).

Maori students at Kapanui School are achieving well against NZ norms in the average stanines but not in the above and superior stanines.

Kapanui School in 2011 and 2012 has noted a need to raise the achievement of Maori at both the national and local level. The MOE strategy Ka Hikitia has been used as a resource to assist the school review and develop goals and actions to raise the achievement of Maori students. The Board should consider setting specific targets in 2013 to increase the % of Maori students achieving at the higher stanine levels for Reading Comprehension.

Pacifica Students

Kapanui has 13 students (23/5/12) who identify as Pacific.

6 Cook Island Maori / 1 Fijian / 5 Samoan / 1 Other Pacific Peoples.

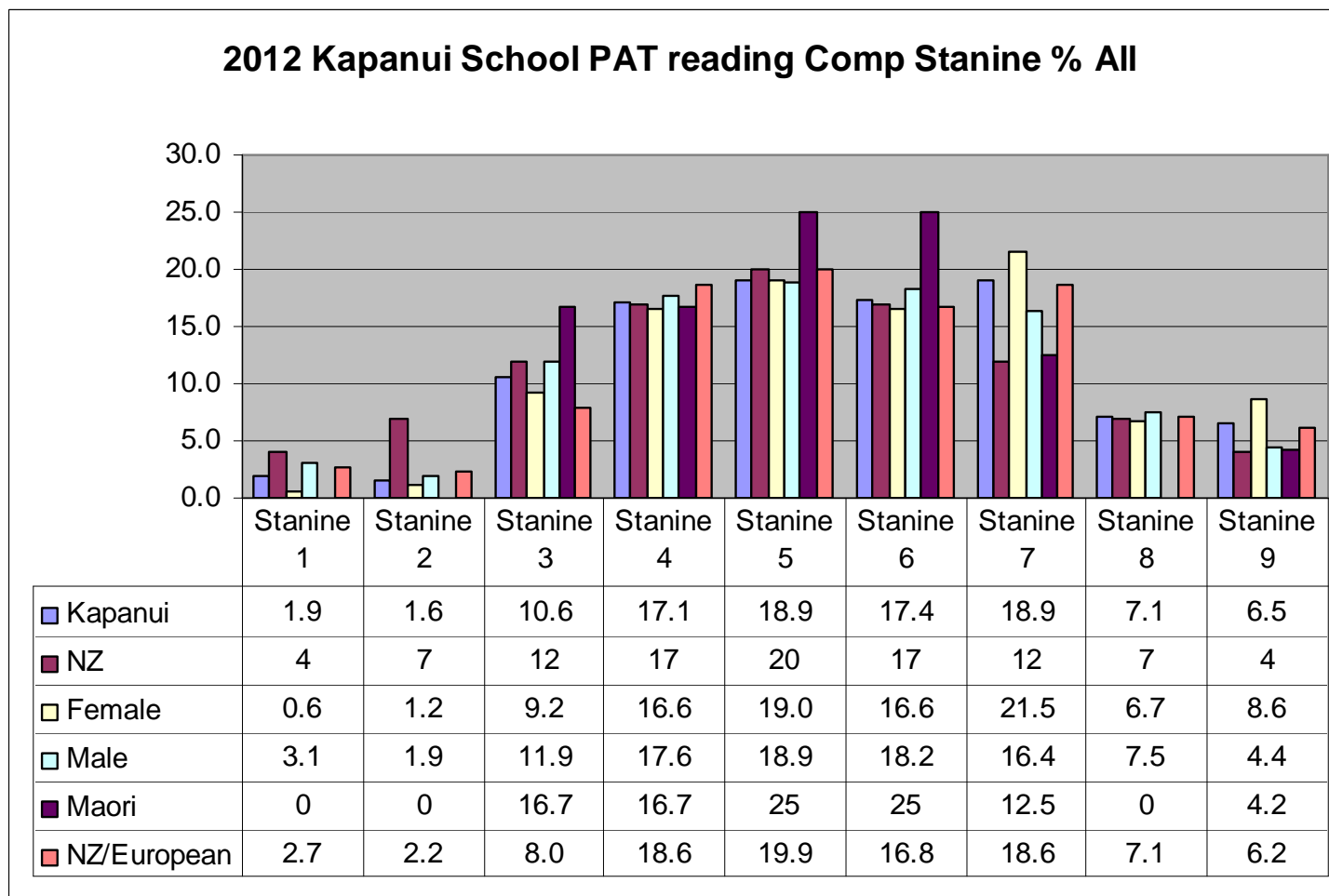
PAT Reading 9 students

1/9 – stanine 8 – 11% / 2/9 – stanine 7 – 22% / 1/9 – stanine 6 – 11% / 3/9 - stanine 4 – 33% / 2/9 stanine 3 – 22%

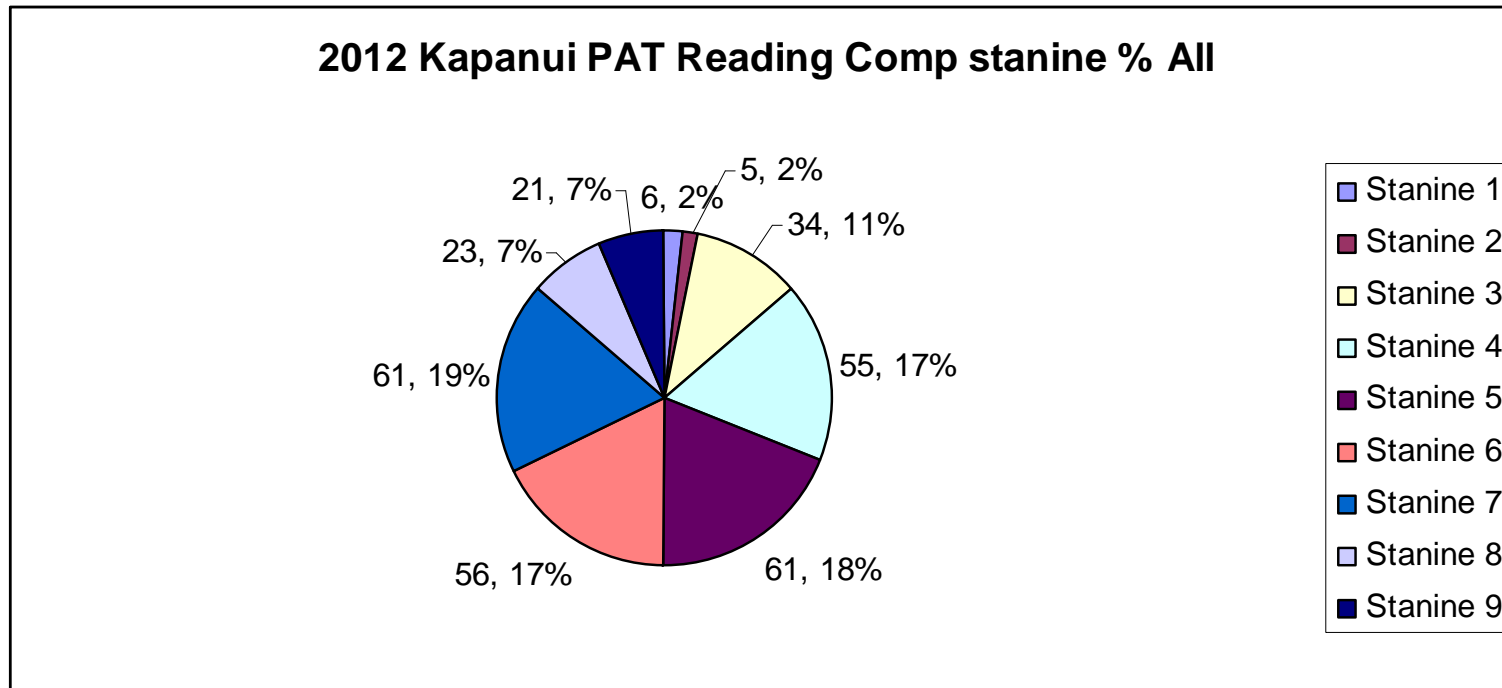
Pacific comparisons are not made as numbers are too small to be of use - 9 students.

2012 Item analysis – item analysis of the tests Y4 – 8 indicated that in all year groups the percentage correct against national percentages was very positive with most percentages above national norms. The Item report is used to look for overall strengths and weaknesses a group may possess **No particular weakness trend is indicated**

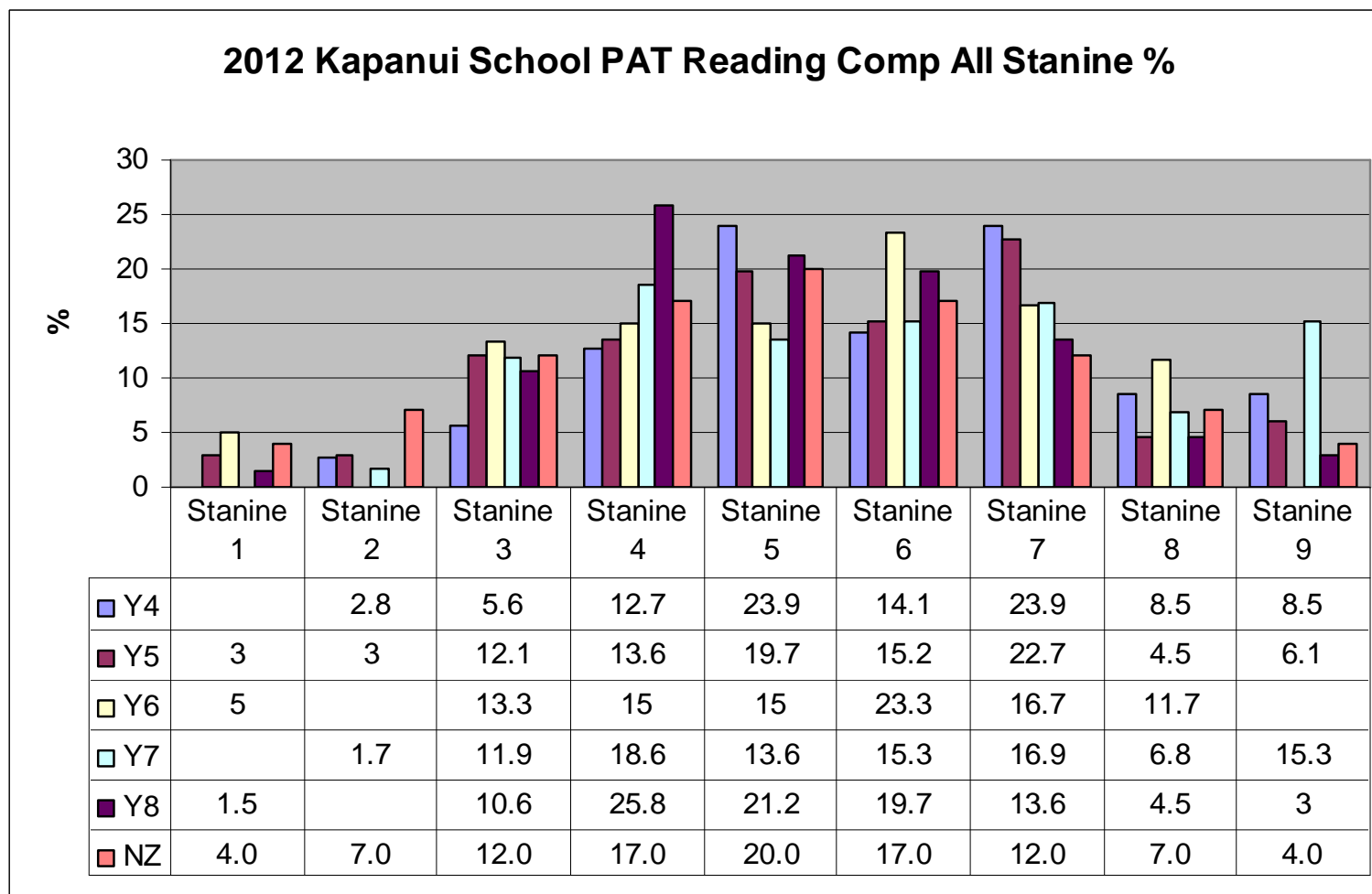
Graph 1 – 2012 PAT Reading Comprehension Whole School Stanine %, Kapanui, Female, Male, Maori, NZ



Graph 2 – 2012 PAT Reading Comprehension Whole School Stanine % and Student Count



Graph 3 – 2012 PAT Reading Comprehension Whole School Stanine % Year 4-8



Comparisons of Groups – Male, Female, Maori, Pacific

Table 1 - 2012 PAT Reading Comprehension Year Group Performance – Female, Male, Maori and Pacific - % stanine

Green – areas of strength / Red – areas of concern

| Stanine 2012 | 1 | | 2 3 | | 4 5 6 | | 7 8 | | 9 | | mean stanine | Stanine % 4 to 9 | 2012 diff | Stanine % 7 to 9 | diff | 2010 4-9 | | 2011 4-9 | | 2010 7-9 | | 2011 7-9 | | | | | | | | | |
|--------------|-----|--|------|--|-------|--|------|--|-----|--|--------------|------------------|-----------|------------------|------|----------|------|----------|------|----------|------|----------|------|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NZ Norm | 4 | | 19 | | 54 | | 19 | | 4 | | 5 | 77 | diff | 23 | diff | | diff | | diff | | diff | | diff | | | | | | | | |
| Kapanui | 1.9 | | 12.2 | | 53.4 | | 26.1 | | 6.5 | | 5.5 | 86 | 9 | 32.6 | 9.6 | | | | | | | | | | | | | | | | |
| All - 2012 | % | | % | | % | | % | | % | | | % | | % | | | | | | | | | | | | | | | | | |
| Y4 | 0 | | 8 | | 51 | | 32 | | 8 | | 5.9 | 91 | 14 | 40 | 17 | 90 | 13 | 90 | 13 | 10 | - | 10 | - | | | | | | | | |
| Y5 | 0 | | 15 | | 51 | | 28 | | 6 | | 5.5 | 85 | 8 | 34 | 11 | 85 | 8 | 86 | 9 | 15 | -13 | 14 | -13 | | | | | | | | |
| Y6 | 6 | | 12 | | 48 | | 29 | | 5 | | 5.5 | 82 | 5 | 34 | 11 | 81 | 4 | 79 | 2 | 19 | -4 | 21 | -2 | | | | | | | | |
| Y7 | 2 | | 15 | | 51 | | 22 | | 11 | | 5.5 | 84 | 7 | 33 | 10 | 89 | 12 | 79 | 2 | 11 | -12 | 21 | -2 | | | | | | | | |
| Y8 | 2 | | 11 | | 67 | | 18 | | 3 | | 5.2 | 88 | 11 | 21 | -2 | 80 | 3 | 90 | 13 | 20 | -3 | 10 | -13 | | | | | | | | |
| Girls | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Y4 | 0 | | 12 | | 41 | | 37 | | 10 | | 6 | 88 | 11 | 47 | 24 | | | | | | | | | | | | | | | | |
| Y5 | 0 | | 14 | | 48 | | 31 | | 7 | | 5.7 | 86 | 9 | 38 | 15 | | | | | | | | | | | | | | | | |
| Y6 | 3 | | 9 | | 48 | | 33 | | 6 | | 5.8 | 87 | 10 | 39 | 16 | | | | | | | | | | | | | | | | |
| Y7 | 0 | | 4 | | 50 | | 27 | | 19 | | 6.1 | 96 | 19 | 46 | 23 | | | | | | | | | | | | | | | | |
| Y8 | 0 | | 12 | | 74 | | 12 | | 3 | | 5.1 | 89 | 12 | 15 | -8 | | | | | | | | | | | | | | | | |
| Boys | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Y4 | 0 | | 3 | | 63 | | 27 | | 7 | | 5.7 | 97 | 20 | 34 | 11 | | | | | | | | | | | | | | | | |
| Y5 | 0 | | 17 | | 53 | | 25 | | 6 | | 5.3 | 84 | 7 | 31 | 8 | | | | | | | | | | | | | | | | |
| Y6 | 9 | | 15 | | 48 | | 24 | | 3 | | 5.2 | 75 | -2 | 27 | 4 | | | | | | | | | | | | | | | | |
| Y7 | 3 | | 24 | | 52 | | 17 | | 3 | | 5 | 72 | -5 | 20 | -3 | | | | | | | | | | | | | | | | |
| Y8 | 3 | | 9 | | 59 | | 25 | | 3 | | 5.3 | 87 | 10 | 28 | 5 | | | | | | | | | | | | | | | | |

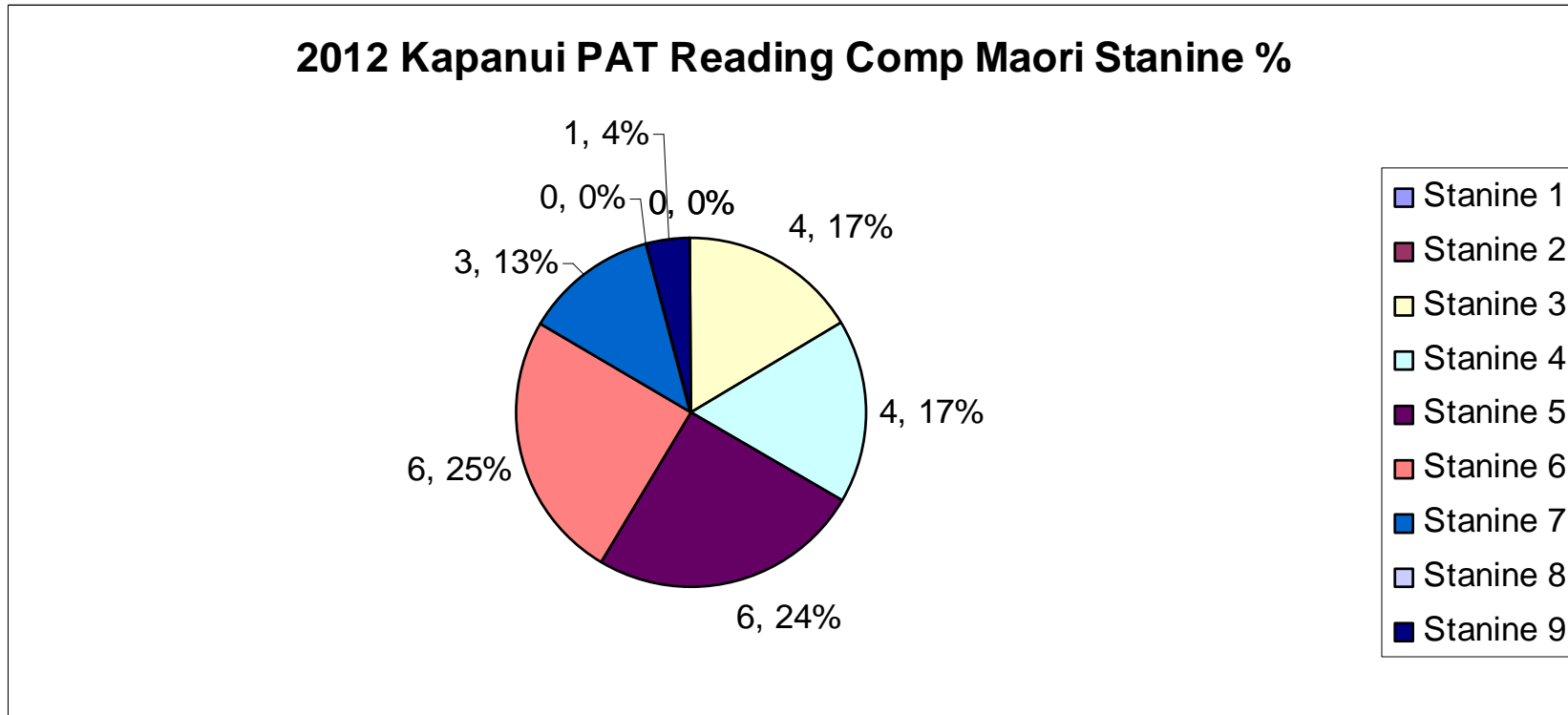
| | | | | | | | | | | |
|---------------|---|----|----|----|----|-----|-----|-----|----|-----|
| NZ / European | | | | | | | | | | |
| Y4 | 0 | 8 | 52 | 33 | 8 | 5.9 | 93 | 16 | 41 | 18 |
| Y5 | 0 | 16 | 50 | 29 | 5 | 5.5 | 84 | 7 | 34 | 11 |
| Y6 | 7 | 13 | 45 | 32 | 3 | 5.4 | 80 | 3 | 35 | 12 |
| Y7 | 2 | 12 | 53 | 22 | 12 | 5.6 | 87 | 10 | 34 | 11 |
| Y8 | 2 | 7 | 68 | 20 | 3 | 5.3 | 91 | 14 | 23 | 0 |
| Maori | | | | | | | | | | |
| Y4 | | | | | | 5.4 | 80 | 13 | 20 | -3 |
| Y5 | | | | | | 5.5 | 100 | 33 | 50 | 27 |
| Y6 | | | | | | 5.7 | 100 | 33 | 14 | -9 |
| Y7 | | | | | | 4.7 | 67 | -10 | 17 | -6 |
| Y8 | | | | | | 4.5 | 75 | -2 | 0 | -23 |
| Pacific | | | | | | | | | | |
| Y4 | | | | | | 0 | | | | |
| Y5 | | | | | | 0 | | | | |
| Y6 | | | | | | 4 | | | | |
| Y7 | | | | | | 4.5 | | | | |
| Y8 | | | | | | 0 | | | | |

* Numbers of Maori students in each year level are too small to usefully use the percentages. (Total 24 students)

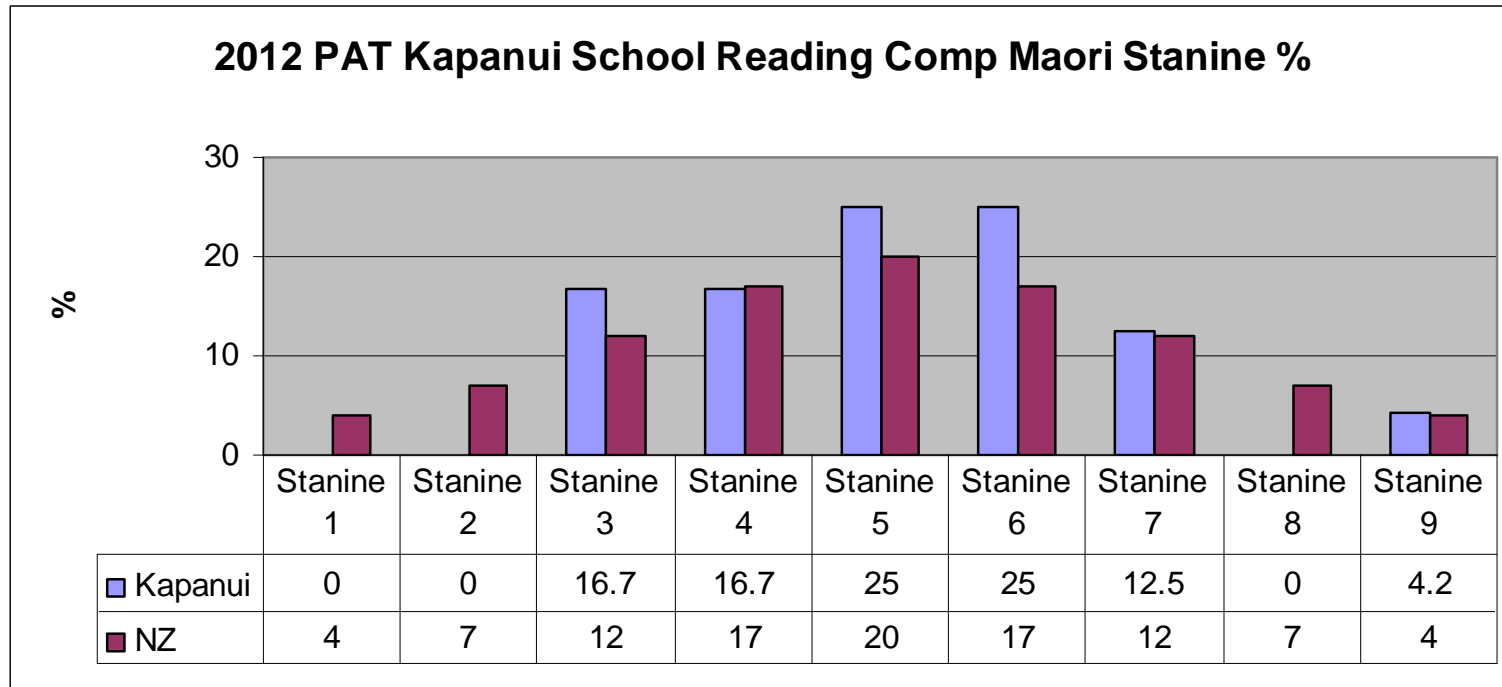
* Numbers of Pacific students in each year level are too small to usefully use the percentages. (Total 9 students)

* Year level data for Maori and Pacific is not presented as it may breach confidentiality.

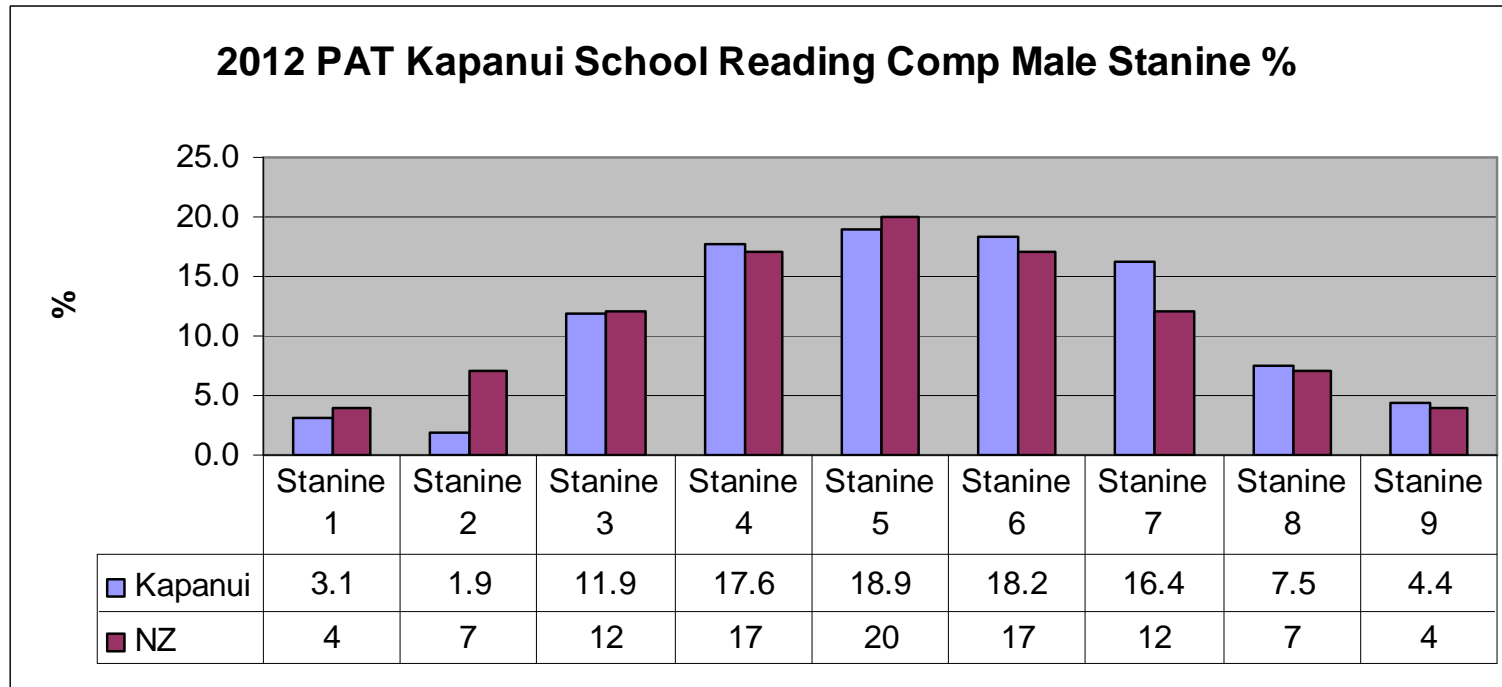
Graph 4 – 2012 PAT Reading Comprehension Maori Stanine % and Student Count



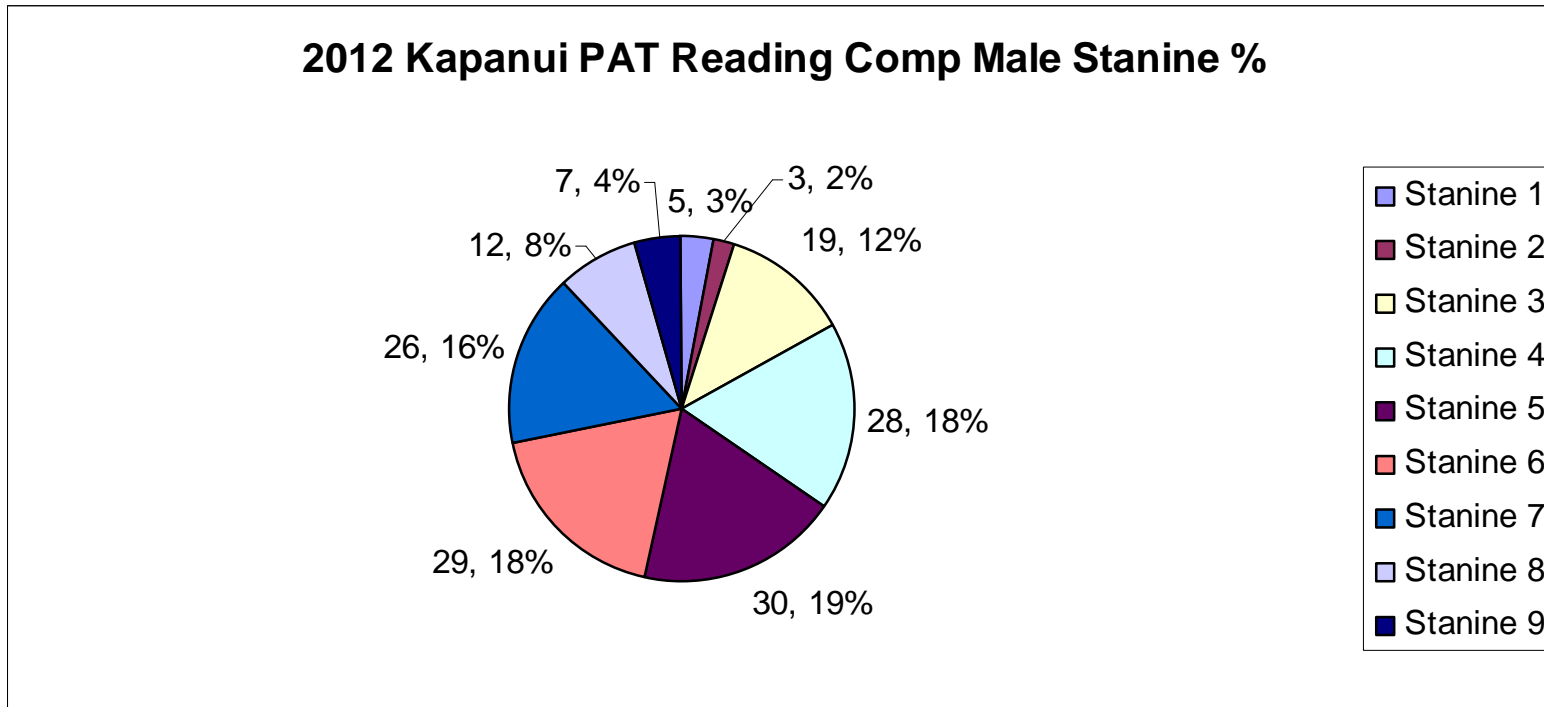
Graph 5 – 2012 PAT Reading Comprehension Maori Stanine %



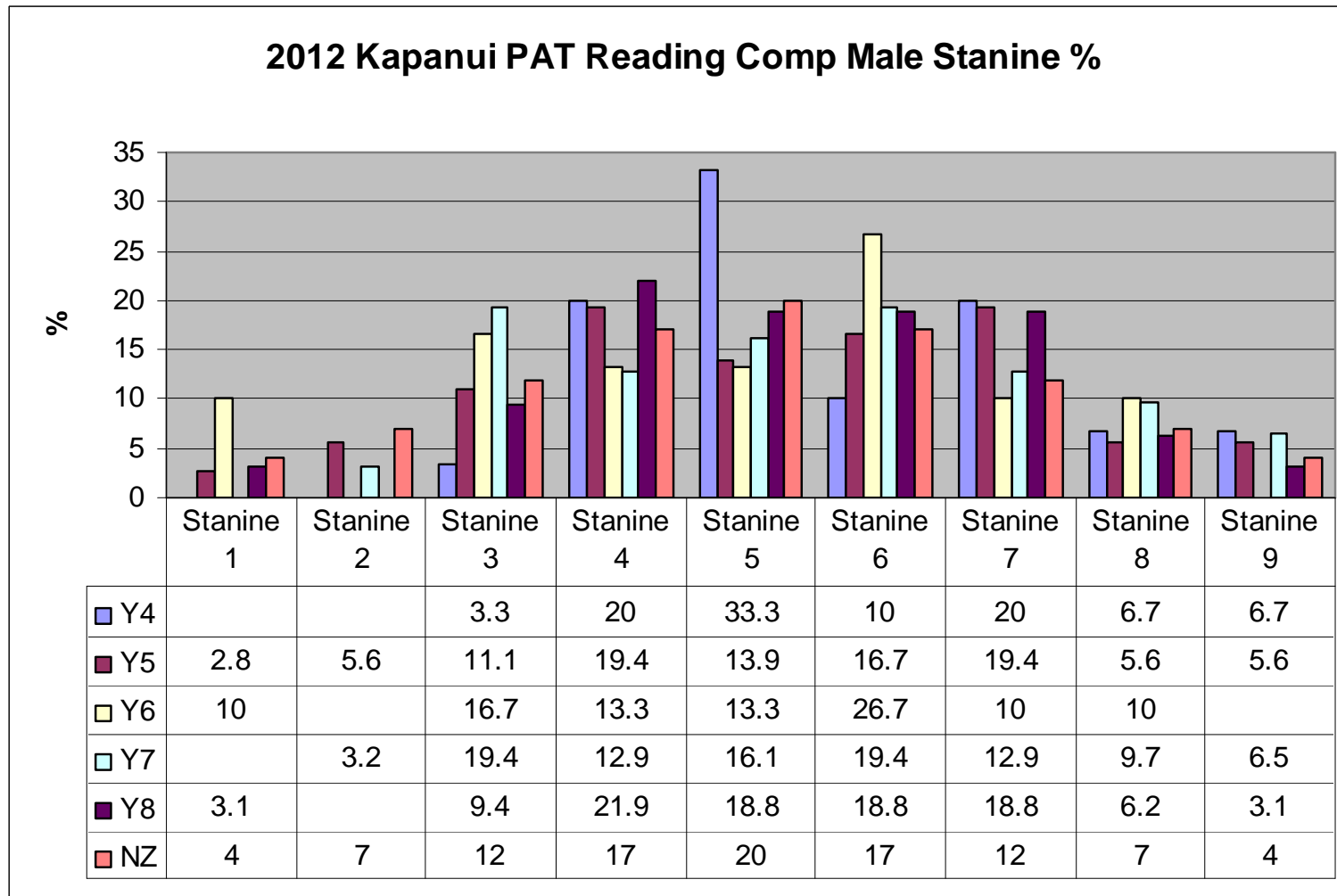
Graph 6 – 2012 PAT Reading Comprehension Male Stanine %



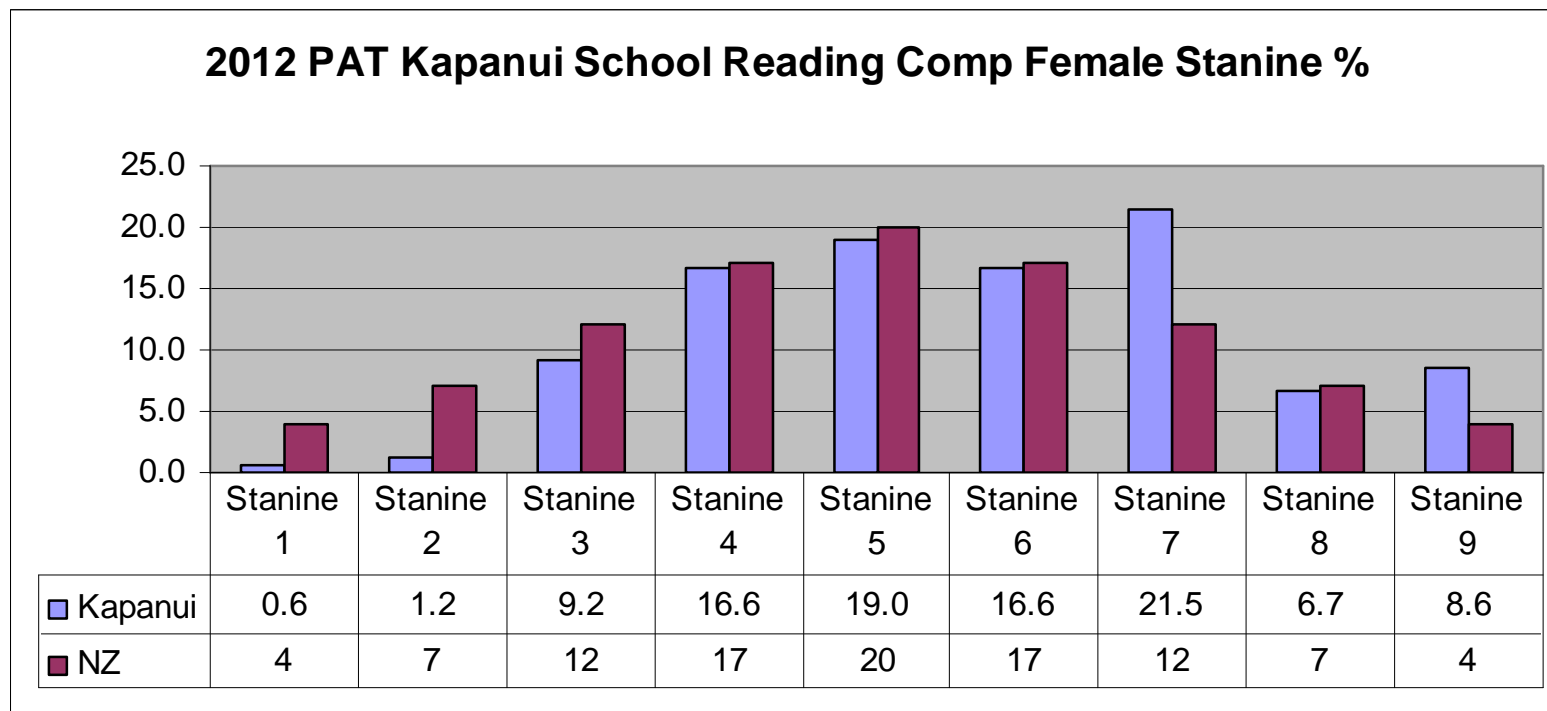
Graph 7 – 2012 PAT Reading Comprehension Male Stanine % and Student Count



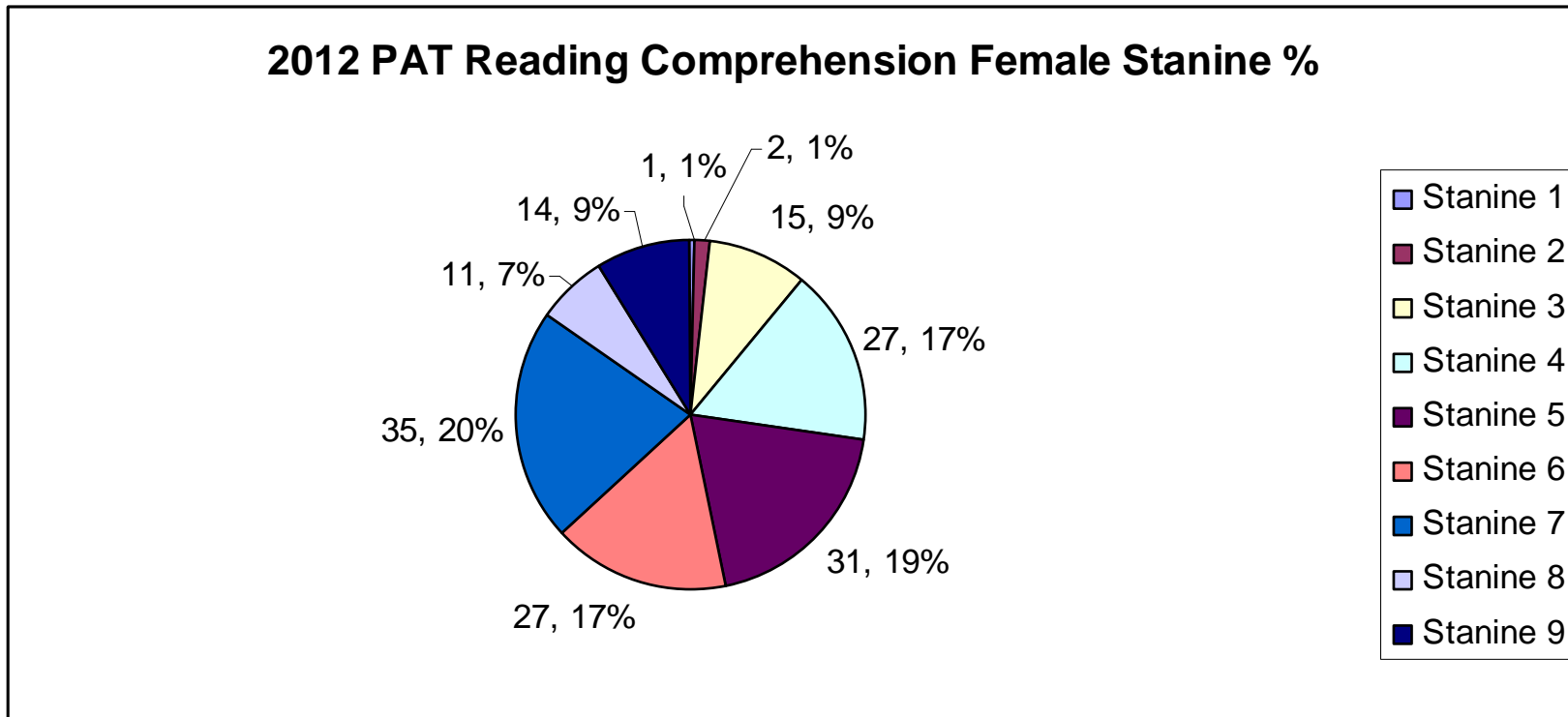
Graph 8 – 2012 PAT Reading Comprehension Male Stanine % Y4-8



Graph 9 – 2012 PAT Reading Comprehension Female Stanine %



Graph 10– 2012 PAT Reading Comprehension Female Stanine % and Student Count



Graph 11 - 2012 PAT Reading Comprehension Female Stanine % Y4-8

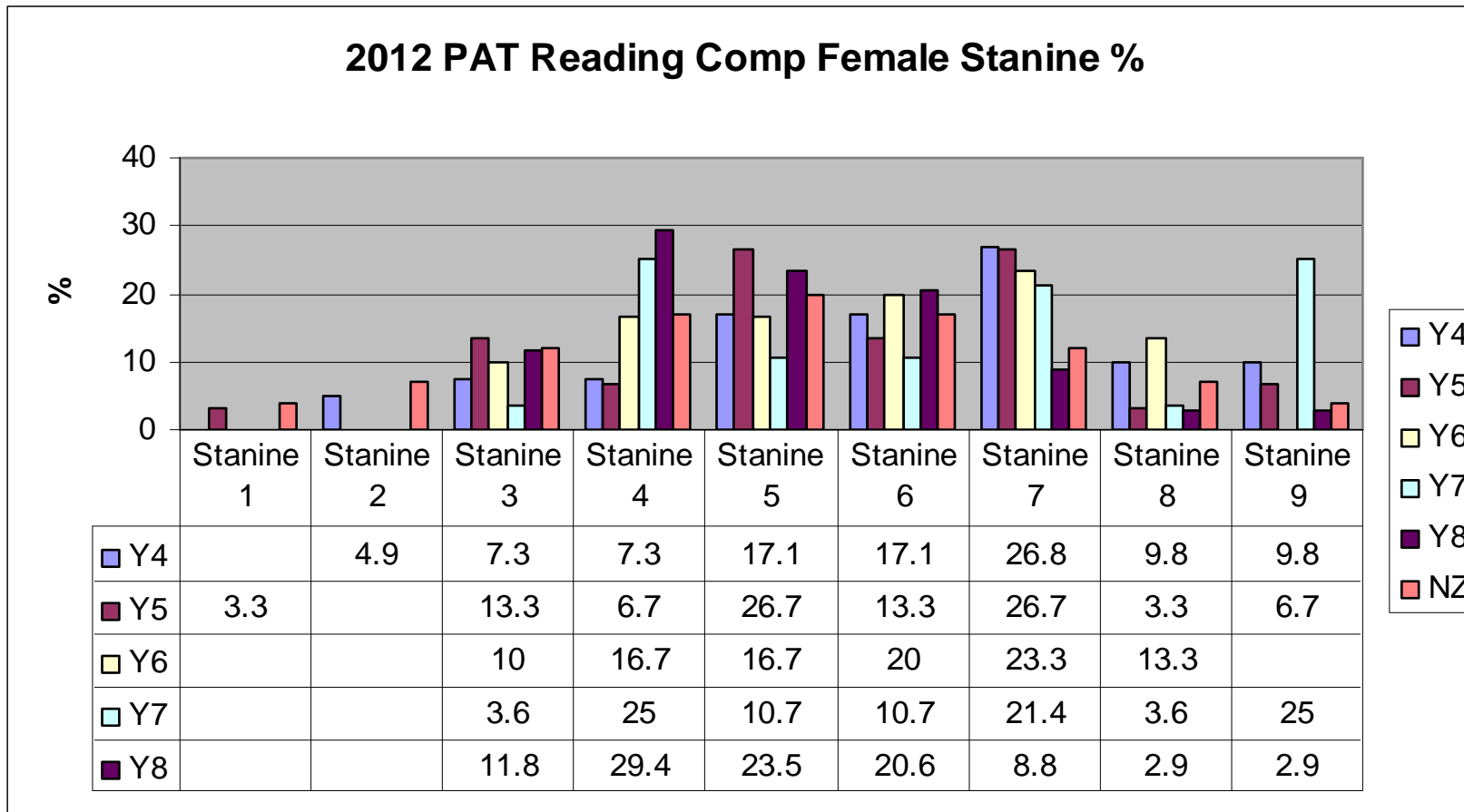


Table 2 - PAT Report 2010 - 12 – Reading Comprehension Comparison Kapanui / NZ / Kapiti Cluster

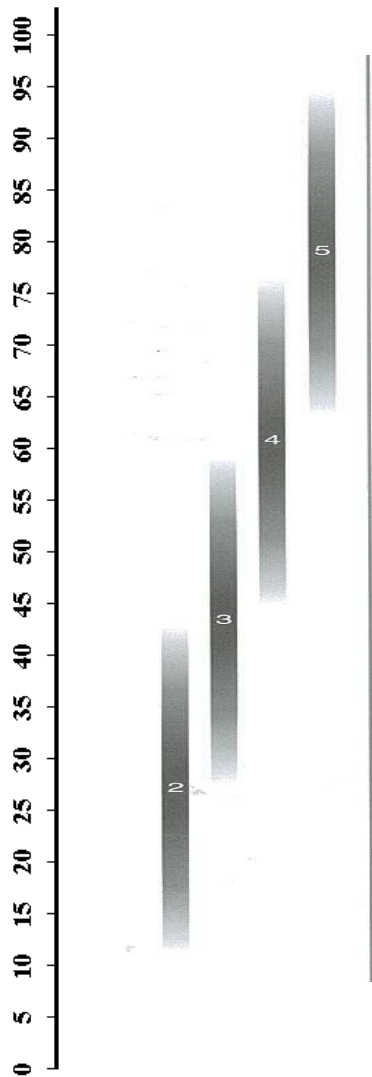
(NZ Mean scale scores in brackets)

Green above NZ mean and equal to or above Kapiti Cluster mean

Red below NZ mean

2012 overall Kapanui School performance is satisfactory as mean scores show Kapanui exceeds the NZ mean scores in all year levels and the Kapiti cluster in all year levels except Y6 and Y8.

| PAT Reading Comp | Mean Scale Score | | | | | | Mean Stanine | | | | | |
|------------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Year | Kapanui 2010 | Kapanui 2011 | Kapanui 2012 | Cluster 2010 | Cluster 2011 | Cluster 2012 | Kapanui 2010 | Kapanui 2011 | Kapanui 2012 | Cluster 2010 | Cluster 2011 |
| 4 | 32.1 (28.8) | 34.1 | 36.5 | 30.7 | 30.3 | 33 | 5.5 (5) | 5.7 | 5.9 | 5.2 | 5.2 | 5.5 |
| 5 | 40.3 (35.8) | 39.5 | 39.4 | 36.6 | 38.8 | 38.5 | 5.5 | 5.5 | 5.5 | 5.1 | 5.4 | 5.4 |
| 6 | 47.9 (45) | 46.8 | 48.3 | 48.4 | 47.8 | 48.7 | 5.4 | 5.3 | 5.5 | 5.5 | 5.4 | 5.5 |
| 7 | 58.3 (53.2) | 57.2 | 57.1 | 56.5 | 57.3 | 56.3 | 5.7 | 5.6 | 5.5 | 5.5 | 5.6 | 5.5 |
| 8 | 61.5 (60.4) | 64.9 | 61.8 | 61.6 | 62.6 | 62.6 | 5.1 | 5.7 | 5.2 | 5.1 | 5.3 | 5.3 |



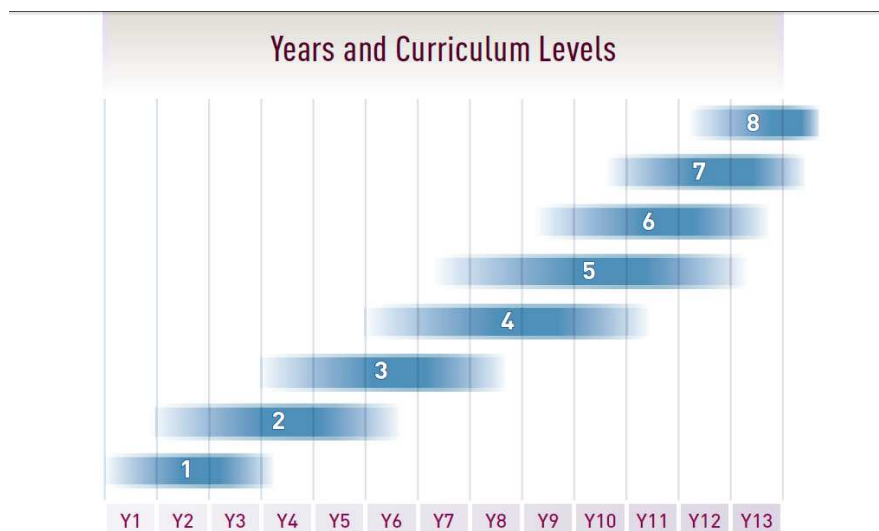
PATC and NZ Curriculum Levels - Mean Scale Scores comparison to NZ Curriculum Levels

This diagram indicates the relationship between PAT Reading Comprehension scaled scores and NZ curriculum levels. An indication of the relationship between points on the PATC scale and the national curriculum levels is provided by the shaded bands on the right of the PATC scale.

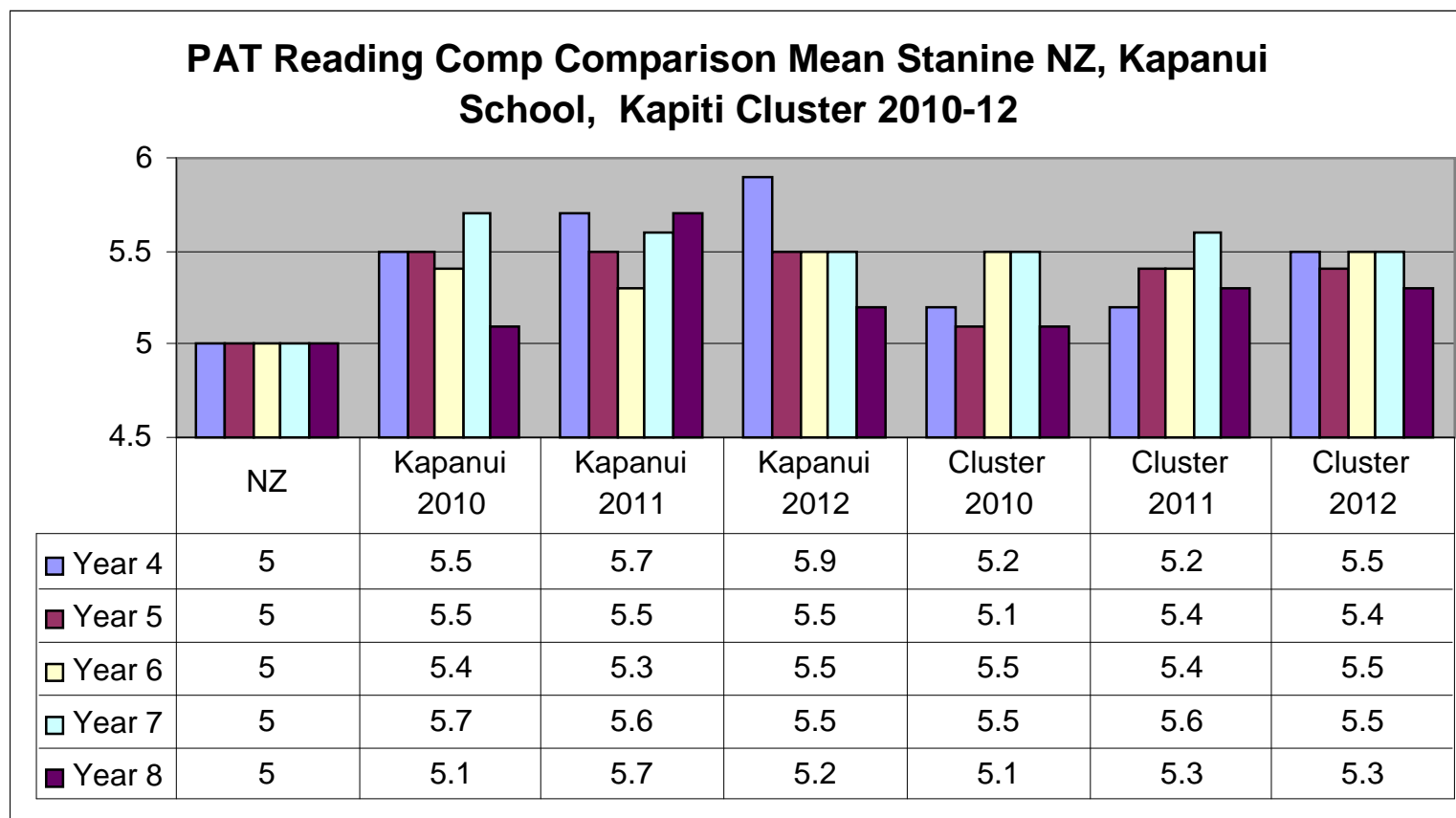
The Kapanui School mean scale score for PAT Reading Comprehension performance indicates that most Kapanui students are achieving within their expected NZ curriculum levels –

- Kapanui Y4 (36.5) - Level 2 beginning Level 3
- Kapanui Y5 (39.4) - Level 3
- Kapanui Y6 (48.3) - end Level 3
- Kapanui Y7 (57.1) - beginning Level 4
- Kapanui Y8 (61.8) - Level 4

The diagram below indicates the relationship between year levels and the NZ curriculum levels.

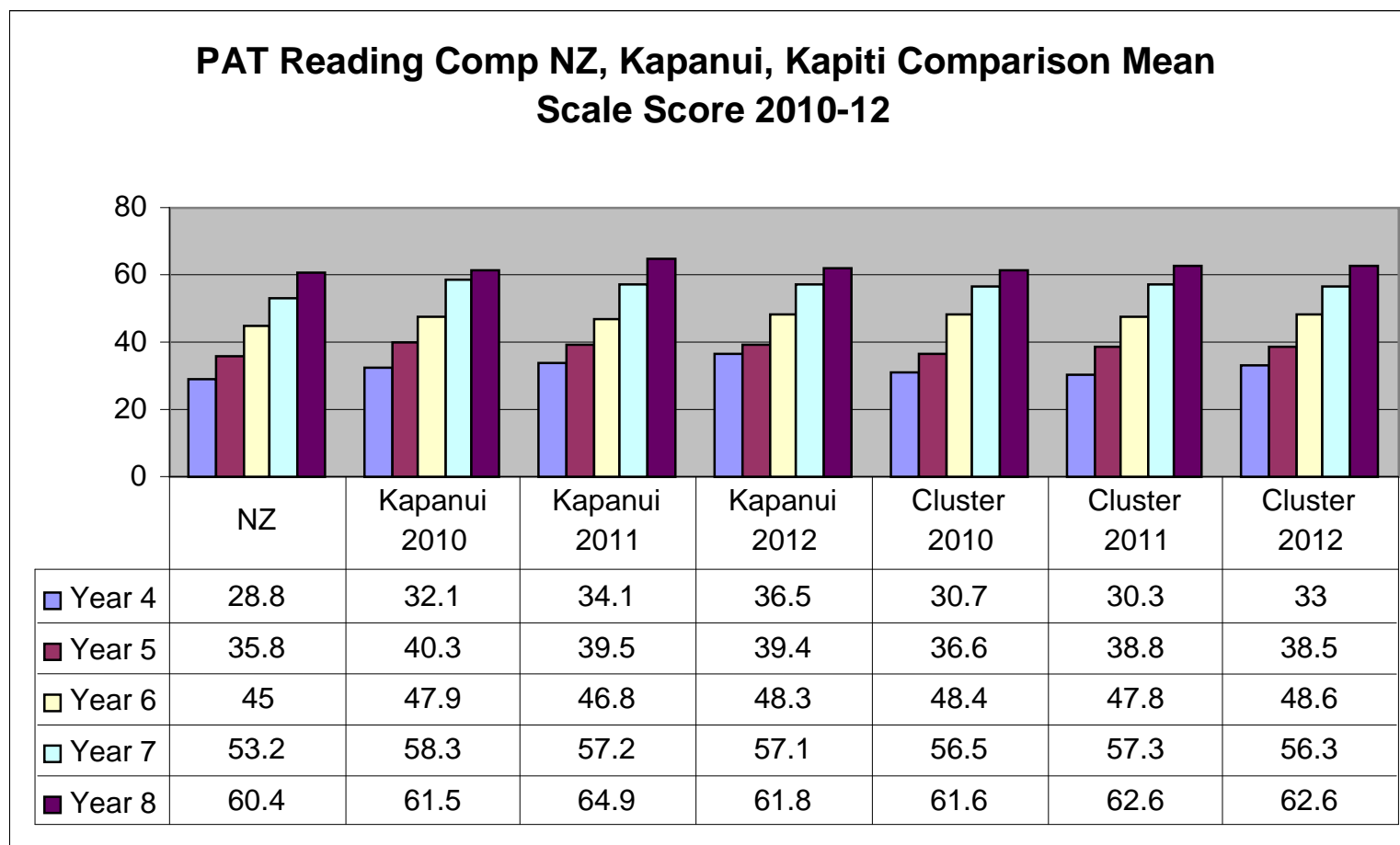


Graph 12 – 2012 PAT Reading Comprehension Mean Stanines Comparison NZ, Kapanui School, Kapiti Cluster, 2010 - 2012



Comment – Mean stanines across time 2010 to 2012 are consistent. Positive growth in the Y4 level is an indication of the success of the early intervention programmes since 2009.

Graph 13 – 2012 PAT Reading Comprehension Mean Scaled Scores Comparison NZ, Kapanui School, Kapiti Cluster, 2010 - 2012



Comment – Mean scale scores across time 2010 to 2012 are consistent. Positive growth in the Y4 level is an indication of the success of the early intervention programmes since 2009. Maintaining this growth as these students' progress through the school should be a goal of strategic planning.

Table 3- PAT reading Comprehension - Progress Over Time – Matched Cohorts

Measuring progress over time allows teachers and schools examine individual and group rates of progress against national norms.

For example, the mean score, nationally, in Year 5 for PAT Reading Comprehension is 35.8 and the mean score on the same test in Year 6 is 45. Expected progress is then a gain of 9.2 on the PAT Reading Comprehension scale. Therefore, a student or group of students gaining more than 9.2 from Year 5 to Year 6 has progressed more than expected.

The chart below shows data at two points in time for matched cohorts. The Y5 cohort is over 1 year 2011 – 2012. For the Y6, Y7 and Y8 groups it is over two years, 2010 and 2012.

Green indicates where Kapanui means or progress rates exceed the NZ norms

Red indicates where Kapanui means or progress rates are lower than NZ norms.

Kapanui means exceed NZ means and Kapiti Cluster means in all year levels in each test. However despite remaining ahead in all tests Kapanui progress rates are less than NZ rates in 3 out of 4. In annual planning and annual target setting it will be important that the school sets targets and actions to accelerate the progress of identified groups.

| PAT Reading Comprehension | | | | | | | | | | | | | | | | | | | | |
|---------------------------|------------|------|----------|------|---------|------------|------|----------|------|---------|------------|------|----------|------|---------|------------|------|----------|------|---------|
| | Y4 | | | Y5* | | Y4 | | | Y6* | | Y5 | | | Y7* | | Y6 | | | Y8* | |
| | 2011 | 2012 | Diff | 2011 | 2012 | 2010 | 2012 | Diff | 2010 | 2012 | 2010 | 2012 | Diff | 2010 | 2012 | 2010 | 2012 | Diff | 2010 | 2012 |
| | Mean Score | Rate | Progress | Mean | Stanine | Mean Score | Rate | Progress | Mean | Stanine | Mean Score | Rate | Progress | Mean | Stanine | Mean Score | Rate | Progress | Mean | Stanine |
| NZ | 28.8 | 35.8 | 7 | 5 | 5 | 28.8 | 45 | 16.2 | 5 | 5 | 35.8 | 53.2 | 17.4 | 5 | 5 | 45 | 60.4 | 15.4 | 5 | 5 |
| Kapiti | 31.8 | 39.3 | 7.5 | 5.4 | 5.5 | 32.2 | 49.1 | 16.9 | 5.4 | 5.6 | 38.4 | 56.2 | 17.8 | 5.3 | 5.4 | 49.2 | 64.5 | 15.3 | 5.5 | 5.6 |
| Kapanui | 33.6 | 40.1 | 6.5 | 5.6 | 5.6 | 32.4 | 49.1 | 16.7 | 5.5 | 5.6 | 40.9 | 57.6 | 16.7 | 5.7 | 5.6 | 48.4 | 62.2 | 13.8 | 5.5 | 5.3 |
| Female | 36.7 | 42.7 | 6 | 6 | 5.9 | 34 | 50.3 | 16.3 | 5.7 | 5.8 | 43.2 | 61.1 | 17.9 | 6 | 6.2 | 49.8 | 62.8 | 13 | 5.7 | 5.3 |
| Male | 31.3 | 38.1 | 6.8 | 5.3 | 5.4 | 30.8 | 47.9 | 17.1 | 5.3 | 5.4 | 38.8 | 54.3 | 15.5 | 5.4 | 5 | 47 | 61.7 | 14.7 | 5.2 | 5.3 |
| Maori Pacific | 32.5 | 41.7 | 9.2 | 5.5 | 5.5 | 32.7 | 50.4 | 17.7 | 5.5 | 5.8 | 41.5 | 51.2 | 9.7 | 5.8 | 4.5 | 44.9 | 58 | 13.1 | 4.8 | 4.5 |

* Current year - 2012

2012 PAT Mathematics

Overall performance – Mean Stanine / Mean Scaled Scores / Stanine %

| PAT | Maths | School | Female | Male |
|--------------|-------|--------|--------|------|
| Mean Stanine | | 5.32 | 5.2 | 5.4 |

Kapanui has satisfactory performance in PAT maths. The mean stanine is slightly above the NZ mean for all students, for boys and for girls. 2012 PAT Maths - Average stanine Boys 5.4, Girls 5.2.

Kapanui School has mean scaled scores greater than NZ means in all year levels (graph 14).

Kapanui School has a satisfactory level of performance in PAT Mathematics with 85.9% (+8.9%) of students in the average, above average or superior range compared with the NZ norm of 77%. Kapanui boys 84.8% (+7.8%) and girls 87%, (+10%) (table 4).

In the above average and superior range Kapanui met the NZ norms (23%) for % of students at stanines 7, 8 and 9 with 23.8%. Boys exceeded this by +4.2% (27.2%). Girls did not meet the NZ norm achieving 20.5%, -2.5%. Only in Y5 do girls exceed the NZ % in stanines 7-9. This trend was also evident in 2011 (table 4).

In the below average, or low range stanines Kapanui has 14.1 %(-8.9%) compared with the NZ norm of 23%. Boys 15.2%, girls 13%, Maori 20.8% (table 4).

Male and Female – table 4

2012 results indicate that overall boys perform higher than girls. Boys have a higher mean stanine and higher percentages in stanines 7, 8 and 9. The school should consider annual goals and actions to raise the percentage of girls' students achieving in the 7, 8 and 9 stanine levels (graphs 14, 15, 16).

Maori – table 4

2012 results indicate a lower % of Maori students achieving at the stanine 7-9 levels compared to NZ and Kapanui School results. Only 1/24 (4.2%) Maori students achieved in the stanine 7-9 groups (NZ 23%). 19/24 (79.2) achieved in the stanine 4-9 levels compared to the NZ norm of 77%. The school should set goals to increase the % of Maori students achieving in the 7-9, above average or superior range. Mean scaled scores and mean stanines for Maori in 2012 are lower than for Kapanui means in all year groups except Y5 (graphs 14,15,16).

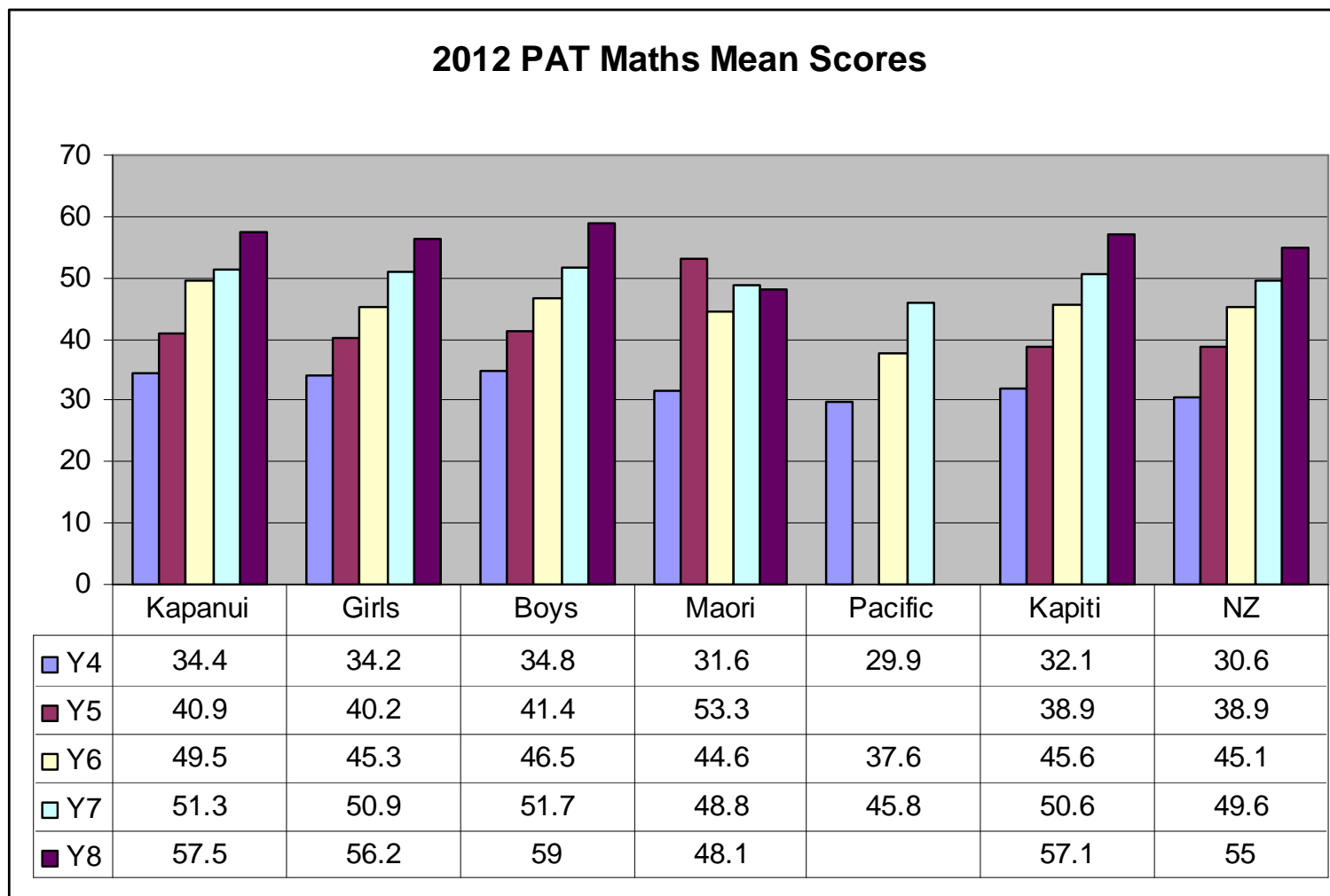
Pacific

PAT Maths 8 students

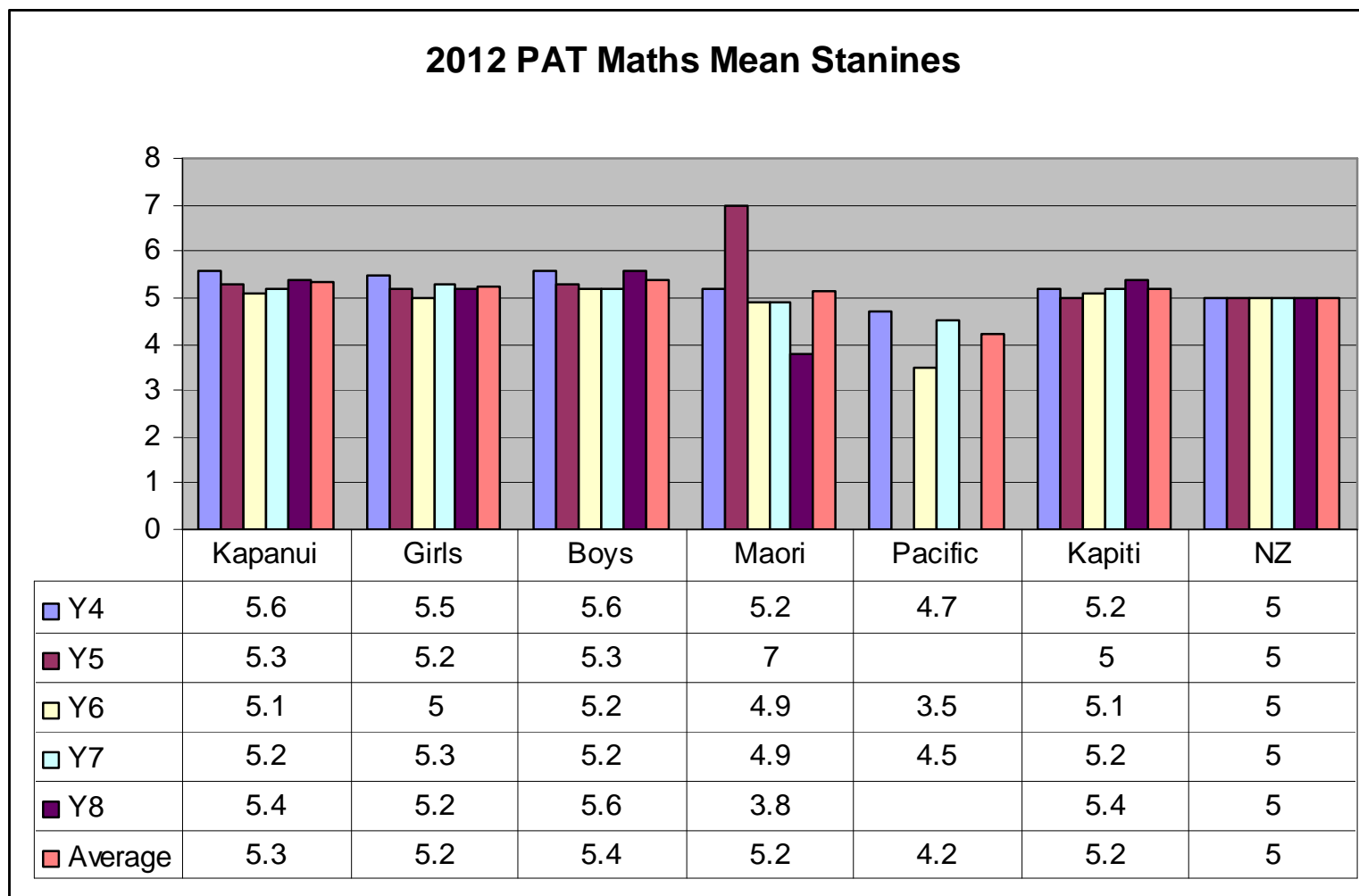
1/8 – stanine 7 – 12.5% / 3/8 – stanine 6 – 37.5% / 1/8 – stanine 5 – 12.5% / 1/8 - stanine 4 – 12.5% / 2/8 stanine 3 – 25

Pacific comparisons are not made as numbers are too small to be of use - 9 students

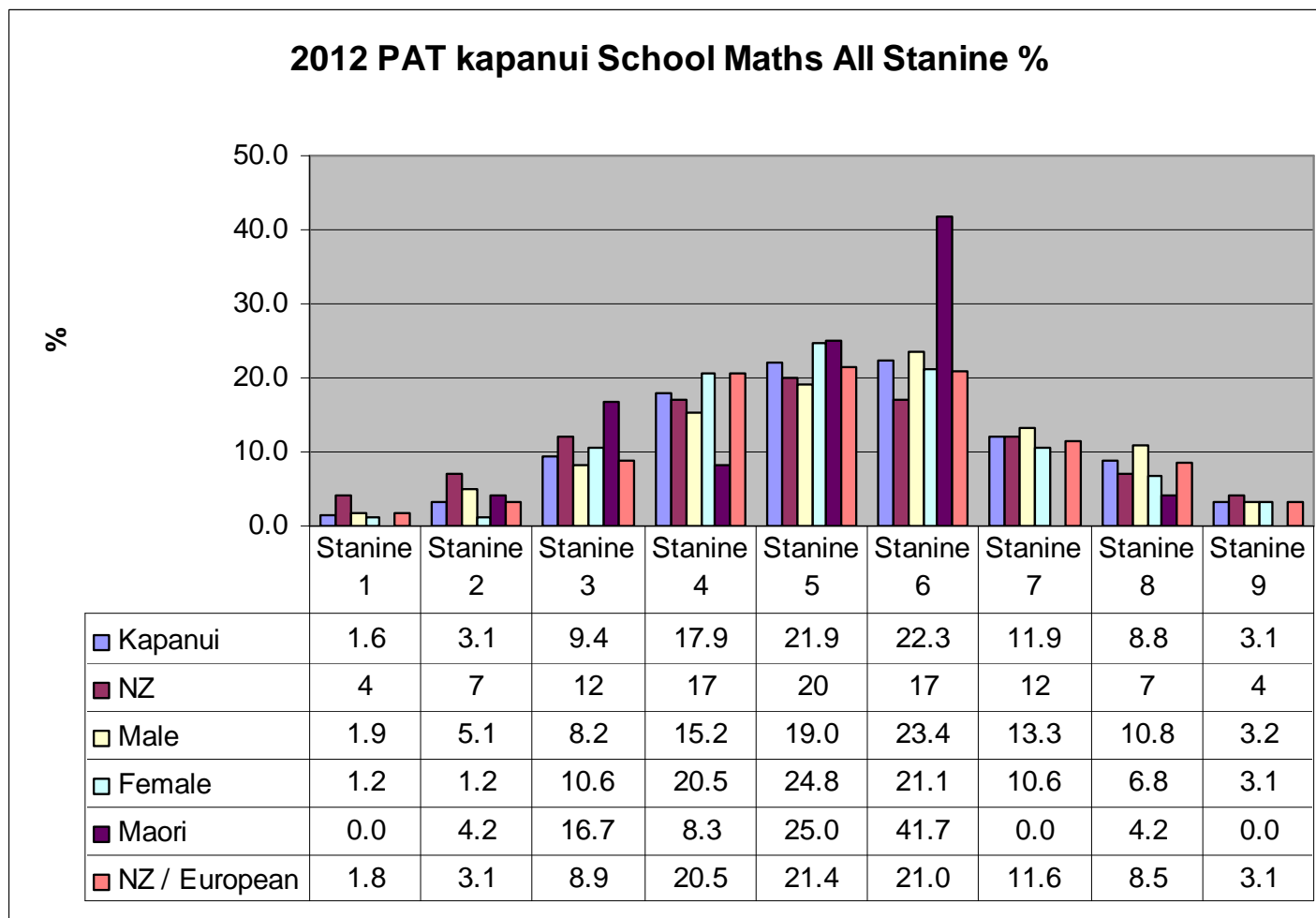
Graph 14 – 2012 PAT Mathematics Mean Scaled Scores Kapanui School Y4-8



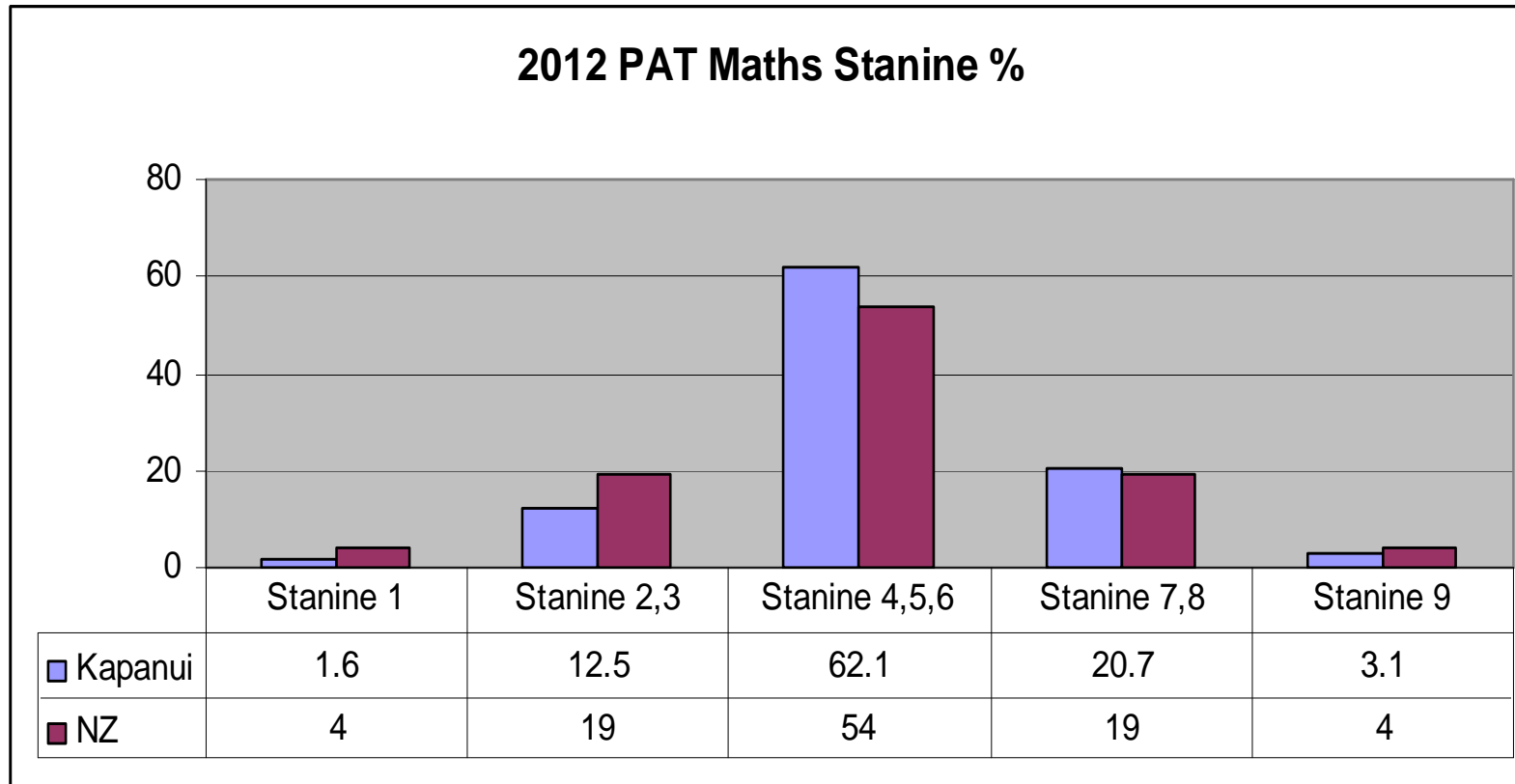
Graph 15– 2012 PAT Mathematics Mean Stanines Kapanui School Y4-8



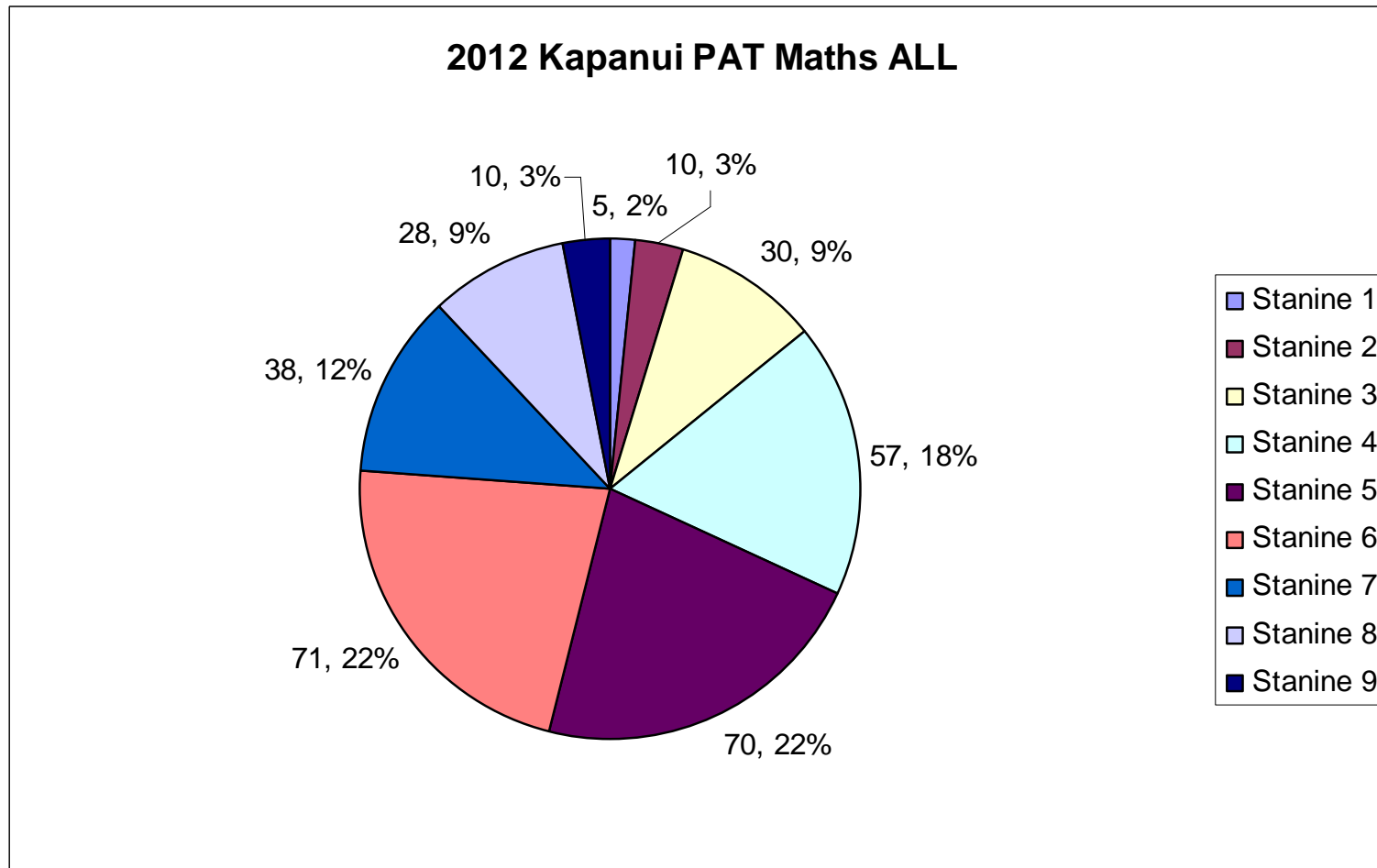
Graph 16– 2012 PAT Mathematics Whole School Stanines %



Graph 17 – 2012 PAT Mathematics Mean Stanine % Kapanui School, NZ – Low, Below Average, Average, Above Average, Superior



Graph 18 – 2012 PAT Mathematics Stanine % Kapanui School and Student Count



Graph 19 – 2012 PAT Mathematics Mean Stanine % Kapanui School Y4-8

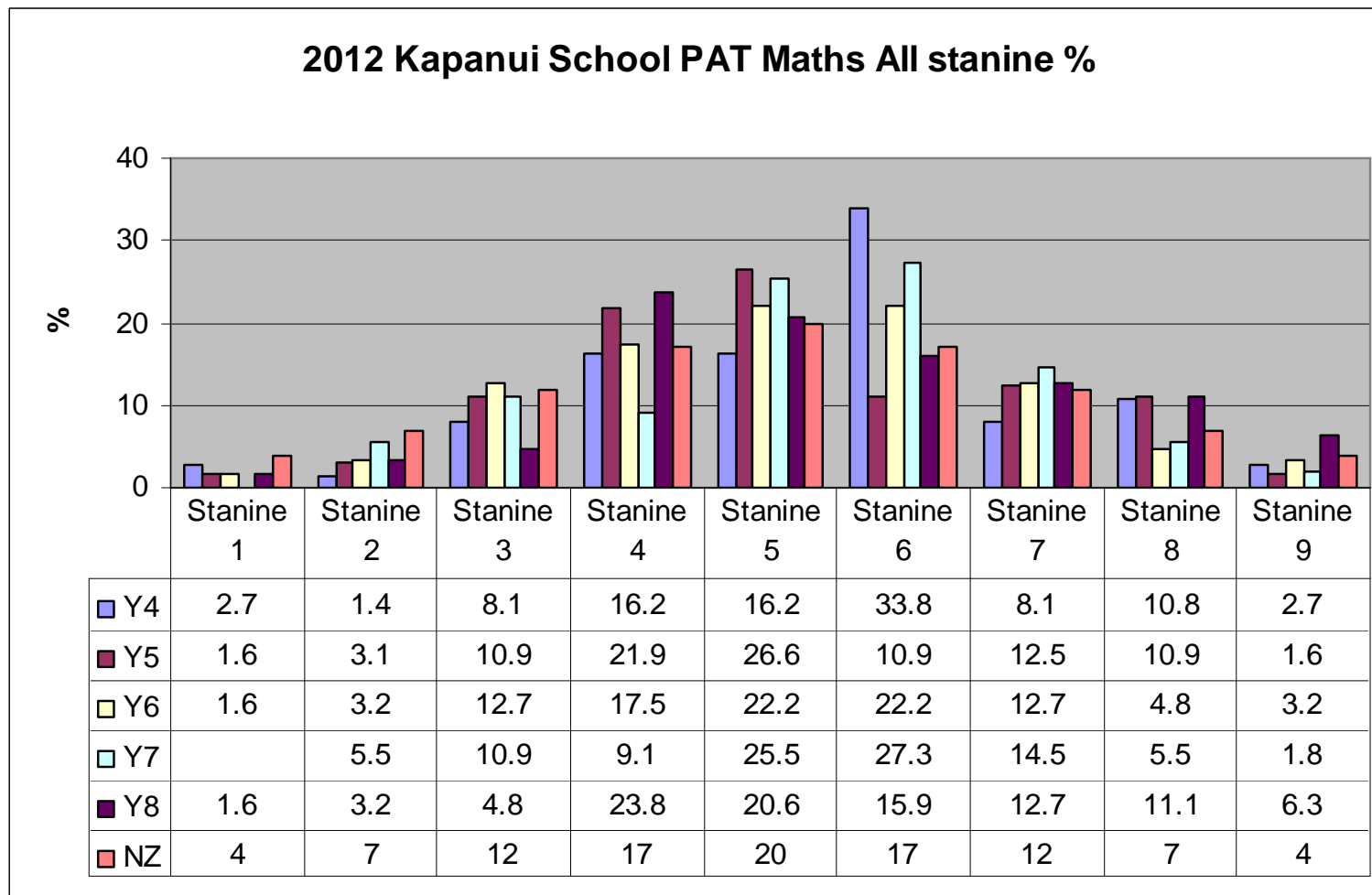
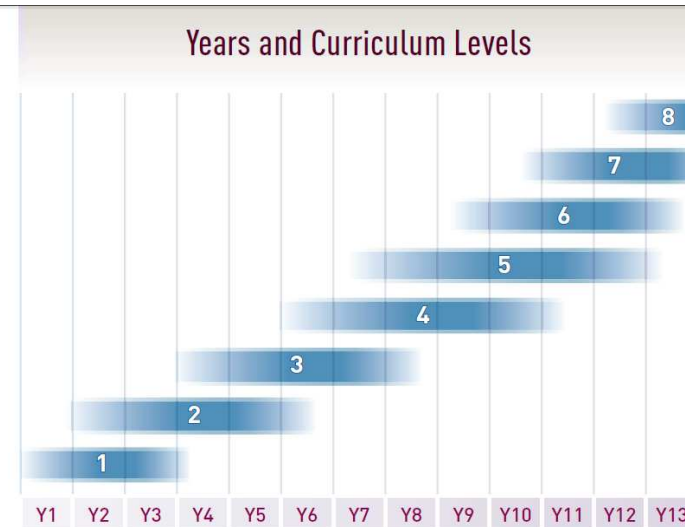
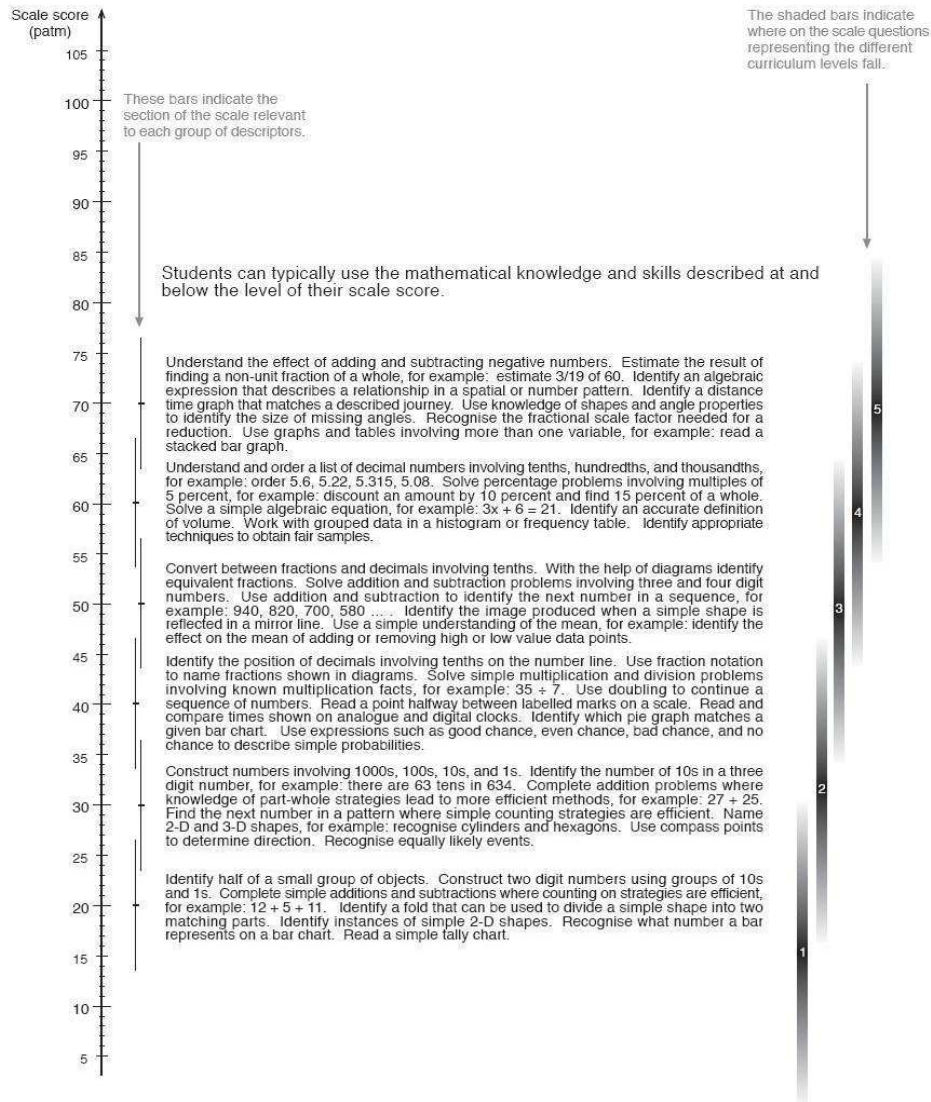


Table 4 – 2011, 2012 PAT Mathematics –Comparisons NZ, Kapanui All, Female, Male, NZ/E, Maori – Y4-8

| Maths % | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 |
|----------|------|------|------|------|------|-------|------|------|------|------|--------------|--------------|------|--------|------|------|--------|--------|------|------|
| Stanines | | 1 | | 2 3 | | 4 5 6 | | 7 8 | | 9 | mean stanine | mean stanine | | 4 to 9 | diff | diff | 7 to 9 | 7 to 9 | diff | diff |
| NZ Norm | 4 | 4 | 19 | 19 | 54 | 54 | 19 | 19 | 4 | 4 | 5 | 5 | 77 | 77 | | | 23 | 23 | | |
| Kapanui | | 1 | | 13.5 | | 59.6 | | 21.7 | | 3.4 | 5.3 | | | 84.7 | | 7.7 | | 25.1 | | 2.1 |
| Y4 | 1 | 0 | 8 | 16 | 68 | 63 | 19 | 21 | 3 | 0 | 5.6 | 5.2 | 90 | 84 | 13 | 7 | 22 | 21 | -1 | -2 |
| Y5 | 0 | 0 | 14 | 12 | 60 | 62 | 25 | 20 | 2 | 6 | 5.3 | 5.6 | 87 | 88 | 10 | 11 | 27 | 26 | 4 | 3 |
| Y6 | 3 | 2 | 17 | 15 | 59 | 63 | 18 | 20 | 3 | 0 | 5.1 | 5.1 | 80 | 83 | 3 | 6 | 21 | 20 | -2 | -3 |
| Y7 | 2 | 3 | 15 | 15 | 64 | 50 | 18 | 26 | 2 | 6 | 5.2 | 5.4 | 84 | 82 | 7 | 5 | 20 | 32 | -3 | 9 |
| Y8 | 2 | 0 | 11 | 12 | 58 | 59 | 23 | 24 | 6 | 6 | 5.4 | 5.4 | 87 | 89 | 10 | 12 | 29 | 30 | 6 | 7 |
| Girls | | | | | | | | | | | | | | | | | | | | |
| Y4 | 2 | 0 | 10 | 16 | 66 | 68 | 20 | 16 | 2 | 0 | 5.5 | 5 | 88 | 84 | 11 | 7 | 22 | 16 | -1 | -7 |
| Y5 | 0 | 0 | 14 | 12 | 62 | 70 | 21 | 18 | 3 | 0 | 5.2 | 5.2 | 86 | 88 | 9 | 11 | 24 | 18 | 1 | -5 |
| Y6 | 3 | 0 | 12 | 12 | 70 | 72 | 12 | 16 | 3 | 0 | 5 | 5 | 85 | 88 | 8 | 11 | 15 | 16 | -8 | -7 |
| Y7 | 0 | 3 | 15 | 13 | 65 | 63 | 19 | 19 | 0 | 3 | 5.3 | 5.2 | 84 | 85 | 7 | 8 | 19 | 22 | -4 | -1 |
| Y8 | 0 | 0 | 9 | 20 | 71 | 65 | 15 | 15 | 6 | 0 | 5.2 | 4.6 | 92 | 80 | 15 | 3 | 21 | 15 | -2 | -8 |
| Boys | | | | | | | | | | | | | | | | | | | | |
| Y4 | 0 | 0 | 6 | 16 | 71 | 59 | 19 | 24 | 3 | 0 | 5.6 | 5.4 | 93 | 83 | 16 | 6 | 22 | 24 | -1 | 1 |
| Y5 | 0 | 0 | 14 | 13 | 58 | 52 | 28 | 23 | 0 | 13 | 5.3 | 6 | 86 | 88 | 9 | 11 | 28 | 36 | 5 | 13 |
| Y6 | 3 | 3 | 21 | 17 | 48 | 55 | 24 | 24 | 3 | 0 | 5.2 | 5.1 | 75 | 79 | -2 | 2 | 27 | 24 | 4 | 1 |
| Y7 | 3 | 3 | 14 | 18 | 62 | 39 | 17 | 30 | 3 | 9 | 5.2 | 5.6 | 82 | 78 | 5 | 1 | 20 | 39 | -3 | 16 |
| Y8 | 3 | 0 | 13 | 6 | 45 | 55 | 32 | 29 | 6 | 10 | 5.6 | 5.9 | 83 | 94 | 6 | 17 | 38 | 39 | 15 | 16 |
| NZ/E | | | | | | | | | | | | | | | | | | | | |
| Y4 | 1 | | 7 | | 69 | | 19 | | 3 | | 5.6 | | 91 | | 14 | | 22 | | -1 | |

| | | | | | | | | | | | | | | | | | | | | |
|-------|---|----|----|----|----|-----|----|----|---|---|-----|-----|-----|-----|-----|-----|----|----|-----|-----|
| Y5 | 0 | | 15 | | 61 | | 23 | | 2 | | 5.2 | | 86 | | 9 | | 25 | | 2 | |
| Y6 | 3 | | 17 | | 57 | | 20 | | 3 | | 5.1 | | 80 | | 3 | | 23 | | 0 | |
| Y7 | 2 | | 14 | | 62 | | 20 | | 2 | | 5,3 | | 84 | | 7 | | 22 | | -1 | |
| Y8 | 0 | | 10 | | 57 | | 26 | | 7 | | 5.6 | | 90 | | 13 | | 33 | | 10 | |
| Maori | | | | | | | | | | | | | | | | | | | | |
| Y4 | 0 | 0 | 20 | 0 | 80 | 100 | 0 | 0 | 0 | 0 | 5.2 | 5.5 | 80 | 100 | 3 | 23 | 0 | 0 | -23 | -23 |
| Y5 | 0 | 0 | 0 | 33 | 50 | 56 | 50 | 11 | 0 | 0 | 7 | 4.6 | 100 | 67 | 23 | -10 | 50 | 11 | 27 | -12 |
| Y6 | 0 | 0 | 29 | 14 | 71 | 71 | 0 | 14 | 0 | 0 | 4.9 | 5 | 71 | 85 | -6 | 8 | 0 | 14 | -23 | -9 |
| Y7 | 0 | 17 | 14 | 33 | 86 | 50 | 0 | 0 | 0 | 0 | 4.9 | 3.3 | 86 | 50 | 9 | -27 | 0 | 0 | -23 | -23 |
| Y8 | 0 | 0 | 40 | 0 | 60 | 33 | 0 | 67 | 0 | 0 | 3.8 | 6.7 | 60 | 100 | -17 | 23 | 0 | 67 | -23 | 44 |
| | | | | | | | | | | | | | | | | | | | | |

PATM and NZ Curriculum Levels – Kapanui Mean Scale Scores comparison to NZ Curriculum Levels



The diagram above indicates the relationship between year levels and NZ curriculum levels. For example most Y6 students will be working at Level 3.

The diagram to the left indicates the relationship between PAT Mathematics scaled scores and NZ curriculum levels. An indication of the relationship between points on the PATM scale and the national curriculum levels is provided by the shaded bands on the right of the PATM scale.

The Kapanui School mean scale score for PAT mathematics performance taken at the beginning of the year indicates that most Kapanui students are achieving within their expected NZ curriculum levels –

- Kapanui Y4 (34.4) - Level 2
- Kapanui Y5 (40.9) – End L2 Beginning L3
- Kapanui Y6 (49.5) – Level 3
- Kapanui Y7 (51.3) - Level 3
- Kapanui Y8 (57.5) – Level 4

Table 5 – PAT Mathematics Progress Over Time – Matched Cohorts 2010 - 2012

Measuring progress over time allows teachers and schools to examine individual and group rates of progress against national norms.

For example, the mean score, nationally, in Year 5 for PAT mathematics is 38.9 and the mean score on the same test in Year 6 is 45.1. Expected progress is then a gain of 6.2 on the PAT mathematics scale. Therefore, a student or group of students gaining more than 6.2 from Year 5 to Year 6 has progressed more than expected. The chart below shows data at two points in time for matched cohorts. The Y5 cohort is over 1 year 2011 – 2012. For the Y6, Y7 and Y8 groups it is over two years, 2010 and 2012.

Mean Stanines are also shown for comparison.

Green indicates where Kapanui means and progress rates exceeds the NZ norms

Red indicates where Kapanui means and progress rates are lower than NZ norms.

Kapanui means exceed NZ means and Kapiti Cluster means in all year levels in each test. Kapanui also exceeds the progress rate in 3 out of 4 cohort groups.

| | PAT Maths | | | | | | | | | | | | | | | | | | | |
|---------------|------------|---------------|------|--------------|------------|----------------|------|--------------|------------|----------------|------|--------------|------------|----------------|------|------------|----------------|------|--------------|--------------|
| | Y4 | Y5* | diff | Y4 | Y5* | Y4 | Y6* | diff | Y4 | Y6* | Y5 | Y7* | diff | Y5 | Y7* | Y6 | Y8* | diff | Y4 | Y8* |
| | 2011 | 2012 | | 2011 | 2012 | 2010 | 2012 | | 2010 | 2012 | 2010 | 2012 | | 2010 | 2012 | 2010 | 2012 | | 2010 | 2012 |
| | Mean Score | Progress Rate | | Mean Stanine | Mean Score | Progress Rates | | Mean Stanine | Mean Score | Progress rates | | Mean Stanine | Mean Score | Progress Rates | | Mean Score | Progress Rates | | Mean Stanine | Mean Stanine |
| NZ | 30.6 | 38.9 | 8.3 | 5 | 5 | 30.6 | 45.1 | 14.5 | 5 | 5 | 38.9 | 49.6 | 10.7 | 5 | 5 | 45.1 | 55 | 9.9 | 5 | 5 |
| Kapiti | 31.7 | 39.5 | 7.8 | 5.2 | 5 | 31.6 | 45.9 | 14.3 | 5.1 | 5.1 | 39 | 50.6 | 11.6 | 5 | 5.2 | 45.4 | 57.2 | 11.8 | 5.1 | 5.5 |
| Kapanui | 32.2 | 41 | 8.8 | 5.3 | 5.3 | 32.1 | 46.6 | 14.5 | 5.3 | 5.2 | 41.5 | 51.9 | 10.4 | 5.4 | 5.3 | 46.3 | 57.6 | 11.3 | 5.2 | 5.4 |
| Female | 31.6 | 41.1 | 9.5 | 5 | 5.3 | 31.4 | 45.7 | 14.3 | 5.1 | 5.1 | 37.6 | 50.4 | 12.8 | 4.8 | 5.2 | 44.8 | 55.7 | 10.9 | 5 | 5.1 |
| Male | 32.7 | 40.9 | 8.2 | 5.4 | 5.2 | 32.9 | 47.4 | 14.5 | 5.4 | 5.4 | 45.2 | 53.3 | 8.1 | 6 | 5.5 | 47.9 | 59.5 | 11.6 | 5.4 | 5.8 |
| Maori Pacific | 35.3 | 53.3 | 18 | 5.5 | 7 | 32.3 | 44.1 | 11.8 | 5.3 | 4.8 | 38.2 | 50.7 | 12.5 | 5.2 | 5.2 | 38.7 | 49 | 10.3 | 3.8 | 4 |

* Current year level

2012 PAT Mathematics Item analysis

Item analysis of the tests Y4 – 8 indicates that in all year groups the percentage correct against national percentages was very positive with most percentages close to or above national norms.

Investigation of items where Kapanui % norms fall below NZ % norms indicates possible weaknesses with calculating in word problems and items involving number strategy. There is also strength with number knowledge.

It is recommended that team leaders and class teachers use results to pin point any areas of weakness within their groups to inform teaching.

2012 PAT Listening Comprehension

Overall Performance – table 6

Kapanui School results indicate good performance as Kapanui exceeds NZ % in stanines 4-9 by +11.1 (88.1) and NZ % in stanines 7-9 by +10.9 (33.2). The Kapanui School mean stanine of 5.7 also exceeds the NZ mean of 5.

Gender – table 6

2012 - Overall girls and boys performance is similar but girls have a higher mean stanine 5.78 than boys 5.61. Of positive note are the Y4 girls with 49%, the Y6 girls with 45% in the stanines 7-9 and the Y3 boys with 40% and Y4 boys with 39% in stanines 7-9. Of concern are the Y8 girls with only 15% in the stanines 7-9. This trend however is consistent with this groups result in 2011 – 12%.

Maori – table 6

23/27 (85.1%) Maori students achieved in the Stanine 4-9 levels (NZ 77%).

7/27 (25.9%) Maori students achieved in the Stanine 7-9 levels (NZ 23%). This is in contrast to only 16.6% of Maori students performing at stanines 7-9 in PAT Reading Comprehension. The Board should consider setting specific targets in 2013 to increase the % of Maori students achieving at the higher stanine levels for Reading Comprehension.

Maori students are performing well with positive percentages in stanines 7-9. All year levels except Y8 have positive % compared to NZ %.

4/27(14.8%) Maori students achieved in the Stanine 1-3 levels - low or below average (NZ 23%).

Maori students have a similar mean stanine 5.68 to the Kapanui mean stanine 5.7 and better than the NZ mean 5.

Pacifica

List 11 students

1/11 – stanine 9 – 9% / 1/11– stanine 8 – 9% / 1/11– stanine 7 – 9% / 1/11 stanine 6 – 9% / 3/11 - stanine 5 – 27% / 2/11 – stanine 4 – 18% / 1/11 – stanine 3 – 9% / 1/11 – stanine 1 – 9%

Pacific comparisons are not made as numbers are too small to be of use - 9 students.

Table 6 displays % Kapanui students in stanines 4-9 (NZ 77%) and % Kapanui Students in stanines 7-9 (NZ 23%)

Green – mean stanines greater than NZ means and Kapanui % greater than NZ %

Red - mean stanines less than NZ means and Kapanui % greater than NZ %

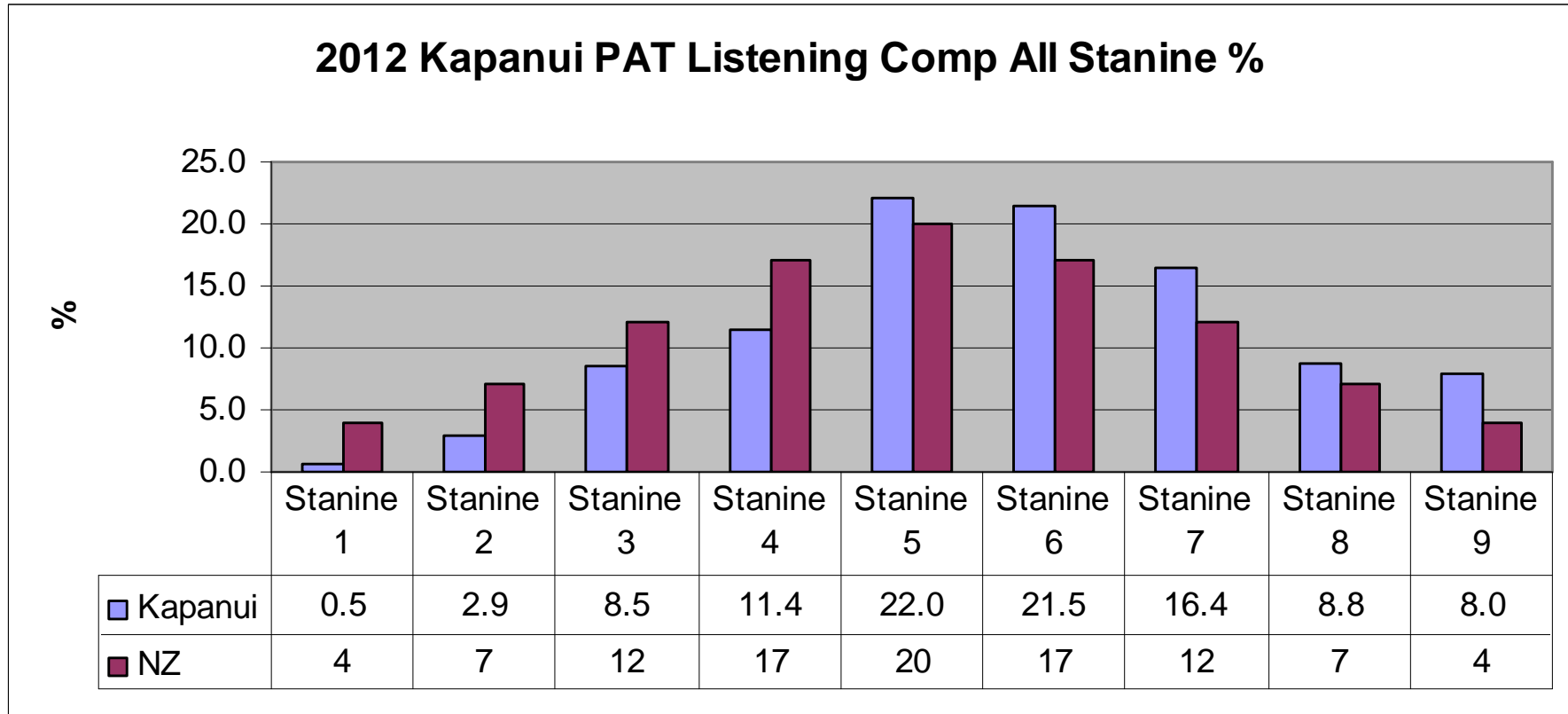
Table 6 – 2012, 2011 PAT Listening Comprehension Stanine %, Mean Stanines – NZ, Kapanui All, Girls, Boys, NZ/European, Maori Y3-8

| | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 |
|-----------|------|------|------|------|------|-------|------|------|------|------|------|---------|------|---------|------|------|------|---------|------|------|
| | | | | | | | | | | | | mean | | stanine | | | | stanine | | |
| Stanine % | | 1 | | 2 3 | | 4 5 6 | | 7 8 | | 9 | | stanine | | 4 to 9 | | | | 7 to 9 | | |

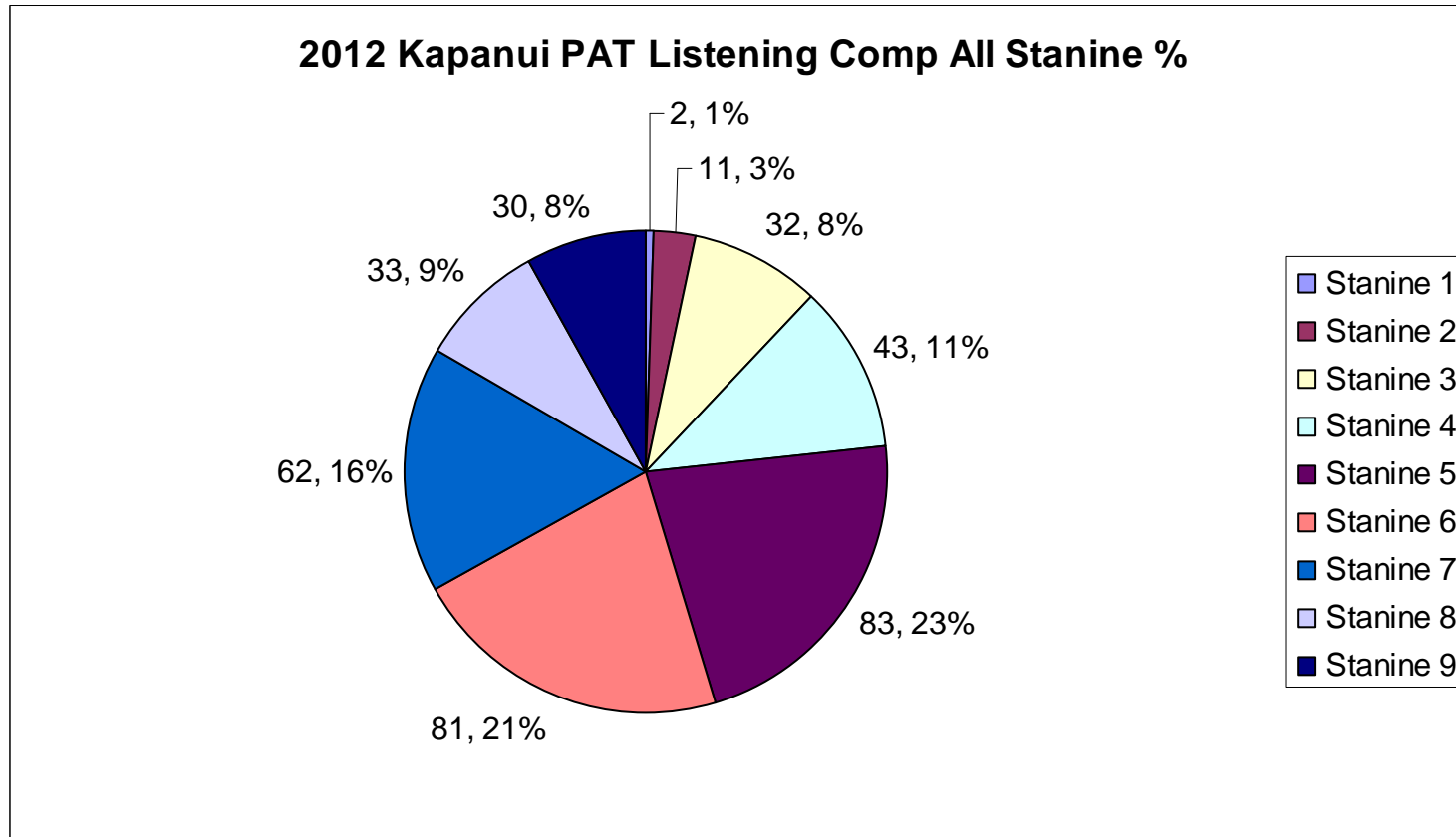
| | | | | | | | | | | | | | | | | | | | | |
|---------|-----|-----|------|------|------|------|------|------|----|-----|--------|-----|------|------|------|------|------|------|------|------|
| NZ Norm | | 4 | | 19 | | 54 | | 19 | | 4 | | 5 | | 77 | | diff | | 23 | | diff |
| Kapanui | 0.5 | 1.1 | 11.4 | 13.3 | 54.9 | 56.8 | 25.2 | 22.3 | 8 | 6.8 | 5.7 | 5.5 | 88.1 | 85.7 | 11.1 | 10.7 | 33.2 | 29.7 | 10.2 | 6.7 |
| Y3 | 0 | 0 | 4 | 23 | 58 | 44 | 33 | 21 | 5 | 12 | 5.9 | 5.5 | 96 | 77 | 19 | 0 | 38 | 33 | 15 | 10 |
| Y4 | 0 | 0 | 10 | 10 | 46 | 53 | 31 | 29 | 14 | 7 | 6.1 | 5.8 | 91 | 89 | 14 | 12 | 45 | 36 | 22 | 13 |
| Y5 | 0 | 3 | 9 | 14 | 61 | 64 | 23 | 14 | 6 | 6 | 5.6 | 5.3 | 90 | 84 | 13 | 7 | 29 | 20 | 6 | -3 |
| Y6 | 0 | 0 | 8 | 13 | 57 | 47 | 28 | 25 | 8 | 15 | 5.8 | 5.8 | 93 | 87 | 16 | 10 | 36 | 40 | 13 | 17 |
| Y7 | 4 | 3 | 25 | 12 | 45 | 62 | 20 | 23 | 7 | 0 | 5.1 | 5.2 | 72 | 85 | -5 | 8 | 27 | 23 | 4 | 0 |
| Y8 | 0 | 0 | 14 | 4 | 65 | 73 | 15 | 24 | 6 | 0 | 5.6 | 5.7 | 86 | 97 | 9 | 20 | 21 | 24 | -2 | 1 |
| Girls | | | | | | | | | | | 5.6833 | | | | | | | | | |
| Y3 | 0 | 0 | 3 | 21 | 60 | 43 | 33 | 24 | 3 | 12 | 5.9 | 5.6 | 96 | 79 | 19 | 2 | 36 | 36 | 13 | 13 |
| Y4 | 0 | 0 | 10 | 17 | 41 | 50 | 32 | 25 | 17 | 8 | 6.3 | 5.6 | 90 | 83 | 13 | 6 | 49 | 33 | 26 | 10 |
| Y5 | 0 | 0 | 10 | 13 | 59 | 66 | 24 | 16 | 7 | 6 | 5.6 | 5.5 | 90 | 88 | 13 | 11 | 31 | 22 | 8 | -1 |
| Y6 | 0 | 0 | 6 | 8 | 48 | 52 | 36 | 28 | 9 | 12 | 6 | 5.9 | 93 | 92 | 16 | 15 | 45 | 40 | 22 | 17 |
| Y7 | 0 | 0 | 22 | 18 | 48 | 70 | 19 | 12 | 11 | 0 | 5.4 | 5.1 | 78 | 82 | 1 | 5 | 30 | 12 | 7 | -11 |
| Y8 | 0 | 0 | 18 | 10 | 68 | 65 | 6 | 25 | 9 | 0 | 5.5 | 5.5 | 83 | 90 | 6 | 13 | 15 | 25 | -8 | 2 |
| Boys | | | | | | | | | | | 5.7833 | | | | | | | | | |
| Y3 | 0 | 0 | 4 | 26 | 56 | 45 | 33 | 16 | 7 | 13 | 5.9 | 5.3 | 96 | 74 | 19 | -3 | 40 | 29 | 17 | 6 |
| Y4 | 0 | 0 | 10 | 6 | 52 | 56 | 29 | 32 | 10 | 6 | 5.9 | 5.9 | 91 | 94 | 14 | 17 | 39 | 38 | 16 | 15 |
| Y5 | 0 | 6 | 9 | 15 | 63 | 62 | 23 | 12 | 6 | 6 | 5.6 | 5.1 | 92 | 80 | 15 | 3 | 29 | 18 | 6 | -5 |
| Y6 | 0 | 0 | 9 | 18 | 66 | 43 | 19 | 21 | 6 | 18 | 5.7 | 5.8 | 91 | 82 | 14 | 5 | 25 | 39 | 2 | 16 |
| Y7 | 7 | 7 | 28 | 7 | 41 | 53 | 21 | 33 | 3 | 0 | 4.8 | 5.3 | 65 | 86 | -12 | 9 | 24 | 33 | 1 | 10 |
| Y8 | 0 | 0 | 9 | 0 | 63 | 77 | 25 | 23 | 3 | 0 | 5.8 | 5.8 | 91 | 100 | 14 | 23 | 28 | 23 | 5 | 0 |
| NZ/E | | | | | | | | | | | 5.6167 | | | | | | | | | |
| Y3 | 0 | | 2 | | 57 | | 38 | | 2 | | 6 | | 97 | | 20 | | 40 | | 17 | |
| Y4 | 0 | | 10 | | 45 | | 30 | | 15 | | 6.1 | | 90 | | 13 | | 45 | | 22 | |
| Y5 | 0 | | 8 | | 62 | | 23 | | 7 | | 5.7 | | 92 | | 15 | | 30 | | 7 | |
| Y6 | 0 | | 7 | | 58 | | 27 | | 8 | | 5.9 | | 93 | | 16 | | 35 | | 12 | |
| Y7 | 4 | | 24 | | 45 | | 20 | | 8 | | 5.2 | | 73 | | -4 | | 28 | | 5 | |
| Y8 | 0 | | 10 | | 67 | | 17 | | 7 | | 5.8 | | 91 | | 14 | | 24 | | 1 | |
| Maori | | | | | | | | | | | 5.7833 | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | |
|----|---|---|----|----|-----|----|----|----|----|-----|------|-----|-----|-----|----|-----|----|-----|-----|-----|
| Y3 | 0 | 0 | 25 | 33 | 75 | 67 | 0 | 0 | 0 | 0 | 4.3 | 4.2 | 75 | 67 | -2 | -10 | 0 | 0 | -23 | -23 |
| Y4 | 0 | 0 | 0 | 0 | 60 | 0 | 40 | 0 | 0 | 100 | 6.4 | 9 | 100 | 100 | 23 | 23 | 40 | 100 | 17 | 77 |
| Y5 | 0 | 0 | 0 | 0 | 50 | 62 | 0 | 38 | 50 | 0 | 6.5 | 6.3 | 100 | 100 | 23 | 23 | 50 | 38 | 27 | 15 |
| Y6 | 0 | 0 | 17 | 14 | 50 | 43 | 33 | 29 | 0 | 14 | 5.5 | 5.6 | 83 | 86 | 6 | 9 | 33 | 43 | 10 | 20 |
| Y7 | 0 | 0 | 29 | 14 | 43 | 71 | 14 | 14 | 14 | 0 | 5 | 5.1 | 71 | 85 | -6 | 8 | 28 | 14 | 5 | -9 |
| Y8 | 0 | 0 | 0 | 0 | 100 | 67 | 0 | 33 | 0 | 0 | 5 | 5.7 | 100 | 100 | 23 | 23 | 0 | 33 | -23 | 10 |
| | | | | | | | | | | | 5.68 | | | | | | | | | |

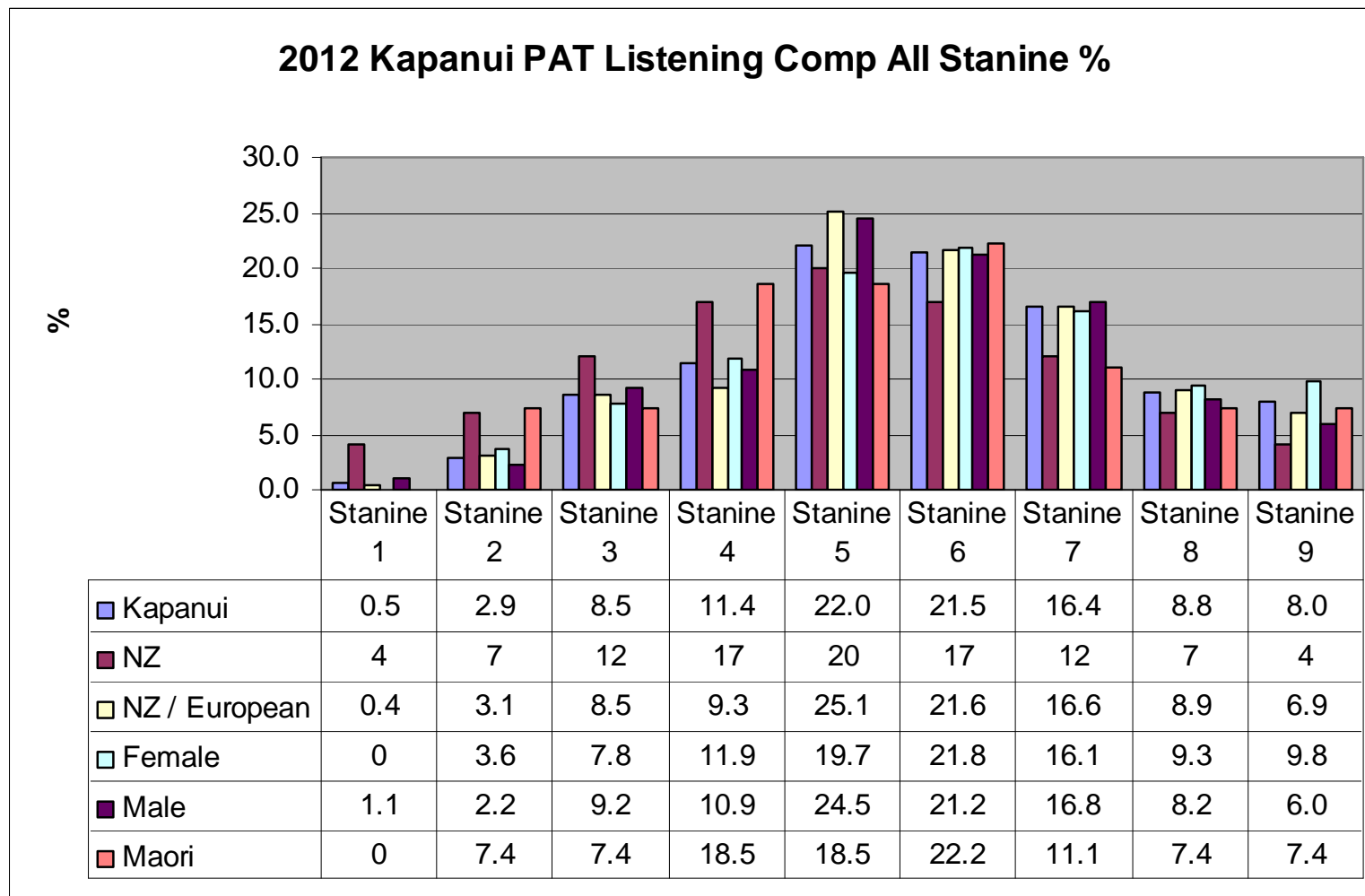
Graph 20 – 2012 PAT Listening Comprehension Mean Stanine % Kapanui School, NZ



Graph 21 – 2012 PAT Listening Comprehension Mean Stanine % and Student Count



Graph 22 - 2012 PAT Listening Comprehension All, NZ, NZ/European, Female, Male, Maori Stanine %



Comparison of Kapanui mean stanines 2011, 2012 Reading Comprehension and Listening Comprehension Y3-8 – table 7

Table 7 displays comparisons of mean stanine data from PAT Listening Comprehension and PAT Reading Comprehension. The Listening PAT helps us gauge 'potential' or 'expectancy' in reading. We would expect a student doing well on the Listening Comprehension test to demonstrate similar ability when reading. In analysing our data we look at differences between these results. This is particularly useful at the individual level.

The table below has the mean stanines for each year group in both PAT Reading comprehension and PAT Listening Comprehension with the difference being Reading minus Listening. Subtracting the difference gives an indication of how groups are reading to potential. A positive difference or higher Reading Comprehension results are desirable. Results for 2012 indicate that girls achieve more to potential than boys. Results overall 2011 and 2012 indicate that Kapanui students are achieving at expectancy or potential.

Table 7 - Comparison of mean stanines 2011, 2012 Reading Comprehension and Listening Comprehension Y3-8

| | 2011 | | | 2012 | | | |
|--------------|---------|---------|------|--------------|---------|------|------|
| | mean | mean | | mean | mean | | |
| | stanine | stanine | Diff | stanine | stanine | Diff | |
| | RC | LC | | RC | LC | | |
| NZ Norm | 5 | 5 | 0 | NZ Norm | 5 | 5 | 0 |
| Kapanui | 5.56 | 5.53 | 0.03 | Kapanui | 5.5 | 5.7 | -0.2 |
| Girls | | | | Girls | | | |
| Y3 | | 5.6 | | Y3 | | 5.9 | |
| Y4 | 6.1 | 5.6 | 0.5 | Y4 | 6 | 6.3 | -0.3 |
| Y5 | 5.8 | 5.5 | 0.3 | Y5 | 5.7 | 5.6 | 0.1 |
| Y6 | 5.6 | 5.9 | -0.3 | Y6 | 5.8 | 6 | -0.2 |
| Y7 | 5.5 | 5.1 | 0.4 | Y7 | 6.1 | 5.4 | 0.7 |
| Y8 | 5.4 | 5.5 | -0.1 | Y8 | 5.1 | 5.5 | -0.4 |
| Boys | | | | Boys | | | |
| Y3 | | 5.3 | | Y3 | | 5.9 | |
| Y4 | 5.4 | 5.9 | -0.5 | Y4 | 5.7 | 5.9 | -0.2 |
| Y5 | 5.3 | 5.1 | 0.2 | Y5 | 5.3 | 5.6 | -0.3 |
| Y6 | 5 | 5.8 | -0.8 | Y6 | 5.2 | 5.7 | -0.5 |
| Y7 | 5.7 | 5.3 | 0.4 | Y7 | 5 | 4.8 | 0.2 |
| Y8 | 5.8 | 5.8 | 0 | Y8 | 5.3 | 5.8 | -0.5 |

Staff has used the PAT results to –

- Identify any year group areas of weakness
- Group students for teaching purposes both within home rooms and where appropriate across teams
- Used the item analysis report to identify any next step teaching or gaps to address.
- Identify students who need specific support within class programmes
- Identify students for the school achievement target groups
- As evidence when making national standard overall professional judgements.
- Report to parents on student achievement levels in relation to NZ norms and areas of strength, weakness or gaps

Recommendations - 2013

1. The Board continue to include goals and actions in the 2013 annual plan to address the negative difference in results for girls in mathematics performing at the 7-9 stanine level.
2. The Board continue to include goals and actions in 2013 annual plan to address the overall lower results for boys in reading.
3. The Board develop and include separate goals and actions in the 2013 annual plan to address the lower percentage of Maori performing in stanines 7-9 in mathematics.
4. The Board should consider setting specific targets in 2013 to increase the % of Maori students achieving at the higher stanine levels in PAT Reading Comprehension.
5. Positive growth in Reading Comprehension at the Y4 level is an indication of the success of the early intervention programmes since 2009. Maintaining this growth as these students' progress through the school should be a goal of strategic planning.
6. Despite remaining ahead of NZ scaled score means in all Reading Comprehension tests Kapanui progress rates for cohorts are less than NZ expected progress rates for 3 out of 4 samples. In annual planning and target setting it will be important that the school sets targets and actions to maintain or accelerate the progress of identified groups in reading comprehension.

Summary Kapanui School 2012 PAT Report

The full report, graphs and tables, is available on the Kapanui School website.

Kapanui PAT 2012 Reading Comprehension

Overall performance - Kapanui School Mean stanine 5.52 (NZ 5)

Kapanui School has a satisfactory level of performance in PAT Reading Comprehension with 86% of students in the average, above average or superior range compared with the NZ norm of 77%. This high level is maintained from Y4 through to Y8 indicating that the students continue to make satisfactory progress each year as they progress through the school.

Kapanui School mean stanines and mean scaled scores are positive against NZ norms in all year groups and positive or equal to Kapiti Cluster data for 4/5 year groups.

Overall girls' performance is better than boys. Girls' mean scores are more positive than boys with all year groups having 86 to 96% of stanines 4-9. Boys are less positive compared to NZ norms with the 2012 Y6 and Y7 slightly below the NZ norm.

The number of Maori students in Y4-8 is small, (24), so any conclusions are to be treated with caution. Maori students make up 11% of the school.

Maori students Y4-8 have a mean stanine of 5.2 compared to Kapanui All 5.5 and NZ All 5. The mean stanine for Maori students at Kapanui School is positive as it is higher than the NZ mean but is lower than the Kapanui mean stanine 5.5.

Maori students at Kapanui School are achieving well against NZ norms in the average stanines but not in the above and superior stanines.

Measuring progress over time

Kapanui means exceed NZ means and Kapiti Cluster means in all year levels in each test. However despite remaining ahead in all tests Kapanui progress rates are less than NZ rates in 3 out of 4 cohort groups.

2012 PAT Mathematics

Kapanui has satisfactory performance in PAT maths. The mean stanine is slightly above the NZ mean for all students, for boys and for girls. Kapanui School has mean scaled scores greater than NZ means in all year levels

Kapanui School has a satisfactory level of performance in PAT Mathematics with 85.9% (+8.9%) of students in the average, above average or superior range compared with the NZ norm of 77%. Kapanui boys 84.8% (+7.8%) and girls 87%, (+10%)

In the above average and superior range Kapanui met the NZ norms (23%) for % of students at stanines 7, 8 and 9 with 23.8%. Boys exceeded this by +4.2% (27.2%). Girls did not meet the NZ norm achieving 20.5%, -2.5%.

2012 results indicate that overall boys perform higher than girls. Boys have a higher mean stanine and higher percentages in stanines 7, 8 and 9.

2012 results indicate a lower % of Maori students achieving at the stanine 7-9 levels compared to NZ and Kapanui School results. Only 1/24 (4.2%) Maori students achieved in the stanine 7-9 groups (NZ 23%). 19/24 (79.2) achieved in the stanine 4-9 levels compared to the NZ norm of 77%. The school should set goals to increase the % of Maori students achieving in the 7-9, above average or superior range. Mean scaled scores and mean stanines for Maori in 2012 are lower than for Kapanui means in all year groups except Y5

Measuring progress over time

Kapanui means exceed NZ means and Kapiti Cluster means in all year levels in each test. Kapanui also exceeds the NZ progress rate in 3 out of 4 cohort groups.

2012 PAT Listening Comprehension

Overall Performance

Kapanui School results indicate good performance as Kapanui exceeds NZ % in stanines 4-9 by +11.1 (88.1) and NZ % in stanines 7-9 by +10.9 (33.2). The Kapanui School mean stanine of 5.7 also exceeds the NZ mean of 5.

2012 - Overall girls and boys performance is similar but girls have a higher mean stanine 5.78 than boys 5.61.

23/27 (85.1%) Maori students achieved in the Stanine 4-9 levels (NZ 77%).

7/27 (25.9%) Maori students achieved in the Stanine 7-9 levels (NZ 23%). This is in contrast to only 16.6% of Maori students performing at stanines 7-9 in PAT Reading Comprehension.

Maori students have a similar mean stanine 5.68 to the Kapanui mean stanine 5.7 and better than the NZ mean 5.

Comparison of Kapanui mean stanines 2011, 2012 Reading Comprehension and Listening Comprehension Y3-8

The Listening PAT helps us gauge 'potential' or 'expectancy' in reading. We would expect a student doing well on the Listening Comprehension test to demonstrate similar ability when reading. In analysing our data we look at differences between these results.

Results for 2012 indicate that girls achieve more to potential than boys. Results overall 2011 and 2012 indicate that Kapanui students are achieving at expectancy or potential.

Recommendations - 2013

7. The Board continue to include goals and actions in the 2013 annual plan to address the negative difference in results for girls in mathematics performing at the 7-9 stanine level.
8. The Board continue to include goals and actions in 2013 annual plan to address the overall lower results for boys in reading.
9. The Board develop and include separate goals and actions in the 2013 annual plan to address the lower percentage of Maori performing in stanines 7-9 in mathematics.
10. The Board should consider setting specific targets in 2013 to increase the % of Maori students achieving at the higher stanine levels in PAT Reading Comprehension.
11. Positive growth in Reading Comprehension at the Y4 level is an indication of the success of the early intervention programmes since 2009. Maintaining this growth as these students' progress through the school should be a goal of strategic planning.
12. Despite remaining ahead of NZ scaled score means in all Reading Comprehension tests Kapanui progress rates for cohorts are less than NZ expected progress rates for 3 out of 4 samples. In annual planning and target setting it will be important that the school sets targets and actions to maintain or accelerate the progress of identified groups in reading comprehension.