

Summer Learning Programme 2018/2019

Northland

The Programme

- 6 primary schools (reporting on data from 5 schools): 444 students (more students received books however there is pre and post data for 444)
 - Year 3 = 135
 - Year 4 = 148
 - Year 5 = 161
 - Female = 212 Male = 232
- students received either 12 (higher reading levels) or 15 (lower levels) books

Objectives

To improve students' reading achievement over the summer holidays

To combat the differential and cumulative impact of summer learning loss

To examine the effects of the programme on a cohort of students who have participated for 3 consecutive years

Measurements

- STAR Reading

| Year | Pre Test | Post Test |
|------|--------------|--------------|
| 3 | STAR 3 – 4 B | STAR 3 – 4 B |
| | | |
| 4 | STAR 3 – 4 C | STAR 5 – 6 A |
| | | |
| 5 | STAR 5 – 6 B | STAR 5 – 6 B |

STAR Reading Test

2nd Edition
Revised
2011

Years 3 - 9

STAR Reading Test is designed to *supplement* the assessments teachers make every day. STAR assesses a range of reading skills that correspond closely to the main components of reading skills as outlined in *The Literacy Learning Progressions*.

Sub-tests: Word Recognition, Sentence Comprehension, Paragraph Comprehension, Vocabulary Range
Additional Subtests Year 7-9: The Language of Advertising, Styles of Writing

STAR Reading

Average Scale Score

| Yr 3 | Yr 4 | Yr 5 | Yr 6 | Yr 7 | Yr 8 | Yr 9 |
|------|------|------|-------|-------|-------|-------|
| 53.8 | 81.4 | 97.6 | 109.0 | 117.9 | 125.2 | 133.7 |

Average Progress

| Yr 3-4 | Yr 4-5 | Yr 5-6 | Yr 6-7 | Yr 7-8 | Yr 8-9 |
|--------|--------|--------|--------|--------|--------|
| 27.6 | 16.2 | 11.4 | 8.9 | 7.3 | 8.5 |

Star Scale Score (STAR) from Table 6 p.33, Teacher Manual

Overall Results: Reading Year 3

| Year Level | N | Pretest mean scale score | Posttest mean scale score | Difference | Average progress STAR Year 3 to 4 |
|---------------|-----|--------------------------|---------------------------|-------------------------|-----------------------------------|
| 3 | 135 | 64.06 <i>66.33</i> | 64.85 <i>67.49</i> | + 0.79 <i>+ 1.16</i> | + 2.3 per month |
| | | | | | + 5.75 over 2 ½ months |
| Gender | | | | | |
| Female | 65 | 67.29 | 68.80 | + 1.51 | |
| Male | 70 | 61.05 | 61.19 | + 0.14 | |
| | | | | | |

Year 3: Ethnicity

| | N | Pre Mean | Post Mean | Difference |
|-------------|----------|-----------------|------------------|-------------------|
| Māori | 91 | 63.07 | 63.94 | + 0.87 |
| | | | | |
| NZ European | 35 | 65.67 | 65.88 | + 0.21 |
| | | | | |
| Pacific | 5 | 65.80 | 67.32 | + 1.52 |
| | | | | |
| Other | 4 | 70.25 | 73.62 | + 3.37 |

Ability

- Ability levels based on Pre-test stanines:

| ABILITY LEVEL | STANINE |
|---------------|---------------------|
| Well Below | Stanine 1 |
| Below | Stanines 2 and 3 |
| At | Stanines 4, 5 and 6 |
| Above | Stanines 7, 8 and 9 |

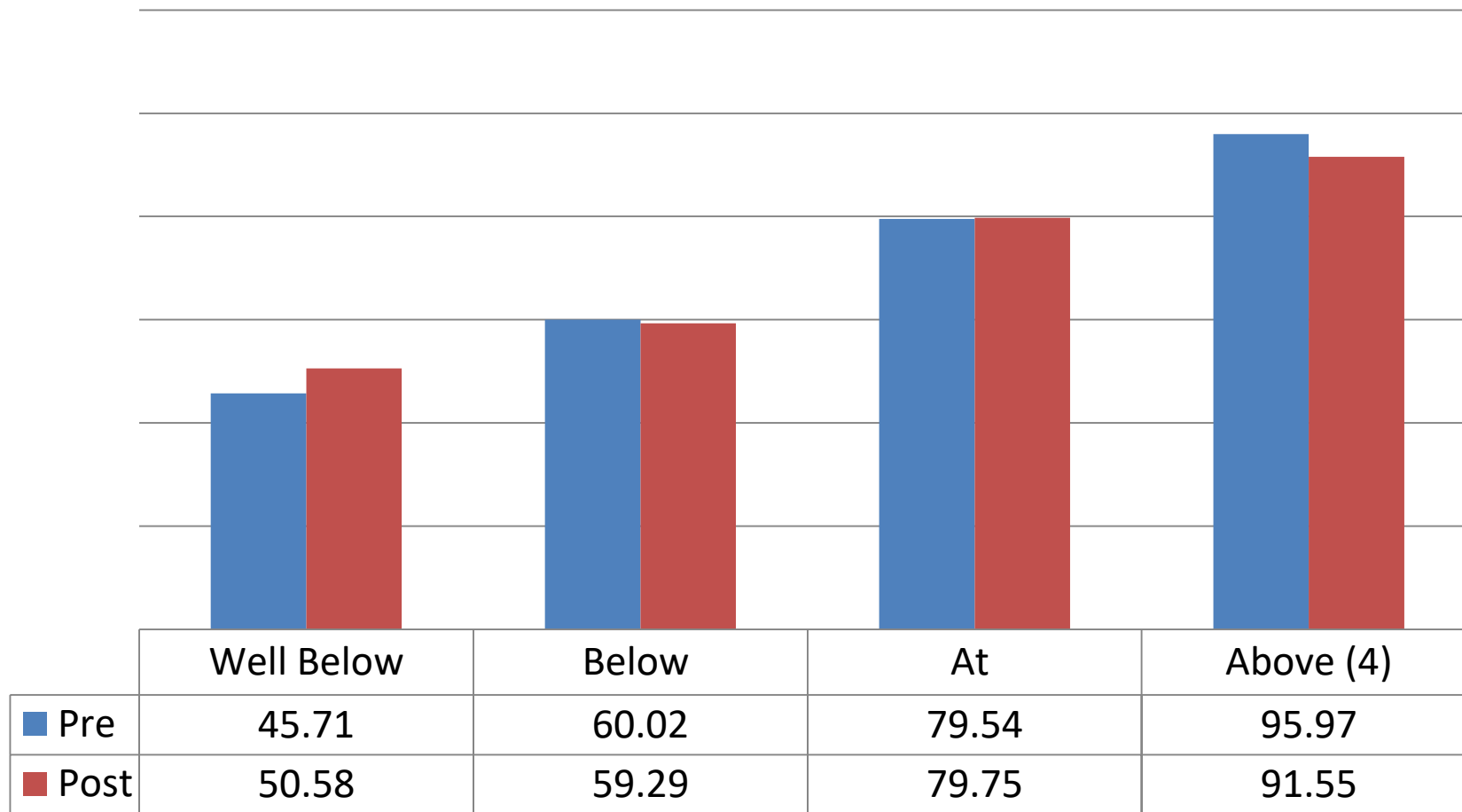
Year 3: Ability

| Group | N | Pre Mean | Post Mean | Difference |
|------------|----|----------|-----------|------------|
| Well Below | 32 | 45.71 | 50.58 | + 4.87 |
| Below * | 55 | 60.02 | 59.29 | - 0.73 |
| At | 44 | 79.54 | 79.75 | + 0.21 |
| Above** | 4 | 95.97 | 91.55 | - 4.42 |

** 5 students dropped between 10-20 scale score points at post test and 2 students dropped between 25-40 ss points*

*** 1 student decreased by more than 10 ss points at post test*

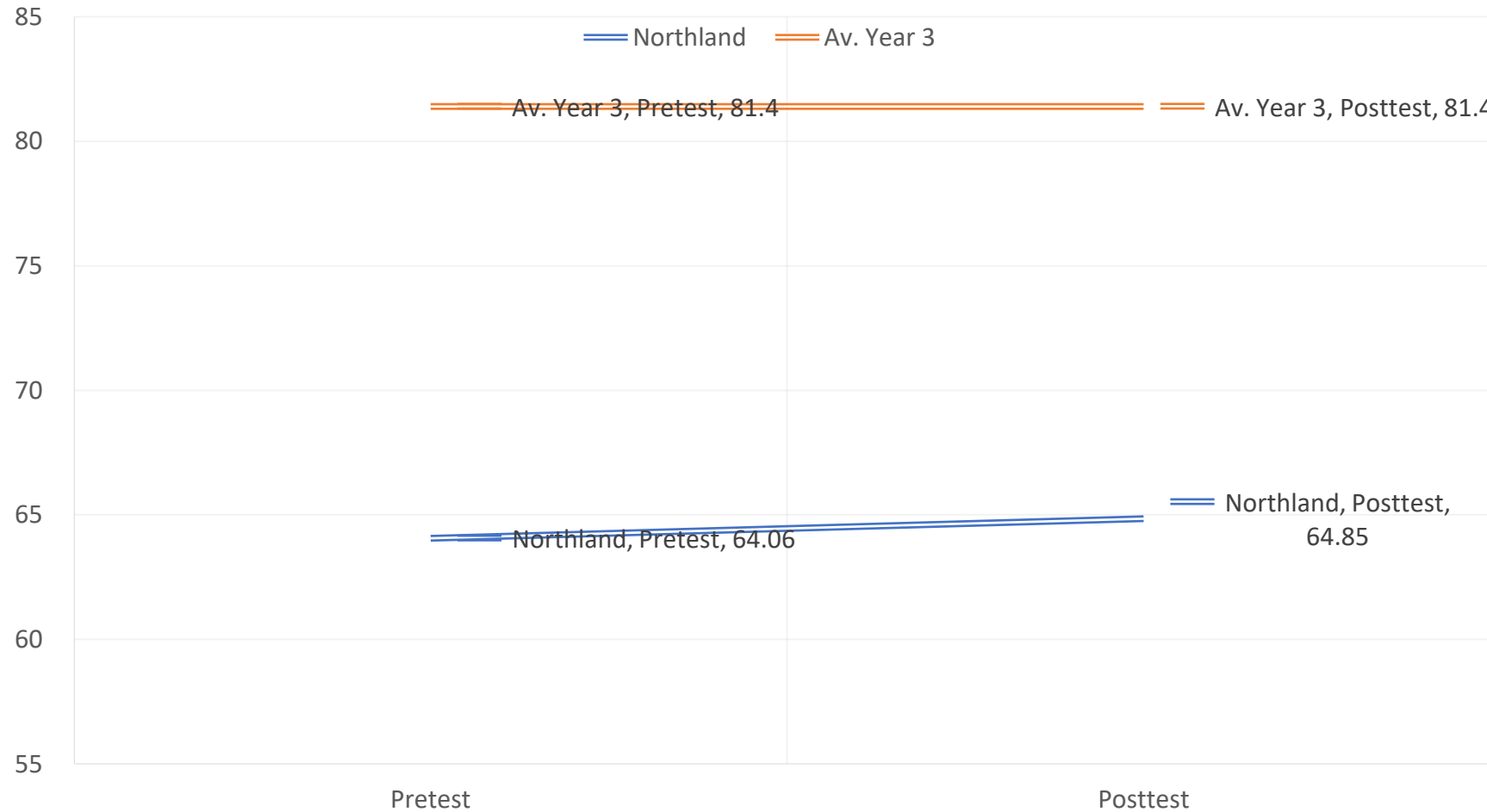
Yr. 3 Reading Progress – Ability Levels



Year 3: Subtests

| Subtest | Pre Mean | Post Mean | Difference |
|------------------|----------|-----------|------------|
| Word Recognition | 6.32 | 6.59 | + 0.27 |
| | | | |
| Sentence Comp. | 4.58 | 4.84 | + 0.26 |
| | | | |
| Paragraph Comp. | 5.16 | 5.10 | - 0.06 |
| | | | |
| Vocabulary | 3.82 | 3.91 | + 0.09 |
| | | | |

Northland Schools Year 3 & Average Year 3



Overall Results: Reading Year 4

| Year | N | Pre Mean SS | Post Mean SS | Difference | Average progress STAR Year 4 – 5 |
|---------------|-----|----------------|----------------|---------------------------------------|----------------------------------|
| 4 | 148 | 82.61 82.47 | 86.94 89.13 | + 4.33 + 6.66 | + 1.35 per month |
| | | | | <i>Greater than expected progress</i> | + 3.37 over 2 ½ months |
| Gender | | | | | |
| Female | 72 | 84.38 | 89.25 | + 4.87 | |
| Male | 76 | 80.94 | 84.76 | + 3.82 | |

Year 4: Ethnicity

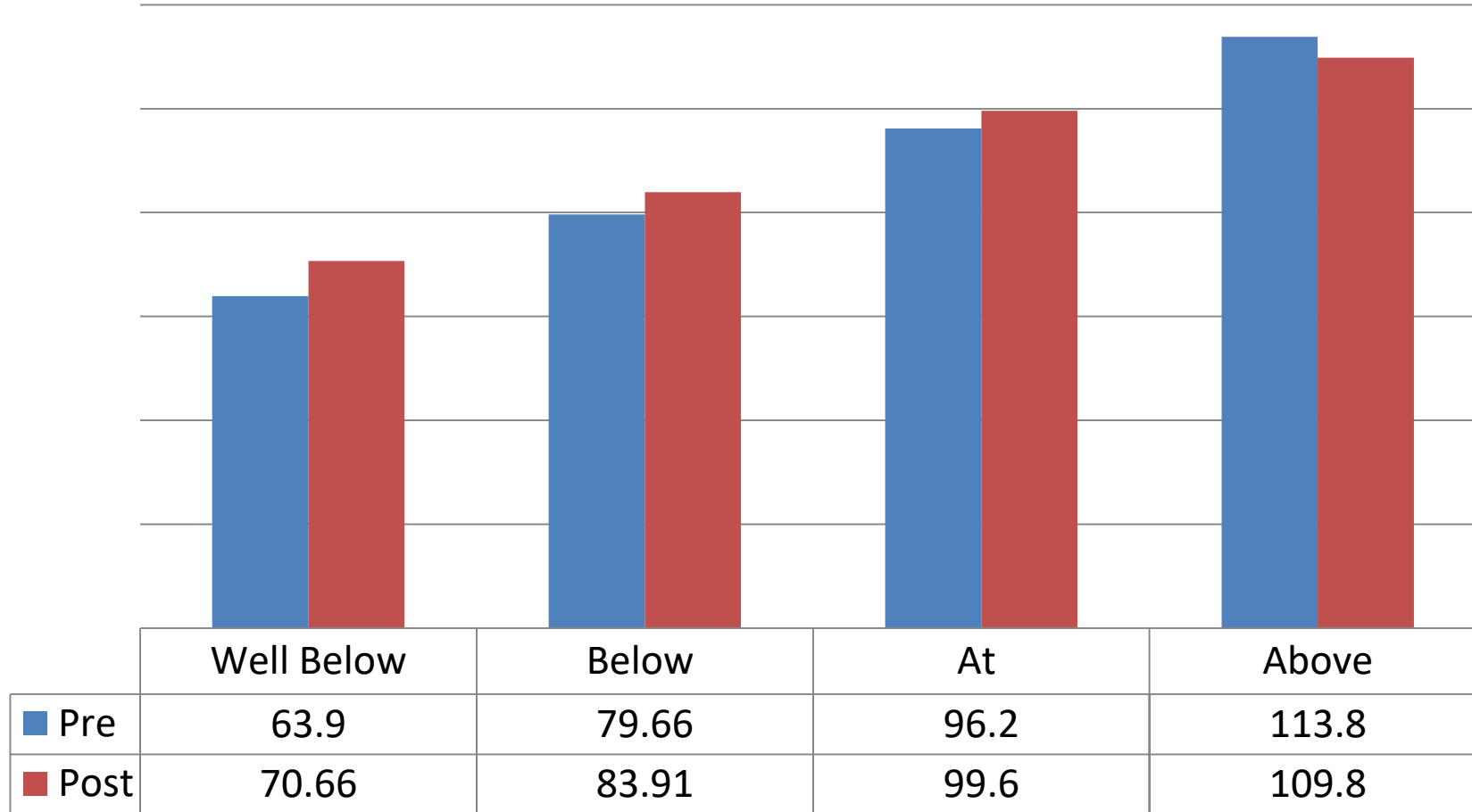
| | N | Pre Mean | Post Mean | Difference |
|-------------|-----|----------|-----------|------------|
| Māori | 111 | 81.53 | 85.65 | + 4.12 |
| | | | | |
| NZ European | 37 | 85.87 | 90.82 | + 4.95 |
| | | | | |

Year 4: Ability

| Group | N | Pre Mean | Post Mean | Difference | Average Progress |
|------------|----|----------|-----------|------------|---------------------------------------|
| Well Below | 43 | 63.90 | 70.66 | + 6.76 | <i>greater than expected progress</i> |
| | | | | | |
| Below | 44 | 79.66 | 83.91 | + 4.25 | <i>greater than expected progress</i> |
| | | | | | |
| At | 55 | 96.20 | 99.60 | + 3.40 | <i>greater than expected progress</i> |
| | | | | | |
| Above * | 6 | 113.80 | 109.80 | - 4.00 | |

** 2 students each dropped by more than 10 scale score points at post test*

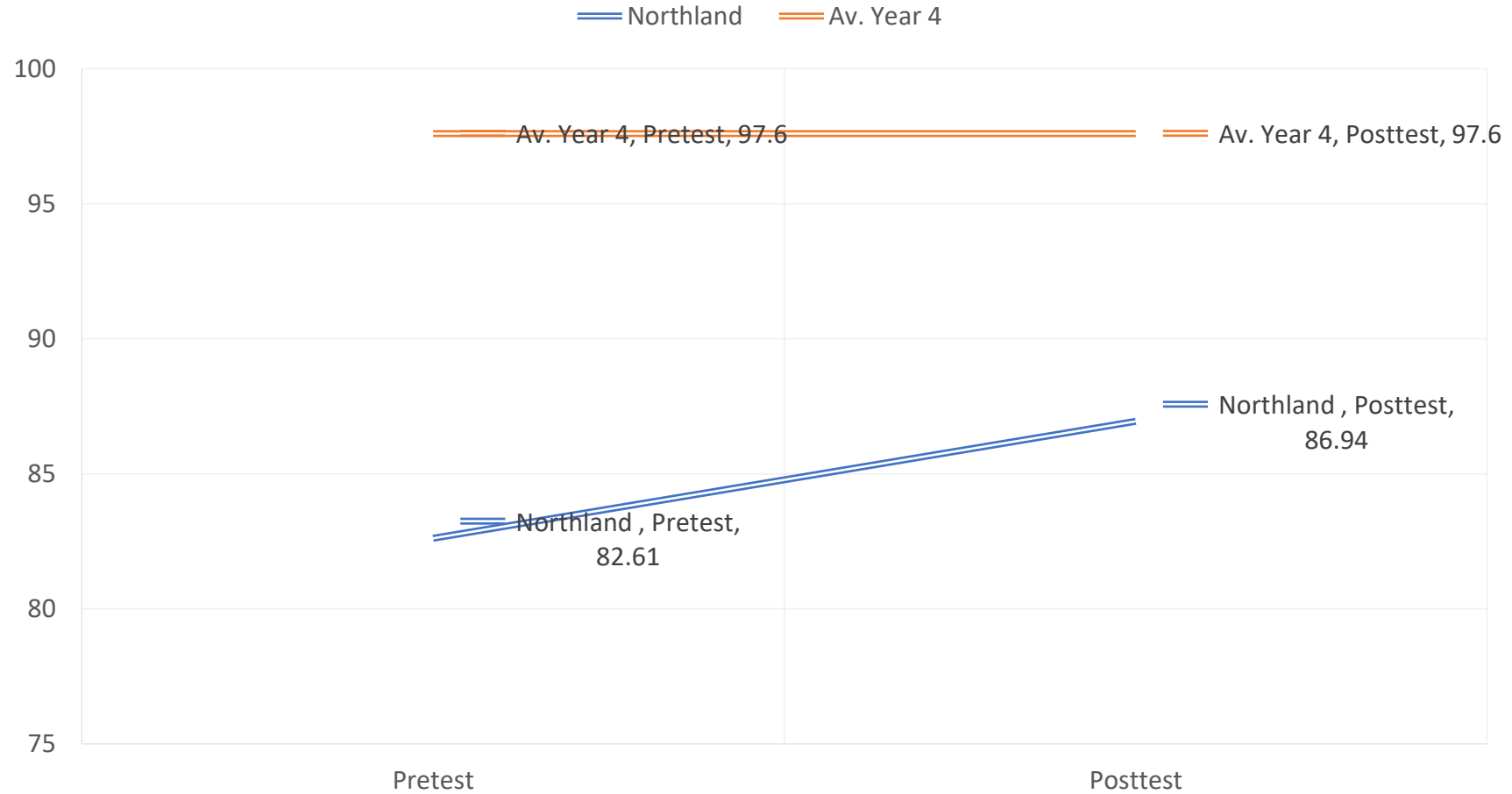
Yr. 4 Reading Progress – Ability Levels



Year 4: Subtests

| Subtest | Pre Mean | Post Mean | Difference |
|------------------|----------|-----------|------------|
| Word Recognition | 6.83 | 7.48 | + 0.65 |
| | | | |
| Sentence Comp. | 4.97 | 5.36 | + 0.39 |
| | | | |
| Paragraph Comp. | 8.28 | 6.14 | - 2.14 |
| | | | |
| Vocabulary | 3.54 | 5.62 | + 2.08 |

Northland Schools Year 4 & Average Year 4



Overall Results: Reading Year 5

| Year | N | Pre Mean SS | Post Mean SS | Difference | Average progress STAR Year 5 - 6 |
|---------------|-----|------------------------|-------------------------|---------------------------------------|----------------------------------|
| 5 | 161 | 98.16 <i>101.21</i> | 101.97 <i>105.31</i> | + 3.81 <i>+ 4.10</i> | + 0.95 per month |
| | | | | <i>Greater than expected progress</i> | + 2.37 over 2 ½ months |
| Gender | | | | | |
| Female | 75 | 100.85 | 103.81 | + 2.96 | |
| Male | 86 | 95.82 | 100.37 | + 4.55 | |

Year 5: Ethnicity

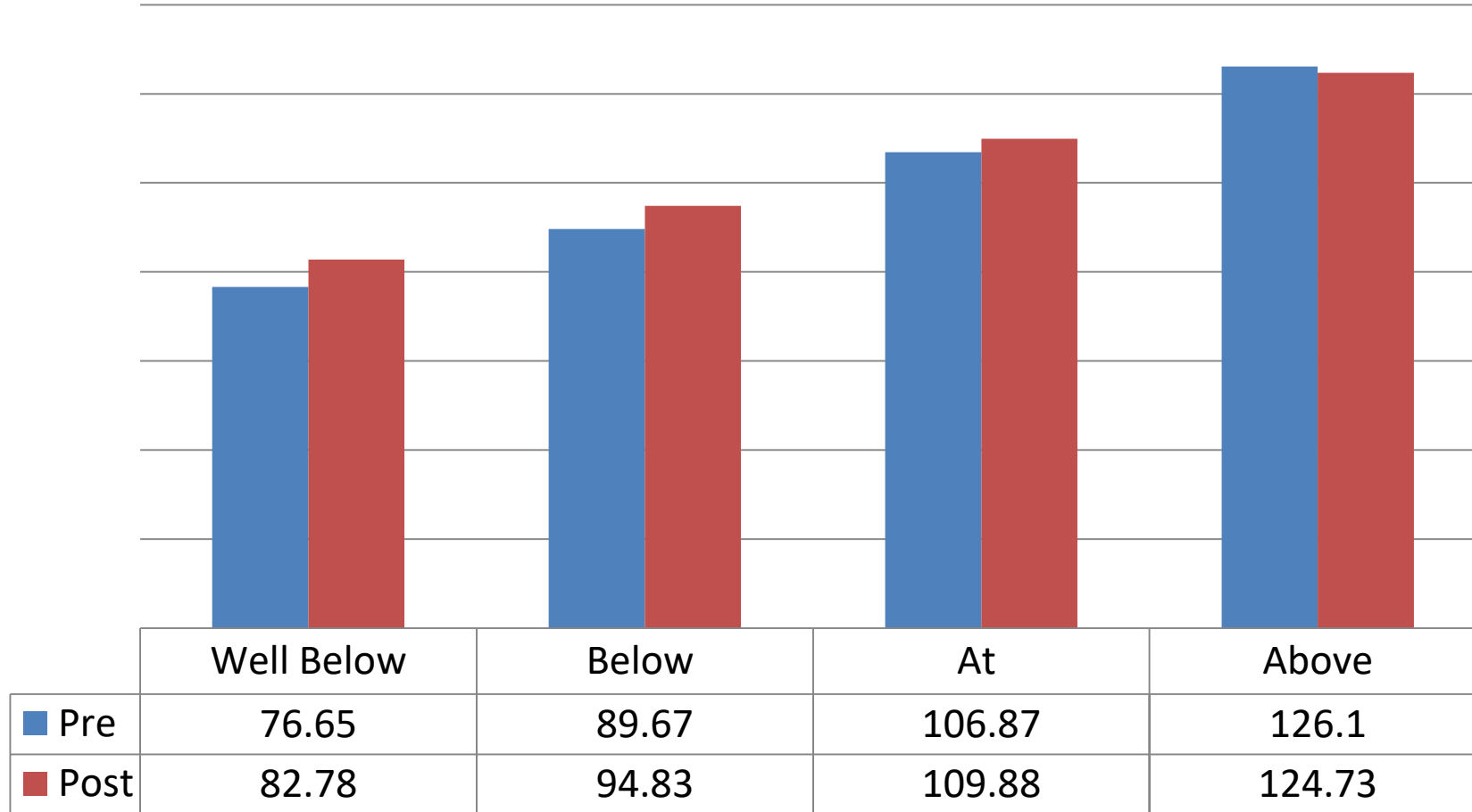
| | N | Pre Mean | Post Mean | Difference |
|-------------|-----|----------|-----------|------------|
| Māori | 120 | 96.28 | 100.10 | + 3.82 |
| | | | | |
| NZ European | 34 | 103.71 | 107.97 | + 4.26 |
| | | | | |
| Pacific | 3 | 100.56 | 99.66 | - 0.90 |
| | | | | |
| Other | 4 | 105.57 | 108.80 | + 3.23 |

Year 5: Ability

| Group | N | Pre Mean | Post Mean | Difference | Average Progress |
|------------|----|----------|-----------|------------|------------------|
| Well Below | 28 | 76.65 | 82.78 | + 6.13 | |
| | | | | | |
| Below | 48 | 89.67 | 94.83 | + 5.16 | |
| | | | | | |
| At | 71 | 106.87 | 109.88 | + 3.01 | |
| | | | | | |
| Above * | 14 | 126.10 | 124.73 | - 1.37 | |

** 3 students each decreased by more than 10 scale score points at post test*

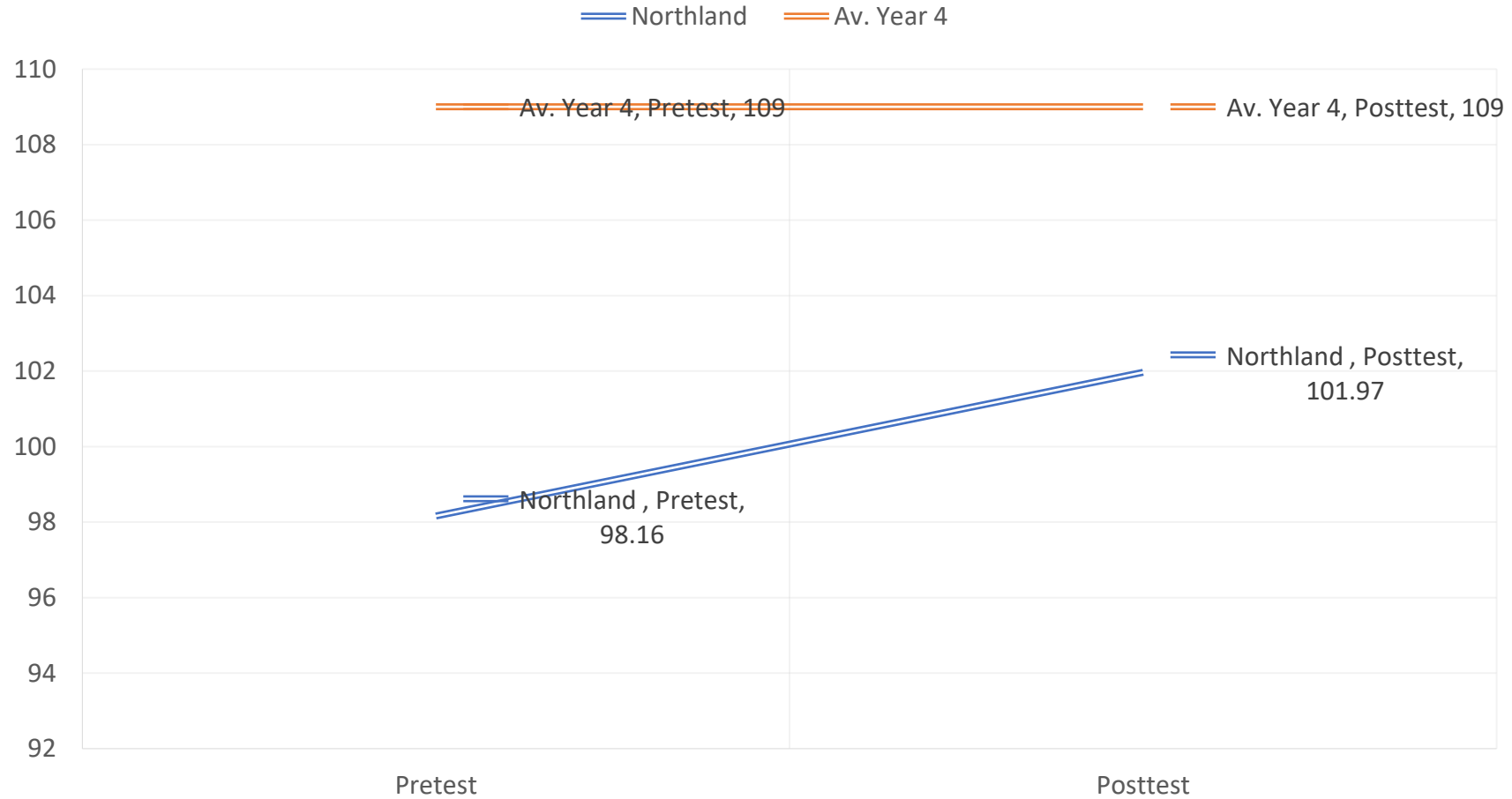
Yr. 5 Reading Progress – Ability Levels



Year 5: Subtests

| Subtest | Pre Mean | Post Mean | Difference |
|------------------|----------|-----------|------------|
| Word Recognition | 7.28 | 7.45 | + 0.17 |
| | | | |
| Sentence Comp. | 5.58 | 6.48 | + 0.9 |
| | | | |
| Paragraph Comp. | 7.93 | 9.27 | + 1.34 |
| | | | |
| Vocabulary | 4.88 | 5.35 | + 0.47 |

Northland Schools Year 5 & Average Year 5



Results Summary & Conclusions

Year 3

- gains for the Overall, Female and Male groups; the Female group made greater gains than the Male
- all Ethnicity groups gained
- the Well Below and At groups gained
- the Below and Above groups dropped – 1 (out of 4) 'Above' student decreased by more than 10 scale score points at post test; 2 'Below' students decreased substantially at post test (between 25-40 ss points)
- mean subtest scores improved for 3 subtests however there was a slight drop in Paragraph Comprehension

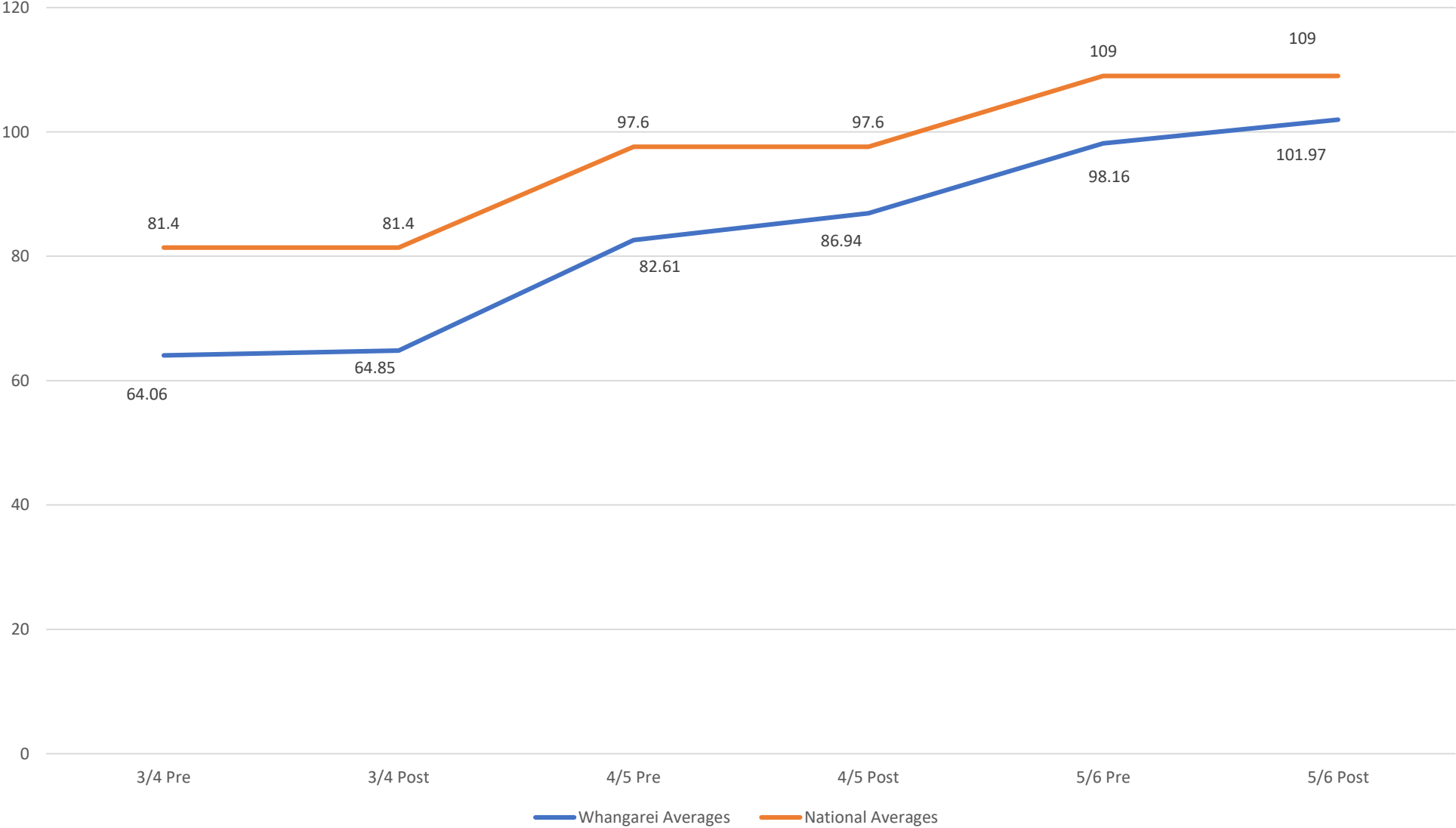
Year 4

- 'greater than expected progress' for: Overall, Female, Male, both Ethnicity groups, and Well Below, Below, and At ability groups
- the Above group dropped – 2 (out of 6) students each dropped more than 10 scale score points at post test
- gains in 3 subtests
- small drop in Paragraph Comprehension

Year 5

- 'greater than expected progress' for: the Overall, Female, Male, NZ Maori, NZ European, 'Other', Well Below, Below, and At groups
- the Male group made greater gains than the Female group
- the Pacific group dropped slightly – small sample size
- the Above group dropped – 3 students each dropped by more than 10 scale score points
- gains in all subtests

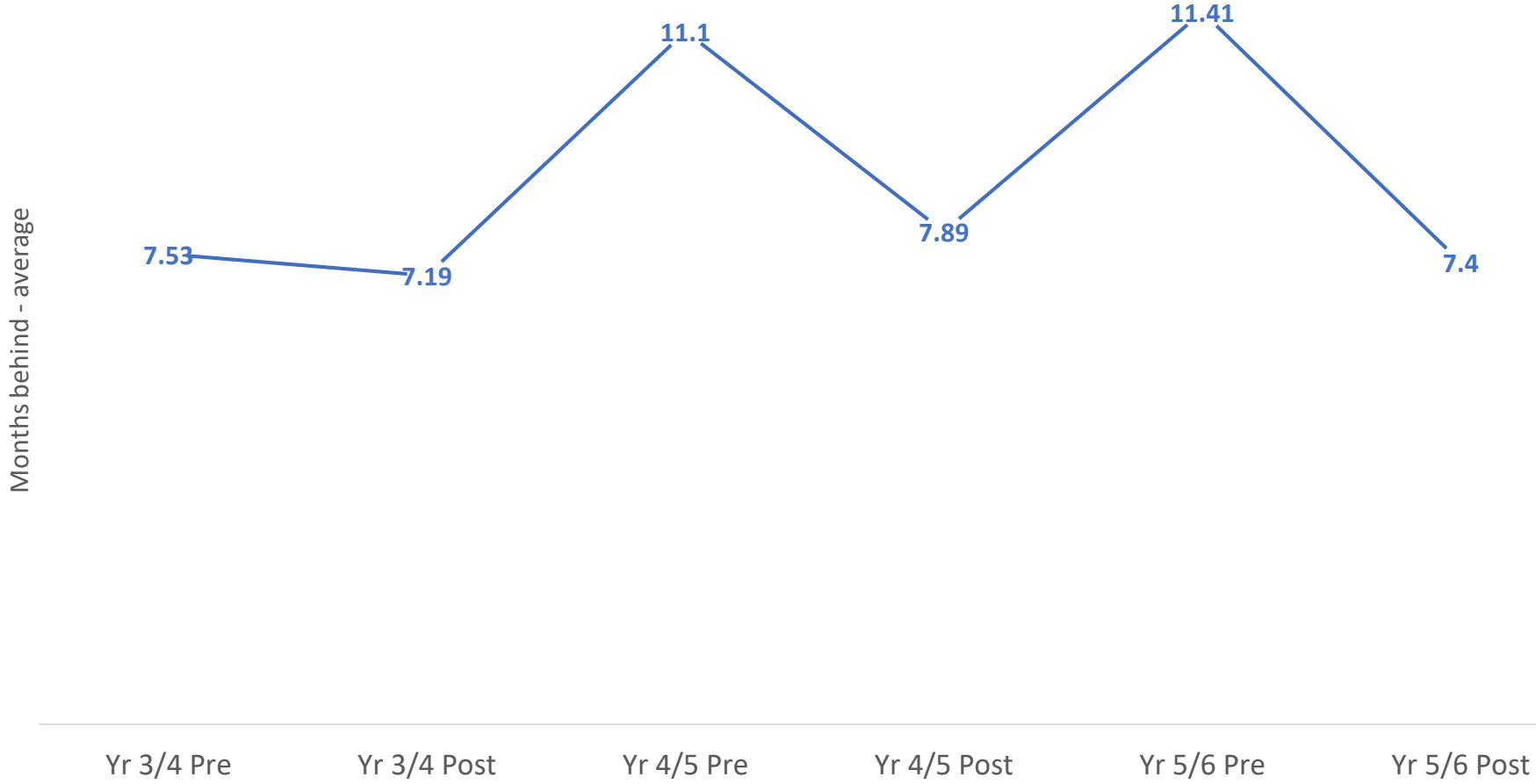
Student Progress vs National Averages



Student Progress vs National Averages - Whangarei

| | Yr 3 / 4 Pre | Yr 3 / 4 Post | Yr 4/5 Pre | Yr 4/5 Post | Yr 5/6 Pre | Yr 5/6 Post |
|---|--------------|---------------|------------|-------------|------------|-------------|
| National Averages | 81.4 | 81.4 | 97.6 | 97.6 | 109 | 109 |
| Whangarei | 64.06 | 64.85 | 82.61 | 86.94 | 98.16 | 101.97 |
| Difference | 17.34 | 16.55 | 14.99 | 10.66 | 10.84 | 7.03 |
| Expected Progress/ Month | 2.3 | 2.3 | 1.35 | 1.35 | 0.95 | 0.95 |
| Average months behind in reading | | | | | | |
| | Yr 3 / 4 Pre | Yr 3 / 4 Post | Yr 4/5 Pre | Yr 4/5 Post | Yr 5/6 Pre | Yr 5/6 Post |
| Average months behind | 7.53 | 7.19 | 11.10 | 7.89 | 11.41 | 7.40 |

AVERAGE NUMBER OF MONTHS BEHIND



3 Year Study: Northland

- interested in comparing our results with Allington et al., 2011, ie. gains were achieved when the same cohort of students participated in the summer reading programme over 3 years
- tracked progress of 84 students who began the summer reading programme as Year 3 students in 2016 and who have participated for 3 consecutive summers
- students from 3 schools: Hora Hora, Totara Grove, Whau Valley
- compared mean scale scores at point 1 (Nov. 2016) and at point 6 (Feb 2019) against average progress for Year 4 (Nov. 2016) and Year 6 (Feb 2019)
- equated this data to average months behind (estimation)

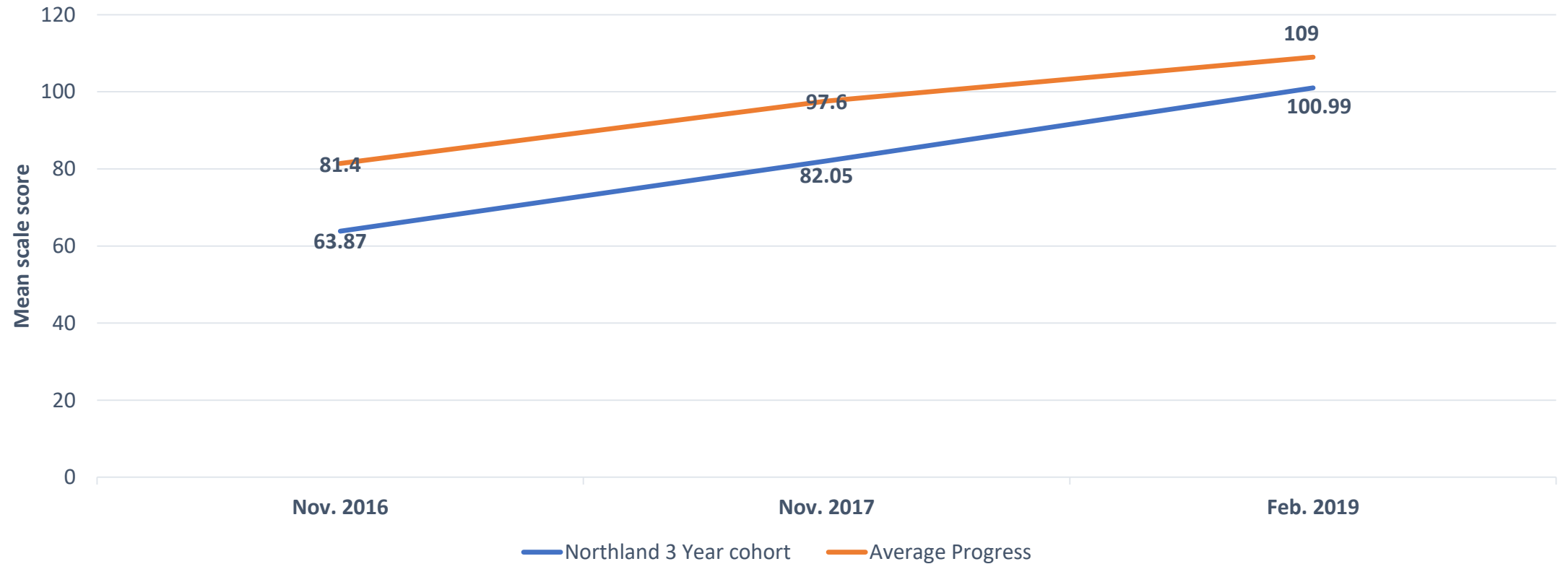
Overall Results: 3 Year Study

| Years | N | Pre Mean SS Nov. 2016 | Mean SS Nov. 2017 | Post Mean SS Feb. 2019 |
|---------------------------|-----------------|-----------------------|----------------------|------------------------|
| 3 – 6 <i>2015-2018</i> | 84 <i>57</i> | 63.87 <i>70.35</i> | 82.05 <i>91.3</i> | 100.99 <i>107.9</i> |
| | | | | |
| Gender | | | | |
| Female | 36 | 66.38 | 85.79 | 105.63 |
| | | | | |
| Male | 48 | 61.98 | 79.25 | 97.52 |
| | | | | |

3 Year Data: Northland

| | Year 3 / 4 Pre 2016 | Nov 2017 | Year 5/6 Post 2019 |
|---|----------------------------|-----------------|---------------------------|
| National Averages | 81.4 | 97.6 | 109.0 |
| 3 Year Cohort average (N=84) | 63.87 | 82.05 | 100.99 |
| Difference | 17.53 | 15.55 | 8.01 |
| Expected progress per month | 2.3 | 1.35 | 0.95 |
| Average months behind | 7.62 | 11.51 | 8.43 |

Northland 3 Year Cohort v Average Progress



AVERAGE MONTHS BEHIND: 3 YEAR COHORT

Months behind - average



3 Year Data Discussion

- results indicate that the gap has reduced over the 3 years
- this suggests that the cumulative effect of the summer reading programme together with school and home is having a positive impact on student achievement; while the summer slide has not been eliminated it has been reduced
- appears to support Allington et al.'s 2011 results

The ABCs of Improved Reading

- A = access to books – need a wide variety, but access alone not enough
- B = books that match readers' ability levels and interests – not too easy and not too hard
- C = comprehension – monitored and guided by an adult, teacher, or parent- the help of an adult who can ask questions and guide child to better understand what they are reading = **critical**

James Kim, Harvard University

- D= designated home liaison – visiting over the holidays supporting and encouraging child and parents & helping to keep the momentum going

Discussion for 2019/2020

- student feedback on books