

## Shine Literacy Project Report 2018

### Background

There is a significant gap between students who do well in New Zealand schools and students who do not. This has been an ongoing concern for New Zealand since the first Progress in Reading and Literacy Study (PIRLS) in 2001, when this achievement gap was highlighted. New Zealand's gap, when comparing students at either end of the achievement spectrum, is the largest of all OECD countries taking part in PIRLS. In 2016, 27% of students taking part in PIRLS from New Zealand schools scored at the Low or Below the Low Benchmark, and 41% scored in the High or Advanced Benchmark.

Between 2014 and 2016, thirty two schools were involved in the *Shine* literacy research project which evaluated the impact of a change in teacher practice on the acquisition of early literacy skills. Because of the success of that research project the majority of these schools have continued to work together ever since.

### Shine Project 2018

In 2018 twenty five schools were part of the *Shine* network of schools working together to implement the *Sounds Like Fun* approach to raise literacy achievement. The focus was on instruction in Year 1 to 3 classrooms.

Our goal was to lift achievement by ensuring the foundation skills for literacy are taught explicitly from school entry using a language-to-literacy approach, so that these are secure when students begin to use them for independent reading, writing and spelling.

This year we have also focused on identifying the key elements that have led to improved literacy outcomes for students in our *Shine* schools. In order to measure these literacy outcomes we asked all schools to use common standardised assessment tools and to use the **beagle**® assessment App to enter and analyse the data to assist teachers to understand what the data means and to help with targeted instructional planning. Detailed results of these assessments follow in this report. The results have raised a number of questions about student achievement, the achievement gap, and the variation in achievement that is evident between schools and classes. These are discussed on pages 18 – 23.

### Results and contributors to success

Results this year were measured by looking at the shift in achievement from the start to the end of the year for each year group of students. We used the Effect Size shift measure to show the impact of instruction over the year. All schools taking part made significant improvements to students' literacy outcomes with some remarkable Effect Size shifts. What this means is that all schools in the project achieved greater success than would be expected in a normal year's learning.

We have identified the following factors as being key contributors to the *Shine* schools' success:

- Support from Principals and Lead Teachers to lead changes in teaching practice.
- Increased skill and consistency in teachers' implementation of the *Sounds Like Fun* approach across junior classes.
- Innovation in practice – teachers are helping develop, shape and implement new teaching strategies and new assessment processes (assessments for oral language and writing) which are shared across the cluster of schools.
- Increased teacher knowledge and understanding of the acquisition of literacy skills and greater confidence to analyse literacy problems.
- Increased teacher skill and understanding to assess achievement, analyse and interpret assessment data via **beagle** and use this to drive teaching.

The success of this project has been enhanced by significant donations from The Todd Foundation and The Wright Family Foundation, allowing us to provide the following:

- Resources for all junior classrooms and Year 1-3 students.
- Lead Teacher PLD (6 meetings over the year) which provided support and leadership mentoring.
- Regular PLD for Year 1-3 teachers (13 sessions in total run over the year) focusing on key areas where there are gaps in teacher knowledge.
- Common, standardized assessment tools which allowed us to compare results across the cohort.
- **beagle** licenses for all schools which has supported teachers to securely store, analyse and interpret assessment data and link this to targeted instruction.
- The employment of Mary Jones to help coordinate the project and to play a specific role in supporting Lead Teachers to manage change in their schools.
- Production of videos of the key PLD sessions which are now freely available online to support in-school PLD ([www.joyallcock.co.nz/sounds-like-fun-pld/](http://www.joyallcock.co.nz/sounds-like-fun-pld/)).

## Beyond 2018

Towards the end of Term 3 we asked schools to complete a survey about their involvement in this project and their needs for the future. Our goal is to ensure the success schools have achieved is self-sustaining and to continue to investigate ways to improve outcomes for all students. One outcome of this survey was that schools asked for their Year 4 to 8 teachers to receive PLD to support the literacy achievement in middle and senior classes.

In 2019 we will provide the following:

- PLD for Year 4-7 teachers (release paid by schools but PLD provided by Joy Allcock at no cost).
  - Introductory session for new Year 1-3 teachers in *Shine* schools (release paid by schools but PLD provided by Joy Allcock at no cost).
  - PLD support online – the key videos to support Year 1-3 teachers using the *Sounds Like Fun* approach are available at no cost on [www.joyallcock.co.nz/sounds-like-fun-pld/](http://www.joyallcock.co.nz/sounds-like-fun-pld/).
- Other videos to support teachers in Years 4-8 are also available on this site.

- Teacher and student resources for Year 4-8 classes.
- **beagle** licenses and training for schools for 2019 with in-depth analysis of achievement data and links to instructional practice.
- Lead Teacher PLD once each term (release paid by schools) with Mary Jones and Joy Allcock.

## Assessments

Assessment data gives teachers a snapshot of their students' achievement. It should also provide teachers with the opportunity to drill down to find out what skills and knowledge students have acquired, which students need support or extension, and how instruction should be tailored to meet these needs. Following is a description of the assessments used in 2018.

### School Entry Checklist

This year *Shine* schools have been trialling a School Entry Checklist which is designed to identify students needing more assessment in the area of oral language, book knowledge and phonological and phonemic awareness skills.

### Phonological Awareness

We used the Sutherland Phonological Awareness Test to assess and track students whose school entry results showed that phonemic awareness was an area of concern. This is an individually administered assessment.

### Code Knowledge

We tracked students' acquisition of knowledge of the alphabet and the alphabetic code using Sounds Like Fun assessments – Letter Name and Letter Sound Knowledge Assessment and Sound to Letter Knowledge.

### Reading and Spelling

We used the Hodder Group Reading Test to measure reading progress and the Hodder Diagnostic Spelling Test to measure spelling. These are standardised and reliable tests that are administered to groups of children and they allow the results to be accurately compared.

### Writing

We have been trialling a writing analysis App to measure and understand the acquisition of writing skills. Writing results are not available for this report because we are still building the data base for working out the norm for different age groups. A separate report on writing will be presented as soon as the data base is of a sufficient size.

## Achievement Data

In 2018 we used Effect Size shifts to measure progress. Our Effect Size shifts were typically between .8 and 1 for the cohort as a whole. Individual schools had a range of Effect Sizes across assessments from .1 to 2.6. Below is an explanation of the Effect Size from the Ministry of Education website TKI.

Effect size is a way of quantifying the difference between two groups. In this instance we are quantifying the difference between the end of year and beginning of year results.

An effect size of 1.0 indicates that a particular approach to teaching or technique advanced the learning of the students in the study by one standard deviation above the mean, typically associated with advancing children's achievement by one year, improving the rate of learning by 50%, or a correlation between some variable (for example, amount of homework) and achievement of approximately .50. When implementing a new programme, an effect size of 1.0 would mean that approximately 95% of average students receiving that treatment would exceed 84% of students not receiving that treatment (Hattie, 1999).

According to Hattie (1999) normative comparison points of effect sizes are:

- 0.1 Student maturation
- 0.24 Any teacher in front of class
- 0.4 Innovations in schooling

Anything above 0.4 would imply that the innovation is working better than expected.

The Professional Learning and Development BES suggests 0.2 – 0.4 is a small but educationally significant impact, 0.4 – 0.6 is a medium educationally significant impact and greater than 0.6 is large.

<http://assessment.tki.org.nz/Evidence-for-learning/Working-with-data/Concepts/Effect-size>

## Year 1

**Table 1: School Entry Checklist**

198 students completed this at school entry during 2018

Book knowledge /6		Oral Language /13		Phonological and Phonemic Awareness /8	
Less than 4	13.94%	Less than 8	29.85%	0-3	57.22%
More than 4	86.06%	More than 8	70.15%	3-6	26.86%
				6-8	15.93%

### Comment

It was clear that most students had good knowledge of simple concepts about print (Book Knowledge) and 70% were able to complete the oral language questions successfully. The Phonological and Phonemic Awareness section was difficult for approximately 60% of students. The results provide us with information to tailor instruction and to share with the early childhood centres that feed into our schools.

**Table 2: Letter Name Knowledge**

**Assessment 1 Sounds Like Fun - Recognising and naming letters of the alphabet**

Students	First test Average /26	Second test Average /26	Effect Size shift
<b>Year 1</b> 585 results over 2018	18.21		N/A
137 students did the test twice	14.9	22.7	1.1
<b>Year 2</b> 211 results over 2018	19.55		N/A
62 students did the test twice	17.5	22.9	.8
<b>Year 3</b> 122 results over 2018	25.15		N/A
40 students did the test twice	24.9	25.8	.5

### Comment

Letter Name Knowledge should be secure by the end of Year 1 and it is, for the majority of students. Students whose knowledge is not secure by the end of Year 1 need specific instruction and their progress tracked. The majority of students in Year 1 only completed the test once because they knew the names of most letters. Those with lower results repeated the test (137 students) and the diminishing number of students in Year 2 and 3 were students who had not made the expected progress in Year 1 who were being tracked over time. The Effect Size shifts reflect the increase in knowledge across the years – the more knowledge students have the less room there is to move and therefore the lower the Effect Size.

**Table 3: Letter Sound Knowledge**

**Assessment 1, Sounds Like Fun - Providing appropriate sound(s) for the letters of the alphabet**

Students	First test Average /34	Second test Average /34	Effect Size shift
<b>Year 1</b> 585 results over 2018	17.63		N/A
137 students did the test twice	12.8	25.7	1.5
<b>Year 2</b> 211 tests taken	20.56		
62 did the test twice	18.3	28.0	1.2
<b>Year 3</b> 122 results over 2018	29.02		
40 students did test twice	26.7	31.8	1.2

### Comment

The Letter Sound Knowledge test asks students to pronounce each letter, but it also allows for diversity in the pronunciation of the vowels and the letters c and g which commonly have more than one pronunciation. Understanding that letters link to sounds and that one letter can be pronounced in different ways, is an important concept for students to grasp if they are to be able to work with the alphabetic code. The results of this assessment show that it is possible to add to students' knowledge of this concept throughout Years 1 to 3. The students who did not have this knowledge secure by the end of Year 1, who were tracked in Years 2 and 3 made significant progress as shown by the Effect Size shifts in Years 2 and 3.

**Table 4: Sound to Letter Knowledge**  
**Assessment 2 Sounds Like Fun - *Writing the sounds of English***

Students	First test Average /45	Second test Average /45	Effect Size shift
<b>Year 1</b> 651 results over 2018	29.83		N/A
147 did the test twice	24.7	33	.8
<b>Year 2</b> 1342 results over 2018	32.8		N/A
501 students did the test twice	29	36.9	.8
<b>Year 3</b> 365 results over 2018	36.41		N/A
153 students did the test twice	33.6	37.6	.5

**Comment**

In order to encode and decode words, students need knowledge of the relationships between sounds (phonemes) and letter patterns (graphemes). Teaching students to record the sounds of English builds a platform for the development of diverse alphabetic code knowledge. This knowledge accumulates across the years and the results show this gradual increase in knowledge between Years 1 and 3. The Effect Size shift gains are all impressive but begin to taper off as the knowledge base increases, as there is less progress to be made.

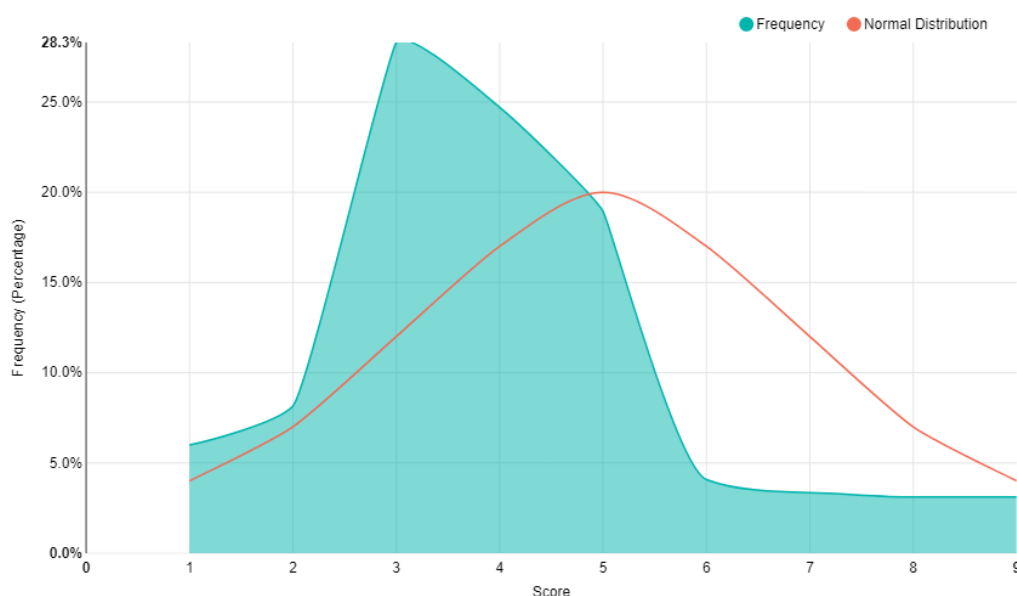
## Hodder Group Reading Tests 1 and 2

Results are presented as stanines\*, showing *Shine* students' achievement compared with the expected population norm. To achieve the same stanine at the start and end of a year, students need to make a good year's progress. To improve a stanine level, students need to make more progress than would be expected in a year.

\* A stanine is a scaled score. Scores are divided into nine levels of achievement, called stanines, with the lowest performance level being stanine one and the highest stanine nine. A stanine score of 1, 2, or 3 is below average; 4, 5, or 6 is average; and 7, 8, or 9 is above average.

### Year 1

**Figure 1: – End of Year**



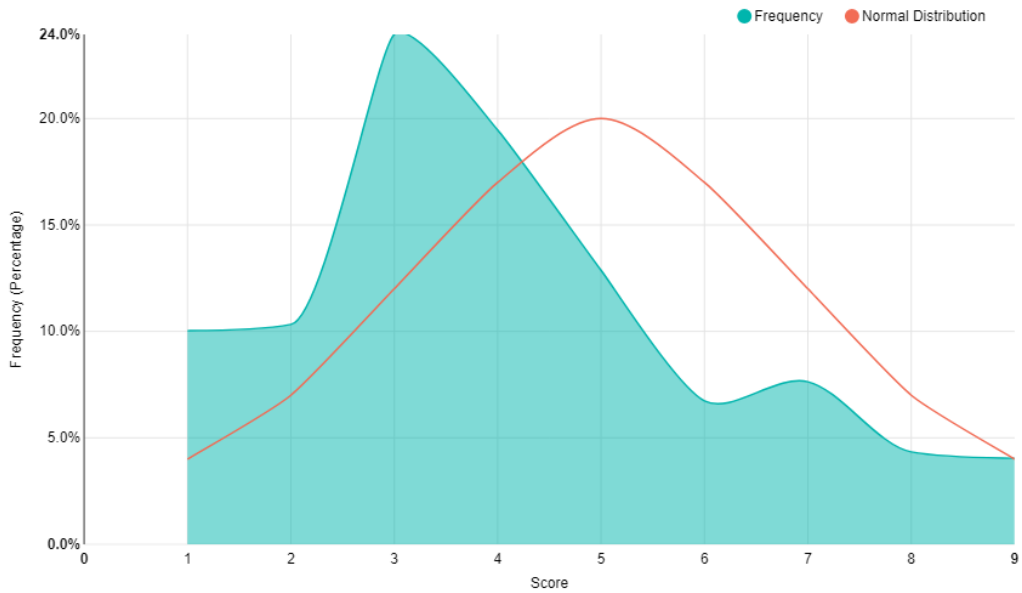
### Comment

There were considerably more *Shine* students in the lower stanines than in the normal population at the end of Year 1. This profile is very similar to the profile of Year 2 students at the start of year 2.

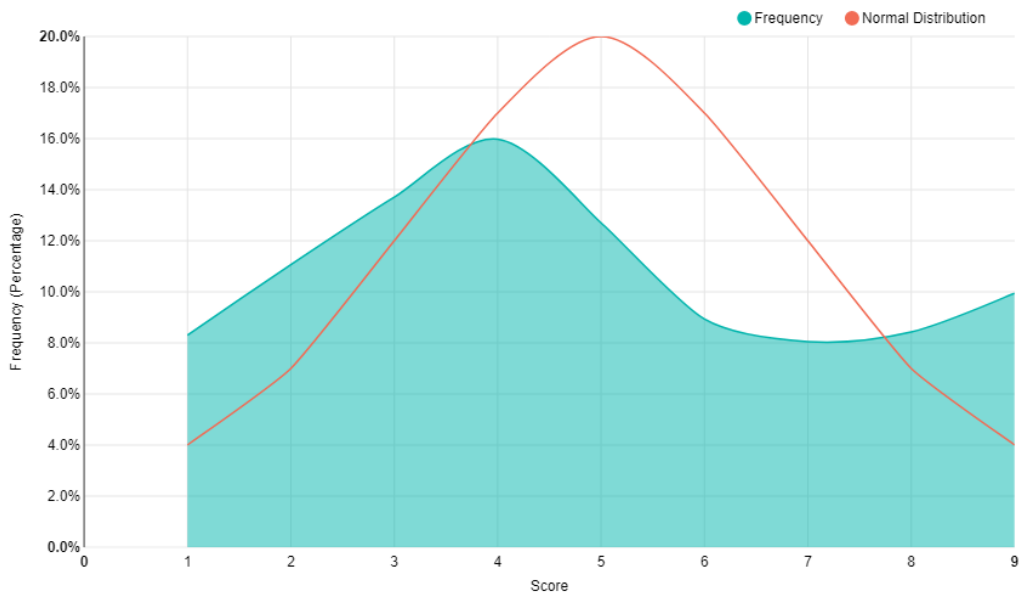


## Year 2

**Figure 2: Start of Year**



**Figure 3: End of Year**

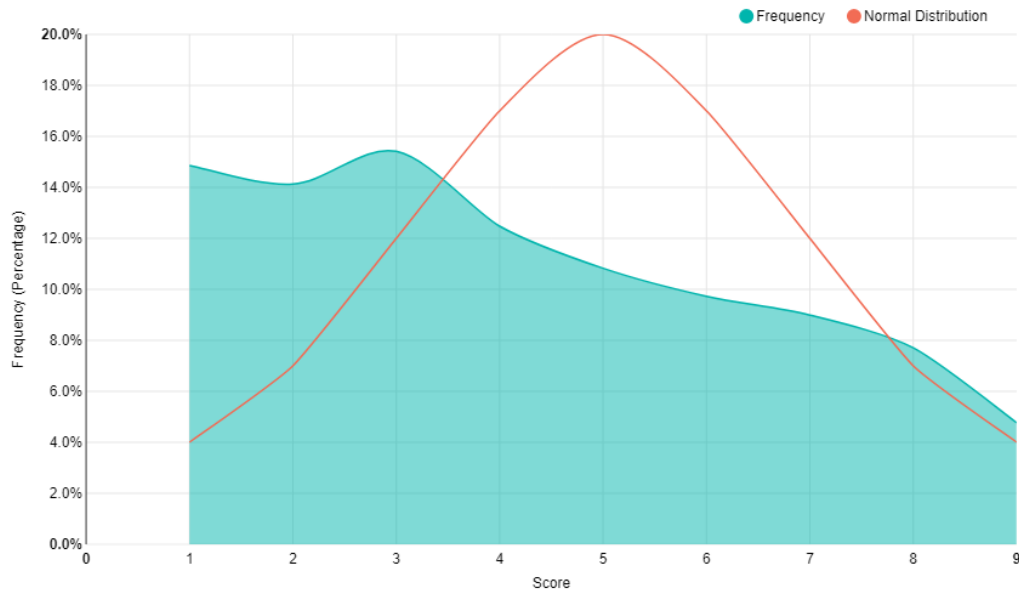


### Comment

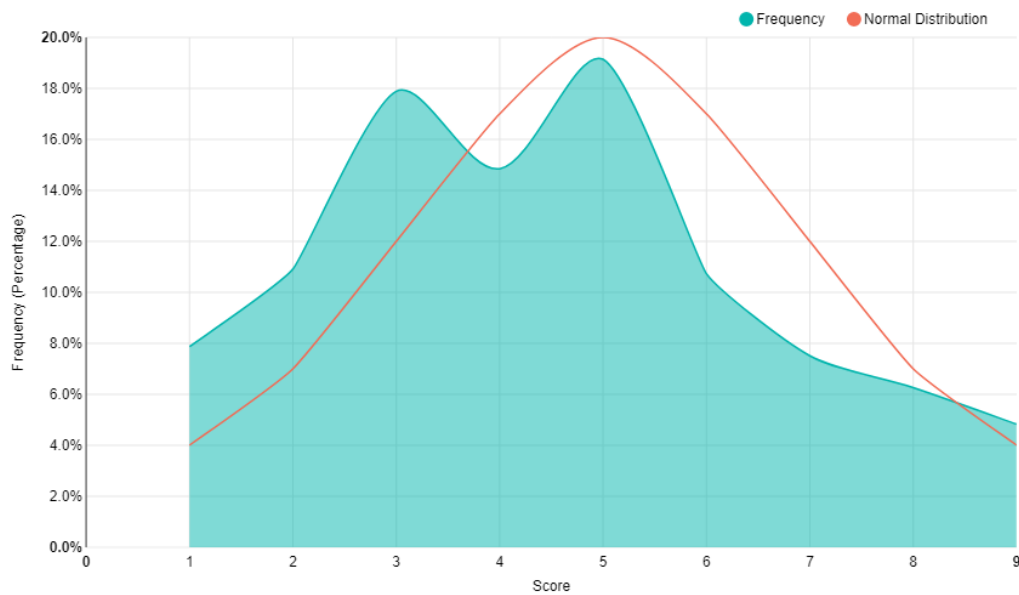
Year 2 students made significant shifts over the year. The peak at the lower stanines from the start of the year is reduced and achievement raised in the middle and higher stanines.

## Year 3

**Figure 4: Start of Year**



**Figure 5: End of Year**



### Comment

The pattern of achievement for Year 3 students shows that many students who were achieving in the lower stanines have moved into higher stanine groups over the year. Achievement in the highest stanines has not changed much.

## Hodder Group Reading Test 1

**Table 5: Stanine scores compared with population norms**

Students	% of students in Stanines 1-3 (Norm 23%)	% of students in Stanines 4-6 (Norm 54%)	% of students in Stanines 7-9 (Norm 23%)
<b>Year 1</b> End of Year only 417 results	42.45	47.72	9.60
<b>Year 2</b> Start of Year 668 results	44.61	39.07	16.01
<b>Year 2</b> End of Year 795 results	33.08	37.60	26.42
<b>Year 3</b> Start of Year 545 results	44.40	33.03	21.47
<b>Year 3</b> End of Year 559 results	36.67	44.99	18.60

### Comment

The table of results above shows that there were considerably more students in *Shine* schools achieving in stanines 1-3 than in the normal population and fewer in the highest three stanines. However, over the year approximately 11% of Year 2 students who achieved in stanines 1-3 at the start of the year moved beyond this by the end of the year and the number of students achieving in the highest three stanines rose above the population norm. There was a similar reduction in the number of students achieving in the lowest stanines in Year 3 but not the same shift in achievement in the highest stanines.

**Table 6: Effect Size Shifts**

**Hodder Group Reading Test 1**

599 Year 2 students completed Hodder Group Reading Test 1 at the start and end of 2018

Effect Size Shift **.8**

Achievement Mean shift 14.1 – 22.4

Achievement Median shift 11-22

281 Year 3 students completed Hodder Group Reading Test 1 at the start and end of 2018

Effect Size Shift **.8**

Achievement Mean shift 15.6 – 22.9

Achievement Median shift 13-22

**Hodder Group Reading Test 2**

59 Year 3 students completed Hodder Group Reading Test 2 at the start and end of 2018

Effect Size Shift **.4**

Achievement Mean shift 15.9 – 20.6

Achievement Median shift 15-18

**NOTE:** Approximately 200 Year 3 students sat Hodder Group Reading Test 1 at the start of the year and Test 2 at the end of the year, so their results are not able to be included in the Effect Size Shift results.

## Hodder Diagnostic Spelling Test

Results are presented as stanines, showing *Shine* students' achievement compared with the expected population norm. To achieve the same stanine at the start and end of a year, students need to make a good year's progress. To improve a stanine level, students need to make more progress than would be expected in a year.

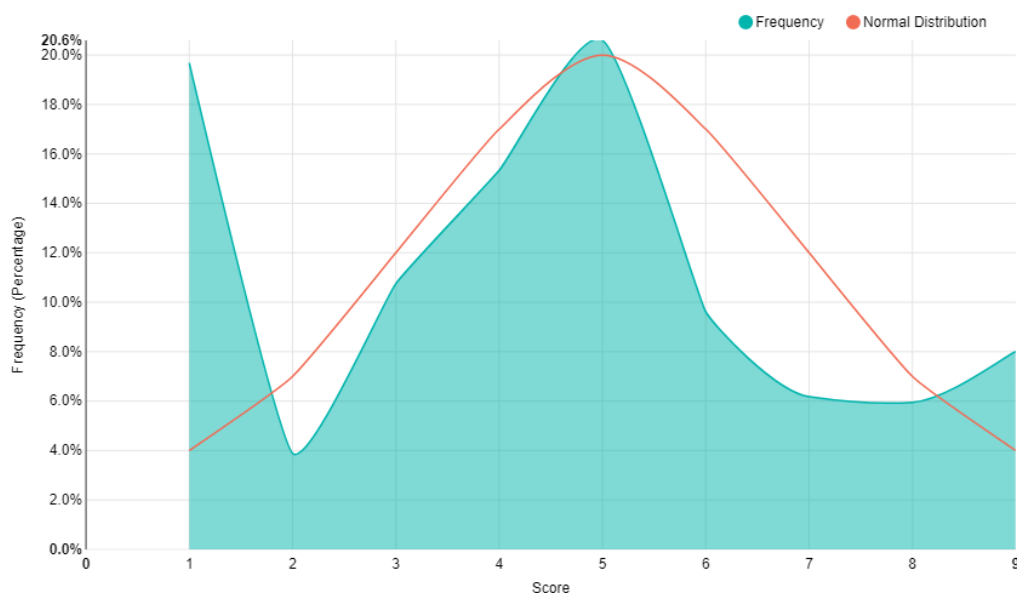
### Note

This assessment measures the ability to correctly spell common words. Many students made considerable progress over the year but their score remained the same because they still did not spell the word correctly.

For example: At the start of the year a student may have written *gl* for *girl* – they were unable to write the /ur/ vowel sound - but at the end of the year they wrote *gerl*, choosing a correct pattern for the /ur/ vowel sound, but an incorrect pattern for spelling of this sound in *girl*. This test is diagnostic and teachers can use the results to discover the progress their students have made in acquiring spelling knowledge. The stanine scores do not however reflect this increase in spelling knowledge, they only reflect an increase in the ability to spell words correctly.

### Year 1

Figure 6: End of Year

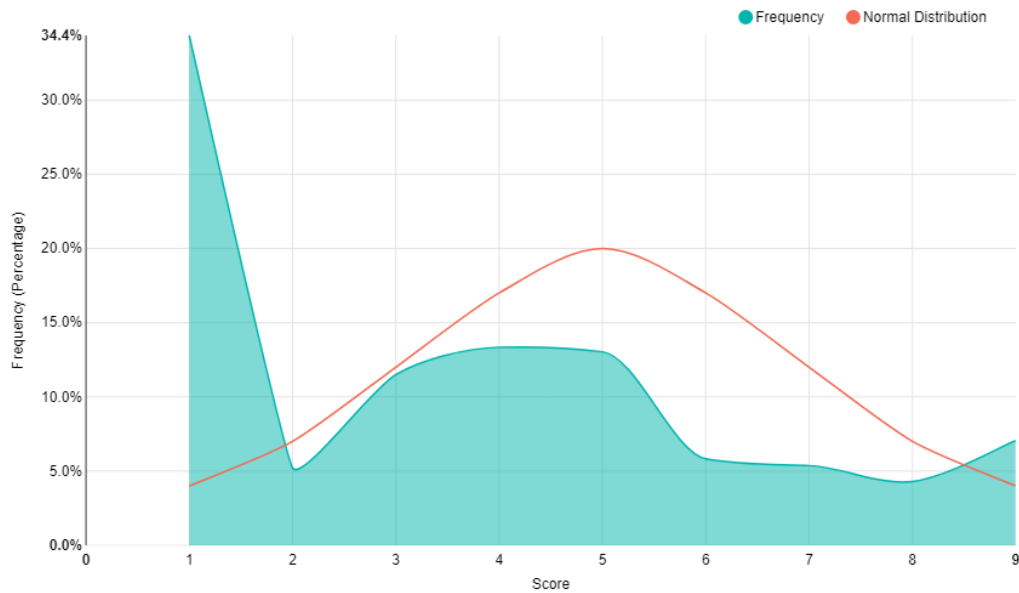


### Comment

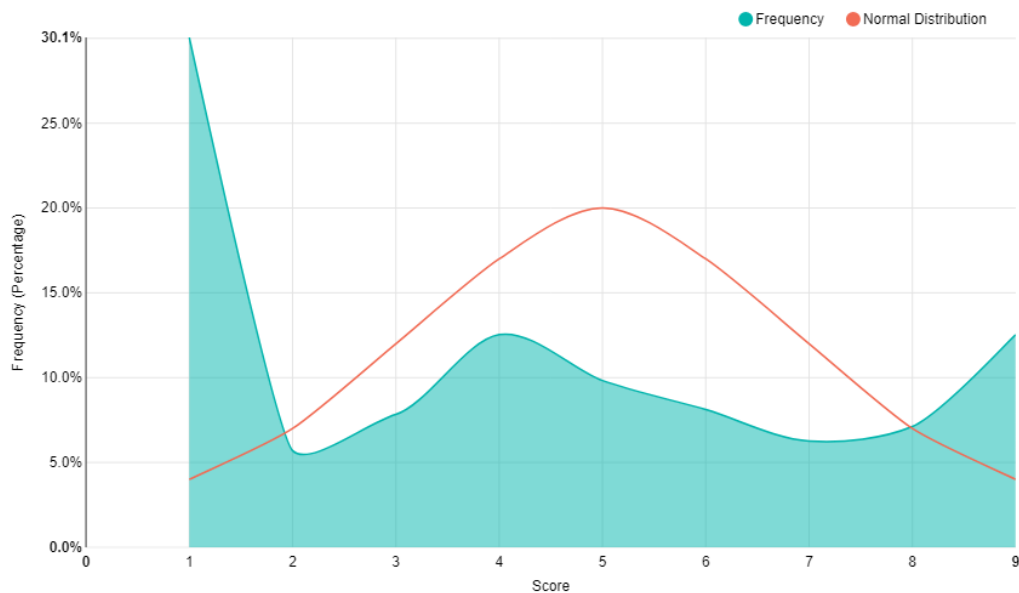
There was a group of Year 1 students who found this test very challenging and the number of students achieving at Stanine 1 reflects this. The distribution of scores for other students closely resembles the population norms.

## Year 2

**Figure 7: Start of Year**



**Figure 8: End of Year**



### Comment

The number of students who achieved in Stanine 1 is similar from the start to the end of the year but there is a pattern of improved achievement beyond this.

## Year 3

Figure 9: Start of Year

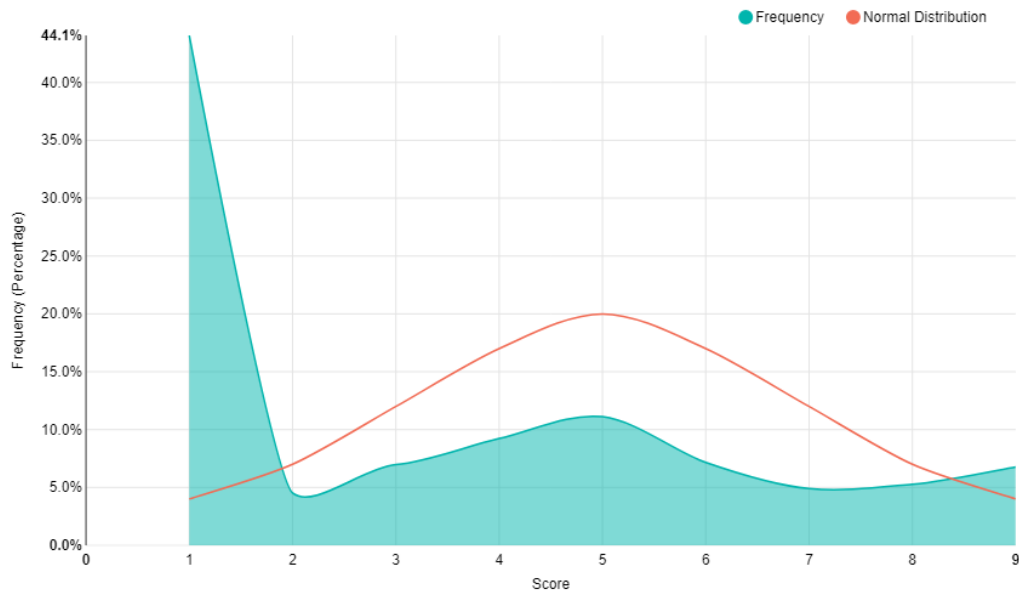
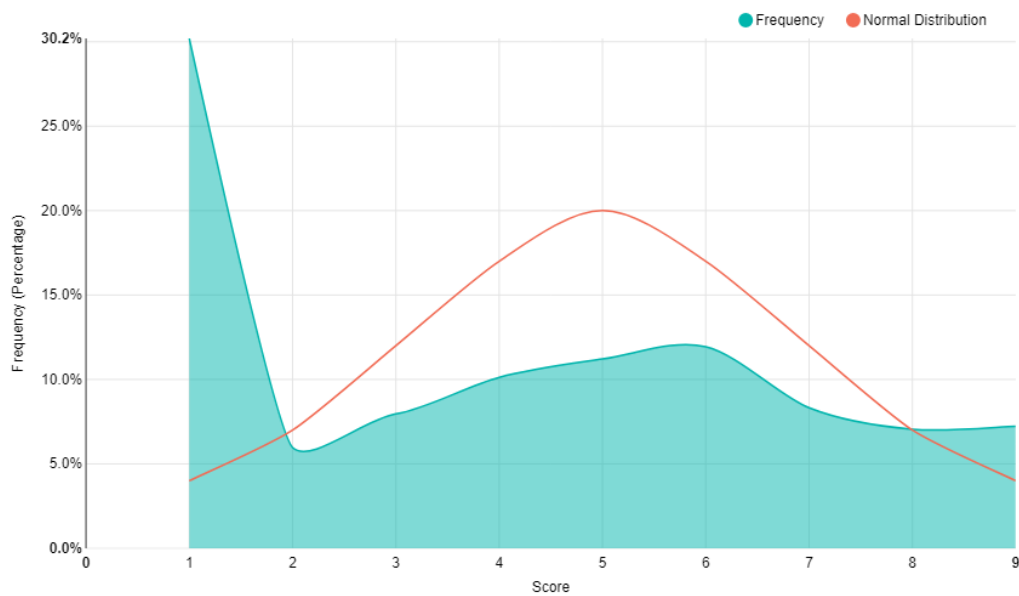


Figure 10: End of Year



### Comment

Although these graphs show that there are more *Shine* students achieving in stanine 1 than in the general population, this number has reduced over the year. There is a general drift in movement towards the higher stanines.

**Table 7: Stanine scores compared with population norms**

Students	% of students in Stanines 1-3 (Norm 23%)	% of students in Stanines 4-6 (Norm 54%)	% of students in Stanines 7-9 (Norm 23%)
<b>Year 1</b> End of Year only 437 results	34.33	45.53	20.14
<b>Year 2</b> Start of Year 652 results	51.07	32.21	16.72
<b>Year 2</b> End of Year 702 results	43.59	30.49	25.93
<b>Year 3</b> Start of Year 531 results	55.56	27.50	16.95
<b>Year 3</b> End of Year 553 results	44.13	33.27	22.60

**Comment**

Year 1 students show a different profile from Year 2 and 3 students. Although there are approximately 11% more students achieving in the lowest three stanines when compared with the population norm, the number achieving in the highest three stanines is close to the population norm.

Over 50% of Year 2 and Year 3 students achieved in the lowest three stanines at the start of the year but this dropped by between 9 and 11% over the year. The number of students achieving in the highest three stanines rose to just above or just below the population norm.

What these results show is that learning to spell words correctly was very difficult for a large number of students, particularly in Year 2 and 3. Correct spelling requires the student to access an accurate visual memory of a word. Many students cannot do this, particularly in the early years. Instead they spell words by recording the sounds they hear which means the word can sound right but look wrong. We have encouraged students to write words by sounding them out if they can't recall the visual image, so that they gain confidence and increase the quantity of their writing. We need to look at the balance between writing words from memory, 'sounding out' words and providing strategies for correcting phonetic spellings in our instruction.



**Table 8: Effect Size Shifts**

**Hodder Diagnostic Spelling Test 1**

539 Year 2 students completed the Hodder Diagnostic Spelling Test 1 at the start and end of 2018

Effect size shift: **.1**

Achievement Mean shift: 9.2 – 18.1

Achievement Median shift: 7 - 17

223 Year 3 students completed the Hodder Diagnostic Spelling Test 1 at the start and end of 2018

Effect size shift: **.8**

Achievement Mean shift: 10.5 – 18.2

Achievement Median shift: 8 – 15

**Hodder Diagnostic Spelling Test 2**

54 Year 3 students completed the Hodder Diagnostic Spelling Test 2 at the start and end of 2018

Effect size shift: **.6**

Achievement Mean shift: 11.2 – 18.1

Achievement Median shift: 9 - 20

**NOTE:** Approximately 250 Year 3 students sat Hodder Diagnostic Spelling 1 at the start of the year and Test 2 at the end of the year, so their results are not able to be included in the Effect Size Shift results.

## Investigation of results

The concern with literacy achievement in New Zealand is the large gap that exists between those who do well in our education system and those who do not. It is clear from our results that this gap in achievement exists in the cohort of students taking part in the *Shine* Literacy Project.

Our focus until now has been on changing teacher practice in the classroom. Using the Response to Intervention (RTI) framework, we have focused our efforts on Tier 1 (whole class) instruction. The achievement results from 2018 show that we have made significant progress in achievement, with Effect Size shifts that show considerably more than a normal year's progress. This improvement in achievement is also evident when we look at the stanines in reading and spelling – moving up stanines from the start to the end of the year can only happen if students make more than a normal year's progress. Teachers deserve to be proud of these results.

However, we need to do more than measure progress globally. We need to find out what is happening to students at both ends of the achievement spectrum. What follows now, is a closer analysis of the achievement gap in our schools. What it shows is that we need to focus our efforts on addressing the needs of students who need Tier 2 and Tier 3 (more intensive) instruction. We need to identify these students in Year 1 to ensure instruction is addressing their needs and accelerating their literacy achievement as early as possible.

### Measuring Progress

We used the online assessment App **beagle**<sup>®</sup> to aggregate and analyse our data. One of **beagle's** functions is to measure the mean (average), median (score at the mid-point of distribution) and achievement gap. Samples of **beagle's** Progress Reports follow (tables 9-14)

When you have a mean and a median that are the same, you have achievement that is evenly spread across the group. If the median is less than the mean it shows that there are more students achieving in the lower ranges.

If the median moves towards to the mean it shows that those in the lower ranges have improved. This is the pattern shown for *Shine* students in the Hodder Group Reading test results (see tables 9 and 10 below).

Teachers using **beagle** can click on the student number for those whose progress improved, stayed the same or worsened and the list of students in their class in each group will appear. A link to Instructional Planning will then support the teacher to provide targeted and differentiated instruction to meet the needs of these students, using the Response to Intervention framework.

**Table 9: Hodder Group Reading Test Year 2**

Achievement Mean Raw scores /40			Achievement Median Raw scores /40			Achievement Gap Range between scores 0-40			Effect Size Shift	Number of students		
Pre	Post	Change	Pre	Post	Change	Pre	Post	Change		Improved	No change	Worse
14.1	22.4	+8.3	11	22	+11	40	40	0	.8	518	14	67
Total – students with 2 or more results										599		
Students with one result only (ignored)										213		

**Table 10: Hodder Group Reading Test Year 3**

Achievement Mean Raw scores /40			Achievement Median Raw scores /40			Achievement Gap Range between scores 0-40			Effect Size Shift	Number of students		
Pre	Post	Change	Pre	Post	Change	Pre	Post	Change		Improved	No change	Worse
15.6	22.9	+7.3	13	22	+9	39	39	0	.8	242	10	29
Total – students with 2 or more results										281		
Students with one result only (ignored)										217		

**Comment**

At the start of the year, the median scores for Year 2 and 3 students were somewhat lower than the means, indicating more students achieving in the lowest range. However, by the end of the year, the mean and median were very close, indicating that students in the lowest range had moved closer to the mean. The achievement gap (the range of scores from highest to lowest) did not change in Year 2 or 3 – there were still students achieving at both ends of the spectrum – 0/40 and 40/40.

**Table 11: Hodder Diagnostic Spelling Test Year 2**

Achievement Mean Raw scores /40			Achievement Median Raw scores /40			Achievement Gap Range between scores 0-40			Effect Size Shift	Number of students		
Pre	Post	Change	Pre	Post	Change	Pre	Post	Change		Improved	No change	Worse
9.2	18.1	+8.9	7	17	+10	37	40	+3	1.0	501	13	25
Total – students with 2 or more results										539		
Students with one result only (ignored)										265		

**Table 12: Hodder Diagnostic Spelling Test Year 3**

Achievement Mean Raw scores /40			Achievement Median Raw scores /40			Achievement Gap Range between scores 0-40			Effect Size Shift	Number of students		
Pre	Post	Change	Pre	Post	Change	Pre	Post	Change		Improved	No change	Worse
10.5	18.2	+7.7	8	15	+7	36	40	+4	.8	204	9	10
Total – students with 2 or more results										223		
Students with one result only (ignored)										268		

## Comment

In Year 2 and 3, the medians were somewhat lower at the start of the year and this pattern remained unchanged over the year. For both groups, there was a slight increase in the gap which means the gap between the highest and lowest scores widened slightly. These results suggest that for spelling, students in the higher achieving group did better than those in the lower achieving group.

## A snapshot of results from two schools

After careful analysis of the results across the *Shine* schools, we found that some schools accelerated the progress of their students when compared with students in other schools, who had started the year in the same place.

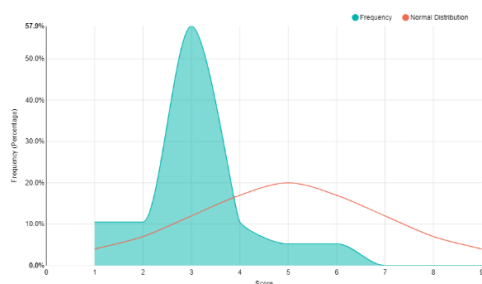
Below are the results from two schools from either end of the socioeconomic spectrum (a Decile 1 and a Decile 10 school) that made very similar, significant shifts in achievement with their Year 2 students in 2018. What we found is that the decile ranking of these two schools made no difference to their progress and achievement – both made similar, spectacular progress, which indicates that what happens in the classroom can have a significant impact on student achievement.

**Table 13: Hodder Group Reading Test 1 Year 2**

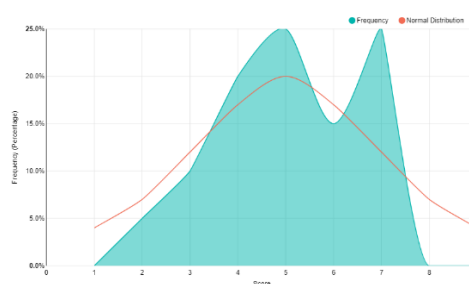
	Achievement Mean			Achievement Median			Achievement Gap Range between scores 0-40			Effect Size Shift
	Pre	Post	Change	Pre	Post	Change	Pre	Post	Change	
<b>Decile 1 (19 students)</b>	9.1	23.1	+14	8	22	+14	24	24	0	2.6
<b>Decile 10 (33 students)</b>	15.8	29.5	+13.7	15	32	+17	28	30	+2	1.8

## Hodder Group Reading Test 1 Decile 1 School, Year 2

**Figure 11: Start of Year**

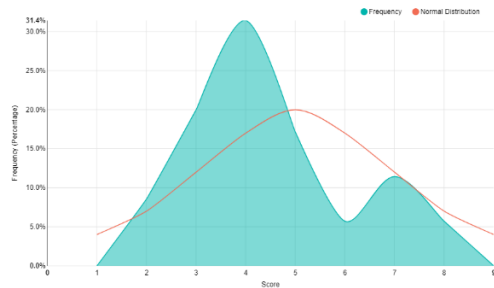


**Figure 12: End of Year**

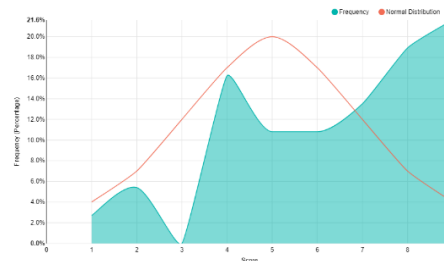


## Decile 10 School, Year 2

**Figure 13: Start of Year**



**Figure 14: End of Year**



### Comment

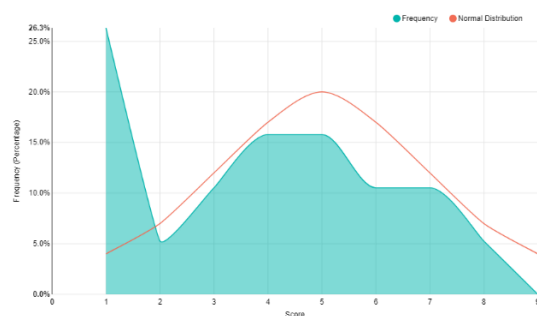
Every student in these schools showed improved results over the year, which is a remarkable achievement. Although these two schools had different mean and median scores at the start of the year, they made the same rate of progress over the year. They both had no change, or a negligible change in the achievement gap, which indicates progress was evenly distributed across students in their classrooms. Both schools had significant Effect Size shifts, which is indicative of achievement that was well above what would normally be expected over a year.

**Table 14: Hodder Diagnostic Spelling Test 1 Year 2**

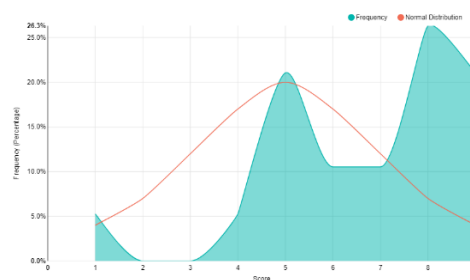
	<i>Achievement Mean</i>			<i>Achievement Median</i>			<i>Achievement Gap Range between scores 0-40</i>			<i>Effect Size Shift</i>
	<i>Pre</i>	<i>Post</i>	<i>Change</i>	<i>Pre</i>	<i>Post</i>	<i>Change</i>	<i>Pre</i>	<i>Post</i>	<i>Change</i>	
<b>Decile 1 (18 students)</b>	9.7	24.5	+14.8	8	23	+15	21	28	+7	2.1
<b>Decile 10 (34 Students)</b>	12.5	24.7	+12.2	12.5	25	+12.50	27	38	+11	1.5

## Decile 1 School, Year 2

**Figure 15: Start of Year**



**Figure 16: End of Year**



## Decile 10 School, Year 2

Figure 17: Start of Year

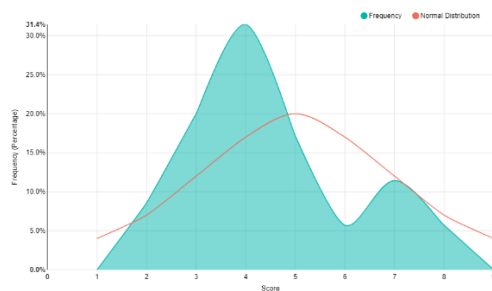
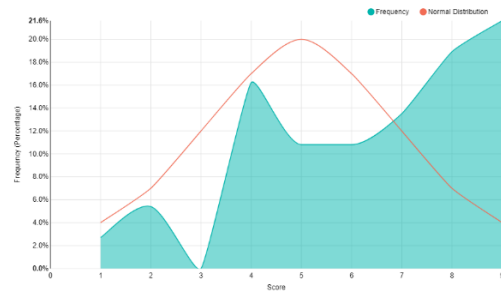


Figure 18: End of Year



### Comment

Measuring the gap (an increase in the gap in both schools) shows that improvements in progress for spelling were skewed more towards the higher achieving students in both schools. Both schools had significant Effect Size shifts which is indicative of achievement that was well above what would normally be expected over a year.

### Summary

International research such as PIRLS uses the mean, median and achievement gap to show the pattern of achievement within and between countries. **beagle** has allowed us to measure our achievement gap and to identify students in need of more intensive instruction. We need to do this from as early as Year 1. We can use the school entry checklist to identify students in need of further assessment as soon as they start school. We can track student progress from school entry on, and use the results of our assessments to tailor instruction to meet student needs. By continuing to measure the achievement gap we will be able to see whether instruction is working to close the gap.

Although there is a significant achievement gap in our *Shine* population, many students moved up one or more stanines over the year. All schools in the *Shine* network achieved significant Effect Size shifts showing that the progress their students made over 2018 was greater than would be expected in a normal year's teaching. Despite this, there is a wide spread of results across and between schools. We need to investigate the factors that have contributed to the accelerated student achievement that is evident in some schools and classes, to identify what accounts for the largest movement in student achievement.

In 2018, we again received generous financial contributions from The Todd Foundation and The Wright Family Foundation as well as donations from other sources, which enabled us to provide schools with support to accelerate students' achievement. The Porirua Foundation has continued to support us and has managed these funds on our behalf. We provided **beagle** to all schools, which helps teachers to analyse assessment data to accurately identify students' needs and measure their progress and achievement. We provided teachers with Professional Learning and Development and Lead Teachers with support to manage change in their schools. We also provided teaching resources and a range of diagnostic assessment

tools that further investigate the learning needs of students who have been identified as needing Tier 2 or 3 (more intensive) instruction.

We will continue to build on the research results of the *Shine* Literacy Project (2014 – 2016) to consistently implement practice that has raised students' literacy achievement across schools and across demographics. We know that we can accelerate students' progress and we will continue to work together as a committed group of professionals to raise student achievement and close the achievement gap.

**Joy Allcock**  
**25/02/2019**