

# **Shine** Literacy Project

## **Evaluating the Effectiveness of the *Sounds Like Fun* Programme**

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### **What is this Project about?**

The *Shine* Literacy Project, *Sounds Like Fun*, is designed to provide teachers with additional strategies to improve the literacy learning outcomes of New Entrant/Year 1 children. The programme comprises supplementary teaching strategies for enhancing the development of children's foundational skills necessary for successful literacy learning. The project is supported by funding from the Porirua Foundation, Infinity Foundation, Mana Community Grants Foundation, Pub Charity and TG McCarthy Trust. The Ministry of Education has funded some of the teacher professional development, and substantially discounted resources have been provided by MJA Publishing, Gilt Edge Publishing, Universal Children's Audio and Pixelhouse. The project has been designed under the guidance of the Literacy Research Team in the Institute of Education at Massey University.

### **Why is this Project being undertaken?**

We've known for over 20 years that not all children gain success from initial literacy instruction. The difference in literacy learning outcomes is often referred to as "the gap" between good and poor readers. We know that New Zealand has one of the largest gaps in literacy learning outcomes among developed countries. We also know that too many children from low decile schools are represented in the "long tail" of underachievement.

This "gap" is not the fault of teachers. Rather, developments in scientific research on literacy instruction have taken a long time to be translated into effective practice in a way that is usable and practical for teachers. We also know from a large amount of research in New Zealand and other countries that many children can benefit from explicit instruction in the foundations of literacy development. In fact, research shows that virtually all children benefit from such explicit instruction, but especially children who for whatever reason don't have some of the important foundation skills when they start school. Research shows that teachers can help the large majority of these children by using teaching strategies such as those used in the *Sounds Like Fun* approach.

The purpose of this project is to find out if teachers and children can benefit from the *Sounds Like Fun* approach. In particular, we want to see if children from low decile schools can accelerate their literacy learning development and close the gap that often shows up when children start school as New Entrants.

The “big goals” of the project are to see if we can support teachers in developing additional literacy instructional strategies, and to provide all New Entrant/Year 1 children with a way to get off to a better start in their literacy learning development.

### How is the Project being done?

This project began in May 2014 with 259 children from 32 schools. Seventeen schools are trialling the *Sounds Like Fun* approach. To provide a way of comparing this approach, 15 schools are continuing with their usual instruction. If the *Sounds Like Fun* approach shows benefits for many children, we will offer the same programme to these comparison schools in the second year of the project

### Who is in this Project?

At the start of the project the sample size was 259 children; 112 (43.2%) were boys and 147 (56.8%) were girls.

Trial group size:	<b>138</b> (71 Decile 9-10; 67 Decile 1-4)
Comparison group size:	<b>121</b> (69 Decile 10; 52 Decile 1-3)

### What is the ethnic background of children in the Project?

We found that children have come from 28 different ethnic backgrounds.

These have been grouped into:

Pakeha	46.3%
Maori	21.2%
Pasifika	18.5%
Asian	11.6%
European	1.5%
Other	0.8%

### What is the decile ranking of schools the children come from?

The following percentages show the make-up of the sample in terms of the decile ranking of the schools participating in the project:

1	19.7%
2	15.1%
3	7.3%
4	3.9%
9	3.9%
10	50.2%

No schools with decile rankings of 5, 6, 7, or 8 are participating in the project.

We also examined the ethnic background of children in the project in terms of the decile ranking of their school. These are the percentages that we found:

<b>Deciles 1 &amp; 2</b>	<b>Decile 3 &amp; 4</b>	<b>Deciles 9 &amp; 10</b>
44.4% Pasifika	41.4% Pakeha	70% Pakeha
36.7% Maori	31.0% Maori	9.3% Maori
11.1% Pakeha	13.8% Pasifika	2.9% Pasifika
6.7% Asian	10.3% Asian	15.0% Asian
1.1% other	3.4% Other	2.9% European

The disproportionate number of Maori and Pasifika children in lower decile schools is fairly typical throughout New Zealand, and especially in urban areas like Auckland and Wellington.

### ***What is the Sounds Like Fun approach?***

Research shows what skills and items of knowledge children need to acquire in order to learn to read and write. The *Sounds Like Fun* instructional approach integrates all the essential literacy skills into daily classroom instruction, with explicit teaching of the foundations for literacy development.

We have used a combination of professional learning seminars for teachers, as well as providing classroom resources to make the teaching approach easy to implement.

Core elements of the *Sounds Like Fun* approach are:

- ◆ Teaching alphabetic code knowledge from sound to print – how to hear and record sounds.
- ◆ Using children’s own language as a basis for all instruction – teaching from what they know as they enter school (spoken language) to what they don’t know (written language).
- ◆ Integrating the teaching of vocabulary, phonological awareness, alphabetic code knowledge and reading and writing skills into short, daily lessons of explicit instruction.
- ◆ Teaching children how the alphabetic code really works – that letters are used to record sounds in lots of different ways – exposing children to the concept of diversity in the way the code works, from the outset (that /k/ can be a c in Cathy, k in Kyle, cc in Rocco, ck in Jack and ch in Christopher).
- ◆ Learning to write the alphabetic code as a platform for learning to read it.
- ◆ Using assessment data to track student progress and to tailor instruction to meet learning needs.

## **What assessments were used with the children?**

Children were tested at school entry – on average after being at school for 3 to 4 weeks (Time 1 – 259 children). They were retested on average after 16-17 weeks at school (Time 2 – 258 children) and again at the end of their first year, on average 51 weeks after starting school (Time 3 – 244 children).

We used a range of different assessments, based on research that shows what skills are important for children to have during initial literacy learning. These assessments are briefly described below:

### **Vocabulary Knowledge – British Picture Vocabulary Scale (BPVS)**

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This assessment measured children’s knowledge of common and less common objects and actions. It is a good assessment of what children know when they start school. This was administered at Time 1.

### **Sutherland Phonological Awareness Test (SPAT)**

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Children were assessed for their ability to hear syllables, detect and produce rhyme, identify initial and final sounds, blend sounds to make words, count sounds in words and delete sounds. These are critical skills for using the alphabetic code. This test was administered at Times 1, 2 and 3.

### **Letter Names and Letter Sounds**

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In order to use the alphabetic code when they are reading, children need to recognise the letters of the alphabet and understand how they link to sounds. Children were shown capital letters and lower case letters and asked to name them. They were also asked to provide a sound for each capital and lower case letter. These were administered at Times 1, 2 and 3.

## **Reading**

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**Reading real words:** At Times 1 and 2, children were shown 15 common words to see if they could read them (Clay Word Reading test). At Time 3, children were assessed using the Burt Word Reading test which progresses from simple, high-frequency words to more complex, less frequent words.

**Pseudoword Reading:** When children are learning to read they often meet words they cannot immediately recognise and they need to develop strategies for working them out. At Time 3, children were asked to read 30 made-up words (pseudowords). This assessment measures a child’s ability to decode unfamiliar words.

## Recording sounds

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In order to spell words by sounding them out, children need to be able to record all the sounds of English in at least one way. The Sound-to-letter test assessed the number of sounds that could be written in an appropriate way. This was administered at Times 1, 2 and 3.

## Spelling

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***Invented Spelling:*** When children first start to write they do not have a print memory for many (or any) words. However, if they can break words into syllables, break syllables into sounds and record all the sounds of English, they can tackle writing words by sounding them out and recording the sounds they hear. At Times 1 and 2, children were asked to write 18 simple words containing most of the sounds of English. They received a point for every sound they spelled appropriately (but not necessarily correctly) for that word. There were 54 sounds to spell in the 18 words.

***Pseudoword Spelling:*** We wanted to find out how children approach spelling completely unfamiliar words, so at Time 3 they were asked them to spell 20 made-up words (pseudowords). They received a point for every sound they spelled appropriately. There were 61 sounds to spell in the 20 words.

## Writing

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At Time 3, children were shown a picture and after a brief discussion, were asked to write for 10 minutes. They received two scores – a total of the number of words they wrote and a total of the number of sounds they recorded in these words. For example, if a child wrote the word *after* – *afda*, they would receive four points for the four sounds they heard and recorded, even though the sounds were not recorded as they should be in this word.

## Mispronunciation Task

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Good readers sometimes misread or mispronounce a word, but they are able to make links to other words that are close in pronunciation, to self-correct the error. In this test, 40 words were read aloud, but deliberately mispronounced and children were asked to work out the words they were supposed to be. This was administered at Time 3.

The following table shows when these assessments were carried out:

**TABLE 1: Assessment Schedule over Year 1**

Assessment	School entry	16 weeks	End of 1 year
Vocabulary (BPVS)	✓		
Sutherland Phonological Awareness Test (SPAT)	✓	✓	✓
Knowledge of letter names	✓	✓	✓
Knowledge of letter sounds	✓	✓	✓
Reading words: Clay	✓	✓	
Reading words: Burt			✓
Pseudoword Reading			✓
Recording sounds (Sound-to- Letter)	✓	✓	✓
Invented spelling	✓	✓	
Pseudoword Spelling			✓
Writing – number of words			✓
Writing – number of sounds			✓
Mispronunciation task			✓

## What Have We Found So Far?

We have analysed the data in a way that compares Trial children with those in the Comparison group. Within these analyses, we have also compared results for children according to whether they are in low decile schools (deciles 1 to 3) or high decile schools (deciles 9 & 10). We have done these comparisons to see whether there is a particular benefit from the *Sounds Like Fun* approach for children in low decile schools. We have also carried out analyses to see if the *Sounds Like Fun* approach can benefit English language learners.

Some of the assessments have been done three times. We have analysed the results of these assessments to see if children in the Trial group showed significant gains compared to children in the Comparison group.

The results so far are very promising. To start with, it was important to look at the scores for the British Picture Vocabulary Scale to see if there were any important differences between children in the Trial and Comparison groups. There was no significant difference in the vocabulary knowledge of the Comparison and Trial groups. The Comparison group mean was 98.64 and the Trial group mean was 100.01. This means that both groups were similar in terms of their receptive vocabulary knowledge at school entry. There was however an approximately 10 point difference in the scores obtained by children in high decile and low decile groups, with low decile children obtaining lower scores on average than the high decile children.

We have examined the mean scores for each of the Trial and Comparison groups, for each of the Time 3 assessment variables. We have also reported the Standard Deviation, which is a widely used measure of the average amount of variation of scores above or below the mean. In keeping with the usual way for presenting results from statistical analyses, we also report the *F* value or ratio, and the *p* value, which is an indicator of the level of statistical significance. The *p* value stands for the statistical probability of obtaining similar differences between the means of the two groups, if a similar study was done with other but similar children. Scientific research almost always presents results in terms of statistical probabilities; this is the case in medicine, marketing, engineering, sociology, education, and so on.

For those of you who have a statistical background, we treated these data by means of a series of two-way Group (Trial vs Comparison) by Decile (Low decile vs High decile) analyses of variance (ANOVAs). Because of the large number of individual comparisons of means, we employed the False Discovery Rate correction procedure to control for Type I errors. There is no agreement on when to use a correction procedure, or which procedure to use. The most frequently used procedure, the Bonferroni, is very conservative and risks too many Type II errors. The False Discovery Rate procedure is more “lenient” and in our view, appropriate for this project.

Table 2 presents the results comparing the Trial and Comparison groups.

**TABLE 2: ANOVA Data Comparing Trial and Comparison Groups**

VARIABLES	TRIAL		COMPARISON		F	p
	MEAN	SD	MEAN	SD		
Vocabulary (BPVS)*	100.01	12.76	98.64	13.35	1.04	.31
Hearing Syllables	3.29	1.16	2.42	1.24	27.84	<b>.01</b>
Detecting Rhyme	3.55	0.96	3.50	1.09	0.07	.81
Producing Rhyme	3.05	1.42	2.93	1.46	0.45	.61
Blending CVC words	3.54	1.07	3.01	1.43	16.92	<b>.01</b>
Onset Identification	3.69	1.01	3.47	1.22	3.35	.12
Final Phoneme identification	3.72	0.90	3.54	0.95	4.70	.07
Segmenting CVC words	3.66	0.90	3.45	1.13	3.34	.12
Segmenting Blend words	2.02	1.62	1.66	1.57	4.48	.08
Deleting Onset	2.72	1.66	2.57	1.69	1.87	.25
Deleting Initial Blend	1.15	1.43	1.03	1.31	0.99	.41
SPAT – Total Phonemic Awareness	30.41	9.40	27.12	10.30	12.82	<b>.01</b>
Letter Name Upper Case	24.89	2.15	25.08	2.77	0.06	.81
Letter Name Lower Case	25.94	2.45	26.18	2.78	0.08	.81
Letter Sound Upper Case	23.71	3.40	23.27	4.88	2.17	.22
Letter Sound Lower Case	24.80	3.74	24.55	4.94	1.31	.34
Sound-to-Letter	34.07	6.20	32.73	6.89	6.00	<b>.03</b>
Burt Reading	23.62	12.83	25.42	14.23	0.07	.81
Pseudoword Reading	61.52	28.72	53.92	31.62	8.09	<b>.01</b>
Pseudoword Spelling	43.28	12.92	39.54	14.25	10.83	<b>.01</b>
Writing – Number of Words	32.66	12.94	26.60	15.68	10.33	<b>.01</b>
Writing – Number of Sounds	85.02	36.82	72.06	44.81	.5.41	<b>.05</b>
Mispronunciation	12.80	5.75	10.44	4.97	15.21	<b>.03</b>

\* The receptive vocabulary (BPVS) was administered at Time 1 only

In Table 2, the green font shows those tests in which the Trial group obtained higher scores than the Comparison group at a level of statistical significance that was equal to or less than .05. This level means that there is a 95% or greater chance that we would find similar results with other children. In other words, these differences are considered to be reliable and important.

Table 3 presents the results comparing the Trial low decile group and the Comparison low decile group.



**TABLE 3: ANOVA Data Comparing Trial and Comparison Low Decile Groups**

VARIABLES	TRIAL Low Decile		COMPARISON Low Decile		F	p
	MEAN	SD	MEAN	SD		
Syllables	3.48	0.97	2.84	1.09	1.37	.29
Detecting Rhyme	3.32	1.07	3.00	1.40	0.48	.49
Producing Rhyme	2.61	1.63	2.08	1.63	2.55	.16
<b>Blending CVC Words</b>	3.40	1.25	2.31	1.73	16.92	<b>.01</b>
Onset Identification	3.46	1.28	2.85	1.58	3.95	.09
<b>Final Phoneme Identification</b>	3.54	1.19	3.02	1.18	5.27	<b>.04</b>
Segmenting CVC Words	3.46	1.14	3.11	1.47	0.69	.45
Segmenting Blend Words	1.81	1.67	1.00	1.22	3.52	.10
Deleting Onset	2.31	1.72	1.49	1.65	7.08	<b>.02</b>
Deleting Initial Blend	1.04	1.36	0.58	0.94	2.46	.17
<b>SPAT</b>	27.79	9.95	20.73	10.86	6.18	<b>.02</b>
Letter Name Upper Case	24.57	2.51	24.20	3.57	1.99	.21
Letter Name Lower Case	25.56	2.92	25.09	3.24	2.80	.16
<b>Letter Sound Upper Case</b>	23.43	4.11	21.00	6.75	9.69	<b>.01</b>
<b>Letter Sound Lower Case</b>	24.48	4.71	22.13	6.59	9.74	<b>.01</b>
<b>Sound-to-letter</b>	32.91	6.37	28.44	6.60	9.66	<b>.01</b>
<b>Burt Word Reading</b>	20.33	12.24	15.09	8.60	12.61	<b>.01</b>
<b>Pseudoword Reading</b>	53.11	29.09	32.88	29.77	7.26	<b>.02</b>
<b>Pseudoword Spelling</b>	42.19	13.37	32.08	16.21	9.32	<b>.01</b>
Writing – Number of Words	31.95	13.47	26.15	15.77	1.32	.29
Writing – Number of Sounds	82.40	37.17	68.35	45.28	0.50	.50
<b>Mispronunciation</b>	13.48	5.63	8.64	3.90	8.99	<b>.01</b>

The data in Table 3 show that a number of comparisons between the low decile Trial and Comparison children were statistically significant. These are shown in the green font. In each case, the low decile Trial children on average outperformed the low decile Comparison children. These data show that the *Sounds Like Fun* programme is particularly beneficial for low decile children on a number of important literacy-related foundation skills.

We also analysed the assessment results in terms of children who were English Language Learners (ELL). Of the 244 children tested at Time 3, 51 were identified as ELL (9 Comparison high decile, 9 Trial high decile, 16 Comparison low decile and 17 Trial low decile). This number is quite small in the context of this project. As a result, a number of the differences in the means for ELL children in the Trial group compared to those in the Comparison group were not statistically significant even though the difference in mean scores was quite large in some cases. In general, the mean scores for the Trial ELL learners were heading in the right direction, but the small sample size means that many of the differences were not reliable (i.e. not statistically significant). Table 4 shows the results just for the ELL children in the Trial and Comparison groups.

**TABLE 4: ANOVA Data Comparing ELL Trial and Comparison Groups**

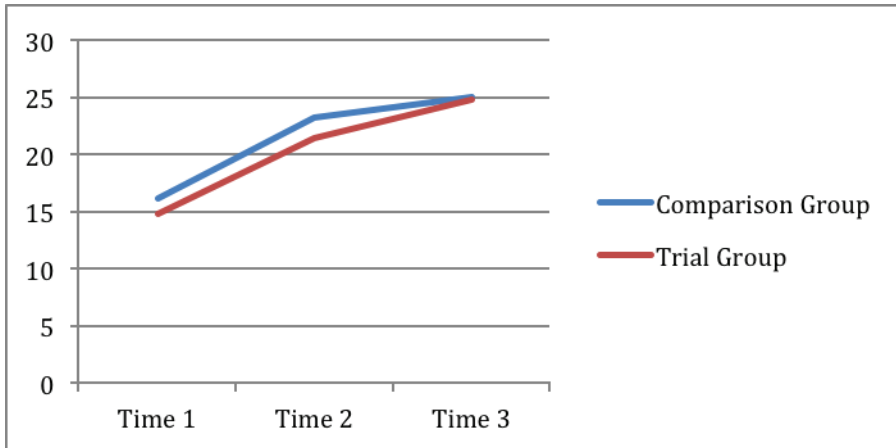
VARIABLES	TRIAL ELL		COMPARISON ELL		F	p
	MEAN	SD	MEAN	SD		
Syllables	2.85	1.43	2.52	1.39	2.70	.17
Detecting Rhyme	3.07	1.36	3.28	1.39	7.10	<b>.03</b>
Producing Rhyme	2.46	1.71	2.38	1.50	0.09	.77
Blending CVC words	3.25	1.43	2.28	1.71	2.89	.17
Onset Identification	3.25	1.48	2.69	1.71	2.67	.17
Final Phoneme Identification	3.54	1.10	2.92	1.58	4.41	.11
Segmenting CVC Words	3.23	1.24	2.88	1.72	0.65	.54
Segmenting Blend Words	1.46	1.48	0.76	1.20	1.15	.41
Deleting Onset	2.27	1.85	1.68	1.77	1.36	.39
Deleting Initial Blend	0.96	1.37	0.64	1.04	0.33	.66
SPAT	25.95	11.67	20.66	11.53	0.94	.45
Letter Name Upper Case	24.65	2.30	23.40	5.14	6.47	<b>.03</b>
Letter Name Lower Case	26.08	2.10	24.56	4.92	8.01	<b>.03</b>
Letter Sound Upper Case	23.58	3.10	20.04	7.83	10.64	<b>.01</b>
Letter Sound Lower Case	25.19	2.88	21.24	7.64	13.29	<b>.01</b>
Sound-to-letter	32.96	6.03	27.68	8.63	7.39	<b>.03</b>
Burt Word Reading	23.38	13.44	18.96	14.38	3.73	.12
Pseudoword Reading	53.89	30.75	35.48	34.42	2.66	.17
Pseudoword Spelling	39.57	15.77	29.31	17.77	7.19	<b>.03</b>
Writing – Number of Words	30.11	14.07	21.79	14.37	0.19	.71
Writing – Number of Sounds	78.96	37.71	56.31	40.83	0.58	.59
Mispronunciation	11.58	6.01	8.88	4.76	0.10	.77

The *Sounds Like Fun* programme is beneficial for English language learners as well as children from low decile schools. Because the statistical significance of differences between mean scores is affected by the size of the samples, many important differences in mean scores cannot be considered to be reliable. That said, they look very promising for English language learners.

We have prepared some graphs to provide a visual idea as to the progress that has been made by each group, including some for the low vs high decile groups.

## Graphs Showing Assessments Repeated at Times 1, 2 and 3

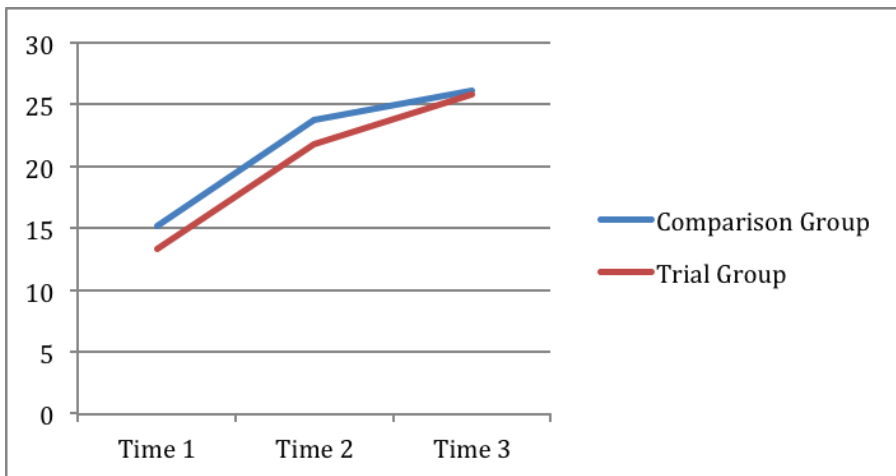
### Letter Names: Upper Case /26



### Mean Scores

	Comparison	Trial	Significance
Time 1	16.12	14.70	Sig (Comp)
Time 2	23.27	21.36	Sig (Comp)
Time 3	25.08	24.89	Non sig

### Letter Names: Lower Case /28

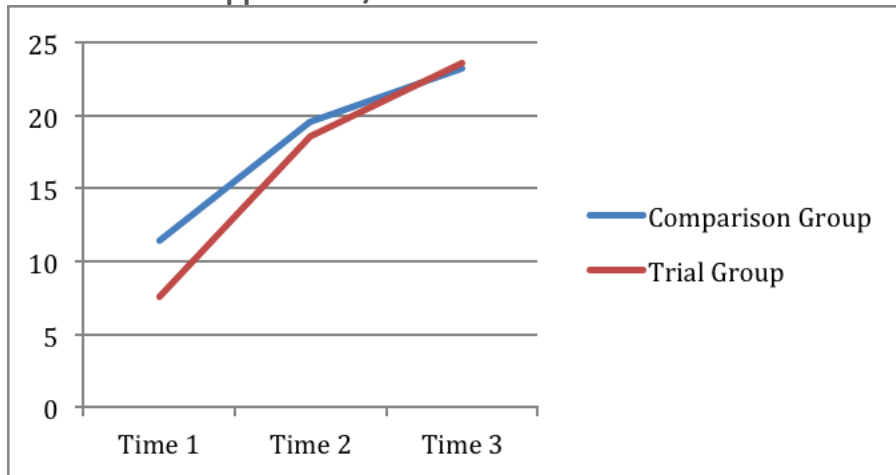


### Mean Scores

	Comparison	Trial	Significance
Time 1	15.17	13.37	Non Sig
Time 2	23.80	21.84	Sig (Comp)
Time 3	26.18	25.94	Non Sig

The Letter Names graphs show that the Trial group started out with scores that were significantly lower than the Comparison group, but they had caught up at Time 3 testing.

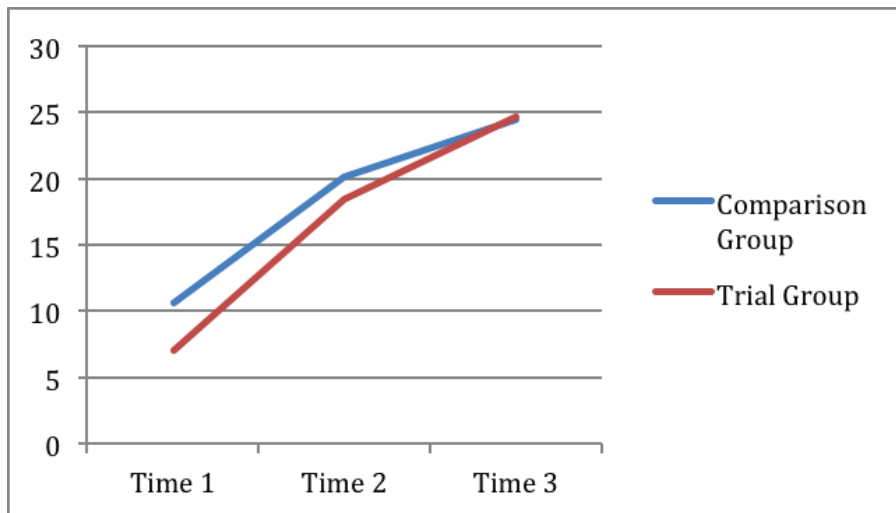
### Letter Sounds: Upper Case /26



### Mean scores

	Comparison	Trial	Significance
Time 1	11.45	7.50	Sig (Comp)
Time 2	19.58	18.48	Non Sig
Time 3	23.27	23.71	Non Sig

### Letter Sounds: Lower Case /28

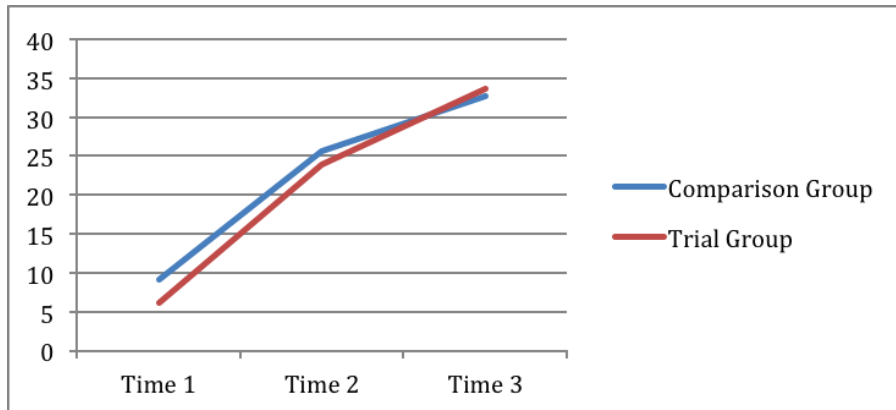


### Mean scores

	Comparison	Trial	Significance
Time 1	10.65	7.05	Sig (Comp)
Time 2	20.22	18.48	Non Sig
Time 3	24.55	24.80	Non Sig

On average, the Trial children started out significantly lower on the Letter Sounds tasks but had caught up by Time 3.

## Sound to Letter /45

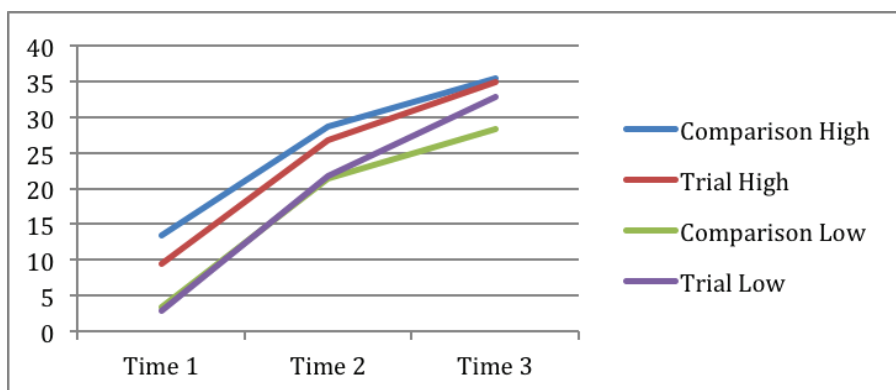


### Mean scores

	Comparison	Trial	Significance
Time 1	9.13	6.29	Sig (Comp)
Time 2	25.60	24.02	Non Sig
Time 3	32.73	34.07	Sig (Trial)

The Trial group started out significantly lower in the Sound to Letter task but by Time 3 were significantly ahead of the Comparison group.

### Sound to Letter /45 – by Decile Groups

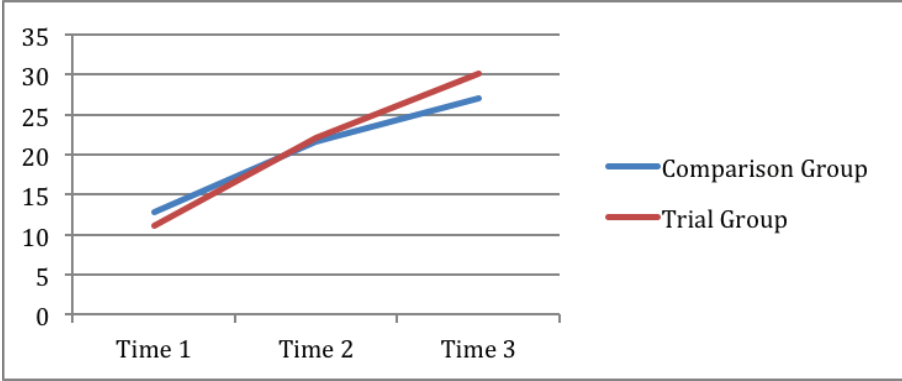


### Progress by decile bands: Comparison High v Trial High, Comparison Low v Trial Low

	Comparison High	Trial High	Significance
Time 1	13.45	9.44	Sig (Comp)
Time 2	28.72	26.72	Non Sig
Time 3	35.56	34.99	Non Sig
	Comparison Low	Trial Low	Significance
Time 1	3.40	2.95	Non Sig
Time 2	21.39	21.72	Non Sig
Time 3	28.44	32.91	Sig (Trial)

The high decile Trial group started out behind the high decile Comparison group, but have effectively caught up at Time 3. The low decile Trial group was slightly behind the low decile Comparison group at Time 1, but out-performed the Comparison group at Time 3, and had effectively caught up with the high decile groups. This illustrates the benefits of the *Sounds Like Fun* approach for children in the Trial group, especially for those children from low decile schools.

**SPAT: Sutherland Phonological Awareness Test /44**

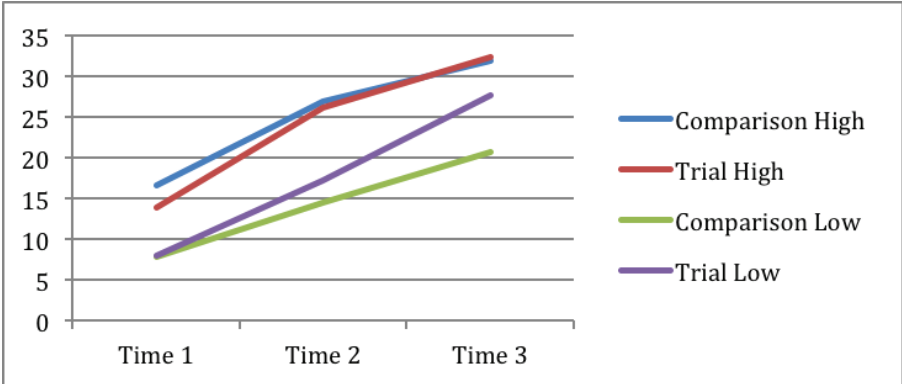


**Mean scores**

	Comparison	Trial	Significance
Time 1	12.75	11.23	Non Sig
Time 2	21.62	22.17	Non sig
Time 3	27.12	30.41	Sig (Trial)

The Trial and Comparison groups started out with similar scores on this measure of phonemic awareness knowledge, but by Time 3 the Trial group was significantly ahead of the Comparison group.

**SPAT: Sutherland Phonological Awareness Test – by Decile Groups**



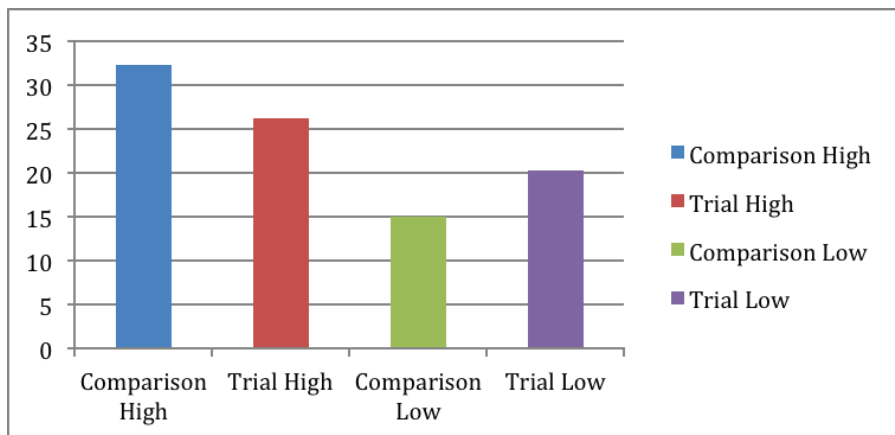
**Progress by Decile Bands: Comparison High v Trial High, Comparison Low v Trial Low**

	Comparison High	Trial High	Significance
Time 1	16.61	13.94	Non Sig
Time 2	26.89	26.23	Non Sig
Time 3	31.91	32.50	Non Sig
	Comparison Low	Trial Low	Significance
Time 1	7.78	7.96	Non sig
Time 2	14.49	17.31	Borderline Sig (Trial)
Time 3	20.73	27.79	Sig (Trial)

The Trial group made significantly more progress with the SPAT tasks over the year. The Trial low decile group is closing the gap with the high decile schools, and is doing significantly better than the low decile Comparison children at Time 3.

## Assessments undertaken at Time 3 only

### BURT Word Reading /110



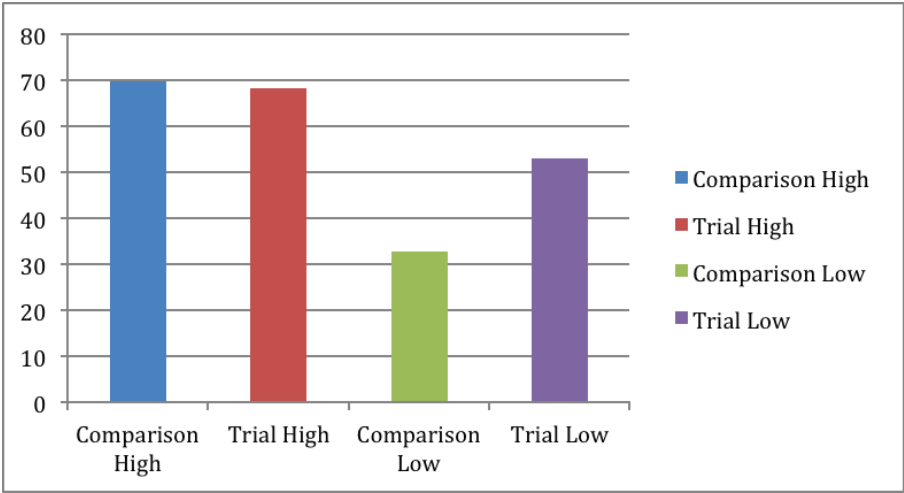
### Mean scores

	Comparison High	Trial High	Significance
Time 3	32.25	26.18	Sig (Comp)
	Comparison Low	Trial Low	Significance
Time 3	15.08	20.33	Sig (Trial)

A Burt score of 20 represents a reading age of 6 years. On average, the children in the low decile Trial Group achieved this score by age 6, whereas the low decile Comparison children were on average considerably lower in their word recognition knowledge. The high decile Comparison group significantly out-performed the high decile Trial group in this task but children in both high decile groups achieved results that were on average, above what would be expected for a 6 year old.



**Pseudoword Reading /101**

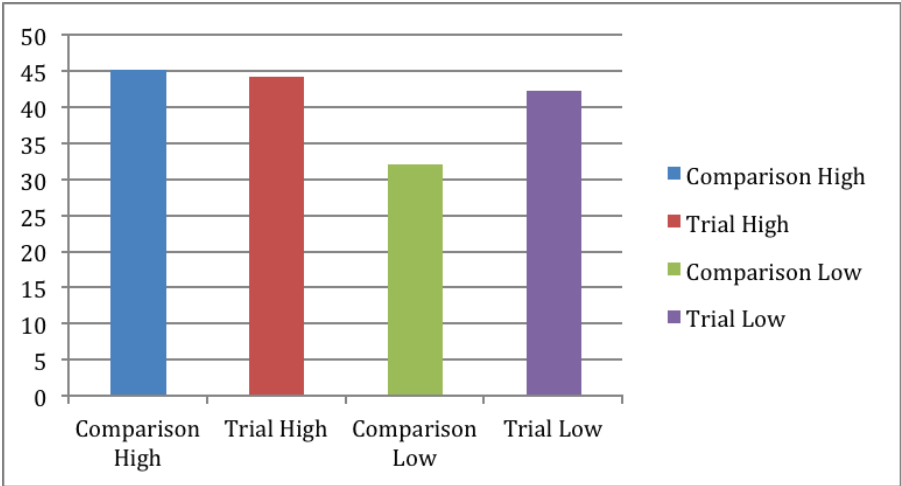


**Mean scores**

	Comparison High	Trial High	Significance
Time 3	69.76	68.26	Non Sig
	Comparison Low	Trial Low	Significance
Time 3	32.88	53.10	Sig (Trial)

The two high decile groups achieved similar results for reading pseudowords, but the Trial low decile group significantly out-performed the Comparison low decile group.

**Pseudoword Spelling /61**

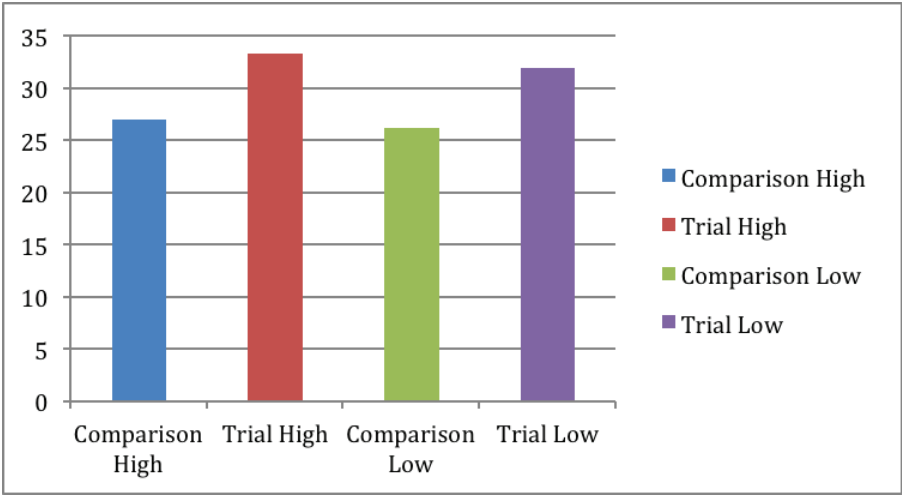


**Mean scores**

	Comparison High	Trial High	Significance
Time 3	45.15	44.14	Non Sig
	Comparison Low	Trial Low	Significance
Time 3	32.07	42.19	Sig (Trial)

The two high decile groups achieved very similar results for spelling unfamiliar words. The Trial low decile group significantly out-performed the Comparison low decile group and achieved results that were almost the same as the two high-decile groups.

**Writing: Number of Words**

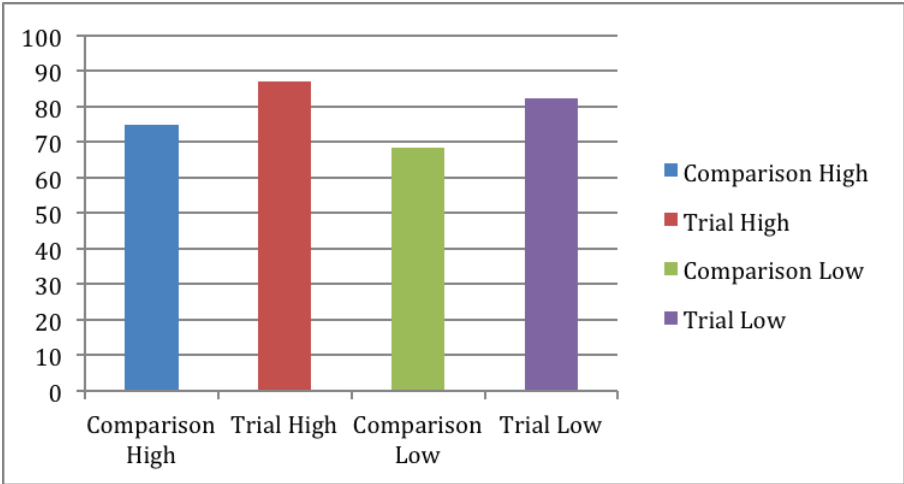


**Mean scores**

	Comparison High	Trial High	Significance
Time 3	26.92	33.23	Sig (Trial)
	Comparison Low	Trial Low	Significance
Time 3	26.15	31.94	Sig (Trial)

Both Trial groups significantly out-performed the Comparison groups in the number of words children wrote in 10 minutes. The low decile Trial group achieved effectively the same results as the high decile Trial group, with both these groups out-performing the Comparison high decile group. The two Comparison groups achieved similar results, with the low decile Comparison children writing as many words as their high-decile counterparts.

**Writing: Number of Sounds**

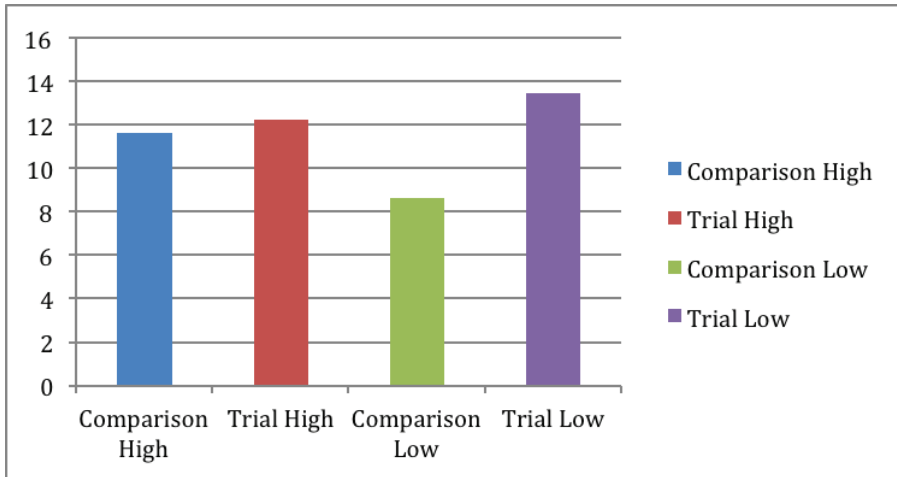


**Mean scores**

	Comparison High	Trial High	Significance
Time 3	74.85	87.11	Sig (Trial)
	Comparison Low	Trial Low	Significance
Time 3	68.34	82.40	Sig (Trial)

Both Trial groups significantly out-performed the Comparison groups in the number of sounds children wrote in 10 minutes. When comparing the two Trial groups with each other (high and low decile), their results were similar and both these groups out-performed the Comparison high decile group. The low decile Comparison group achieved results that were close to those of the high decile Comparison group.

### Mispronunciation Task /40



### Mean scores

	Comparison High	Trial High	Significance
Time 3	11.94	12.26	Non Sig
	Comparison Low	Trial Low	Significance
Time 3	8.64	13.48	Sig (Trial)

The Trial low decile group achieved the highest result for this task, out-performing all other groups. The two high decile groups achieved similar results to each other but the low decile Trial group significantly out-performed the low decile Comparison group.

## What Do These Results Mean?

The *Sounds Like Fun* approach focuses on teaching children to write words using the alphabetic code as a platform for learning to read them. It engages children by using words they already know, and teaches them to hear and manipulate sounds in words (develop phonemic awareness skills), to use letters in various ways to record the sounds they hear (understand the alphabetic principle and use the alphabetic code), and to understand the diversity of the alphabetic code (to write sounds in different ways and to pronounce graphemes in different ways). We would therefore expect to see successful achievement in the following assessment tasks if this approach is effective: Letter sound knowledge, Sound to Letter, SPAT, Pseudoword Spelling, Pseudoword Reading and Writing. As the tables of results show, these are the areas where there were statistically significant differences between the Trial and Comparison groups.

The *Sounds Like Fun* approach seems to have had the most impact over a wide range of measures for the children in the low decile Trial schools, with children in this group outperforming children in the low decile Comparison group on some key variables by the end of one year at school. These differences suggest that the approach is contributing to a closing of the literacy learning gap often shown between children in low decile and high decile schools.

The two high-decile groups showed little difference in results except for the Burt Word Reading task, where the Comparison group had statistically significantly higher results than the Trial group, and the Writing task, where the Trial group had statistically significantly higher results for the number of words and sounds children wrote in 10 minutes.

Comparison schools now have the option to take up the *Sounds Like Fun* approach for the next year. They will be offered the same professional learning seminars and classroom resources as the Trial group received this year.

Children's results have been sent to their parents or caregivers and also to their teachers.

All children in the project will be further assessed on their acquisition of reading and writing skills at the end of 2015 and mid-2016, and we hope to reassess their progress at the end of Year 4.



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